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SPECIAL REPORT

INDONESIA MOVING TOWARDS A SELF-RELIANT NATIONAL DEFENSE INDUSTRY

SPECIAL EDITION
INDO DEFENCE
EXPO & FORUM 2022


Dassault Aviation • Safran • Thales
OMNIROLE
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RAFALE
INTERNATIONAL
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Rafale carries out different complex combat assignments simultaneously. This makes it different from so-called “multirole” or “swing-role” aircraft. Higher systems integration, advanced data fusion, and inherent low observability all make Rafale the first true omnirole fighter. Able to fight how you want, when you want, where you want. *Rafale*. The *OMNIROLE* fighter



KAI

KAI, Creating the Future
of the Aerospace Industry

KAI suggests its KUH multi-role utility helicopter in Southeast Asia military helicopter market

Versatile Player in the air, KUH

KUH is a brand new multi-role modern helicopter, which has characteristics of the Black Hawk UH-60 design requirement and operational concept, and European platform that has been validated and verified for a long time. Through the combined advantages, the KUH is able to perform the maneuvers and missions that are required for a multi-role helicopter.

The KUH, twin-engine utility helicopter was developed by Korea Aerospace Industries (KAI), collaborated with Airbus Helicopters (formerly Eurocopter). Its program was initiated in 2006 in order to replace the aged UH-1H in service with the ROKA (Republic of Korea Army) and completed in 2012.

The helicopter is being successfully performing all missions as main air power of ROKA along with UH-60, and carrying out diverse missions for civilian purposes as well.

The KUH features a variety of state-of-the-art technologies including a four-axis digital Automatic Flight Control System (AFCS), next generation avionics suite, a cockpit with multifunctional displays, Two Engines with Full Authority Digital Control (FADEC), Health & Usage Monitoring System (HUMS) for engine and rotor system, dual redundant systems and high ballistic tolerance.

Proven Helo

Initial KUH manufacture started in December 2010, and starting in 2013, the serial products were handed to the ROKA.

There are currently more than 250 units confirmed follow-on orders, and KAI is mass producing those items while adhering to the client's specified delivery timeline.

As of today, more than 200 units including its derivatives have been successfully operating in local customers such as ROKA, Republic of Korea Marine Corps (ROKMC), National Police Agency (NPA), Korea Coast Guard (KCG) and so on.

The ROKA is expected to operate KUH on a long term basis in the future, which has a lot of benefits for follow-up support.

Additionally, the development of KUH's new derivatives such as Mine Countermeasures Helicopter (MCH) and Marine Attack Helicopter (MAH) will be commenced next year, and it will continue to be improved and evolve into a next-generation utility helicopter based on KUH technology, ensuring operational sustainability for more than 50 years.



Best Choice for Indonesia

More than 17,000 islands make up Indonesia, and there are at least 300km between each island.

In this environment, the Indonesian air power is operating mostly aged small helicopters for multi-purpose missions, including reconnaissance and troop transportation. As a result, it seems that there are constraints to perform efficiently several missions.

KUH has ability to perform rapid mission conversion by adding mission-specific equipment according to mission. Through improved operating capability and the comfort of the pilots based on the most recent handling quality, cutting-edge avionics, and automatic flight control system, it is possible to efficiently complete a variety of missions.

Additionally, by utilizing the near-field between the KAI headquarters located in Korea and Indonesia, urgent maintenance actions for KUH can be made available, contributing to the ongoing growth in operating rate. In a similar vein, it is anticipated that KAI would be able to revive the Indonesian aviation industry in collaboration with local company through KUH program in the future.









About KAI

The aviation divisions of Daewoo Heavy Industries, Samsung Aerospace, and Hyundai Space & Aircraft were combined in 1999, creating Korea Aerospace Industries (KAI) as a single company.

Since then, the company has developed and manufactured a variety of aircraft, including not only fixed wing such as KT-1, T-50 and FA-50, but also rotary wing like KUH.

Light-armed Helicopter (LAH) owned by the company is in its last stage of development, and it will likely begin mass production around the end of 2023. Together with Indonesia PTDI, the KF-21 fighter is also being developed; it will be finished by 2026.

KAI, Creating the Future of the Aerospace Industry

INDONESIA MOVING TOWARDS A SELF-RELIANT NATIONAL DEFENSE INDUSTRY



Dear Readers,

On behalf of Indonesia Defense Magazine and its Editorial Staff, we wish to extend a warm welcome to all colleagues and counterparts in Indonesia and abroad, to the 18th Edition of our Magazine, with a special salute to participants in the forthcoming INDO DEFENCE 2022 EXPO & FORUM, scheduled to take place from 2~5 November 2022 at JIExpo KEMAYORAN JAKARTA.

Non-Alignment Moving Toward Self-Reliance in Defense

The overall thrust of our national defense policy, aligned with a standing policy of non-alignment, has historically served as a philosophical bedrock of international relations as espoused by the Republic of Indonesia. It is summed up in a proverb widely shared by Minister of Defense Prabowo Subianto as "A thousand friends are too few; one enemy is one too many".

In this Special Edition, Indonesia Defense Magazine (IDM) presents a special report that explores a wide spectrum of issues related to the development of Indonesia's indigenous defense industry, in an in-depth and comprehensive manner, as it determinedly forges toward self-reliance. Those aware of our unique geography will appreciate how difficult it is to extend proper defense of sovereignty over the thousands of islands and vast seas within our national borders.

History has taught us that defense equipment suppliers are subject to the same vicissitudes as other entities, and other countries can suddenly withhold vital supplies, equipment or consumables if political realities so dictate. This leaves us vulnerable, and that is unacceptable for a firm defense posture. Our national Government has thus moved to set and nurture ongoing synergy between state-owned enterprises (SOEs) and privately-owned enterprises (POEs) in the quest to achieve the targets set by the Government and, by extension, to realize a solid, reliable, cost-effective and self-reliant national defense system.

The defense industry in Indonesia has a long history, dating back to Dutch colonial rule. Once Indonesia gained its Independence, nationalized companies were transformed into Boma Bisma Indra (1971), Barata Indonesia (1971), Krakatau Steel (1971), Dahana (1973), Inti (1974), PAL Indonesia (1980), Pindad (1983) and Len Industri (1992).

The rise of a national defense industry, and the beginning of Self-Reliance

A creative, vibrant and self-standing defense industry is one of the key planks of national defense policy. The policy direction is aimed at building an advanced, strong, independent, and competitive industrial base, one capable of meeting domestic equipment needs while growing the national economy. In addition, it aims to realize a professional, effective, efficient and integrated defense industry. To achieve this goal, the government consolidated various defense industry policies through the passage of Law 16/2012 on defense industry and other legislation.

To implement the law, the Defense Ministry has implemented a number of policies, including encouraging relevant ministries/agencies to use locally-produced equipment whenever available, guiding the defense industry to collaborate with foreign partners through transfer of knowledge/technology scheme, joint research and development and joint production.

Challenges Toward Realizing a Self-Reliant Defense Industry

Indonesia's drive to achieve self-sufficiency in defense equipment is not without its challenges. According to a 2021 report by the Stockholm International Peace Research Institute (SIPRI), while Indonesia's military spending last year hit US$8.3 billion, it was still ranked 29th in the world, down from 25th place in 2020. This shows that the performance and contribution of the national defense industry still needs to be enhanced.

National Resilience Institute (Lemhannas) governor Andi Widjajanto, in a focus group discussion (FGD) held in September 2022, highlighted at least four weaknesses that beset the national defense industry. First, a stagnant defense budget allocation which remains at only 0.8 percent of GDP. Second, the dominant position of SOEs in the defense industry ecosystem, which has yet to embrace the triple/penta-helix model and refine an integrated supply chain. Third, the small allocation of budget for defense research and development makes it impossible for technology adoption, let alone making a technological leap. Fourth, the absence of economies of scale in several equipment that Indonesia wishes to develop.

This first point, according to House Committee I member Faisal Fahmi, needs to be noticed by Defense Minister Prabowo Subianto. "Our defense spending is still 0.8 percent to GDP. So this should become the point of concern for Pak Prabowo," said Faisal.

However, he believes that under Prabowo's leadership Indonesia is making slow but sure progress toward a self-reliant defense industry. "I think Pak Prabowo is one of the best figures. His perspective is based on experience and deep insights," said Faisal. "A good leader should be someone who is able to see the big picture. He has traveled across the globe to see progress in various countries, so he can assess what Indonesia's shortcomings are. Furthermore, due to his background as a soldier, he is very determined and strong-willed. But he is also an open-minded person."

Indonesia Defense Magazine is always open to your comments, criticisms or other feedback. We also accept submissions for publication.

And always remember the great Latin proverb: "Sī vīs pācem, parā bellum: "If you want peace, prepare for war".

Have an enjoyable and educational read, dear friends.

Sincerely,

Irawan Ronodipuro

Editor-in-Chief

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French Air Force's Rafale jets conducted a joy flight above Indonesian skies (12/9).
Photo by: IDM/Muhammad Hidayat



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