

## Philippines eyes heavy metal

A number of plans exist to upgrade the inventory of the Philippine Army's Mechanized Infantry Division. (Photo: Gordon Arthur)



The Philippine Army's armoured fighting vehicles (AFVs) are fielded by the Mechanized Infantry Division (MID), which celebrated its 12th activation anniversary on 20 September. There are currently five pending projects to induct much-needed new armoured platforms, alluded to in a speech given by President Rodrigo Duterte on the anniversary.

These projects under Horizon 2 of the Revised Armed Forces of the Philippines (AFP) Modernisation Program are as follows:

### 1. Light/medium tanks

The army wants a battalion of 44 or more tracked tanks and 8x8 destroyers with a budget allocation of ₱9.48 billion (\$185 million). The two platforms, to be acquired in a ratio of around 2:1 respectively, will share a common turret and gun of at least 105mm calibre.

Expected tracked contenders include the Hanwha K21-105, Otokar Tulpar and Pindad Kaplan MT, with Russia and Ukraine also throwing their hats in the ring. Meanwhile, potential 8x8 entries are the FNSS Pars III, Hyundai Rotem K808 and Otokar Arma. An Elbit Systems/European tie-up is thought to have entered each category too. However, this acquisition will probably be intergovernmental and will avoid a competitive tender.

### 2. Wheeled armoured personnel carrier (APC)

The MID needs 28 APCs, likely to be 6x6 models, with an approved budget of ₱2.27 billion. These vehicles will likely feature a

manned turret with 12.7mm machine gun/40mm grenade launcher.

Contenders include an unidentified Elbit Systems offering, the FNSS Pars III, Gaia Amir, Hyundai Rotem K806, Kamaz Typhoon-K, Nexter Titus, Otokar Arma, Steyr Pandur II, Pindad Anoa and the Ukrainian BTR-4.

### 3. M113 APC Firepower Upgrade

The army will upgrade around 32 M113A2 APCs with a 25mm unmanned turret in an effort that has been allocated a ₱288 million budget.

This project is still in the pre-procurement phase and could progress later this year or in early 2019. Elbit previously supplied UT25 unmanned turrets to the Philippine Army.

### 4. M113 mortar carriers

Approximately 15 existing M113A2s will have a 120mm mortar system installed. The AFP has budgeted ₱1.1 billion for this programme to be executed by Elbit Systems with its 120mm CARDOM mortar. A contract could be signed by the end of 2018. These will supplement five 81mm mortar carriers that Elbit is upgrading under Horizon 1.

### 5. Tank gunnery simulator

As the MID inducts more sophisticated AFVs than the current fleet of Simba, V-150 and M113 APCs, the need will grow to adequately train crews. Two gunnery simulators are thus required, for which the AFP has set aside ₱36.2 million. Obviously, this project is dependent on the platform types chosen for the light/medium tank acquisition.

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## Anticipation grows for second-hand corvette

STAND D140

**The transfer of a decommissioned 1,200t Pohang-class corvette from the Republic of Korea Navy to the Philippine Navy (PN) is moving forward after an invitation for bids to reactivate it opened on 30 July.**

Seoul had promised the second-hand *Chungju* to the Philippines in late 2016. However, Manila took a long time to confirm the transfer of this 88.3m-long anti-submarine warfare (ASW) corvette.

The Bids and Awards Committee issued three separate lots for bidding under Horizon 2 of the Philippine military's modernisation plan. Lot 1, worth ₱24.7 million (\$470,000), covers logistics. Lot 2 (worth \$495,000) encompasses the supply and installation of weapons, communication, electronics and information systems to replace obsolete or removed equipment.

Lot 3, for machinery and repair work, is the largest tender, with

an allocated budget of \$2.26 million. This will include the ship's generator and diesel engines.

Successful bidders will perform the work at Jinhae Naval Base in South Korea within 60 days of a notice to proceed being issued.

VAdm Robert Empedrad, the PN's Flag Officer in Command, commented: 'Our projected crew is already ready. They can go to Korea for training [at any time] so they will sail the ship from Korea to the Philippines.'

The PN is desperate for larger vessels, even while it awaits the arrival of its most capable warships ever – two frigates being built in South Korea. The 31-year-old *Chungju* is around 20 years younger than the three *Hamilton*-class cutters donated by the US.

The ex-South Korean corvette will be assigned to the Offshore Combat Force. It will offer an important ASW capability, since no other PN vessel is currently configured for such missions.

## Longer reach for Korean small arms

STAND 1910

**South Korean small-arms manufacturer S&T Motiv signed a JV with the Philippine company United Defense Manufacturing Corporation (UDMC) on 25 September.**

S&T Motiv stated in a press release: 'The joint venture agreement includes comprehensive cooperation for firearms manufacturing and supply to the Philippine military and police, and steadily expanding the market as a long-term vision.' Indeed, this tie-up is significant as it is the first such international JV that S&T Motiv has entered into.

UDMC added: 'Through the agreement, the two companies expect to supply the continued demand of firearms in the Philippines by utilising quality and price-competitive products from S&T Motiv. Together, the

two companies will leverage their combined strengths in R&D and distribution as well.'

Cementing their newfound cooperation, S&T Motiv and UDMC are sharing a joint stand at ADAS 2018.

When President Rodrigo Duterte visited South Korea in June, S&T Motiv and the Ministry of National Defense had the opportunity to give him a presentation. The company, established 45 years ago, is the major supplier of small arms to the South Korean military, plus it has exported weapons to more than 30 countries in Europe, the Middle East and Southeast Asia.

UDMC has focused on its F5 5.56mm assault rifle and designated marksman rifle, plus an S7 7.62mm precision rifle. The Philippine Navy's Naval Special Operations Group began using its weapons in 2015.

## Rafael ready to equip fighters

STAND 1310

**The Philippine Air Force hopes to induct 12 multirole fighters under both Horizons 2 and 3 of its modernisation plan. However, these 24 aircraft must be equipped with suitable combat systems.**

Rafael Advanced Defense Systems told ADAS Daily News: 'As the need for air superiority continues to play an increasing role in all types of recent military conflicts, we believe the Philippine Air Force stands to gain a significant advantage if it equips its aircraft with Rafael's advanced air combat aerial systems, whether they decide to buy individual systems or a complete aerial suite.'

The company manufactures the Python-5 and i-Derby MR/SR to provide active-radar and full-sphere-imaging IR air-to-air missiles for short-range to beyond-visual-range threats.

Air-to-ground munitions include stand-off weapons and precision-guided ammunition kits (SPICE 250, 1000 and 2000) for use against high-value targets.

The Rafael Litening 5 EO targeting and navigation pod is the most widely used in the world, according to the OEM, and the Reccelite



Rafael offers a range of products for fighters. (Photo: Rafael)

reconnaissance pod is claimed to shorten the sensor-to-shooter cycle.

Airborne communications include BNET voice communications, data links and wireless networks. Rafael also has advanced airborne EW products including support jammers, radar warning receivers, electronic support measures and electronic intelligence and ECM systems.

## Troposcatter connects the dots

**In April this year, Comtech Telecommunications was awarded a \$6.5 million contract to supply the Philippines with troposcatter communications equipment to link Zamboanga and Tawi-Tawi in the south.**

The company will supply its deployable Modular Transportable Transmission System (MTTS) along with ISR video downlinks.

According to Comtech, the MTTS troposcatter terminals 'will enable the armed forces to establish data links between island locations that were previously beyond the reach of high-bandwidth terrestrial communications.'

'The video downlink systems will allow airborne assets to deliver ISR data for distribution to ground-based decision-makers in real time,' the OEM added.



## IAI offers views over the horizon

STAND 1110

**Israel Aerospace Industries (IAI) Elta Systems is exhibiting its over-the-horizon air surveillance radars at ADAS 2018, three of which are being supplied to the Philippine Air Force (PAF) under a contract won in 2015.**

Eli Alfassi, VP of marketing at IAI, told *ADAS Daily News*: 'One of the main products highlighted this year at ADAS is the IAI Elta advanced family of AD-STAR air defence radars, which includes the mobile medium-range ELM-2288MR and long-range ELM-2288ER.'

'The mobile radar allows the Armed Forces of the Philippines to deploy the system rapidly, while the long-range radar is installed in a fixed location and provides very long-range detection.'

At the time of the contract announcement, a spokesperson from the air force said: 'The surveillance radars will help us monitor our territorial airspace and air defence identification zone.'

The radars are believed to be situated in Ilocos Norte (the

northern tip of the Philippines), Lubang Island (Mindoro) and Palawan, all facing westwards to enable monitoring of the South China Sea.

Alfassi added: 'Both radars share the same technology and common hardware, thus allowing for significant maintenance and integrated logistics support cost reduction. The radars share a common protocol and synchronisation of detected targets for easy integration and creation of a single situation picture in centralised command and control, with very high accuracy and high performance.'

'IAI Elta's design utilises the most advanced technology existing today in the market, which allows the system to offer top performance for many years and decades to come,' he said.

At the ADAS exhibition, IAI is also highlighting the Bird-Eye 650D UAV, loitering munitions, land warfare simulator and Super Dvora Mk III fast patrol vessel.

The spokesperson added that IAI fully understands the

challenges of the Philippines, and has carefully studied its needs and Horizon 2 strategic plans. For example, the company is seeking to offer refurbished Black Hawks to the PAF.

'IAI came up with an innovative approach – acquisition of modernised pre-owned Black Hawks. This approach will enable the air force to operate the most modernised upgraded platform at a much lower cost,' he noted.

Alfassi said: 'We are glad to report that IAI has been very active and successful in the Philippines in past years. During this time, we leveraged our relationship to promote cooperation with local industry and customers.'

'In view of the stronger relationship between the two countries and the recent visit of President Duterte, we are confident that both countries can go a long way in reinforcing our collaboration and reap mutual benefits.'

Another regional success for IAI is the multi-billion dollar sale of its Barak missile system to the Indian Navy.

## Bulgaria steps in with RPGs



Photo: Gordon Arthur

STAND 1260

**Following the failure of AirTronic in the US to supply the Philippine military with its first-ever shoulder-fired RPGs under a sole-source FMS, Bulgarian company Arsenal stepped into the breach.**

The company's RPGs (pictured) were used in the bitter fighting in Marawi last year, where they proved their worth in combat.

Petyo Asenov, Arsenal's Asia-Pacific business development director, said that President Rodrigo Duterte visited the OEM's stand at ADAS on 26 September to personally offer his gratitude for 'making a difference in Marawi'.

AirTronic was supposed to deliver several hundred RPG launchers to the Philippine Army, but instead the US resorted to sourcing 250 launchers from its own inventory. However, these did not come with any sights, spare parts or maintenance kits.

Arsenal donated six ATGL-L launchers, plus it was able to urgently supply sights and rockets to the Philippines to meet combat requirements. Interestingly, the company had been conducting training for the army's Light Reaction Regiment when the fighting in the south of the nation broke out.

Troops used the 3,600 warheads available in the Marawi conflict, and Arsenal is now supplying three types of grenades (anti-personnel, thermobaric and HEAT) for future use by regular infantry units.

China and Russia have both donated or sold RPG launchers to the Philippines as well, which is thought to have an eventual requirement for 2,800 RPG launchers.

## PAF inducts first ScanEagles

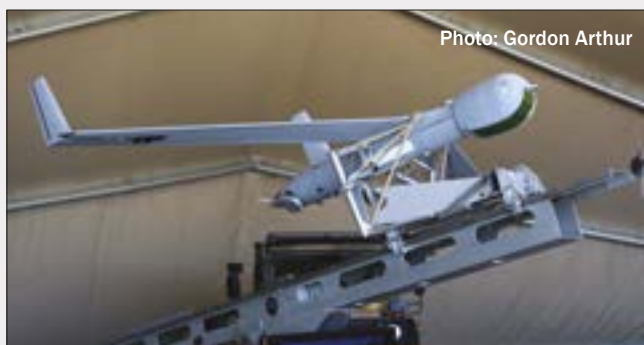


Photo: Gordon Arthur

STAND D160

**The Philippine Air Force (PAF) formally received its first batch of six ScanEagle 2 tactical UAVs from the US government at a ceremony at Villamor Air Base on 13 March 2018.**

The Philippines acquired the ScanEagles via the FMS scheme of the US in a contract

worth \$13.76 million. As well as the UAVs, included in this delivery were a trailer-mounted Mk 4 pneumatic launcher and trailer-mounted Mk 1 Mod 2 SkyHook recovery device.

The equipment will be used by the PAF's 300th Air Intelligence and Security Wing for military missions such as internal security,

counterterrorism, limited maritime patrol, humanitarian assistance, disaster relief and search and rescue, and to support different government departments in their national development activities.

In addition to this batch, the PAF ordered six ScanEagles last August in a \$7.4 million deal, and these should be handed over by July 2019. Another order for six of the type was placed on 18 September 2017, according to a US announcement, with delivery expected in September 2019.

The Philippine Navy will also receive ScanEagles for flight operations from naval vessels.

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# Standing united

With a renewed focus on special forces, the Philippine military has combined its existing commands in a move to strengthen joint operations. **By Gordon Arthur**

**On 6 April 2018, the Armed Forces of the Philippines (AFP) stood up a new integrated joint command, called the AFP Special Operations Command (AFPSOCOM), with the aim of better enabling joint special operations against violent extremist organisations and terrorists and to improve external defence.**

## Under one umbrella

Putting disparate SF units under a single command for the first time, AFPSOCOM combines existing formations from the Philippine Army, Navy (PN) and Air Force (PAF). As a unified entity, it mirrors the US Special Operations Command to some degree.

The army's special operations command, now deactivated, included the First Scout Ranger Regiment, the Special Forces (Airborne) Regiment and the Light Reaction Regiment. These three units continue as they were but now fall under AFPSOCOM.

Meanwhile, the PN fields the Naval Special Operations Group (NAVSOG), with plans to double its size. In addition, the Philippine Marine Corps supports NAVSOG with its Force Reconnaissance Battalion. The PAF possesses the 710th Special Operations Wing.

In recent times, the AFP General HQ also deployed the Joint Special Operations Group, which was created in 2003 as



**AFPSOCOM combines special forces from the army, navy, marine corps and air force of the Philippines.** (Photo: author)

an inter-service anti-terrorism strike force that combined existing SF units and assets.

The new unified command is headquartered at Fort Magsaysay in Nueva Ecija, which was previously home to the army's SOCOM HQ. Understandably, army personnel now constitute the core of the new AFPSOCOM in terms of numbers.

The first AFPSOCOM commander is Maj Gen Ronnie Evangelista, who previously led the army's SOCOM after being appointed to that position on 9 January 2018. He noted: 'We are all very thankful because our dream of being under one umbrella has been realised. This

has been our dream because we know the intricacies and peculiarities of special operations.'

## Joint efforts

The creation of AFPSOCOM came after last year's vicious combat in Marawi in the southern island of Mindanao.

Indeed, AFP Chief of Staff Gen Rey Leonardo Guerrero said that activation of the command was the 'result of lessons learned in the Zamboanga City attack in 2013 and the Marawi siege in 2017'.

Marawi's brutal conflict, lasting from 23 May to 23 October 2017, saw 168 military personnel killed and more than 1,400 wounded, and 974 insurgents of Maute and ISIS-inspired groups were killed. The conflict reinvigorated cooperation between Philippine and foreign SF units.

'I have personally seen the need for a joint SOCOM, having been a brigade, division and area commander,' said Guerrero. 'In the Eastern

Mindanao Command, I saw the need for a single unit that would oversee the proper employment of the different major service special operations forces deployed in the area.

'I expect that all of the gaps and challenges we encountered in joint operations involving our SOF will be addressed with our activation of the AFPSOCOM. Organisational improvements will ensure that the AFP remains responsive and adaptive to current and emerging challenges in the global security environment,' he continued.

All existing SF units will fall under the operational control of AFPSOCOM by 2019, and the command is expected to be fully operational in terms of personnel, equipment and training by 2020-21.

The Philippines' SF can claim one of the highest operational tempos in the world, with ongoing operations against both communist and Islamic insurgents all around the country. ■

**"Organisational improvements will ensure that the AFP remains responsive and adaptive to current and emerging challenges in the global security environment."**



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**•MULTIPLE PLATFORMS•MULTIPLE MISSIONS•MULTIPLE TARGETS**

Southeast Asian nations are modernising their land forces to better respond to state-based threats and internal security challenges. **By Gordon Arthur**

The 35t Kaplan MT is a joint development effort by FNSS and PT Pindad. The medium tank features a CMI Defence 105mm gun in a Cockerill 3105 turret. (Photo: PT Pindad/CMI)



## Advances in Asia

**In 2017, the biggest military spender within the Association of Southeast Asian Nations (ASEAN) was Singapore (\$10 billion), followed by Indonesia (\$8.2 billion), Thailand (\$6 billion), Vietnam (\$5 billion), Malaysia (\$3.6 billion), the Philippines (\$2.8 billion) and Myanmar (\$2.1 billion).**

### Strides in Singapore

In February, ST Engineering Land Systems (formerly ST Kinetics) exhibited its Next Generation Armoured Fighting Vehicle (NGAFV) at the Singapore Airshow 2018, with the first units for the Singapore Army to be delivered in 2019.

The customer has not disclosed the number of vehicles ordered to replace its M113A2 Ultra armoured personnel carriers (APCs), but variants such as armoured recovery vehicles and bridge-layers will also eventuate.

The prototype NGAFV is armed with a 30mm Mk44 Bushmaster II cannon and 7.62mm coaxial machine gun mounted in an Adder M 30 remote weapon station (RWS).

An ST Engineering spokesperson said that the vehicle has a clean-sheet design and is 'the world's first fully digitised AFV' with features such as a 360° camera surveillance system and an open architecture to mitigate obsolescence issues.

A vehicle monitoring system promotes fleet-wide maintainability and quicker turnaround for repairs, and a commander's independent sight enables hunter-killer engagements.

The platform weighs between 29t and 32.5t depending on the chosen weapon system and armour level. In the future, unmanned technology such as UAVs may be integrated.

ST Engineering is working with American partner SAIC to promote the platform to the US Army for its Mobile Protected Firepower requirement, for which it would receive a 105mm gun in a Cockerill 3105 turret.

The Singapore Army has also introduced Rafael's Spike SR (Short Range) missile to infantry units. Replacing Saab's Carl-Gustaf 84mm recoilless rifle, the Spike SR will be used primarily against enemy tanks. Singapore has been using the Spike LR (Long Range) variant since 1999.

### Indonesian initiatives

The Indonesian Army (TNI-AD) publicly debuted a prototype of the Kaplan medium tank – fitted with a Cockerill 3105 turret and 105mm gun from CMI Defence – in October 2017.

The Kaplan is being developed under a JV between Turkey's FNSS and Indonesia's state-owned

PT Pindad. Production begins next year, with Abraham Mose, president director of PT Pindad, saying that 100 units would be produced to fulfil the TNI-AD's first-stage requirements.

PT Pindad began producing the Anoa-1 6x6 APC in 2008, and the Anoa-2 was introduced to market in 2012. Based on the latter's hull, the Badak is the fruit of cooperation with CMI Defence, which provided its CSE90 LP 90mm gun mounted in a two-man turret. Badaks are being produced in Indonesia at an annual rate of 25-30 units.

In February last year meanwhile, it was announced that Indonesia had procured a further 18 CAESAR 155mm truck-mounted howitzers from Nexter.

In a press release, the OEM stated: 'In addition to the artillery systems, Nexter will also provide its fire control system FINDART, CAESAR simulators for training ►





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and over 50 artillery battalion auxiliary vehicles assembled in Indonesia by its local partner PT Pindad.'

Indonesia inked a first contract in 2012 for 36 CAESARs based on the Renault Sherpa 6x6 chassis.

## Tanks for Thailand

Thailand has turned heavily to China's embrace to satisfy its equipment modernisation needs.

For example, a \$137 million contract was signed in March 2016 for 28 Norinco-built VT4s to replace ageing M41 light tanks. The first batch reached Thailand in October 2017, six months ahead of schedule.

The Royal Thai Army (RTA) is commissioning its VT4s into two battalions of the 3rd Cavalry Division in the nation's northeast.

The army is procuring a second batch of ten VT4s under FY2017 funding and is also seeking a third batch of ten tanks. In addition, China will establish a logistics/maintenance centre in Thailand, where Chinese technicians will be stationed.

The RTA also selected the Chinese-built VN1 8x8 amphibious infantry fighting vehicle, ordering 34 units for \$57 million in 2017. Norinco will deliver these later this year.

Thailand's VN1s sport an RWS with a 30mm cannon, 7.62mm machine gun, 40mm automatic

grenade launcher and HJ-73D antitank missile launcher. The RTA plans to procure a second batch of VN1s in the near future.

Turning to indigenous products, in 2015, the Defence Technology Institute (DTI), part of Thailand's MoD, displayed a prototype Black Widow Spider 8x8 APC at the Defense & Security exhibition.

After undergoing improvements based on feedback from RTA trials in 2016, the Black Widow Spider was to be ready for further evaluations in April 2018 as a potential solution for the army as it replaces older M113 and Type 85 APCs.

Last year, DTI unveiled its Amphibious Armoured Personnel Carrier (AAPC) with flotation kit and trim vane. Designed to swim from ship to shore, the 24t AAPC is aimed at a Royal Thai Marine Corps (RTMC) requirement.

The prototype was fitted with a 30mm cannon in an ST Engineering unmanned turret. Col Chatchapong Punpayak, director of DTI's business development department, said the AAPC shares 90% commonality with the Black Widow Spider.

However, developing an 8x8 armoured vehicle to series production standard is a technically challenging task, and it remains to be seen whether

## "Thailand has turned heavily to China's embrace to satisfy its equipment modernisation needs."

the Thai military will place faith in this domestic solution.

## Adding armour

Thai company Chaiseri launched its First Win 2 4x4 MRAP-type vehicle last November at the Defense & Security exhibition.

In late 2017, the manufacturer delivered a first lot of these enhanced vehicles to the RTA. Although Kan Koolhiran, Chaiseri's general manager, could not disclose the quantity, ADAS Daily News understands that more than 100 First Wins have been ordered or delivered to date.

The most significant improvement to the First Win 2 is increased armour protection, something achieved without any increase in its 11t weight thanks to the use of imported steel. Other additions include the integration of a digital backbone, all-round thermal camera system and potentially a laser warning system connected to smoke grenade launchers.

The RTMC currently operates Cadillac Gage Commando V-150 APCs, but this ageing platform offers insufficient protection against mine blasts and IEDs encountered in an Islamic insurgency being waged in southern Thailand.

To modernise the V-150, Panus Assembly developed the HNV-150, which has a 12mm-thick double-layer steel hull and 16mm-thick V-shaped belly armour.

The 16t platform also adds air conditioning, spotlights, IR lights and front/rear cameras. After field tests, the marine corps began deploying HNV-150s in Thailand's southern provinces last September.

## Mounted mortars

Turning to artillery, the RTMC plans to acquire 155mm L/52 Autonomous Truck-Mounted Gun (ATMG) systems, which are part of Elbit Systems' ATMOS family.

The army acquired six ATMGs mounted on Tatra 6x6 trucks from Israel in 2015. Phase two of this project has started, which will see a battalion of 18 ATMGs enter service, with assembly occurring in Thailand.

Thailand's MoD is developing its Autonomous Truck-Mounted Mortar (ATMM) in conjunction with Elbit Systems. The ATMM employs Soltam's 120mm Spear recoil mortar mounted on a Tata 4x4 truck.

Offering a 6.5km range, the ATMM can enter action within two minutes of coming to a stop. The Weapon Production Centre will produce ten ATMMs in Thailand to equip a single mortar company.

To read more about Southeast Asian land programmes, see *Land Warfare International* (Apr-May 2018, p24-29) or visit [www.shephardmedia.com](http://www.shephardmedia.com). ■

The tracked NGAFFV from ST Engineering will become the Singapore Army's high-tech replacement for the M113 Ultra. (Photo: author)







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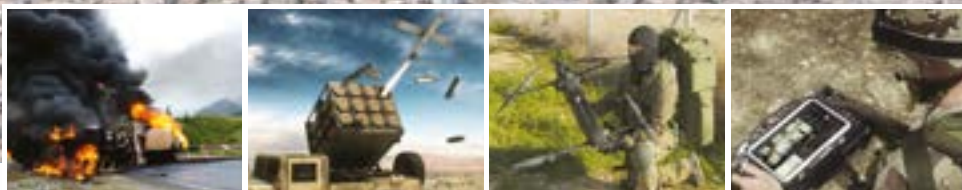
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