



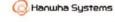


October 2-6 GYERYONGDAE

The Headquarters of the ROK Army, Navy, and Air Force

#### **Featured Exhibitors**

























































ICEYE







SCHMIDT @ BENDER

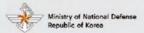
HOST I

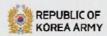


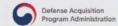




Sponsor I

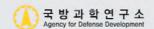


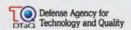


















## Japanese Fighters Scrambled to Intercept China Drone

JAPAN said its air force scrambled fighter aircraft against a Chinese combat drone near its southwestern islands on June 4, the third time this year an unmanned aerial vehicle (UAV) with military applications has been spotted operating near Japanese airspace.

A report by the Defence Ministry's Joint Staff Office said its forces detected a Chinese TB-001 drone, designed for long-range reconnaissance and precision strikes, operating between the East China Sea and the Philippine Sea in the Western Pacific Ocean.

The Medium Altitude Long Endurance (MALE) drone reportedly turned northeast, passing Okinawa and Amami Oshima island before returning to the East China Sea, as Japan Air Self-Defense Force units were scrambled to intercept the Chinese aircraft, The twin-boom tail design UAV has an estimated operational range of 3.700 miles.\*

#### **Philippines: China-made Ship Sinking Coincidental**

**THE** selection of the decommissioned oil tanker BRP Lake Caliraya for a sinking exercise as part of this year's Balikatan exercises between Filipino and American forces was coincidental, a ranking official of the Philippine Navy (PN) has said.

A PN spokesperson made the remark after China called the act provocative. In an April 20 editorial, China's state-run English newspaper Global Times claimed that the BRP Lake Caliraya was built in a Chinese shipyard for the Philippine National Oil Company (PNOC), which it called "a witness to previous cooperation between China and the Philippines".\*

The PNOC donated the BRP Lake Caliraya, formerly known as M/T Lapulapu, to the Navy in 2014. He also added that it is customary to use decommissioned Navy ships in "any ship sinking activity conducted" in any part of the world.

PN flag-officer-in-command Vice Admiral Toribio Adaci Jr said he does not see anything wrong with the move. "There's no issue with that. The vessel has been used in the Philippines (for a) long long time so any attachment to China – if ever there's any – it doesn't matter at all," Adaci told a press briefing at the Navy headquarters in Manila.

#### **Increasing Drone Use in Myanmar Conflict**

**IN** a significant development in Myanmar's ongoing civil war, junta troops are gaining the upper hand employing an increasing number of drones against rebel fighters who had earlier relied on modified Chinese-made commercial drones.

It was reported early June that the rebels have encountered the junta's improved use of armed unmanned aerial vehicles (UAVs) in recent months, marking a shift in the conflict's dynamics. In the country's southeast region, resistance fighters described instances where the junta had deployed modified Chinese-manufactured drones

to carry explosives and attack rebel positions.

The Tadmadaw began procuring thousands of Chinese commercial UAVs at the start of the year, modifying them to carry munitions. The government has said that last year rebels had dropped over 25,000 bombs using drones during a major October offensive on military posts.

The junta has armed CH-3 military UAVs from China in its inventory but resistance groups report that the military is currently employing multi-rotor commercial drones in recent attacks.

#### **RSAF F-16 Crash at Base**

A REPUBLIC of Singapore Air Force (RSAF) F-16C fighter aircraft experienced an issue during take-off and the pilot responded in accordance with emergency procedures on May 8.

The pilot successfully ejected and the plane crashed thereafter within Tengah Air Base. The pilot was conscious after the incident and was able to walk before receiving medical attention.

No other personnel were hurt.

Detailed investigations were led by the air force and supported by F-16 manufacturer Lockheed Martin and the Transport Safety Investigation Bureau. The May 8 crash was the fourth involving an RSAF F-16 since the aircraft entered service in the late 1980s. •

#### Singapore, US Ink New Agreement

**SINGAPORE** and the United States have inked an agreement to further cooperate on defence innovation, such as leveraging artificial intelligence (AI) and autonomous systems to solve their militaries' operational challenges.

According to the memorandum of understand-

ing (MoU) signed on May 31, the two countries will work on solutions to ongoing security challenges, such as the development of counter-drone capabilities, and technologies to enhance maritime security.

## **Deadly Helicopter Collision in Malaysia**

THE mid-air collision between two Malaysian navy helicopters that killed all 10 personnel on board was caused by one of the aircraft flying at the wrong altitude, the navy said in a statement on May 30.

"The Fennec helicopter was not at the altitude and direction set for it and had entered the (HOM) AW139's flight path," it said. The Fennec and HOM AW139 helicopters were participating in a parade rehearsal flight with other helicopters over the Lumut Naval Base in Perak state on April 23. The Royal Malaysian Navy's 90th anniversary celebrations to be held April 27 was cancelled.

The HOM helicopter crew experienced "channelised attention" when executing the turn, limiting their reaction in avoiding the crash, the Malaysian navy said, identifying this as a secondary factor behind the crash. The US Air Force has described channelised attention as a tight focus of attention that can lead to the exclusion of comprehensive situational information. •

#### Pakistan Ship Conduct Drills with Japanese, Spanish Warships

PAKISTAN Navy Ship (PNS) Aslat on June 7 conducted exercises with ships from Japan and Spain in the Indian Ocean during a regional maritime security patrol.

It conducted naval drills with Japan Maritime Defense Force destroyer, Onami during the regional maritime security patrol, the Inter Services Public Relations (ISPR) said.

PNS Aslat, an F-22 PO Zulfiquar-class frigate, also held naval exercise with Spanish Navy frigate Canarias. The purpose of these exercises was to strengthen mutual relations and enhance mutual cooperation between navies in the region.

"Pakistan Navy believes in joint efforts to maintain law and order at sea. Joint exercises of the Pakistan Navy with international naval forces is a manifestation of Pakistan's determination for regional peace," the ISPR statement said. •

#### **FOUNDERS**

Dato Haji Syed Hussain Syed Abdul Karim (1930-2018) Datin Faridahanum Abd Kadir (1947-2006)

#### **PUBLISHER & EDITOR-IN-CHIEF**

Syed Mohd Fazilla bin Dato Haji Syed Hussain

#### **GROUP EDITOR**

M Ghazemy Mahmud

#### **EXECUTIVE EDITOR**

Mohd Hanif Ismail

SENIOR EXECUTIVE MANAGER

Duncan Looi

**CONTRIBUTING EDITOR** 

Isaak Zulkarnaen

STRATEGIC STUDIES EDITOR

Dato Dr Zakaria Ahmad

**AVIATION EDITOR** 

Ehsan Iskandar

**ELECTRONICS EDITOR** 

Mike Witt

REGIONAL CORRESPONDENT

Duncan Looi, J M Jamaluddin

**SPECIAL WRITERS** 

Shamsul Akmar, Bunn Nagara, Omar A. Amin

#### **CONTRIBUTORS**

Rusdi Mustapha, Benjamin Mahmud, Irman Moad, Suresh Abraham, H B Warimann (ASEAN) Dr Baladas Ghoshal, Pushpindar Singh (INDIA) Paolo Valpolini (ITALY) Victor Fic (NORTHEAST ASIA) Ali Abbas Rizvi (PAKISTAN) Edward Trower (AUSTRALIA) Valentin Shishlevskiy (RUSSIA/CIS) Tim Huxley, Will Fowler, Damon Bristow, John Reed, John Ford (UK/EUROPE) Prof Stephen Blank (UNITED STATES)

#### **BOARD OF DIRECTORS CHAIRMAN**

Tunku Dato' Ya'acob Khyra

#### **DIRECTORS**

Syed Mohd Fazilla Dato Haji Syed Hussain Mazlina Azlene Ahmad Marzuki

#### **CREATIVE DIGITAL MANAGER**

Mohd Rezualirwan Mohd Rosdi

#### **HEAD OF ADMINISTRATION & FINANCE**

Connie Lam

#### **ADMINISTRATION & FINANCE MANAGER**

Azree Ishak

#### **EDITORIAL AND PUBLISHING OFFICES**

SHP Media Sdn Bhd (767620 D) 815, 8th Floor, Block E, Phileo Damansara 1, 9, Jalan 16/11, 46350 Petaling Jaya, Selangor. **MALAYSIA** 

Tel: +60-3-79601148. Email: info@shpmedia.com www.adj.com.my

#### ADVERTISING SALES OFFICES

#### FRANCE/GERMANY

Emmanuel Archambeaud

We Media Solutions,

Tel: +336 1103 9652

Email: earchambeaud@outlook.fr

#### ITALY/SWITZERLAND

**Ediconsult Internazionale Srl** 

Tel: +39-010-583684. Fax: +39-010-566578

Email: difesa@ediconsult.com

#### **RUSSIA/COMMONWEALTH OF** INDEPENDENT STATES

Yury Laskin

Tel: +7-495-9112762. Fax: +7-495-9121260 Email: ylaski@mail.ru

#### UNITED STATES/CANADA/BRAZIL

Scott Chase

Chase Media LLC,

Tel: +1 301 879 1613.

Email: scottchase@verizon.net

#### MALAYSIA/REST OF THE WORLD

Sved Mohd Fazilla SHP Media Sdn Bhd,

Tel: +60-3-79601148.

Email: fazilla@shpmedia.com Website: www.shpmedia.com



For subscription and information enquiries, please contact: Mohd Hanif hanif@shpmedia.com 815, 8th Floor, Block E, Phileo Damansara 1, 9, Jalan 16/11, 46350 Petaling Jaya, Selangor. MALAYSIA.

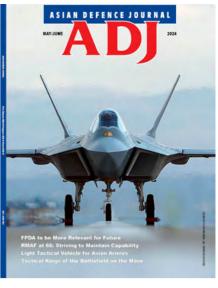
Tel: +60-3-79601148

Printed by:
Ultimate Offset Printing Plt (LLP0021004-LGN)
13, Jalan Lorong Brunei 2, off Jalan Pudu, 55100 Kuala Lumpur. Malaysia.

#### ASIAN DEFENCE JOURNAL

is published bi-monthly by SHP Media Sdn Bhd. The publisher reserves the right to accept or reject all editorial or advertising matter and assumes no responsibility for return of unsolicited manuscripts or artwork. All rights reserved. Reproduction in whole or in part prohibited without written permission. Reprints of articles appearing in previous issues may be made on request. The views expressed in this magazine are not necessarily those of the publisher





COVER: Turkish Aerospace Industries' (TAI) Kaan next-generation stealth multirole fighter jet. The prototype successfully carried out its maiden flight in February and recently made its second flight for 14 minutes and reaching an altitude of 10,000 feet. Turkiye recently offered to partner with Malaysia on further developing the project.

#### **SECURITY ISSUES**

#### **FPDA** to be More Relevant for Future

ONE of the world's oldest active defence pacts is planning to increase its qualitative edge of its annual military exercises later this year, which will indirectly remind disruptors in the region that it is here to stay.

#### **COUNTRY REPORT** RMAF at 66: Striving to Maintain

Capability and More
GUARDING the skies of Malaysia is the Royal Malaysian Air Force (RMAF), a capable air arm with its inventory of existing European, Russian and American aircraft. Despite this, the RMAF has been, and continues to operate across the vast expanse of the nation's airspace and more from strike, surveillance to humanitarian operations.

#### **SPECIAL REPORT**

#### Cooperation, Friendship or Sabre-Rattling, War Drills Continue with Rival **Powers**

WITH the Asia Pacific region in the midst of the Sino-American rivalry, the volume of military exercises across Southeast Asia involving the two powers has significantly increased. Although regional bilateral and multilateral drills involving the two rivals with Asian states are not new or neither exclusive, war games involving the US greatly outnumber those involving China.

#### **FOCUS**

#### Fast Movers: Light Tactical Vehicle for Asian Armies

A modern fighting force needs agile tough vehicles, whether it is for transportation of troops, routine patrols or as carriers of weapons and systems in the battlefield. The Light Tactical Vehicle (LTV) is a category of military vehicle designed for agility, manoeuvrability, and versatility. Compared to heavier armoured vehicles, LTVs are smaller and lighter, allowing them to navigate tight spaces, rough terrain, and even be transported by air.

#### **Tactical Kings of the Battlefield on the Move**

A self-propelled howitzer (SPH) is a powerful artillery weapon mounted on a tracked or wheeled chassis that can move under its own power. This allows it to quickly relocate and respond to battlefield situations unlike towed howitzers which require a separate vehicle to move them. Some SPHs are heavily armoured for crew protection and carry large calibre cannons that fire explosive shells over long distances to provide indirect fire support for ground troops.

#### **COMPANY PROFILE**

#### PT Inaro Tujuh Belas, Organiser of Bali International Airshow 2024

INDONESIAN company PT Inaro Tujuh Belas will be organising the Bali International Airshow 2024 in Sept 18-21. More than 80% of the exhibition booths are already secured by an impressive array of Indonesia and global brands. More than just a couple of months to the event, the organisers are ramping up the countdown to what is billed as "Southeast Asia's premier exposition for aerospace, aero technology, and defence, dedicated to propelling Indonesia to the forefront of the regional aerospace industry".

#### **Mindmatics: Towards Critical Sovereign Capability**

MALAYSIAN company Mindmatics Sdn Bhd has a long track record in the defence industry since it supplied the Army with electronic warfare capability in 2008 and was subsequently awarded maintenance contracts with such equipment. Two years ago, it won the contract to supply 1,000 Harris tactical radios. It also won the Command Control Platform (CCP) tender published in September/October 2020 with an LoA worth US\$3.76 million.

#### SHOW PREVIEW

Bali International Airshow 2024	28
DronTech Asia 2024	30
CyberDSA 2024	33
nternational SAR Conference & Exhibition 2024	3:

#### **SHOW REPORT**

DSA & NATSEC 2024

#### **REGULAR COLUMNS**

Frontline
ASEAN
Industry and Equipment News
People on the Move/Index to Advertisers

12

16

24

26

20

40

# Schedule

Official Publication

and Show Daily

Media Partner

and Show Focus

Media Partner

and Show Focus

Media Partner

and Show Foci

#### 6-9 May 2024

#### DSA & NATSEC Asia

MITEC, Kuala Lumpur, Malaysia www.dsaexhibition.com

#### 17-21 June 2024

#### Eurosatory

Parc des Expositions de Paris Nord Villepinte, Paris, France www.eurosatory.com

#### 22-26 July 2024

#### Farnborough International Airshow

Farnborough International Exhibition and Conference Centre, Farnborough, UK www.farnboroughairshow.com

#### 6-8 August 2024

#### Cyber DSA

Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia www.cyberdsa.com

#### 2-5 September 2024

#### Egypt International Airshow

El Alamein International Airport, Egypt www.egypt-air-show.com

#### 18-21 September 2024

#### Bali International Airshow

Ngurah Rai International Airport, Bali, Indonesia www.baliairshow.com

#### 25-27 September 2024

#### ADAS

World Trade Center Metro Manila, The Philippines

https://www.adas.ph/

#### 2-6 October 2024

#### **KADEX**

Gyeryongdae, South Korea www.kadexaroka.com/eng/



#### ASIAN DEFENCE JOURNAL is a

controlled circulation publication whose objective is to enhance awareness of the latest developments in defence technology, military strategy and geopolitics. It is available to senior government officials, senior military staff officers, those involved in policy making, planning and procurement and defence industry personnel. It is also available to other qualified persons. Cheques and bank drafts should be made payable to SHP Media Sdn Bhd.



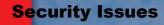


**REPRINTS**: In response to specific requests, reprints of selected articles, product profiles and armed forces profiles, which appeared in the past issues of *ADJ* are available.

RESOURCE LIBRARY: Over its past 53 years of existence, SHP Media Sdn Bhd has amassed a wealth of data and rare photographs of the Asia-Pacific defence forces and equipment that are part of *ADJ*'s extensive archives. These resources are now available for those interested in security and defence research and related activities.







# FPDA to be More Relevant for Future

#### By MG Mahmud

Advanced drones, fifth-generation fighter jets and high-altitude surveillance aircraft and warships including a carrier strike group are all set to take part in a multilateral military exercise in the strategic space of Malaysia and Singapore scheduled in October.

F-35 fighter jets from Australia, P-8 Poseidon maritime patrol aircraft from New Zealand, high altitude unmanned systems and elements of the United Kingdom's carrier strike group will join assets contributed by Malaysia and Singapore in the Bersama Lima ("Five Together") annual series of manoeuvres.

These are some of the next-generation capabilities that will be incorporated in future joint military drills under the Five Power Defence Arrangements (FPDA), which groups Australia, Malaysia, New Zealand, Singapore and the United Kingdom.

The 12th FPDA Defence Ministers' Meeting (FDMM) in Singapore on May 31, agreed to include these high-end military capabilities in exercises under the grouping. They also agreed to expand into non-conventional areas of cooperation such as counterterrorism, humanitarian and disaster relief, and maritime security.

The FDMM is the highest-level meeting of the FPDA, alternately hosted by Malaysia and Singapore. Chaired by Singapore's Defence Minister Dr Ng Eng Hen, it was attended by Australia's Defence Minister Richard Marles, New Zealand's Defence Minister Judith Collins and UK's Delegation Head Paul Wyatt.

The FPDMM is crucial in ensuring cooperation among the five member nations and strengthening international defence relations, Malaysia's Defence Minister Mohamed Khaled Nordin aims to enhance Malaysia's multi-directional



The 12th FDMM was held on the sidelines of the Shangri-La Dialogue

defence cooperation in line with the pillars of the country's Strategic Partnership Strategy. The meeting discussed recent developments in FPDA activities, including the Bersama Lima exercise in October 2023 and Bersama Shield conducted in April 2024.

Reflecting on the role of the FPDA in the region at the joint press conference after the meeting, Dr Ng said: "The FPDA is now 53 years old, and it is the 'grandfather of multilateralism'. Many things have changed since the FPDA was formed in 1971, but it remains relevant today. We will make it even more relevant for the future."

During the joint press conference, the official FPDA website was also launched. This website seeks to give additional insight to the public on how the FPDA functions as a defensive arrangement aimed at building trust and confidence in the region.

### Improving Air, Maritime, Land Force Operations

Commenting on this year's more complex exercises, Minister Richard Marles said: "This is not about China in the sense that the FPDA has been around for 53 years. What defines the FPDA and the five countries that you've got in front of you ... [is] our desire to work closely together."

Marles said Australia will be contributing F-35 Joint Strike Fighters to the Bersama Lima exercise later this year. The exercise is one of the regular exercises aimed at building the ability for FPDA countries to operate well together, as well as improving the proficiency of their air, maritime and land forces.

Pointing out that this will make it the first time a fifth-generation aircraft is to participate in Bersama Lima, Marles said: "It's an example of what we are trying to do in terms of increasing

what we are trying to do in terms of increasing the complexity of these exercises and the higher nature of them."

New Zealand Defence Minister Judith Collins said a P-8 Poseidon would be deployed to Singapore for the first time as part of the drills.

Emphasising the UK's continued firm commitment to the FPDA, UK Director General (Security Policy) Paul Wyatt said FPDA exercises and activities "will provide a path for thinking about modern challenges and the integration of modern capabilities".

"We are going to continue to adapt, modernise and to introduce new capabilities, but this is a message of continuity, not a message of expansion," he said, adding that the grouping has conducted larger exercises before involving some 200 aircraft in the 1990s.

### Constructive, Peaceful Defence Arrangement

Established in 1971, FPDA is a defence arrangement comprising Malaysia, Singapore, Australia, New Zealand and the UK to safeguard

the external defence of Singapore and Malaysia, amid the withdrawal of British forces East of Suez. It is also aimed at developing defence capabilities through seminars, visits, courses and military exercises.

Over the decades, the FPDA has been continually revised and modernised to keep pace with shifting needs and priorities. It remains relevant 53 years on, as member countries see it as playing an important role as a constructive and peaceful defence arrangement in enhancing regional cooperation and strengthening military-to-military ties.

It has navigated a complex regional environment and occasionally tense bilateral relationships while successfully evolving to meet the needs of its members. Together, they have sought to build the "unique" partnership at a measured and considered pace that is mutually agreeable. An official FPDA website has been launched, aimed at providing public exposure to the establishment history, the 3RFPDA principles (Remit, Relevance and Reassurance), and exercise activities to ensure the defence arrangements uphold regional sensitivities.

Since its formation, the FPDA has been accepted as a "net contributor" to the regional security architecture that does not target any one power. The arrangements have progressed collectively together through the years with Malaysia and Singapore consistently acting as responsive members. This commitment has survived and strengthened through ongoing and future initiatives.

### UK Underlines Strong SEA Ties

THE United Kingdom has emphasised the importance of defence alliances for regional stability and security during a tour of Southeast Asia by a top British official. "It was a huge pleasure to visit Malaysia and Thailand last week and discuss how we can continue to grow our defence cooperation," said Minister of State for Defence, Timothy George Lariston Eliot-Murray-Kynynmound.

He said the Indo-Pacific is critical to global prosperity and security, and the UK will continue to work with partners including Malaysia and Thailand to ensure the region remains free and open. A Carrier Strike Group will sail to the region and the UK Armed Forces take part in regular exercises with Thailand and Malaysia, the UK Ministry of Defence said.

In the face of increasing threats to global stability and security, Prime Minister Rishi Sunak and Defence Secretary Grant Shapps announced that the UK's defence spending would increase to US\$109.9 billion by the end of the decade.

The Minister's visit affirms the UK's steadfast commitment to work with the members of the Association of South East Asian Nations (ASEAN) to secure a free, open and prosperous Indo-Pacific region, a May 14 statement added.

Reinforcing the UK's commitment to the region, the Royal Navy has two ships operating in the Indo-Pacific – HMS Spey and HMS Tamar. HMS Spey visited Thailand last year, shortly before Thai and UK Forces partnered together during Exercise Panther Gold in July 2023.

Visiting Kuala Lumpur, Lariston met with Chief of Defence Force General Mohammad Ab Rahman and Deputy Defence Minister Adly Zahari to discuss defence cooperation both bilaterally and through the Five Power Defence Arrangements (FPDA).

At the 18th Defence Services Asia (DSA) 2024 and the third National Security Asia (NATSEC Asia) 2024 exhibitions which took place in Kuala Lumpur on May 6-9, the Minister addressed a security seminar where he spoke about the need for international alliances and clear rules to protect our values

In Bangkok, the Minister met with Thai Defence Minister Sutin Klungsang to discuss defence policy and strategy, and areas where the UK and Thailand can work together. He also met with Chief of Defence Forces General Songwit Noonpackdee and other military top brass. •



# RMAF at 66: Striving to Maintain Capability and More

**GUARDING** the skies of Malaysia is the Royal Malaysian Air Force (RMAF), a capable air arm with its inventory of existing European, Russian and American aircraft. Despite this, the RMAF has been, and continues to operate across the vast expanse of the nation's airspace and more from strike, surveillance to humanitarian operations.

A parade was held at the Kuantan Air Base in Pahang state to commemorate its 66th year since its establishment on June 2, 1958 at the height of the Malayan Emergency. As the main pillar in defending the country's airspace, analysts have said that the transformation of the RMAF and its development must continue unabated to maintain its status as a credible air force to meet current and future challenges.

As defence spending rises in the region, ASEAN air forces have already gone forward with plans for fifth generation stealth fighters or purchasing fourth generation plus fighters to maintain air superiority. In this context, the RMAF is still locked in the process to modernise its fleet due to force development programme delays.

#### **Preserving Capability**

Last November, the RMAF's 3rd Squadron attained 5,000 flight hours without incident using the Government Operated, Company Own (GOCOM) Leonardo AW139 helicopter. The four AW139s owned by Weststar Aviation Services have been operated by the air force since December 2021 utility transportation , VIP flight, medical evacuation (MEDEVAC), casualty evacuation (CASEVAC) and body evacuation (BODEVAC).

In March this year, the RMAF's Airbus H225M helicopter fleet achieved a momentous 30,000 flight hours since 2012, one of the highest in Asia-Pacific. Furthermore, the event also

celebrated the first successful installation of an enhanced main gear box (eMGB) outside of Europe on one of the Malaysian H225Ms. The eMGB provides an improved mechanical system and an innovative monitoring feature that reduces the fleet's maintenance workload.

In another milestone, the RMAF's Airbus A400M successfully deployed paratroopers for the first time via MC1-1C and MC1-1D parachutes in a Trial Static Jump. It is the first time an A400M user nation has done so, as other operators only use the European made Ensemble de Parachutage du Combattant (EPC) parachutes.

A second RMAF F/A-18D Hornet successfully completed its Local Planned Maintenance 12 Years (LPM12Y) carried out by Rosebank Engineering. The LPM12Y is a part of Depot Level Maintenance (DLM) for the F/A-18D which has been done domestically since 2021, with M45-07 being the second Hornet to complete its LPM12Y which started on January 5, 2023 and ended on April 15, 2024. The maintenance encompassed a comprehensive inspection of the airframe, and assessment of any damages as well as repairs to any structural damage caused by fatigue or wear and tear. Generally, the fleet is required to undergo such maintenance overseas, but the entire programme was carried out locally for the second time, a feat attributed to the combined force of the RMAF and aerospace industry both domestic and abroad

The Labuan Air Base saw comprehensive upgrades to its facilities completed in June in order to accommodate the Hawk Squadron which would likely be based there permanently. The federal government approved a USD23 million allocation for further infrastructure development, including a new headquarters building, base command and control centre



(BCCC) and others.

#### **On Course Towards Modernisation**

In December 2023, Thales won a deal to supply the RMAF with a new Ground Master GM400 Alpha long-range radar. Malaysia was previously a launch customer of the preceding GM400 radar. The firm will deliver a GM400 Alpha complete with radar station infrastructure, including access roads, power source, air conditioning, telecommunications systems, radome and associated logistics. Its high mobility, high availability, easy upgradeability and







Defence Minister Mohamed Khaled with the TAI Anka during his recent trip to Turkiye.

seamless integration gives users enhanced air surveillance and defence capabilities.

Three units of Turkish Aerospace Industries (TAI) Anka-S medium-altitude long endurance (MALE) unmanned aerial systems (UAS) ordered for the RMAF are progressing well and are on schedule to be delivered as per the agreement. Specialised equipment requested by Malaysia and training of RMAF personnel on its operation are also underway. Malaysia is the first in the region to order the Anka and is expected to acquire another batch of three drones under the 13th Malaysia Plan (2026-

For the Korean Aerospace Industries (KAI) FA-50 aircraft acquisition, it was said that the first four units should arrive in October 2026 while the remaining 14 are scheduled to arrive by August 2027. Six RMAF pilots are due for comprehensive training on FA-50 operations in early 2026, with three to six months of training to be conducted at the Republic of Korea Air Force's (ROKAF) Gwangju Air Base.

It was reported that the Leonardo ATR-72 maritime patrol aircraft (MPA) programme would experience slight delays caused by final





Air defence systems are also on the RMAF shopping list.

#### **Country Report**

configuration issues and that ground-based support and communications capabilities of Kuantan Air Base are presently being upgraded to support operations of the two aircraft in the future which would begin arriving in 2026. Six RMAF personnel from the MPA Overseas Project Team have been stationed in Turin, Italy since August 2023 to oversee the project.

In Malaysia's 2024 Budget, it was announced that the RMAF would receive funding to procure a dozen new helicopters, though no candidates for the new programme have been announced thus far. RMAF chief Gen Mohd Asghar Khan stated that the procurement of the aforementioned helicopters is targeted to be finalised by the end of 2024 via open tender. The new batch of helicopters are aimed to further enhance combat search and rescue (CSAR) as well as SAR capabilities. The helicopters would have to be armed to provide fire support for Army troops or air missions.

The RMAF is restarting the efforts to acquire the Kuwaiti Air Force's inactive F/A-18C/D Hornets, after initial discussions were several years ago. It was recently announced that an RMAF delegation will be in Kuwait in June, for a technical visit to discuss the prospective acquisition. The fleet of more than 30 Kuwaiti Hornets have been the target of several interested parties due to its relatively low flight hours and good condition. Earlier reports stated that Kuwait is unlikely to part with the fleet after it requested to upgrade the Hornets while awaiting its delayed delivery of newer F/A-18E/F Super Hornets.

The RMAF also received approval from the US State Department for the possible sale of 10 AN/AAQ-33 Sniper Advanced Targeting Pods (ATP) from Lockheed Martin to be used on the fleet of F/A-18D Hornets. The USD80 million sale was approved after Malaysia's government submitted a request for the ATPs; they could also possibly be equipped on the RMAF's future fleet of FA-50 aircraft. A US Defense Security Cooperation Agency (DSCA) statement stated that the deal included "technical data and publications; personnel training; software and training equipment; US Government and contractor engineering, technical, and logistics support services; and other related elements of logistics and program support".

The RMAF is also in the market for ground based air defence (GBAD) systems to complement its fighter capability in defending Malaysian airspace. According to air force chief Gen Asghar, the service's air defence strategy has outlined three initiatives, which are to detect, deter and deny. Therefore, the RMAF is currently working towards improving their surveillance and detection capabilities by applying the latest in radar technology. Aside from the acquisition of a long range air defence radar, purchasing medium range air defence (MERAD) systems are also on the horizon.

#### **Exercises with Regional Forces**

In line with the country's defence diplomacy, the RMAF is an active participant in bilateral and multilateral engagements with regional partners and beyond. In January, the Royal Brunei Air Force (RBAF) and its Airbus C295 transited through the RMAF airbase in Subang where the RBAF crew visited the A400M-equipped 8th Squadron. In the process, aircrew from both sides shared their expertise and discussed the operations of both platforms.

In May, the RMAF carried out the sixth bilateral Search and Rescue Exercise (SAREX) MALSING with the RSAF at Kuantan Air Base. With both forces deploying the H225M platforms to plan and execute joint SAR operations while simultaneously enhancing their professional relationship and fostering cooperation as well as interoperability.

On May 25, the RMAF conducted a joint air patrol, PATKOR MALINDO, with their Indonesian Air Force (TNI-AU) counterparts to secure the Malacca Strait. Dispatching F/A-18D Hornets alongside TNI-AU F-16s, the joint force patrolled the maritime artery where some 94,000 vessels pass through the Malacca Strait annually and account for 30% of all goods traded worldwide.



Maintaining regional partnerships and beyond are an important role for the RMAF.



6 - 8 AUG 2024 | KUALA LUMPUR CONVENTION CENTRE

# NAVIGATING TOMORROW'S CYBER AND DIGITAL FRONTIER



WWW.CYBERDSA.COM f in @ Cyber DSA





























#### SPECIAL REPORT

# Cooperation, Friendship or Sabre-Rattling, War Drills Continue with Rival Powers

**WITH** the Asia Pacific region in the midst of the Sino-American rivalry, the volume of military exercises across Southeast Asia involving the two powers has significantly increased. Although regional bilateral and multilateral drills involving the two rivals with Asian states are not new or neither exclusive, war games involving the US greatly outnumber those involving China, according to recent reports. Analysts have said that there are multiple reasons for such exercises. Among them are to enhance interoperability among the participating forces against a perceived enemy or as part of defence diplomacy as military exercises can also be used to build trust between nations.

#### Friendship with the Dragon

In April, China announced it would hold the China-Bangladesh Golden Friendship 2024 exercise, the first such collaboration between the two countries. Bangladesh has emerged as the second largest customer of China's defence exports, to the extent of operating two refurbished Chinese Type 035B diesel-electric submarines in the China-built Pekua Naval Base to enhance Bangladesh's naval power after the demarcation of their maritime borders with India and Myanmar, a move which concerns India from its economic, security and foreign policy interests. The strengthening Chinese influence over Bangladesh could possibly affect India's strategy in the region, and result in Bangladesh being stuck in a tug-of-war between the two regional powers.

On May 16, China and Cambodia kicked off the 15-day Golden Dragon exercise which looked to train against terrorism and humanitarian relief. Involving 1,315 Cambodian troops, 760 Chinese personnel and 11 Cambodian warships, the People's Liberation Army's (PLA) Navy (PLAN) also deployed one of their Type 071 amphibious transport dock vessels Qilianshan and two Type 056 missile corvettes Wenshan and Bazhong which have been docked at the Ream naval base's new pier since last December, a pier China helped to build.

China-Cambodia ties have been increasingly strengthened in recent years and not surprisingly as most of Cambodia's military equipment are made in China, even since the country's inception. The Army's commander in chief Gen Vong Pisen acknowledged China's efforts in supplying new equipment and assisting in the upgrade of military facilities in the country, adding that China's contributions would help build deeper cooperation and trust between both forces. The exercise was first held in 2016.

#### Shoulder-to-Shoulder

The largest annual bilateral drills between the Philippines and the US, Exercise Balikatan was held from April 22 to May 10. Meaning "shoulder-to-shoulder" in Tagalog, this 39th edition of the drills involved almost 17,000 troops even from Australia and observers from over a dozen countries including Brunei, Canada, France, Germany, Britain, India, Indonesia, Japan, Malaysia, New Zealand, Singapore, Thailand and Vietnam.

Balikatan comes at a time where Japan, the Philippines and the US are seemingly heightening security ties at a first-ever trilateral summit of the three countries while tensions rise with China over the latter's increasingly reportedly aggressive behaviour in the South China Sea.

As a result, the Philippines is looking to step



China has been a major partner of several militaries in the region and other continents.

up its military capabilities with a USD35 billion modernisation programme. The country's new Comprehensive Archipelagic Coastal Defense Concept (CACDC) will expand the role of its armed forces well into their exclusive economic zone (EEZ).

Balikatan recorded a number of firsts, such as the firing of the newly acquired LIG Nex 1 SSM-700K C-Star sea-skimming surface-to-surface anti-ship cruise missile by the PN frigate BRP Jose Rizal. Following that, there was the deployment of the Typhon Mid-Range Capability (MRC) missile system which is capable of firing SM-6 and Tomahawk missiles.

The French Navy also marked their maiden participation in a "Multilateral Maritime Exercise in the Philippines' EEZ" with Philippine Navy and US Navy warships. For the first time, Balikatan involved holding joint naval drills beyond the Philippines' 12 nautical miles of its EEZ.

Under the umbrella of the Philippine-US Enhanced Defence Cooperation Agreement (EDCA), the exercise treks into uncharted territory with drills planned at three of four new staging sites, one of which is the newly designated air base on Balabac island opposite the disputed Spratly islands. With drills simulating the armed recapture of island territories and saw troops mobilise from Cagayan province's Lal-lo airport to secure Batanes, one of the Philippines' northernmost islands, just 200 kilometres away from Taiwan. The drills drew warnings from China against countries flexing "gunboat muscles".

#### Tiger Strike in Malaysia

Paratroopers from the Malaysian Army's elite 10th Parachute (PARA) Brigade recently concluded the bilateral Tiger Strike 2024 exercise with the US Marine Corps (USMC) and US Navy (USN). Held from May 29 to June 6 around Kuala Terengganu, 300 airborne troops trained with 1,100 Marines and sailors from the USMC's 15th Marine Expeditionary Unit (MEU) embarked aboard the San Antonio-class landing platform dock USS Somerset.

The exercise focusing on Subject Matter Expert Exchanges (SMEE), Command Post Exercises (CPX), Field Training Exercises (FTX) gave participants a platform to share training practices across a myriad of military skills

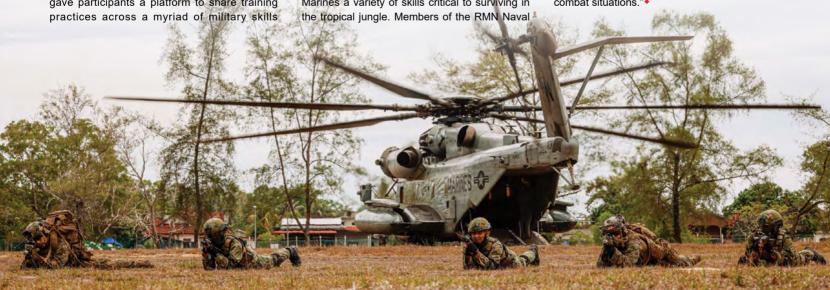


including amphibious operations, live-fire, the employment of unmanned aerial systems (UAS), urban operations, jungle operations and survival, reconnaissance and multi-domain awareness (MDA), engineering, medical as well as the enhancement of communication and coordination between all three forces. Throughout the exercise, various air, naval and ground assets were used, including the US Navy's Landing Craft Air Cushion (LCAC), the USMC's CH-53E Super Stallions, LAV-25 armoured reconnaissance vehicles, a Royal Malaysian Air Force's (RMAF) H225M helicopter and the Royal Malaysian Navy's (RMN) Kedah-class offshore patrol vessel (OPV) KD Terengganu.

Across the weeklong drills, both sides were able to carry out true amphibious and air assault operations involving all three domains, which are the sea, air and land. Malaysian troops and vehicles joined their Marine counterparts onboard the Somerset before deploying back to shore via the LCAC and Super Stallions to launch amphibious assaults. US personnel were also trained on jungle survival skills in the Den of Lions, where survival instructors from the 18th Battalion of the Royal Malay Regiment (RMR) taught Marines a variety of skills critical to surviving in the tropical jungle. Members of the RMN Naval

Special Warfare (PASKAL) and 10th PARA Pathfinder Company were also on hand, operating together with the 15th MEU Reconnaissance Company to execute tactical beach insertions on the beachhead.

For the closing ceremony, Marines and paratroopers from the 9th Battalion of the RMR conducted a combined amphibious assault at Sri Pantai Camp's Aslan's Urban Competency Area (AUCA). Attended by the Army's deputy chief, Lt Gen Tengku Mohd Fauzi, USN Capt Tate Robinson, 10th PARA commander, Maj Gen Khairul Azmizal, US Defence Attache USN Capt Pasit Somboonpakron and senior officials. Lt Gen Fauzi said Tiger Strike successfully enhanced operational capabilities and interoperability of both forces. "We conduct joint training with the United States forces as they possess experience, the platforms, and capabilities to carry out operations. The most important aspect is that besides learning operational and strategic elements, all of our personnel involved can use this knowledge to train other members. In today's world, we cannot work alone, hence the cooperation with the United States forces. The meticulously planned training provides invaluable experience in handling real combat situations." •



# Fast Movers: Light Tactical Vehicle for Asian Armies

A modern fighting force needs agile tough vehicles, whether it is for transportation of troops, routine patrols or as carriers of weapons and systems in the battlefield.

The Light Tactical Vehicle (LTV) is a category of military vehicle designed for agility, manoeuvrability, and versatility. Compared to heavier armoured vehicles, LTVs are smaller and lighter. This allows them to navigate tight spaces, rough terrain, and even be transported by air.

Analysts have said that it is a development of the Mine Resistant Ambush Protected (MRAP) vehicles developed as a result of the insurgency wars of the early 2000s such as Iraq and Afghanistan.

Emphasising mobility over heavy armour, LTVs typically feature powerful engines, high ground clearance, and good suspension systems, making them adept at handling offroad conditions. LTVs can fulfil various roles depending on their configuration and equipment. Some common uses includes as Troop Transport, Reconnaissance, Command and Control and Logistics. As Troop Transport, LTVs can carry soldiers and equipment to combat zones or patrol areas. As Reconnaissance, its agility allows LTVs to scout ahead and gather intelligence. As Command and Control, LTVs can serve as mobile command centres for battlefield coordination. And as Logistics, LTVs can be used for transporting supplies and equipment.

LTVs aren't heavily armoured like tanks, but they often carry light to medium weaponry for self-defence. This might include machine guns and heavy machine guns, grenade launchers, or light mortars.

#### LTVs in Southeast Asia

Compared to heavier vehicles, LTVs offer several advantages, such as lower cost, deployment flexibility and other operational advantages. The choice of LTV by a particular nation depends on various factors, including budget, terrain requirements, and operational needs. As the region's security landscape continues to evolve, LTVs are sure to play an increasingly important role in Asian militaries. Overall, Light Tactical Vehicles are a valuable asset for modern militaries, providing a balance between mobility, firepower, and affordability.

Southeast Asian nations are increasingly focusing on modernising their militaries, and light tactical vehicles (LTVs) are becoming a crucial part of their arsenal. These agile and versatile vehicles are ideal for navigating the region's diverse terrain, from dense jungles to mountainous borders. Asian Defence Journal looks at some of the prominent LTVs seen in Southeast Asia:



Cendana Auto's Fitted For Radio vehicle in UN livery.

#### Weststar GK-M1 (Malaysia)

Developed by Malaysian defence contractor Weststar Defence Industries, the GK-M1 is a 4x4 LTV designed for troop transport, reconnaissance, and patrol missions. It can be armed with a variety of light and medium weaponry, making it a flexible platform for various battlefield roles.

The GK-M1 boasts a 4x4 drivetrain, providing good off-road capabilities for navigating Malaysia's diverse terrain. Its relatively compact size allows for easier manoeuvring compared to larger vehicles

While not a heavily armoured vehicle, the GK-M1 offers some level of ballistic protection for its occupants against small arms fire and shrapnel. The GK-M1 can be equipped with various weapon systems depending on the mission requirements. This might include machine guns, grenade launchers, or weapon mounts for crew-served weapons.

The Malaysian Army has equipped a number of its infantry battalions with the Weststar GK-M1 since 2015.

#### Cendana Auto 4x4 (Malaysia)

Developed and manufactured locally by Cendana Auto, this 4x4 LTV is a workhorse for the Malaysian Army. It bears a resemblance to the American Humvee, offering modularity for various missions. This allows for different configurations like troop carriers, machine gun platforms, mortar carriers, and even radio vehicles.

Powered by a single-stage turbo diesel engine providing a maximum speed of around 170 km/h.

The vehicle offers basic ballistic protection for the crew. It can be armed with various weapon systems depending on the variant, including machine guns, grenade launchers, and anti-tank guided missiles (ATGMs) for specific roles.

The Cendana Auto 4x4, which is in service with a number of Malaysian Army infantry battalions, is widely used by the Army for patrol duties, border security, and internal security operations. It's also seen in UN peacekeeping missions in the fitted for radio configuration.



### Maung 4x4 Tactical Vehicle and Komodo 4x4 Recon (Indonesia)

These two Indonesian-made LTVs is known for its durability and off-road capabilities. The Maung and Komodo, both products of PT Pindad (Persero) are used extensively by the Indonesian Army for patrol duties, border security, and internal security operations.

The Maung 4x4, officially introduced in 2020, is intended for various military applications, including, troops transport, reconnaissance and patrols. It can carry up to four personnel and their equipment. Its manoeuvrability makes it suitable for scouting missions. The Maung can be deployed for border security or internal security operations.

The Maung is known for its agility and offroad capabilities, making it ideal for navigating Indonesia's diverse terrain, from jungles to mountains. It has a reported maximum speed of 120 km/h and a cruising range of up to 800 km.

While not an armoured fighting vehicle, the Maung offers some level of ballistic protection for its occupants. The Maung can be equipped with various weapon systems depending on the mission requirements. This might include machine guns, grenade launchers, or weapon mounts for crew-served weapons.

The Maung can be configured in several ways to accommodate the user requirement, with the full specification or a more lightweight configuration as a rapid intervention vehicle.

The Komodo is primarily used for military applications, including internal security, counter terrorism, escort duties and limited combat roles.

It can be used for patrolling, riot control, and other situations requiring a balance of mobility and protection. It can also be used when responding to hostage situations or other close-quarter combat





The South Korean KLTV in service with the ROK military.

scenarios, or for protecting convoys or VIPs. While not a heavily armoured fighting vehicle, it can provide some protection for troops in low-intensity conflicts.

The Komodo boasts a powerful engine and good suspension, making it agile and manoeuvrable on various terrains. The monocoque hull offers bulletproof protection against up to 7.62mm calibre rifle rounds and handgun fire. This level of armour allows the Komodo to operate in situations where basic ballistic protection is necessary.

A weapon station on top allows for mounting various armaments, such as machine guns, grenade launchers, or automatic grenade launchers. The specific weapon system depends on the mission requirements.

The Komodo can typically carry a crew of two to five personnel depending on the variant. Additional space is available for equipment or extra passengers.

There are a few reported variants of the Komodo: the standard troop carrier – this is the most common version, designed for transporting personnel and equipment; command vehicle – This variant is equipped for communication and battlefield coordination; and the ambulance – a medical variant used for battlefield casualty evacuation. PT Pindad is also marketing a variant of the Komodo equipped with man portable air defence system.

The Komodo has a top speed of 80km/h and a range of 450 km with a 215 hp diesel engine with turbo charger intercooler. The vehicle is equipped with thermal vision for night driving.

### Bushmaster Protected Mobility Vehicle (PMV) (Australia)

The Australian-made Bushmaster PMV is a

popular choice for several Asian nations, including Indonesia and Japan. This well-protected LTV by Thales Australia provides a high level of crew survivability in combat situations.

The Bushmaster PMV is a multi-role combat vehicle designed for various battlefield tasks, including troop transport, reconnaissance, command and control and engineering.

It can safely carry up to ten infantry soldiers and their equipment to combat zones or patrol areas. Its manoeuvrability allows it to scout ahead and gather intelligence. Bushmasters can also be configured as mobile command centres for battlefield coordination. Apart from that, specific variants can be used for engineering tasks like mine clearance or route reconnaissance.

A key strength of the Bushmaster is its robust protection system. The welded steel hull offers excellent ballistic protection against small arms fire, artillery shrapnel, and Improvised Explosive Devices (IEDs). The distinctive V-shaped hull deflects the blast of explosions away from the crew compartment, enhancing survivability against landmines.

An automatic system extinguishes fires within the vehicle. The Nuclear, Biological, and Chemical (NBC) air filtration system protects the crew from hazardous materials, while run-flat tires allow the vehicle to continue operating even after tire punctures.

Indonesia received 15 Bushmaster PMVs in August 2023. These vehicles are intended to enhance the capabilities of the Indonesian peacekeeping forces participating in United Nations Peacekeeping Operations (UN PKO). Indonesia reportedly has ordered 50 examples of a local variant called Sanca for its peacekeeping operations overseas and for its special forces,

#### **FOCUS**

the Kopassus

Japan currently possesses eight Bushmaster PMVs. The initial order of four Bushmasters was placed in April 2014. A second order for four additional Bushmasters was received in 2018. These vehicles are primarily used by the Japan Ground Self-Defense Force (JGSDF), specifically the Central Readiness Regiment (CRR). The CRR's mission focuses on overseas contingency operations, such as evacuating Japanese citizens from crisis zones. The Bushmaster's armor protection and off-road capabilities make it wellsuited for these types of missions.

#### Stevr Survivor (Austria)

The Steyr Survivor is a versatile Austrian-made LTV. It can be configured for various roles, including troop transport, reconnaissance, and command and control.

The light armoured vehicle is designed and manufactured by the Austrian company Stevr Defence (now part of General Dynamics European Land Systems). It is known for its versatility, mobility, and protection, making it a valuable asset for military and security applications.

The Survivor offers a good balance between weight and protection. The modular armour system allows for various levels of ballistic protection depending on the mission needs. The base model can typically withstand small arms fire and shrapnel. Additional armour kits can be added for enhanced protection against heavier weaponry.

The Steyr Survivor is known for its excellent off-road capabilities. It has powerful engine and suspension system: These enable it to navigate rough terrain effectively. Its relatively compact size: This allows for better manoeuvrability in tight spaces compared to larger armoured vehicles.

The Survivor can be equipped with various weapon systems for self-defence or offensive operations. This might include a machine gun station on the roof, grenade launchers, or light cannons. The specific armament depends on the configuration and mission requirements.

Thailand acquired an undisclosed number of Steyr Survivor 4x4 Light Armored Vehicles (LAVs) in the mid-2000s.

The Survivors' manoeuvrability and armour protection made it suitable for patrolling Thailand's borders and maintaining internal security.

Philippine is a user of another Steyr product, the Steyr Trooper.

#### **URO VAMTAC (Spain)**

The URO VAMTAC (Vehículo de Alta Movilidad Táctico, meaning "High Mobility Tactical Vehicle") is a successful Spanish-made 4x4 military vehicle known for its off-road prowess and versatility. The Spanish URO VAMTAC is a highly mobile LTV. This 4x4 vehicle is designed for operations in rough terrain and can be equipped with various weapon systems.

Designed and manufactured by UROVESA



Australia's Bushmaster PMV has seen use in various conflicts, including the Russia-Ukraine conflict.

(URO Vehículos Especiales, S.A.), the VAMTAC is a successful export product for Spain. The Spanish Armed Forces are the primary user, with over 2,000 VAMTACs delivered.

Malaysia has acquired a number of URO VAMTACs. Among others, its Rapid Deployment Force which primarily consisted of the 10th Para Brigade (Airborne), is equipped with the URO VAMTAC.

Singapore introduced the URO VAMTAC ST5 into its service around 2015, with the first vehicles spotted in holding facilities. The URO VAMTAC was introduced as a replacement for the older Mercedes-Benz G-Class and possibly other light utility vehicles.

#### **Kia Light Tactical Vehicle (South Korea)**

The Kia Light Tactical Vehicle (KLTV) is a family of military vehicles developed and manufactured by Kia Motors specifically for the needs of the South Korean armed forces. It's a more modern and comprehensive solution compared to older products from the company.

Introduced in 2015, the KLTV is a response to the South Korean military's need for a modern and adaptable light tactical vehicle platform. It prioritises mobility, protection, and modularity to fulfil various missions.

The KLTV boasts a powerful engine, high ground clearance, and four-wheel drive, allowing for excellent off-road capabilities. While not a heavily armoured vehicle, the KLTV offers improved ballistic protection. The level of protection can be enhanced with additional armour kits depending on the variant and mission requirements.

A key strength of the KLTV is its modular design. The basic chassis can be adapted into various configurations. Variants of the KLTV includes:

KLTV141: An armoured personnel carrier (APC) variant with enhanced ballistic protection.

This variant, also known as the K151 Raycolt, is sometimes referred to as the "Kia Light Tactical Vehicle Weapon Carrier" due to its capability to mount weaponry.

KLTV240: A troop carrier variant designed for transporting personnel and equipment.

KLTV280: A multi-purpose vehicle with a cargo deck for various uses, including transporting troops, cargo, or specialised equipment.



September 20 18-21 24 INTERNATIONAL Ngurah Rai International Airport Bali, Indonesia

WHERE AEROSPACE EXCELLENCEMEETS DEFENSE INNOVATION

#### TRADE REGISTRATION IS NOW OPEN

Register Today and be part of the future of aviation in Indonesia!

baliairshow.com



### **GET IN TOUCH**

International

#### Vivian Koo

- H +65 9692 4289
- ▼ vivian@inaro17.com
- sales@baliairshow.com
- www.baliairshow.com

80%

#### Indonesia

#### Lulu Fazriah

- □ +6282125808028
- +62 21 29125577
- +62 21 29125566

Supported By

■ lulu@inaro17.com

Hosted By





















A self-propelled howitzer (SPH) is a powerful artillery weapon mounted on a tracked or wheeled chassis that can move under its own power. This allows it to quickly relocate and respond to battlefield situations unlike towed howitzers which require a separate vehicle to move them. Some SPHs are heavily armoured for crew protection and carry a large calibre cannon that fires explosive shells over long distances to provide indirect fire support for ground troops.

Some of the most famous SPHs include the American M109 Paladin and the German Panzerhaubitze 2000. They have been used in numerous conflicts around the world, including in the Ukraine-Russia and Israel-Hamas conflicts, and they continue to be a vital part of modern militaries.

Many armed forces of Asian countries are looking either to introduce or add additional SPHs into their arsenal and are shopping around from western as well as Asian manufacturers.

The procurement of SPHs in Asia reflects the growing emphasis on regional militaries' modernisation and self-defence capabilities. It also signifies the growing focus on enhancing artillery firepower and improving overall defence preparedness in the region. These powerful weapons provide significant firepower and mobility for land forces in the region.

Here Asian Defence Journal looks at some of the recent developments related to the SPH.

#### **SPH** in Asia

Several countries in Asia possess SPHs as part of their military arsenals. Here are some of the nations with notable SPH deployments:

Singapore: The Singapore Armed Forces (SAF) utilises the Singapore Self-Propelled Howitzer Primus (SSPH), developed by Singapore Technologies Kinetics (ST Kinetics). Introduced in 2003, the Primus is known for its compact size, allowing for swift deployment and firing position changes.

Thailand: The Royal Thai Army employs a mix of SPHs, including the American-made M109A5 Paladin, Israeli-made ATMOS 2000 mounted on 6x6 10-tonne Tatra truck (also known as the M758 ATMG) and the French-made CAESAR. The M109A5 is a well-established platform known for its firepower and accuracy, while the ATMOS 2000 and CAESAR offers a more strategically mobile design with advanced fire control systems. The M758 ATMG (Autonomous Truck-Mounted Gun) is a Thai modification of the Elbit Systems ATMOS 2000 SPH. Thailand integrates the ATMOS 2000 155mm howitzer system with a 10-ton Tatra 6x6 truck chassis produced by the Defence Technology Institute (DTI) of Thailand.

Indonesia: The Indonesian Army fields the American-made M109A4-BE and the Frenchmade CAESAR and AMX Mk-61 SPHs. The CAESAR is a lighter-weight SPH compared to the M109 and AMX Mk-61, offering greater mobility on the road. Indonesia's first order for CAESAR howitzers came in February 2013. They acquired 37 CAESAR units for \$240 million. In February 2017, the country placed an additional order for 18 CAESAR systems, bringing their total inventory

to 55 units.

Vietnam: The Vietnamese People's Army has a number of SPHs in its inventory, including the Soviet-era 2S1 Gvozdika and 2S3 Akatsiya and is looking to add South Korean K9 Thunder to its arsenal.

Philippine: The Philippine Army acquired ATMOS 2000 SPHs manufactured by Elbit Systems of Israel. The Philippines received a total of 12 ATMOS 2000 howitzers in December 2021. These howitzers were deployed to the 10th Field Artillery Battalion "Rolling Thunder" in September 2022. The ATMOS 2000s are intended to bolster the Philippines' firepower for internal security operations, particularly against terrorist groups.

Malaysia: The Malaysian Army has a long standing requirement for SPHs to support its combined arms division. Among the contenders are the French CAESAR, Turkish Yavuz and Slovakian EVA. However, the procurement plan continues to be dogged by controversies after controversies. The recent strengthening of defence relationship between Malaysia and Turkiye points to Yavuz returning as a leading contender.

However, the CAESAR remains a strong contender for the Malaysia programme. In February 2024, the French Ministry of Defence placed an order for 109 new CAESAR 6x6 MkII SPHs. The order signifies a continued commitment to modernising the French Army's artillery capabilities.

Cambodia: The Royal Cambodian Army has Chinese-made PCL-09 (also known as CSD/SH1 for the export version) SPHs in service.

Laos: The Lao People's Armed Forces has a



#### **FOCUS**



Myanmar is reportedly one of the ASEAN countries operating the Norinco SH-15.

mixture of Soviet-era and new Chinese-made SPHs in the form of 2S3 Akatsiya and PCL-09 (or CS/SH1). Laos also uses 122-HL-70 SPHs.

Myanmar: The Myanmar Army is another user with a mix of Soviet-era and newer Chinese-made SPHs in the form of 2S1U Gvozdika and SH1. Myanmar also has B-52 Nora SPHs from Serbia in its inventory. The Myanmar Army have extensively relied on artillery and air power in its fight against the People's Defence Force and other armed groups in the country.

India: Following tensions with China in 2020, India actively invested in bolstering its artillery capabilities. The South Asian country has acquired the K9 Vajra, a 155-mm, 52-calibre tracked SPH manufactured in India by Larsen & Toubro (L&T) under a technology transfer deal with South Korea. The K9 Vajra offers superior mobility and firepower compared to towed howitzers, allowing for quicker deployment and response to border threats. India is also developing its indigenous SPHs.

Pakistan: The Pakistan Army utilises a mix of SPHs, including the Chinese SH-15 and foreign-acquired options like the M109A5 Paladin and

M110A2 from the United States. The procurement of the SH-15 155mm SPH includes a transfer of technology programme to enable it to be manufactured by local contractor Heavy Industries Taxila.

Bangladesh: The Bangladesh Army has introduced the B-52 Nora SPHs from Serbia into its inventory. The Bangladeshi examples are equipped with SAGEM Sigma 30 inertial navigation platform system for autonomous navigation and pointing.

South Korea: South Korea possesses a powerful SPH known as the K9 Thunder: The 155mm SPH is a domestically-designed and produced workhorse of the South Korean artillery. Known for its mobility, accuracy, and firepower, the K9 Thunder is deployed in large numbers by the South Korean Armed Forces.

The K9 Thunder has also enjoyed export successes and has won numerous contracts around the world. In December 2023, Poland signed a contract for 152 K9 Thunder howitzers, with deliveries expected between 2025 and 2027. An additional order of 100 K9 howitzers for India was confirmed in November 2023 by



Russia has also marketed the 2S19 Msta-S and other vehicles for export.

# Several types of SPH by Ukraine in conflict with Russia

The domestically developed 2S22 Bohdana 155mm SPH boasts a wheeled chassis for manoeuvrability and a NATO-standard calibre for compatibility with allied ammunition.

Meanwhile, Germany has supplied Ukraine with Panzerhaubitze 2000 (PzH 2000) SPHs. Renowned for their accuracy and advanced fire control systems, these tracked SPHs provide significant firepower on the battlefield.

Alongside the Bohdana and PzH 2000, Ukraine has received numerous 155mm SPH from various countries, including the French CAESAR and the American M109 variants.

The deployment of SPHs has been crucial for Ukraine in this conflict. Their mobility allows for quicker relocation and response compared to towed howitzers, while their long range and firepower offer a significant advantage in artillery duels.

On the Russian side there are several SPHs in the conflict, among them variants of the Msta-S armoured tracked SPH and the heavier 2S7Pions. The 2S19 Msta-S is a 152mm self-propelled howitzer which entered service in 1989 as the successor to the 2S3 Akatsiya, which is also deployed by the Ukrainians.

It is key to note that both sides use the same heavy artillery weapons made in the Soviet Union and later Russia. The 2S7 Pions 203mm SPH, which weighs 51 tons and does not have a turret, but an open deck for the twelve meter long 203mm gun barrel. This cannon fires 103 or 110 kg shells 37.5 kilometers, or 55.5 kilometers using a rocket assisted shell.

Hanwha Aerospace, the K9 Thunder manufacturer. Meanwhile, Estonia signed a new contract for 12 additional K9 Thunder howitzers in January 2023.

In December 2021, Australia signed a contract to purchase AS9 SPHs, which are essentially K9 Thunders manufactured by Hanwha Defense Australia under license and incorporating some Australian-made components. This initial order included 30 AS9s (K9 Thunders) along with 15 AS10 armoured ammunition resupply vehicles. The first two AS9s and one AS10 are expected to be delivered from South Korea by the end of 2025, with production of the remaining vehicles commencing in Australia by late 2024.

# ADAS 2024



5th Asian Defense and Security Exhibition

WORLD TRADE CENTER METRO MANILA

25-27 SEPTEMBER 2024

www.adas.ph

# BUILDING ON A DECADE OF CAPABILITY MODERNIZATION













#### SUPPORTED BY





























#### **ORGANIZED BY**



#### For inquiries

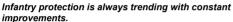
Sales@adas.ph

+63 917 512 3200 (Philippines)

+65 8383 8011 (International)

#### SHOW REPORT:





**THE** Defence Services Asia 2024 exhibition has maintained its trajectory of being the best defence show in the region notwithstanding the steady post-pandemic increase in defence expenditure in the region, as various countries strive to modernise their armed and security services.

Held every two years, top brass and high level officials have said that it showed good progress in terms of organisation and display of new defence and security equipment on displays and experts on hand as well as lauding the relevant conferences and bilateral meeting to enhance defence cooperation.

Officially the 18th Defence Services Asia (DSA) 2024 and the third National Security Asia (NATSEC Asia) 2024, the joint-exhibition was held at the Malaysia International Trade and Exhibition Centre (MITEC) in Kuala Lumpur on May 6-9.

Hosted, supported and co-organised by the DSA Exhibition and Conference Sdn Bhd, Malaysian Ministry of Defence and Ministry of Home Affairs, DSA 2024 & NATSEC Asia 2024 was billed as the biggest and most efficiently-organised defence and homeland security show in Asia, showcasing world's most advanced technologies, systems, hardware and electronic warfare that the market has to offer.

The trade show lived up to this, marking a resounding success, drawing industry giants and government decision-makers along with military delegates from all over the world. The show, forum and seminars associated with it provided an international and regional atmosphere at the same time, making it one of the few "must attend" events for the industry.

It was inaugurated by Malaysian Prime Minister Anwar Ibrahim, while Defence Minister Mohamed Khaled Nordin opened the Putrajaya



A variety of materiel offered by Norinco.

Forum that took place at the show's premises – the forum being an international conference on defence and security.

DSA Exhibition and Conferences chairman Asmat Kamaludin said DSA 2024 & NATSEC Asia 2024 marked a 30% increase compared to the previous iteration. Throughout its four days, a record-breaking 1,324 exhibitors from 60 countries showcased their latest solutions, services and products in MITEC.

### **Strong Presence by International Players**

A total of 588 international delegates from 40 countries were present at the show as 47,587 trade visitors filled the 48,000 square metres of space across the exhibition centre's three halls.

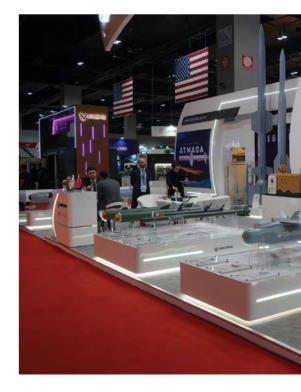
With 34 international pavilions, major names included BAE Systems, MBDA, Naval Group, Thales, KNDS, Leonardo, Kongsberg, Fincantieri, Schiebel, Aimpoint, EDGE, NORINCO, FNSS, Iveco Defence Vehicles, Arquus, Nurol Makina, Syncrolift, BRAHMOS, STM, Pakistan Ordnance Factories, Korea Aerospace Industries (KAI), Airbus and more. Meanwhile, the Turkive and United Arab Emirates pavilions were among the largest at the show, with China, the United States, South Korea, Britain, Austria, Germany, Italy, France and India all having a large share of the floor as well. Iran's Ministry of Defence also made a comeback at the show with a booth featuring some of the country's best materiel.

Furthermore, many more companies made up Australian, Czech, Swiss, Singaporean, Taiwanese, Dutch, Norwegian, Slovakian and Indonesian pavilions. Another impressive sight was more than 100 small companies from China showcasing their products and services.

With exhibitors hailing from places as far as

South Africa, Southeast Asia remains a buyer's paradise as countries in the region build up military capabilities, not to mention the export capabilities of Association of Southeast Asian Nations (ASEAN).

Unmanned platforms of various applications were omnipresent throughout the show – BAE Systems debuted their T-650 all-electric "heavy lift" UAS for the first time in the region. The 300kg UAS successfully carried and released a 200kg Sting Ray training torpedo last year. Schiebel's Camcopter S-100 was also presented at MITEC, with the company recently winning a South Korean contract to



# DSA 2024: Biggest-Ever, Record Participation

develop and deliver the S-300. UAE's EDGE Group showcased virtually everything from smart weapons, electronic warfare solutions and even unmanned platforms. Meanwhile, Turkish Aerospace Industries (TAI) has offered its fifth-generation KAAN stealth fighter to showgoers, with the KAAN completing a second test flight just days before DSA 2024 & NATSEC Asia 2024 kicked off. Turkiye has promoted the KAAN for the Royal Malaysian Air Force (RMAF) and as a means of collaboration on joint defence projects for mutual benefits.

The spotlight was on STM's Ada-class corvette which was vying for the Royal Malaysian Navy's littoral mission ship programme. Naval Group and Fincantieri were both present coming off its successes in the region, recently closing deals with Indonesia to sell two Scorpene Evolved diesel-electric attack submarines and two PPA offshore patrol vessels respectively and hope to build a much stronger foothold in Asia Pacific. Malaysia has outlined a procurement plan for two more submarines between 2031 and 2040.

Malaysia has plans to procure a multi-role support ship which Fincantieri is looking to propose its proven San Giusto-class amphibious transport dock. Small arms





DSA & NATSEC 2024 attracted an impressive 47,587 trade visitors.

hallmark Glock, Steyr, FN Herstal, Beretta, Brugger and Thomet were present with various up-and-coming weapons manufacturers from all corners of the globe.

Firms such as KNDS, MKE, Yugoimport among others had scale models of their respective self-propelled howitzers (SPH) on display, as the Malaysian Army's 155mm SPH programme is still up for grabs. KNDS put forth its CAESAR SPH, while MKE'S Yavuz, Yugoimport's NORA B-52, Konstrukta's EVA and NORINCO's SH-15 were among some of the others being offered at the exhibition. Diehl Defence, MBDA, Kongsberg, ROKETSAN, BRAHMOS, Nammo, Saab and more all covered various rocket requirements for naval, air and land applications, with ground-based air defence platforms, anti-ship, anti-tank, anti-air, air-to-ground missiles. The Malaysian Army and Air Force is reportedly seeking GBAD systems to replace its increasingly obsolete air defence

Leonardo signed an Industrial Collaboration Programme agreement with MINDEF, which will see Leonardo partner on joint projects with the RMAF, academic institutions and local industries in order to facilitate the transfer of technical knowledge and further explore future prospects of collaboration. In turn, the local industry will also back Leonardo in development activities of the ATR-72 fleet and supply chain management. Malaysia's Lumut Naval Shipyard (LUNAS) also signed a memorandum of agreement with Indonesian shipyard PT PAL, a move which is expected to bear fruitful outcomes for both countries in naval shipbuilding.

Malaysian firm SME Ordnance (SMEO) secured an MoU with Colt to jointly develop and supply small arms ammunition, such as the 5.56mm M193 ammunition. According to the agreement, SMEO would produce and deliver six million rounds of ammunition every year to Colt for the next three years.

BAE Systems formed a working partnership with United Engineering Services (UES) to better promote the Nautomate autonomous control system to customers. The collaboration leverages the proven success both firms have had in the military watercraft and autonomy sector. BAE highlighted the new Nautomate being used aboard UES' proven platform, the P38 Aggressor Fast Interceptor Craft. The pairing transforms the vessel into a high speed,

#### SHOW REPORT:

high performance platform with a full range of levels of autonomy capable of 24 hours of uninterrupted operations at sea with a range of 300 nautical miles

South Korean group Hanwha Aerospace signed an MoU with Malaysia's Widad Business Group that would focus on offering the Korean K239 Chunmoo Multiple Launch Rocket System for Malaysian requirements. Widad also signed another deal to collaborate with HAVELSAN to identify and develop opportunities for the Weapon Training Shooting Simulator project. Lucelta Defense, a Brooklyn-based firm with an existing production line in Turkiye also agreed to collaborate with CZR Consulting to form Lucelta Defence Malaysia, the move will see Lucelta establish a manufacturing facility in Malaysia to produce its portfolio of products ranging from weapons, brushless direct current electrical motors and field hospitals.

### **Local Defence Industry Participation**

The exhibition saw an uptick in Malaysian firms participating in DSA 2024 & NATSEC Asia 2024 is a sign that Malaysia's domestic defence industry is on the rise, with companies such as Mindmatics, Weststar, Deftech, Sapura and various others highlighting the diverse range of expertise in the automotive, maritime, aviation and technology sectors.

Malaysian firm MILDEF unveiled several new vehicles, among them the latest update on their indigenously-developed and produced Tarantula 4x4 High Mobility Armoured Vehicle, with several improvements from its original variant to meet Malaysian criteria. Changes include using a monocoque chassis for the Tarantula along with the standard rolling chassis currently produced. Then, an all-new Weapon Carrier Vehicle that can carry a rotary wing unmanned aerial system (UAS) on its rear flatbed, four personnel and a heavy machine gun turret on top. Lastly, the High Mobility Light Tactical Vehicle which was displayed with United Nations livery.

Compatriot Cendana Auto unveiled a prototype VEXTOR 4x4 light tactical troop transporter and a new Magatti light strike vehicle. The Magatti is a newer version of the firm's Special Operations Vehicle (SOV) that has been evaluated by Malaysian Army special forces since mid-2022. With prospective customers from Tanzania and Sudan showing interest, the VEXTOR is currently being evaluated before proposals can be submitted for testing with Malaysian forces. The company is also hoping to export to neighbouring countries Brunei and Timor Leste.

Another Malaysian company, Mindmatics, unveiled their first loitering munition, which features an in-house developed artificial intelligence control algorithm and a handheld Fire Control Unit. Powered by a 25.5V solid-



state lithium-ion battery, the Todak can fly autonomously for up to 40 minutes and engage moving and stationary targets without surveillance input. Mindmatics also featured their navigation monitoring and control system which can be utilised for maritime navigation or coastal monitoring. The unmanned radar can detect 360 degrees in azimuth as far as 30 kilometres.

### **Defence Diplomacy, International and Regional Ties**

The event was also a platform for defence diplomacy as the Ministry and the armed forces hosted 10 courtesy visits and bilateral engagements at the defence minister level with various countries and counterparts.

There were five courtesy visits and engagements at the deputy defence minister level, along with 11 courtesy visits and engagements at the secretary-general and top management levels. Also held were 70 courtesy visits and engagements for all branches of service in the armed forces. Of these, 36 involved the chief of the defence forces and the army, 19 involved the RMAF, and 15 the RMN.

Minister Mohamed Khaled said DSA 2024 & NATSEC Asia 2024 has exemplified the strength of international defence cooperation. "These events highlight not only their economic impact, but also strengthen our collaborative defence capabilities, representing a global commitment to shared security and defence readiness. By uniting the best minds and technologies worldwide, we set a precedent for future international defence engagements, essential for navigating the complex challenges of our geopolitical environment."

He reminded all that the exhibition did not favour or give advantages to any country or company. It was open to all countries and industry players including huge participation from Muslim countries such as Turkiye, Indonesia, UAE, Iran and Pakistan. Besides Muslim countries, the exhibition is also an important arena for regional and Asia-Pacific defence industry players including those from South Korea, China, India and Singapore, he had said in a statement. "Malaysia is a free trade country, which gives space to all global industry players to market their products and services. Thus, Malaysia takes an approach



to not intervene in matters involving global companies from any country."

He added that relations between several global defence companies with a certain country in the course of their businesses will not be interjected by Malaysia. "The aim of organising the exhibition is clear, which is to give space and opportunity to all parties to showcase their expertise as well as the latest defence technology. It enables the governments of various countries and global industry players to explore the latest technologies and innovations to elevate defence preparedness."

Meanwhile, the show, forum and seminars associated with DSA 2024 & NATSEC Asia 2024 provided an international and regional atmosphere at the same time, making it one of the few "must attend" global events for the industry. True enough, a few days after DSA and NATSEC, it was reported that several ministers and top brass of regional countries had follow-up meetings at their respective capitals with some of those companies and delegations which took part at the Kuala Lumpur events.

#### **Agreements Inked**

Minister Mohamed Khaled announced that the ministry had signed contracts and deals worth USD1.5 billion by the end of the show. They involved 17 acceptance letters worth USD695 million, seven contracts totalling USD400 million, four Lol amounting to USD385 million, 10 MoUs between various Malaysian, regional, and international organisations and players worth USD59 million. He added that the investments and value creation witnessed during the week were "still growing and expected to achieve higher figures".

Among them was the supply of an initial batch of ROKETSAN KARAOK man-portable anti-tank guided weapons launchers and munitions to Malaysia. According to the company, Malaysia will be the first to receive the short-range fireand-forget anti-tank weapon by early 2026. In addition, the Turkish firm will provide extensive training to Malaysian Armed Forces (MAF) personnel, involving simulated training via indoor and outdoor simulator platforms and live training. Next, an agreement for a new Air Surveillance Radar and Air Traffic Management system for the RMAF They also include maintenance contracts and letters of intent (LoI) were signed for the retrofitting of three RMN vessels, in-service support for two Scorpene-class submarines. low pressure turbines for the A400M fleet and another in-service contract for the H225M fleet.

### DSA - NATSEC to be Held Separately in Future?

DSA 2024 & NATSEC Asia 2024 featured several meetings such as the Putrajaya Forum, an international conference which drew the participation of policymakers, stakeholder agencies, think tanks and academicians to discuss, share knowledge and promote understanding of regional issues. Also held was the National Security International Seminar, which saw participants deliberating on the topic titled "Enhancing National Security Through Good Governance and Credible Partnership: Opportunities and Challenges".

DSA Exhibition and Conference executive director Nadzeem Rahman said they are looking to optimise space utilisation in order to accommodate increased participation in upcoming editions. "This year's DSA and NATSEC Asia have seen a significant increase in both the number of companies and international representation". Hence, another potential strategy is to hold NATSEC Asia separately from DSA to specifically cater to national security interests. "NATSEC Asia has its own tracking and followings within the security sector, and a separate event could enhance its focus and impact," he added.

Next on the event calendar for the organisers is CyberDSA 2024, to be held at the Kuala Lumpur Convention Centre (KLCC) near the iconic Petronas Twin Towers on Aug 6-8 this year. The next edition of DSA and NATSEC Asia is scheduled to be held on April 20-23, 2026, again at MITEC.•



#### **COMPANY PROFILE**

# Interview with CEO of Bali International Airshow 2024 Organiser



PT Inaro Tujuh Belas CEO, Andy Wismarsyah.

**ADJ:** Can you provide an overview of the history and significance of the Bali International Airshow 2024? What inspired its creation, and how has it evolved over the years since its inception?

AW: The Bali International Airshow is Southeast Asia's premier exposition for aerospace, aero technology, and defence, dedicated to propelling Indonesia to the forefront of the regional aerospace industry. This prestigious event serves as a pivotal platform that unites diverse industry stakeholders to champion innovation in aerospace across Southeast Asia and Indonesia.

**ADJ:** Can you share with our readers what is new at this year's edition of the Bali airshow? What are its main goals and objectives?

AW: The main purpose of Bali International Airshow is to bolster Indonesia's aviation and aerospace industry to greater heights by highlighting state-of-the-art technological advancements from our clients, exhibitors and partners.

As the aviation landscape continues to expand, Indonesia is shifting its focus into sustainable aviation. This year, Bali International Airshow will be highlighting the latest innovation and development in sustainable aviation, including sustainable aviation fuel (SAF), green airports, Urban Air Mobility (UAM), Green Aviation Environment (Route, Sustainable Aviation Fuel [SAF], Eco Airport).

**ADJ:** As a platform for the businesses of aerospace and aviation to debut their latest aircraft and products, can you share with us how many companies and country pavilions will be present at the airshow this year? What types of aircraft can we expect to see?

**AW:** We are expecting around 150 companies and 10 country pavilions to be present at the Bali International Airshow this year. With confirmed exhibitors such as Dassault and Airbus, we are expecting to have exciting aircraft on display.

**ADJ:** As in any airshow throughout the world, there will always be a defence and aviation security segment. Can you brief us on the military and security segment of the Bali airshow? How many such companies are participating?

**AW:** Yes. We are expecting around 30% of participants to come from the defence segment.

ADJ: The Bali airshow continues to draw a

plethora of global leaders and distinguished guests for each edition. How many visitors and country delegations are you expecting this year? *AW:* We are expecting more than 6,000 trade visitors, 100 exhibitors and 100 hosted delegations from 35 countries to the airshow. As of now, we have filled 80% of the booths that have been booked by Indonesian and global brands such as Pertamina as our main sponsor, PT Dirgantara Indonesia, Airbus, Bell, Brahmos, MBDA, Dassault and many more.

**ADJ:** What are the relevant government ministries and organisations of the host nation involved in the airshow? Will the Indonesia Air Force (TNI-AU) and organisations such as Indonesian Search and Rescue Organisation (BASARNAS) be involved?

AW: The Bali International Airshow is hosted by the Coordinating Ministry of Maritime and Investment Affairs, the Ministry of Transportation, and supported by the Ministry of Defence, the Ministry of Foreign Affairs, the Ministry of Tourism and Creative Economy, the Indonesian AIr Force (TNI AU), AirNav Indonesia and the Ngurah Rai International Airport Authorities.

**ADJ:** Will there be any conferences and forums during the airshow -- to allow industry professionals to keep abreast of the latest developments and join industry leaders, key aerospace and aviation organisations and government agencies in the discussion on the opportunities, challenges and strategies in aerospace and aviation industries?

**AW:** We actually have three forums that will run concurrently during the event:

 MRO Forum: This forum showcases the future of aviation maintenance, repair and overhaul. Immerse yourself in in-depth



discussions on crucial MRO strategies, cutting-edge technological advancements, sustainability practices and the latest regulatory updates. Network with industry experts, forge new collaborations and expand your professional circle. This forum is by invitation only, gathering the driving force shaping the future of aviation maintenance

- ASEAN Plus Air Chief Forum: A joint event with Indonesia Air Force. This forum is strictly by invitation only, it gathers air chiefs, military leaders, aviation experts and defence officials to set stage for the region's air power future. The forum serves as the platform for discussions that will define the future course of air power in Southeast Asia with an emphasis on strategy, technology, collaboration and security.
- Asia Pacific Air Transport Forum: Touching on sustainable aviation industry, including routing, sustainable fuel, and eco airport. This summit is also strictly by invitation, and is jointly-organised with the Ministry of Transport and the Directorate General of Civil Aviation.

The Asia Pacific Air Transport Forum will not only witness the global aviation community's dedication to reviving international operations sustainably but also feature discussions on key topics such as aviation revival, sustainability, and innovation. Leading figures from both the public and private sectors will engage in panel discussions, providing insights into the industry's future trajectory.

ADJ: Can you share with our readers the theme for this year's Bali International Airshow 2024?

AW: The theme for this year's edition is 'Where Aerospace Excellence Meets Defence Innovation'.

ADJ: Always a crowd favourite, will there be any expansion of the aerospace display and aerobatic flight teams flying during the airshow? Will there be any live demonstration at this year's edition? AW: We are proud to host our home team, the Jupiter Aerobatic Team, which will be present at the airshow. We are also inviting teams from

other countries.

ADJ: Thank you for your time. Any last words that you would like to share with our readers? AW: We deeply appreciate the interest shown by Asian Defence Journal and its readers in the Bali International Airshow 2024. Indonesia is committed to advancing its aviation industry through collaboration with ASEAN neighbours and beyond. Thank you for your support and we eagerly anticipate your presence there.

**Brahmos** Aerospace is among the early birds to sign up to be part of the Bali International Airshow 2024. From left: Head of Indonesian Air Force Information Service, First Marshal Agung Sasongkojati; Chief Operating Officer of PT Inaro Tujuh Belas, Seno Adhi Damono; Brahmos Aerospace Director (Market Promotion & Export) and Corporate IT head, Praveen Pathak, and Deputy for sovereignty, maritime, and energy coordination at the Coordinating Ministry for Maritime Affairs and Investment of Indonesia, Jodi Mahardi.





#### **COMPANY PROFILE**

# Mindmatics: Towards Critical Sovereign Capability



**MALAYSIAN** company Mindmatics Sdn Bhd has a long track record in the defence industry since it supplied the Army with electronic warfare capability in 2008 and was subsequently awarded maintenance contracts with such equipment. Two years ago, it won the contract to supply 1,000 Harris tactical radios. It also won the Command Control Platform (CCP) tender published in September/October 2020 with an LoA worth US\$3.76 million. The four CCPs – fitted on a demountable cabin with the associated equipment, are now operational with the Western Field Command, First, Second and Third divisions.

Not resting on its laurels, the company continues to develop its capability and products; it funds all of its own research and development, where 90% of its workforce of about 100 are engineers.

At the 18th Defence Services Asia (DSA) 2024 and the third National Security Asia (NATSEC Asia) 2024 joint-exhibition held in Kuala Lumpur on May 6-9, Mindmatics displayed a passive emitter tracking system named Tedung, with a range of up to 500km line-of-sight; a radar electronic support measures (ESM) system named Kurita to provide ships with early warning of incoming threats; an X-band coastal surveillance radar named Camar; and an electric UAV named Helang, a VTOL design which has multimission applications. Helang first flew in June 2021 and has a four-hour endurance. The drone was designed for surveillance missions and has been deployed by the Eastern Sabah Security Command for border surveillance missions.

Mindmatics also offers a customised shelter system named Prima for housing command and control functions; a cellular phone detection system named Bee which is designed for border security in areas with a high risk of illegal crossings by criminals or immigrants; and a satellite monitoring system (SMS). Mindmatics is now offering software and hardware solutions to the Armed Forces to meet current and future requirements.



#### **FCS for Naval Vessels**

Mindmatics has also developed its own Fire Control System (FCS) for the Royal Malaysian Navy's (RMN) KD Laksamana Muhammad Amin. In May this year, the company was awarded the Letter of Award (LoA) for the tender to supply, deliver, install, integrate and commission of such a system for the Fincantieri-built corvette.

The company describes the FCS as a Combined Naval Tactical Command System 1 (CONTACS 1), where software and hardware components are designed and integrated to bolster a ship's combat capabilities within the context of its specific mission. The main capabilities encompass combat execution and mission management tasks. These tasks include situation awareness, track management, threat detection and response and mission planning preparation. Other capabilities include support for elements of Anti Surface Warfare (ASUW), Naval Gunfire Support (NGS), and Electronic Warfare (EW), as well as navigation support, helicopter recovery, and training.

For the programme, Mindmatics had selected the Australian manufactured Trakka Systems TC-300M multi sensor maritime surveillance system as the eletro-optical turrets for its FCS. •



### Interview with Mindmatics' Dr Abd Rahim Mat Sidek

MINDMATICS provides a comprehensive range of solutions in IT, computing and electronics. Asian Defence Journal spoke to its technical operations and projects manager Dr Abd Rahim Mat Sidek

.ADJ: With growing concerns about maritime security in Southeast Asia, what specific solutions does your company offer to enhance Territory Domain Awareness (MDA) for countries in the region?

AR: In recent years we have seen a lot of military build-up in the South China Sea. Those activities can be focused on three main regions which are the Spratlys, the Paracels and the Scarborough. Those three areas can be described as "The Big Three" areas in which potential conflict flashpoints would likely occur between all the disputed parties including Malaysia. Involvement of forces such as China, US and all other Southeast Asia (SEA) countries has increased in recent years. Thus, it is important for us to have "eyes" in those particular areas in order for us to respond to any incoming threats on our territorial sovereignty and also economic interest in the area. Mindmatics offers a wide solution with regards to the early warning systems, by introducing a long-range surveillance radar for early detection and monitoring of all forces loitering in the region. The monitoring can also be done passively by applying the equipment with COMINT, ELINT and SIGINT-capability equipment, to gather intel on all the forces operating in the region.

**ADJ:** Effective MDA often requires integrating data from multiple sources. How do your solutions ensure seamless integration with existing territorial security?

AR: Seamless Integration is possible if all the agencies are willing to disclose all the protocols of their own agency communication system. The development of our defence solution with regards to the communication and data-sharing were developed by upholding the concept as per lined up in the Malaysian Defence White Paper 2020, Chapter 4 - Commonality of doctrines, procedures, systems and equipment is very important to achieve interoperability between the three services of the MAF and also between the agencies that would increase efficiency during joint or combined operations and minimise cost. Our systems were designed in an open architecture concept that will adapt to all the existing MAF and all other National Agencies' equipment and assets.

**ADJ:** How do you integrate infrastructure and facilitate information-sharing between different agencies?



AR: Mindmatics has always emphasised an open architecture design in all of its equipment to be able to integrate with all other gadgets, equipment, systems and assets from other agencies. Information-sharing is the key agenda in our design and thus it will provide a huge advantage to our clients in terms of integration with respect to the information-sharing between the existing and future systems.

**ADJ:** From piracy and terrorism to illegal fishing and trafficking, maritime threats are diverse. Can you elaborate on how your MDA solutions can be customised to address the specific challenges faced by countries in this region?

AR: Piracy and terrorism operates in a different spectrum rather than conventional military forces. Thus a certain method needs to be implemented in order to deal with these types of threats. Mindmatics and the Malaysian Armed Forces have been together in this field since 2019 with the ESSCOM establishment. Our GSM Radar Locator has played a vital role to ensure our sea passages in the vicinity of Lahad Datu (Sabah) are free from any intrusion.

**ADJ:** New sensor technologies like drones and Al-powered surveillance systems are playing an increasingly important role in MDA. Does your company offer solutions that incorporate these advanced technologies, and if so, how do they

improve situational awareness?

AR: The combination of Cyber Operations with Electronic Warfare (EW) capabilities forms up the Cyber Electromagnetic Activities (CEMA) efforts to protect Critical National Information Infrastructures (CNII). EW is a promising countermeasure element in combating drones of all sizes and mission profiles. Defence can be carried out through EW to disrupt the navigational system, communication, fuses and weapon trigger functions, and may potentially take over the control of drones.

Mindmatic offers a combination of sensors, weapons and AI technology. Potentially, AI will increase the efficiency of the computation time and would shorten the time taken for a warfare commander to make a final decision on how to affect a certain situation.

ADJ: Budgetary constraints are a reality for many countries. Can you discuss how your MDA solutions are designed to be cost-effective, offering high value without placing an undue burden on national resources?

AR: The development of our solutions are mostly done in-house by local expertise thus it contributes to less production cost in terms of manpower for any specific projects and in the provision of spares. More importantly, we provide sovereign capability and technology support in this field.

**Bali Airshow: Commitments to Drive Indonesia Economic** 

Growth

WITH the Bali International Airshow 2024 set to take place in Sept 18-21, more than 80% of the exhibition booths have already been secured by an impressive array of Indonesia and global brands. More than just a couple of months to the event, the organisers are ramping up the countdown to what is billed as "Southeast Asia's premier exposition for aerospace, aero technology, and defence, dedicated to propelling Indonesia to the forefront of the regional aerospace industry".

Aerospace powerhouses have committed to showcase their innovations in Bali alongside a confirmed number of 300 exhibitors from 35 participating countries from Indonesia, the US, China, France, Australia, India and more making up 10 national pavilions.

This significant commitment from key industry players underscores the strategic importance of airshow, set against the backdrop of Indonesia's aviation sector's projected 5% annual growth over the next five years.

Andy Wismarsyah, CEO of PT Inaro Tujuh Belas, organisers for the airshow, said: "We are expecting around 30% of participants to come from the defence segment, and more than 6,000 trade visitors, 100 exhibitors and 100 hosted delegations from 35 countries to the airshow. As of now, we have filled 80% of the booths that have been booked by Indonesian and global brands such as Pertamina as our main sponsor, PT Dirgantara Indonesia, Airbus, Bell, Brahmos, MBDA, Dassault and many more."



The Bali International Airshow 2024 is hosted by the Coordinating Ministry for Maritime and Investment Affairs and the Ministry of Transportation, and supported by the Ministry of Foreign Affairs, Ministry of Tourism and Creative Economy, Indonesian Air Force, PT Angkasa Pura I and AirNav Indonesia.

The main purpose of the airshow is to bolster Indonesia's aviation and aerospace industry to greater heights by highlighting state-of-the-art technological advancements. Providing a receptive platform for strengthening bilateral and multilateral relationships between Indonesia and foreign partners in the region and beyond will also be the aim of the business event, the show organisers say.

The most populous Southeast Asian country has an ambitious growth plan for its airport infrastructure, aiming to construct 50 new airports over the next 25 years under the Ministry of Transport -- this commitment reflects its

dedication to improving accessibility and creating new opportunities for domestic and international travellers.

As previously reported, 10 new airports are being developed, further cementing the nation's commitment to advancing its aerospace capabilities. propelling Indonesia to the forefront of the regional aerospace industry.

This prestigious event serves as a pivotal platform that unites diverse stakeholders within the industry, championing aerospace innovation in Southeast Asia and Indonesia.

While Indonesia carries out its strategic defence vision with a projected US\$27.6 billion military expenditure until 2030, their commitment to fortifying national security takes the spotlight. A substantial player in the Asia-Pacific region, Indonesia's strategic military investment reflects a dedicated effort to enhance its defence capabilities.

# Indonesia Targets US\$742m Profit from SAF Sales, Exports

INDONESIA's Coordinating Minister for Maritime Affairs and Investment Luhut Binsar Pandjaitan is eyeing profit of Rp12 trillion (US\$742 million) from the sales and exports of sustainable aviation fuel (SAF).

"The domestic and export sales of SAF are estimated to reach a profit of Rp12 trillion per year," he said on May 26.

According to the minister, this figure was obtained by calculating the economic value of the production capacity of state-owned oil company Pertamina's biofuel refineries.

Pertamina is a leader in the field of energy transition and has carried out successful static trials of SAF for use in the CFM56-7B jet engine.

"This proves that their product is suitable

for use on commercial aircraft," Pandjaitan emphasised. In addition, the development of the SAF industry will be an entry point for further investment in biofuel refineries from the private sector and state-owned companies, he added.

Quoting data from the International Air Transport Association (IATA), he remarked that Indonesia is projected to become the fourth-largest aviation market in the world in the next few decades. Pandjaitan then used the forecast as a basis to chair the Roadmap Design Meeting and National Action Plan for the Development of the Sustainable Aviation Fuel (SAF) Industry in Indonesia.

He acknowledged that as aviation activity increases, the carbon emissions produced will

also soar, thereby necessitating interventions to reduce carbon emissions.

"From various data and studies, I can conclude that SAF is the most effective solution for realising an environmentally-friendly aviation future in Indonesia," he was quoted by Antara news agency.

Hence, efforts to realise environmentallyfriendly SAF are not just centered around innovation but rather a commitment to reducing global carbon emissions, he added.

"After the issuance of the presidential regulation, I am targeting to launch SAF's legal umbrella at the Bali International Airshow 2024, next September at the latest," the minister said. •



ORGANIZED BY









SUPPORTED BY





December 2024

Gia Lam Airport Ha Noi - Viet Nam

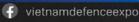


# **VIET NAM** INTERNATIONAL DEFENCE EXPO



FOR MUTUAL DEVELOPMENT

VIETNAMDefenceExpo2024











# Regional Unmanned Systems on Own ASEAN Stage

**THE** first international exhibition and conference in Thailand dedicated to drones and their technology, to be held in Bangkok, has garnered interest from major global players in all manner of unmanned solutions.

The event, to be held on Nov 25-27, 2024, at the IMPACT Exhibition and Convention Center in Bangkok, is "the latest premier biennial exhibition and conference in Thailand dedicated to drones and their technology," the event organisers said.

The staging of DronTech Asia 2024 is an interesting indicator of just how rapidly the global drone industry (for defence/security/military and civilian applications) is growing -- driven by technological advancements, cost reductions and increased adoption across various industries, to the point of being able to have its own standalone event, representatives told Asian Defence Journal.

This inaugural event is expected to be the platform for those who want to have an early edge in the fast growing industry in the Southeast Asian region, which has a combined population exceeding 670 million, and the wider Asia-Pacific.

They also stated that the main exhibition will showcase "an incredible array of drone-related products, services, and technologies for various business and industry sectors. Exhibitors with a hand in the drone industry are more than welcome to join the show". There, the areas of focus will include: Agriculture, Forestry and Fisheries; Infrastructure and Construction; Energy and Utilities; Oil and Gas; Logistics and Transportation; Photography and Cinematography;

Mining and Aggregates, and Defence and Security.

In Asia, the drone market is also experiencing strong growth, driven by rising demand for aerial imaging and surveying, drones for industrial applications, and favorable government regulations. A report by Mordor Intelligence predicts that the Asia-Pacific drone market will grow at a compound annual growth rate (CAGR) of 19.8% from 2020 to 2025. In the ASEAN region, the drone industry shows significant growth potential despite being in its early stages.

According to research by the ASEAN Post, the ASEAN drone market is expected to reach US\$1.3 billion by 2023, growing at a CAGR of around 20% between 2021 and 2026, all driven by increasing adoption in agriculture, mining, and construction, along with the region's large population and rising urbanisation.

Globally, the drone industry is primed for sustained growth, driven by technological advancements and increased adoption across various industries. In Asia and ASEAN, the industry is poised for even stronger growth as the demand for drones continues to increase.

Capitalising on the potential of the rapidly growing drone industry, DronTech Asia 2024 aims "to cement Thailand as ASEAN's latest hub for drone development". This event is a showcase of the latest technological developments in drones worldwide, serving as the ideal meeting platform for drone professionals and enthusiasts around the globe.

DronTech Asia 2024's organiser, GML Exhibition (Thailand) Co Ltd, is also the organiser of the tri-service Asian Defense & Security exhibition, conference and networking event in Bangkok, where the next event, on November 10-13, 2025, will be the 12th biennial edition of the impressive show

The company prides itself as "ASEAN's leading exhibition and conference trade organiser, specialising in international trade exhibitions, seminars and conferences". With a team of professionals in major cities and business networks across Asia, the company serves thousands of top-quality trade customers from around the world.

At press time, GML Exhibition will co-organise DronTech Asia 2024 with the Civil Aviation Authority of Thailand (CAAT), as well as several other Thai government and independent agencies and organisations: the National Science and Technology Development Agency (NSTDA), Drone Association of Thailand, Defence Technology Institute, Digital Economy Promotion Agency (DEPA), Thailand Convention and Exhibition Bureau (TCEB), Industry for National Defense & Security Association (INDSA), Disaster Response Association Thailand (DRAT), Agriculture Drone Associate of Thailand, and the Geo-Informatics and Space Technology Development Agency (GISTDA).

Meanwhile, Asian Defence Journal is the Official Publication and Official Show Daily Publisher for DronTech Asia 2024.



# INCODEFENCE 2024 EXPO & FORUM

THE 10th INDONESIA'S OFFICIAL TRI-SERVICE DEFENCE, AEROSPACE, MARITIME, AND SECURITY EVENT

### "DEFENCE PARTNERSHIPS FOR **GLOBAL PEACE & STABILITY**

#### 6 - 9 NOVEMBER 2024



MAIN VENUE: JIEXPO KEMAYORAN

OTHER ACTIVITY: HALIM PERDANAKUSUMA AIRFORCE BASE | AIRCRAFT STATIC DISPLAY

VENUES PONDOK DAYUNG NAVAL BASE | NAVAL DISPLAY

JAKARTA, INDONESIA

INCORPORATING WITH

















































































CONTACT US LIMITED SPACE AVAILABLE BOOK YOUR SPACE TODAY!









# CyberDSA 2024: Navigating Tomorrow's Cyber, Digital Frontier

**SOUTHEAST** Asia's digital economy is set to reach US\$363 billion in 2025. As the world becomes increasingly dependent on digitalisation, it is inevitable for governments and businesses to protect and secure its assets and provide real economic value to the global market.

Cyber Digital Services, Defence and Security Asia 2024 (CyberDSA) is one of the leading regional conference events serving the cyber and digital security community. This event unite key stakeholders and professionals dedicated to safeguarding national, public and business interests in cyberspace. CyberDSA aims to connect decision makers in governments and private sectors to accelerate their cyber defence and security agenda.

In 2023, CyberDSA welcomed 30 VIP leaders from government organisations worldwide, hosted 105 cybersecurity companies and saw 6,616 visitors pass through its doors. Moreover, 58 esteemed speakers from 20 nations contributed their insights and expertise, enriching discussions

and inspiring attendees to explore new frontiers in cybersecurity. These numbers underscore the power of global cooperation in shaping the future of cybersecurity and serves as a beacon for the industry's continued advancement.

CyberDSA 2024 will be held on August 6-8, 2024 at the Kuala Lumpur Convention Centre, Malaysia. The edition is expected to draw over 7,000 trade visitors and 80 VIP delegations from across the globe, anticipating the participation of over 50 thought-leading speakers and 150 exhibitors from 20 countries.

Key highlights at CyberDSA 2024 include:

 Main Stage Forum: Join industry leaders, cybersecurity experts, and visionaries as they converge to explore cutting-edge strategies, share insights and tackle the evolving challenges in cyberspace. Engage in thought-provoking discussions that will shape the future of cybersecurity.

- Vibrant Exhibition Floor: Engage with the exhibitors from international and local showcasing their cutting-edge cybersecurity technologies, products, solutions and services covering a range of elements within a focus area, covering diverse dimensions of cybersecurity, from state-of-the-art innovations to developing strategic opportunities.
- Cyber Security Awards: This award is created to honour individuals and organisations who contributed to Malaysia's cyber security or information security. The awards are conferred in recognition of their innovativeness, commitment, industry/product/service leadership, and sound business strategies
- 'Siber Siaga 2024': Serves as a knowledgesharing platform to promote the concept of Whole of Government, Whole of Society (WoGoS) where the community can engage and share insights in the field of cybersecurity and technology to enhance cyber awareness.
- 5. Asean Cyber Defence Network (ACDN): Bringing together cybersecurity experts, government officials, and industry leaders from across Asia, this meeting showcases a seamless fusion of knowledge exchanges, and collaboration initiatives, address evolving cyber threats and unite diverse stakeholders to forge dynamic alliances.
- 'Capture The Flag': This event offers a unique blend of competition, learning and collaboration, where participants test their skills against a series of cybersecurity challenges.
- Flash Talk sessions: Attendees will have the exceptional opportunity to stay informed about the latest technologies and gain insightful knowledge presented by the participating exhibitors at the Flash Talk Zone.
- Closed Door Briefings and Roundtable Talks: A platform for subject matter experts to discuss issues on cyber threat intelligence.

Over the three days of the event, attendees will have the opportunity to engage with industry experts, leaders and practitioners from the cybersecurity field. In addition to this invaluable interaction, attendees will have the chance to connect with innovative digital entrepreneurs and dynamic start-ups, opening doors to explore exciting market opportunities and forge strategic partnerships. This event promises a vibrant atmosphere of collaboration, innovation and growth for all participants.

Meet leading professionals in cybersecurity at a world-class exhibition and conference programme. Professionals, business leaders, and trade visitors are invited to attend the exhibition. Visitor registration is now open. For additional details, visit https://www.cyberdsa.com . Stay updated with the latest news and information about CyberDSA 2024 by following "@cyberdsa" on social media. •

REPRESENTATIVES from military organisations, other government agencies and NGOs, and also industry practitioners will make their way to the upcoming 10th International Search and Rescue Conference and Exhibition (ISAR) 2024 in Malaysia. The event, to be held at the Royale Chulan Hotel in Kuala Lumpur on September 9-11, 2024, is organised by Malaysian company Global SAR Resources Sdn Bhd, and is supported by the Malaysia Ministry of Transport and the Ministry of Defence.

Themed "Global Resilience: Uniting Technology and Humanity for Safer Communities", ISAR 2024 will explore "the dynamic interplay between cutting-edge technology and the indomitable human spirit in the context of search and rescue operations". Global SAR Resources CEO, ex-Royal Malaysian Air Force Major (retd) Murali Bhaskaran said that the key objectives of ISAR 2024 are to

- Foster international collaboration and knowledge sharing in search and rescue (SAR).
- Showcase the latest technological advancements in the field.
- Emphasise the vital role of SAR personnel and volunteers.
- Promote the creation of safer and more resilient communities.

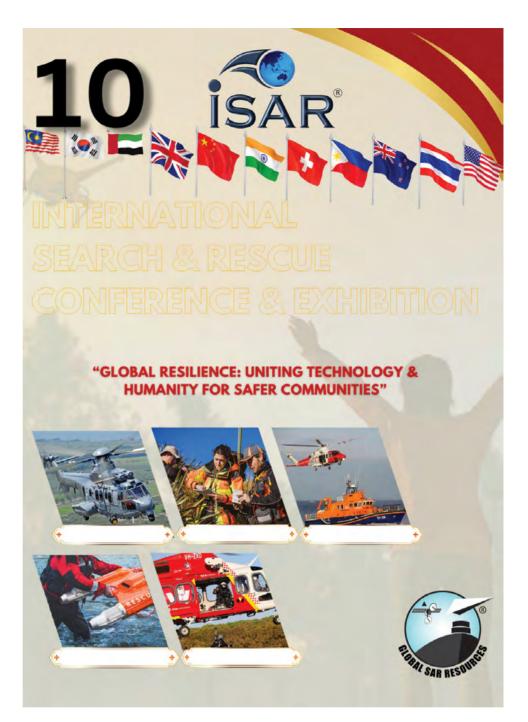
#### The conference highlights include:

Global Perspectives: Engage with experts and practitioners from around the world who are at the forefront of SAR efforts. Gain insights into global challenges and solutions.

- Resilience Through Technology: Explore the innovative technologies driving advancements in SAR, including drones, artificial intelligence, geospatial analysis and communication systems.
- Human-Centred Approach: Celebrate the bravery, dedication and heroism of SAR teams. Learn about the psychological and physical challenges they face and how to support their well-being
- Community Empowerment: Understand the importance of community involvement in building resilience. Discover best practices for community engagement and disaster preparedness.

"The three-day conference will see five plenary sessions, four concurrent sessions, visit to SAR agencies -- on the third day, about 50 speakers from many countries and more than 50 exhibitors," said Major (retd) Murali, adding that ISAR 2024 especially welcomes SAR professionals, emergency responders, disaster management agencies, technology providers and innovators, government agencies, oil and gas industry players, NGOs and humanitarian organisations, and academics and researchers.

At press time, 50 speakers have confirmed participation in ISAR 2024. "Our expert speakers



# ISAR 2024: Uniting Technology, Humanity for Safer Communities

hail from diverse corners of the globe, each bringing a wealth of knowledge, experience and passion to the forefront of this esteemed event. They hail from Malaysia, China, India, Philippines, Indonesia, South Korea, US, UK, New Zealand, Switzerland, France and the United Arab Emirates," he said.

Global SAR Resources Sdn Bhd, established in 2007, is a multi-disciplinary company providing consultancy and training on SAR for land, aeronautical and maritime agencies. It also offers a wide range of services in terms of products, training, and research and development. Its operators and personnel are fully armed with experience and knowledge based on years of hands-on work on being on the front line of SAR operations. •

#### **INDUSTRY EQUIPMENT NEWS**

### Romania to buy S. Korean howitzers for US\$920m

ROMANIA has confirmed a purchase of South Korean K-9 self-propelled howitzers for US\$920 million, the defence ministry said on June 20. Romanian Defence Minister Angel Tilvar announced the decision during talks in Romania with Seoul's defence chief Shin Won-sik, who is in Romania and will travel to Poland next.

It is the biggest arms acquisition by Romania

in the past seven years. It will further activate defence and arms cooperation between the two countries. Shin added that he hopes the deal will lead to an array of cooperation, including joint manufacturing, cross training between relevant units and exchange of personnel.

During talks, Shin and Tilvar agreed to further improve cooperation in military education and

training, sharing of information and exchanges, defence acquisition as well as science and technology. In April, President Yoon Suk Yeol and his Romanian counterpart Klaus Iohannis agreed to further cooperate in defence and nuclear energy.

#### Hanwha Group acquire US shipyard for US\$100m



**HANWHA** Group announced a US\$100 million investment in Philly Shipyard Inc to acquire a 100% stake in the US shipbuilder, the first entry of

a South Korean company into the US shipbuilding industry. The venture also involves the group's two defence units, Hanwha Systems Co and Hanwha

Ocean Co, according to Hanwha Group.

Philly Shipyard has delivered almost half of the large US Jones Act commercial ships in the US since 2000. The shipyard constructs large commercial vessels, tankers and container ships, as well as training vessels for the U.S. Maritime Administration (MARAD).

Hanwha Group said it plans to utilise Philly's dock, the largest in the country for shipbuilding, maintenance, repair and operations, to tap into the US naval market. Hanwha Systems is looking to participate and develop civilian merchant ships capable of autonomous operations. The company's advanced technologies in unmanned maritime systems, naval radars and sensors will be integrated into commercial vessels and special-purpose ships, such as unmanned underwater vehicles. Hanwha Ocean hopes to diversify its sales and expand Hanwha Ocean's market presence by securing an overseas production base and increasing orders in these segments. •

#### **Germany-Poland Hypersonic Weapons Project**

THE German Defence Ministry has submitted a request for around US\$697.18 million to the parliament's budget committee for a hypersonic weapons development project with Norway, according to reports. In mid-May, Norway's Kongsberg announced a partnership with Germany's Diehl and MBDA to develop a supersonic missile known as 3SM Tyrfing. Hypersonic missiles, which can travel at up to 25 times the speed of sound, have been used by Russia in

its war in Ukraine and are a cause of concern among NATO members.

Meanwhile, Kongsberg opened a new missile factory on June 20, to meet rising demand for weapons in light of recent conflicts. NATO allies are racing to increase their own production of weapons, ammunition and missiles, partly to supply Ukraine but also to replenish stocks and be able to counter new threats.

Kongsberg had decided to build the

1,200-personnel strong US\$61 million facility in 2021 when the firm's products experienced higher demands, partly from the US Navy selecting the anti-ship Naval Strike Missile (NSM) for its fleet. The Norwegian government paid US\$19 million while the European Union provided US\$950,000 for the costs.

The plant is expected to produce several hundreds of missiles yearly.

## Denmark, Hungary, Germany Formalise Cooperation within ESSI

**DURING** Eurosatory 2024, the governments of Denmark, Hungary, and Germany formalised a new step in their cooperation within the European Sky Shield Initiative (ESSI), formalised through the signing of a letter of intent at Rheinmetall's stand.

The partnership looks to enhance short-range

air defence by acquiring Rheinmetall's Skyranger 30 system designed to offer effective protection against short-range aerial threats, its customisable modular design can be integrated onto a variety of platforms, including 6×6 or 8×8 wheeled vehicles, as well as tracked vehicles. •

By integrating the Skyranger 30, Denmark, Hungary, and Germany are strengthening their capacity to protect their airspace against drones, helicopters, and other low-altitude aerial threats.

#### **INDUSTRY EQUIPMENT NEWS**

#### **STM Selected for RMN LMSB2 Programme**

TURKIYE's shipbuilder Savunma Teknolojileri Muhendislik (STM) was awarded the contract to build three corvettes for the Royal Malaysian Navy (RMN) under the "Littoral Mission Ship Batch-2 (LMSB2)" programme. The ceremony hosted at the Presidency of the Republic of Türkiye on June 10 in Ankara was attended by the Minister of Defence of Malaysia Mohamed Khaled Nordin, President of Turkiye and Secretariat of Defence Industries of Turkiye Prof Dr Haluk Gorgun, STM Chairman of the Board Prof Dr İhsan Kaya, STM General Manager Ozgur Guleryuz, defence officials from both nations and Turkish defence industry executives.

"STM, as the main contractor, will be responsible for all phases of the LMS Project for the RMN, from design and construction to delivery. I would like

to extend my gratitude to the STM Management and their team for their dedication to this project. Construction of the ships will start this year and will be completed in 3.5 years," Güleryüz said, adding that STM was proud to be signing the agreement and add strength to the RMN. "We are committing to the construction of three ships for the RMN. The vessels will be based on the ADA-Class design, which has already demonstrated its reliability and effectiveness in international waters."

The capabilities of similar combat platforms produced by STM in terms of safety, performance, reliability and ease of maintenance have been tested, and have proven themselves during operations in the open and coastal seas, and under heavy sea conditions. LMSs can be tasked with a wide range of duties including

anti-surface warfare (ASuW), anti-air warfare (AAW), Asymmetric Warfare (ASYW) and electronic(EW), drawing upon the capabilities of the most advanced Sensors & Weapons Suite and Command & Control System.

The construction and outfitting of the ships will be carried out in Turkiye with the intensive involvement of Turkish defence industry companies. STM, in its role as main contractor, will turn to the Turkish defence sector for such equipment as the Combat Management System, the Gun Fire Control System from HAVELSAN; and the 3D Search Radar, Fire Control Radar, IFF, 30mm Gun, ESM and Chaff Decoy System, as well as other electronic sensors, to be supplied by ASELSAN. ROKETSAN will be supplying its ATMACA Surface-to-Surface G/M System. •

#### **RMN Gowind Type LCS Put to Water**

THE Royal Malaysian Navy"s (RMN) Maharaja-Lela-class littoral combat ship (LCS) entered the water on May 23 at Lumut Naval Shipyard (LUNAS), following official announcements from the shipbuilders. In December, the KD Maharaja Lela will undergo a Harbour Acceptance Trial (HAT) before being further fitted with equipment. Then, it will proceed to its Sea Acceptance Trial (SAT) by the end of 2024 and is on schedule for delivery in August 2026.

Additionally, construction of the second to fifth LCS vessels are currently on track, with each ship being slated for delivery in eight month intervals starting from the second ship in 2027

onwards. The fifth and final LCS is anticipated to be completed in 2029.

On May 15, LUNAS announced that it had passed the critical design review for the LCS' Integrated Platform Management System in a small signing ceremony with L3HARRIS MAPPS.

#### **Ceremony for Final Two PAF T-129 ATAK Helis**

**THE** Philippine Air Force (PAF) in mid May carried out an Arrival and Blessing Ceremony for its fifth and sixth Turkish Aerospace Industries (TAI) T-129 ATAK attack helicopters. After a traditional and ceremonial welcome, the pair of aircraft was

formally received by the PAF.

Delivered on November 30 last year, the helicopters are the last two units of a total 6 units under a government-to-government (G2G) deal worth US\$269 million with Turkiye in July 2020.

The T-129 procurement was among the higher priority projects under Horizon 2 of the Armed Forces of the Philippines (AFP)'s Modernisation Programme.◆

#### **Final TNI-AU Super Hercules Delivered**

**THE** Indonesian Air Force (TNI-AU) has taken delivery of their fifth and final Lockheed Martin C-130J-30 Super Hercules. The aircraft arrived at Jakarta's Halim Perdanakusuma Air Base on May 16. The Super Hercules with tail number A-1342

left for a five-day journey from the production line at Marietta, Georgia, making several stops along the way. All five aircraft will be stationed at Halim Perdanakusuma with the 31st Squadron. Part of a Direct Commercial Sale (DCS) in 2019

between the manufacturer and the Air Force, the four preceding aircraft were delivered in March, June and August of 2023 with the most recent in January this year. •

#### **EDGE to Supply Ammunition Facility to Indonesia**

**EDGE** Group signed a US\$27 million agreement in mid-May to supply an ammunition production line to PT Pindad, an Indonesian state-owned materiel manufacturer.

The agreement for the production of 5.56x45mm and 7.62x51mm calibre ammunition was signed in the presence of the President-elect of Indonesia

and Minister of Defence Prabowo Subianto, during an official visit to the United Arab Emirates in May, a group statement said on May 14. Aligned with the Indonesian Ministry of Defence's objective to increase local job creation and sovereign manufacturing capabilities, the ammunition facility is scheduled to commence production in 2026, it added. The visit and agreement are part of an ongoing effort between both countries that aims to increase bilateral trade to US\$10 billion by 2030 under the Comprehensive Economic Partnership Agreement.

#### Diehl to expand production of IRIS-T systems

**GERMAN** missile maker Diehl Defence plans to further expand production of their IRIS-T air defence system. The company is aiming to produce at least 10 firing units from 2026 and to double production of IRIS-T medium-range

missiles from 2025, according to its CEO Helmut Rauch. It is the second time the firm has publicised plans to step up production of the IRIS-T.

Germany has committed to supply another six IRIS-T units to Ukraine with delivery of the first of

six systems for its own air force expected to be in October. Estonia and Latvia jointly agreed to buy the air defence system last year. •



#### **Indonesia: Su-35 Contract Remains**

**INDONESIA** has never terminated a contract to purchase Su-35 fighter jets from Russia and is waiting for the situation to become "more accommodating" to return to its implementation, Indonesian Ambassador to Russia Jose Tavares has said.

"Indeed, at some point Russia and Indonesia signed this treaty. Indonesia has never terminated it, but it was put on hold to avoid certain potential inconveniences," he was quoted by Russian news agency TASS on May 8.

The ambassador added that Indonesia will return to this question when the situation becomes "more accommodating." He estimated that 30% of weapons in service with his country's armed forces are Russian-made.

Western mainstream media has reported that the Indonesian government had abandoned

its plans to purchase 11 Russian-made Su-35 multirole fighters due to lack of funds.

News about the signing of a US\$1.1 billion contract with Jakarta for the delivery of 11 Su-35 fighter jets became known in early 2018. In July 2019, former Indonesian Ambassador to Russia Mohamad Wahid Supriyadi said that the delay in the implementation of the contract was due to the complexity of the trade scheme, which involved both government agencies and companies.

In March 2020, Bloomberg reported that Indonesian authorities decided to give up on plans to implement the Su-35 contract with Russia due to a lack of funds in the budget caused by the COVID-19 pandemic, and also due to threats from the US to impose sanctions on Indonesia if the contract was implemented.

## PH, Brunei Agree on Peaceful Resolution of Conflicts

**THE** Philippines and Brunei have agreed to endorse peaceful resolution to any conflict in the Indo-Pacific region.

President Ferdinand R. Marcos Jr said this was agreed upon during the discussions on maritime cooperation with His Majesty Sultan Hassanal Bolkiah in their bilateral meeting on May 28 in the state capital during a two-day state visit.

"We talked about maritime cooperation. We talked about strengthening the partnership and streamlining the processes in BIMP-EAGA (Brunei Darussalam Indonesia-Malaysia-Philippines East ASEAN Growth Area). It was really more about trade," Marcos said in a press briefing.

"On the diplomatic side, the closest we came to any kind of defence agreement was really a diplomatic document that express[es] the understanding that we both endorse a peaceful resolution to any conflicts between our two

countries and in the region," he said.

Marcos and the Sultan witnessed the signing of a memorandum of understanding (MoU) on maritime cooperation between the Philippines and Brunei, in which both sides agreed to further cooperation on wide ranging areas including pollution, skills training, research and information sharing.

Two other MoUs on tourism cooperation, and on Mutual Recognition of Standards of Training, Certification and Watchkeeping (STCW) certificates were also signed between the two Southeast Asian countries, along with the letter of intent to renew the MoU on food security and agricultural cooperation. Marcos' state visit to Brunei coincides with the 40th anniversary of the bilateral relations between the Philippines and the Sultanate. •

#### Indonesia, US Army Chiefs Meet in Pentagon

**INDONESIA'S** Army Chief of Staff General Maruli Simanjuntak met with his counterpart, General Randy A George, in the Pentagon in Arlington Country, Virginia, in mid May to discuss defence cooperation.

It was General Maruli's first meeting with the Chief of Staff of the US Army for talks on issues related to defence cooperation since being inaugurated by President Joko Widodo on November 29, 2023.

At the meeting, Gen Maruli exchanged views on several areas of cooperation between Indonesia and the US armed forces. The areas of cooperation discussed at the meeting include joint military exercise, military personnel exchange programmes and knowledge exchange related to

the primary weaponry defence system (Alutsista), a May 21 statement by the Indonesian Army (TNI-AD) said.

At the meeting, Gen George was quoted as saying that the United States is committed to supporting Indonesia's endeavours to strengthen its defence capability.

General Randy, who assumed duties as the 41st Chief of Staff of the Army on September 21, 2023, expressed his high appreciation for the close cooperation between the two armies, according to the press statement.

The close cooperation was not only beneficial for Indonesia and the United States but it would also give significant impacts on regional stability and security as a whole, it added.

#### New Singapore PM Sworn In

**LAWRENCE** Wong was sworn in as Prime Minister May 15, marking the country's first leadership transition in 20 years. Speaking after he and his Cabinet were sworn in at the Istana, Wong said his team will "lead in our own way" and with a style different from previous generations.

He paid tribute to his predecessor Lee Hsien Loong who remains in the Cabinet as a Senior Minister. "We owe him a great debt of gratitude," Wong said.

Wong made small changes to the Cabinet, retaining his finance portfolio and promoting seasoned politician Gan Kim Yong to Deputy Prime Minister. Continuity and stability were key considerations.

President Tharman Shanmugaratnam spoke at the swearing-in ceremony earlier, expressing his "full confidence" in Wong's ability to lead Singapore as Prime Minister. Wong, 51, is the first Singapore Prime Minister born after the country's independence in 1965 when it separated from the Federation of Malaysia. •

# ISOC Commander brief OIC on Southern Thailand

**FOURTH** Army Region Commander and Internal Security Operations Command (ISOC) Region 4 Director Lt Gen Santi Sakuntanark recently highlighted the complex security dynamics in Thailand's southern border provinces in a briefing to a delegation from the Organization of Islamic Cooperation (OIC). He stressed that the regional issues are not rooted in religious conflict but are primarily driven by a desire for identity and existence.

During the OIC's visit, Lt Gen Santi discussed the challenges faced in the region, including incidents that have escalated tensions. He noted that these events are often exploited by dissident groups who distort religious differences to incite violence. However, he reaffirmed the government's position, supported by the Sheikhul Islam Office of Thailand, that these are not religious disputes.

In response to the ongoing security issues, ISOC Region 4 has developed strategies to bolster the resilience of local officials and volunteers, seeking to create a stable environment that supports both economic and social development. Lt Gen Santi also outlined government policies to improve the quality of life in these provinces by promoting economic ties with neighbouring countries and the broader Southeast Asian region.

Meanwhile, Thailand and Malaysian armies are strengthening their defence cooperation at all levels to combat cross-border crimes. Thai Army's fourth Deputy Commander Major-General Phaisang Nusarn said that his side has always collaborated with the Malaysian army in combating crime along the two nations' borders. He stated that the sides exchange intelligence information and undertake cooperative operational patrols along the border. •



The Preferred Media Partner Since 1970

# Secure your Asia-Pacific's Defence & Security Market

www.adj.com.my

**The Official Publication & Show Daily** 









To advertise, please contact:

Syed Mohd Fazilla fazilla@shpmedia.com

Mohd Hanif Ismail hanif@shpmedia.com

# PEOPLE ON THE MOVE

### **ADF Top Brass Appointments**



**THE** Australian Government has announced a number of senior command changes within the Australian Defence Force (ADF). The changes will take effect this July (subject to the Governor-General's consideration and approval).

The Vice Chief of the Defence Force, Vice Admiral David Johnston (pix), AC, RAN will be appointed as the new Chief of the Defence Force. VAdm Johnston joined the ADF in 1978.

Air Marshal Robert Chipman, will be appointed as the new Vice Chief of the Defence Force. He was appointed as the Chief of Air Force in July 2022.

Air Vice-Marshal Stephen Chappell will be appointed on promotion as the Chief of Air Force. He is currently the head of Military Strategic Commitments.

Following confirmation of the Federal Executive Council of the preceding statutory appointments by the Governor General, other senior ADF appointments will also change in early July. The Chief of the Defence Force, in consultation with the Secretary of Defence, Greg Moriarty, and ADF chiefs has recommended to the Deputy Prime Minister and Minister for Defence, the following senior appointments:

Rear Admiral Justin Jones, will replace Lt Gen Greg Bilton, as the Chief of Joint Operations. RAdm Jones is currently the Deputy Chief of Joint Operations.

Maj Gen Susan Coyle, will replace Lt Gen John Frewen, as the Chief of Joint Capabilities. Maj Gen Coyle is currently the Commander of Army's Forces Command.

Lt Gen Gavan Reynolds, will complete his term as the inaugural Chief of Defence Intelligence. The Chief of Defence Intelligence position will rotate to a civilian appointment with the replacement to be identified in due course.

### **New Indian Army Chief**



INDIA'S Central Government announced on June 11 that Vice Chief of Army Staff Lt Gen Upendra Dwivedi was appointed as the next Army Chief. Lt Gen Dwivedi will take over the new appointment on June 30.

The former Northern Army Commander is the most senior officer in the Army at present and the norm is to appoint the most senior Army commander or the Army vice chief is made the Army chief when the serving COAS retires. The Army chief retires on completion of three years in the appointment or on attaining the age of 62, whichever is earlier.

Born on July 1, 1964, Lt Gen Dwivedi was commissioned into the Infantry (Jammu & Kashmir Rifles) of the Army on December 15, 1984. He has served in a variety of Command, Staff, Instructional and Foreign appointments.

### New Bangladesh Army Chief

LIEUTENANT General Waker-Uz-Zaman has been appointed the chief of the Bangladesh Army and promoted to the rank of General. His appointment is effective from June 23, Inter-Services Public Relations (ISPR) said on June 11. He was appointed for three years as the Chief of General Staff of

### New NZ Chief of Defence Force



AIR Vice-Marshal Davies has been promoted to Air Marshal for three years effective June 6, Defence Minister Judith Collins announced on May 14.

AVM Davies was Vice Chief of Defence Force, a role he has held since 2018. He has been a career officer in the New Zealand Defence Force (NZDF) since joining the Royal New Zealand Air Force in 1984 and for the next 16 years held a number of leadership and operational flying roles.



Bangladesh Army.

An alumnus of Bangladesh Military Academy, he was commissioned in the Corps of Infantry on December 20, 1985. Having an illustrious career of more than three and a half decades, Lt Gen Waker brings with him enormous experience in holding key command, staff, and instructional appointments.

Prior to assuming the duties of the CGS of the Bangladesh Army on January 1 this year, he served as the Principal Staff Officer to the Prime Minister in the Armed Forces Division under the Prime Minister's Office. •

#### **New BAF Chief**



AIR Vice Marshall Hasan Mahmood Khan has been appointed the new chief of the Bangladesh Air Force for three years effective June 11, according to a gazette notification issued by the Ministry of Defence. He succeeds Air Chief Marshal Shaikh Abdul Hannan.

Air Vice Marshal Hasan Mahmood Khan was born on June 20, 1966 in Dhaka. He was commissioned in the Bangladesh Air Force on June 15, 1986 in the General Duties (Pilot) Branch.

A fighter pilot and flying instructor, he is one of the pioneer members who inducted Mig-29 aircraft in the BAF. Khan has served in various command and staff appointments.

### India's 26th Navy Chief

**ADMIRAL** Dinesh K. Tripathi has assumed command of the Indian Navy as the 26th Chief of the Naval Staff. He succeeds Adm R. Hari Kumar who retires upon superannuation after over 40 years of service.

"The existing and emerging challenges in the maritime domain mandate the Indian Navy to remain operationally ready to deter potential adversities at sea in peace and to 'win the war at sea' when asked to do so." Admiral Tripathi said.

AdmTripathi, who took charge April 30, is an alumnus of the National Defence Academy, Khadakwasla. He was commissioned into the executive branch of the Navy on July 1, 1985.

A communication and electronic warfare specialist, he has served on frontline warships of the Navy as signal communication officer and electronic warfare officer and principal warfare officer of the guided missile destroyer INS Mumbai, the Navy said in a statement. His sea commands include INS Vinash, Kirch and Trishul. He was the Vice Chief of Naval Staff, prior to taking over as Navy Chief.

#### INDEX TO ADVERTISERS

**ADAS 2024** 19 **KADEX 2024 IFC** 15 ВС **BALI AIRSHOW LIMA 2025 CYBER DSA 2024** 9 **VIETNAM DEFENCE EXPO IDEAS 2024 IBC** 29 INDO DEFENCE 2024 31







Tel: +92-21 34821159, +92-21 34821160 Fax: +92-21 34821179 Email: info@ideaspakistan.gov.pk

Actualidad Marítima y Portuaria GLOBAL DEFENSE INSIGHT

AVIATION MILITARY EXPOROOMS

C-175, Block-9, Gulshan-e-Iqbal Near Aziz Bhatti Park, Karachi - Pakistan











# LIMA'25

LANGKAWI

THE 17TH LANGKAWI INTERNATIONAL MARITIME AND AEROSPACE EXHIBITION

20-24 MAY 2025

MAHSURI INTERNATIONAL EXHIBITION CENTRE







INNOVATE TODAY, THRIVE TOMORROW

www.lima2025.com