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# Royal Thai Army (RTA) to Purchase 6 EC145 T2 Light Utility Helicopters





On 23 February, it was announced that the Royal Thai Army (RTA) has signed a contract with Airbus Helicopters to purchase six 6 EC145 T2 light utility helicopters for VIP transport duties. Deliveries are scheduled to begin in 2016. Mr. Philippe Monteux Airbus Helicopters' Head of Region South East Asia & Pacific stated: "By acquiring the EC145 T2, the Royal Thai Army again demonstrates its confidence in Airbus Helicopters'

products and services, following the successful entry into service of the AS550 C3e Armed Reconnaissance Helicopters in 2014 and the imminent delivery of the UH-72A Lakota Light Utility Helicopters from the United States".

The EC145 T2 features a modern digital cockpit and a 4-axis autopilot. With a maximum take-off weight of 3.65 tons, the helicopter is powered by Turbomeca Arriel 2E powerplants equipped with dual-channel full authority digital engine controls (FADEC). Operational safety is enhanced by Airbus Helicopters' Fenestron® shrouded tail rotor, particularly for landings and takeoffs in confined landing sites, as well as during loading/unloading on the ground while the rotor is turning.



**Source: ©Airbus Helicopters** 

The EC145 T2 is the newest 4-ton-class lightweight twin-engine helicopter in Airbus Helicopters' product range. This is a "hot-and-high" evolution of the company's multipurpose EC145/BK117 family, and retains excellent performance levels throughout the flight envelope – even in extreme conditions.

Kyriazis Vasileios, Epicos Newsletter Head Editor

# Thailand Defence Budget and Procurements





The armed forces of Thailand are responsible among others for defending and maintaining the security of the country from internal and external threats as it is explicitly stated by the country's Ministry of Defence. In order to accomplish this mission the armed forces would have to be equipped with the appropriate equipment. The authorities of the Asian country are deliberately trying to correlate this with the growth of the defence industry, as they want to equip, when

possible the armed forces with armament developed and produced in the country. The main reason is that the defence budget is rather limited. It is indicative that in 2013, the country spent \$5.638 million US dollars in constant 2011 prices according to Stockholm International Peace Research Institute (SIPRI).

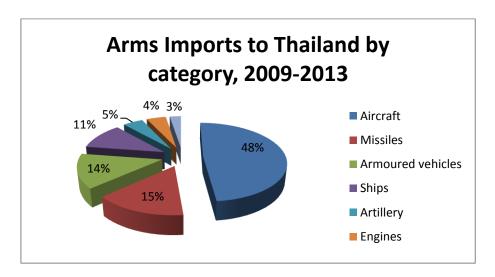
Sweden has a leading role in the Thai armament imports. Apart from the European country, other important countries that exported arms to Thailand, for the period 2009-2013, are Ukraine, USA, Singapore and China.

Imports (expressed in US\$ m. at constant 1990 prices)

	2009	2010	2011	2012	2013	Total
Sweden		27	158	36	171	392
Ukraine		13	24	106	43	186
<b>United States</b>	4	1	50	23	53	130
Singapore		3	4	75		81
China	12		5	25	25	66

Source: SIPRI Publications, Arms Transfers Database

Aircraft were the predominant area of imports for the same period with a total amount of 506 US\$ m. at constant (1990) prices. The 2<sup>nd</sup> most important sector was that of missiles with 157 US\$ m. at constant (1990) prices whereas other areas such as armored vehicles, ships, artillery and engines followed.



Sweden is in the first place of arm exports to Thailand mainly due to the fact that the country's air force procured in 2008 6 JAS-39C Gripen FGA aircraft. Deliveries were concluded in 2011. Additionally, Thailand purchased from Germany 6 BK-117/EC-145 helicopters, for \$34 million. Deliveries will be concluded during 2015.

Kyriazis Vasileios,

**Epicos Newsletter Head Editor** 

# Epicos "Industrial Cooperation and Offset Projects"

epicos.com Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

# For Further Information Press Here

# Development of Semi Rigid RF Coaxial Cables assembly line for Aerospace & Defence applications



A company specialised in the production and commerce of hoses, control cables and rigid tubes for aircraft is willing to expand its activities/capabilities in the area of Semi Rigid RF Coaxial Cables by establishing a respective assembly line to be used on various systems/projects for Aerospace & Defense applications.

# For Further Information Contact our ICO Department

Mail at: g-menexis@epicos.com

#### Provision of an advanced Ground Power Unit (GPU) for A&D applications



A company providing services and products for the Aerospace & Aviation Industry is proposing the provision of its advanced Ground Power Unit (GPU) to address domestic and international markets. This provision may potentially occur through a representation or a Joint Venture with a local organization in a targeted country.

# For Further Information Contact our ICO Department

Mail at: g-menexis@epicos.com

# News from our A&D Business Network



# AGUSTAWESTLAND Aviation Services LLC to Expand Support Capabilities in the Middle East



AgustaWestland Aviation Services LLC (AWAS), an Abu Dhabi Aviation (ADA) and Finmeccanica-AgustaWestland joint venture, announced today it is expanding its range of support solutions serving the growing fleet of AgustaWestland helicopters in the Middle East.

A three stage capability expansion plan will further grow AWAS' range of support services in line with the continued expansion of the regional helicopter fleet. These plans include the completion of the introduction of helicopter MRO (maintenance, repair and overhaul) and logistics services, expansion of MRO services for a range of components, including a range of AW139 main rotor items, by the second half of this year and the introduction of capabilities to support the latest additions to the AgustaWestland product range, the AW189 and AW169, which have already received important orders by operators in the region. With the introduction of these capabilities AWAS will become a major support hub for the whole AgustaWestland Family of new generation helicopters.

Since its launch in late 2011 and becoming fully operational in 2013, AWAS has made significant steps forward to offer an array of comprehensive services and activities for the planned sale of helicopter spare parts and accessories, helicopter/component repair and overhaul, customization, modification and upgrading.

With more than 200 AgustaWestland helicopters in service in the region today, AgustaWestland and ADA have successfully joined forces thanks to the combination of engineering and maintenance expertise and the local partner's willingness to invest in new technologies. The set-up of a local hub for maintenance services has helped customers to access spare parts locally within a few hours. Annual tests for AW109 legacy and AW139 rafts and floats, repairs and overhauls for both items and a turnaround time reduction of 50% on a range of MRO activities are among major results achieved. AWAS has been offering its customers 24/7 support access in case of AOG (aircraft on the ground) since early 2014.

#### About Abu Dhabi Aviation

Abu Dhabi Aviation was formed in 1976 with the Emirate of Abu Dhabi as its principle shareholder and is the largest commercial helicopter and fixed wing aircraft operator in the Middle East. Its global operations span five continents including Saudi Arabia, Qatar, Kuwait, Sultanate of Oman, Republic of Yemen, Iraq, Afghanistan, Pakistan and Eritrea, as well as Spain, Brazil, Papua New Guinea, Indonesia and Australia. For more information about Abu Dhabi Aviation visit www.abudhabiaviation.com

# About Finmeccanica-AgustaWestland

Finmeccanica-AgustaWestland is a total capability provider in the vertical lift market. Through its rotorcraft systems design, development, production and integration capabilities, its experience in the training business and its customer focused solutions, the Company delivers unrivalled mission capability to military and commercial operators around the world. This expertise, backed by technological excellence and innovation, makes the Company a leader in a number of the world's most important helicopter markets offering the widest range of advanced rotorcraft available for both commercial and military applications.

Abu Dhabi Aviation media contact:
Khalid Mashhour
k.mashhour@abudhabiaviation.com

AgustaWestland media contact: Geoff Russell geoff.russell@agustawestland.com Raytheon, NIMR to integrate TALON laser guided rockets, anti-tank missiles onto UAE ground vehicle



Raytheon Company and NIMR Automotive, part of the Emirates Defence Industries Company (EDIC), are collaborating to equip NIMR armored vehicles with TALON™ Laser Guided Rockets. Using the Raytheon remote weapons

station, each vehicle will carry 16 TALON LGRs. The RWS enables TALON to be fired from both stationary and moving vehicles, while an elevated sensor/designator enables the TALON to be fired from concealed positions ensuring lethality and survivability for the ground vehicle.

"Integration onto the NIMR vehicle further demonstrates the versatility of TALON," said Michelle Lohmeier, Raytheon vice president of Land Warfare Systems. "In partnership with EDIC, we are providing an affordable, near-term and reliable solution."

"The NIMR 6x6 tactical platform provides a range of modular system integration to support a full range of missions including armed reconnaissance, infrastructure defense, defensive fire suppression and border security," said Dr. Fahad Saif Harhara, NIMR CEO. "It can also support rapidly advancing infantry. The mobile and fixed firing modes enhance the vehicle's effectiveness and provide a significant advantage over existing heavy artillery.

#### **About TALON**

The TALON LGR is a low-cost, digital semi-active laser guidance and control kit co-developed with the United Arab Emirates. The TALON guidance section fits directly to the front of the legacy 2.75-inch Hydra-70 unguided rocket. TALON's architecture and ease of employment make it a low-cost, highly-precise weapon for missions in urban environments, as well as counter insurgency and swarming boat defense missions. TALON is fully compatible with existing airborne and ground laser designators.

## **About Emirates Defence Industries Company**

EDIC is the region's premier integrated national defence services and manufacturing platform, providing world-class facilities, technology and support services. Based in the UAE, the company brings together the combined capabilities of the UAE's defense industries into a single integrated platform to enhance value for our clients, shareholders, partners and other stakeholders.

#### **About NIMR**

NIMR, a subsidiary of the Emirates Defence Industry Company, delivers highly capable wheeled military vehicles that are designed for the harshest environments, across a diverse scope of mission requirements. NIMR's range of desert-proven 4x4 and 6x6 vehicles are available in armored or non-armored configurations, with modular configurable crew

capacity and payload, where protection and mobility is the focus of our design activities. Through engineering innovation, comprehensive testing and implementation of the highest standards in design and manufacturing, NIMR provides exceptional vehicle reliability and best-in-class desert performance to ensure the protection of the vehicle crews that use them. For more about NIMR, visit us at www.nimr.com

# **About Raytheon**

Raytheon Company, with 2014 sales of \$23 billion and 61,000 employees worldwide, is a technology and innovation leader specializing in defense, security and civil markets throughout the world. With a history of innovation spanning 93 years, Raytheon provides state-of-the-art electronics, mission systems integration and other capabilities in the areas of sensing; effects; and command, control, communications and intelligence systems, as well as cyber security and a broad range of mission support services. Raytheon is headquartered in Waltham, Mass. For more about Raytheon, visit <a href="www.raytheon.com">www.raytheon.com</a> and follow on Twitter@raytheon.

Raytheon Company NIMR

Missile Systems Abu Dhabi, United Arab Emirates

Tucson, Ariz.

Media Contact
Media Contact
Oliver Cribben Pearse
+971.2.4927538

+1.520.794.4559

<u>rmspr@raytheon.com</u> <u>opearse@nimr.ae</u>

# **Epicos Newsroom**



# Bids submitted for S. Korea fighter deal

South Korea said it had received two bids Tuesday for a multi-billion dollar jet fighter contract, with foreign makers Airbus and Lockheed Martin each partnering with a Korean firm to submit rival offers.

The defence ministry said the two bids had been submitted to the state arms procurement agency and the winner of the 8.6 trillion won (US \$7.8 billion) contract would be announced in July.

The competition pits the country's top civilian carrier Korean Air (KAL) and European aerospace giant Airbus, against a rival bid from Korean Aerospace Industries (KAI) in partnership with US firm Lockheed Martin.

The KF-X fighter project is designed to develop and produce 120 fighter jets of a new "indigenous" type to replace South Korea's ageing fleet of F-4s and F-5s.

The South Korean government would provide 60 percent of the jets' development costs, with the rest to be shared by Indonesia, as a result of a bilateral defence treaty, and the winning consortium.

Some experts see the KAI-Lockheed alliance as having the upper hand, as the same partnership developed the T-50 trainer, which is South Korea's first homegrown supersonic aircraft.

Lockheed, which won a contract in 2013 to sell 40 F-35A joint strike fighters to South Korea, has promised to transfer key technologies for the KF-X project to Seoul.

South Korea's military procurement needs, especially where the air force is concerned, have overwhelmingly been met by US suppliers in the past -- a reflection of their close military alliance.

KAL, however, said it would strengthen its bid with technical support from Airbus, which is part of the European consortium that developed the Eurofighter.

Korean Air currently operates aircraft maintenance workshops for both the South Korean and US air forces.

In a statement Tuesday, KAL described Airbus as "the most suitable partner" for the project, saying the European company had a strong commitment to transferring core technology to South Korea.

"Through cooperation with Airbus, we will develop an indigenous model, which is superior to the Eurofighter," it said.

Airbus has made a number of bids for the South's military contracts, including a \$1.38 billion deal to provide air refuelling tankers.

Assessment of the two KF-X bids will be based on technological capabilities and price.

The defence ministry's request for the project requires a new design, although experts say either bidder might opt for a heavily modified version of an existing fighter model.

# Turkey drives hard bargain over crucial missile deal

Turkey has alarmed fellow NATO members by raising the prospect of handing China a multibillion dollar missile contract, yet the long-running saga is far from over and Ankara may just be trading for a better deal.

Turkey, NATO's only Muslim member, entered discussions in 2013 with the China Precision Machinery Export-Import Corporation (CPMIEC) over its first anti-missile system, a contract worth \$3.4 billion (3 billion euros).

French-Italian consortium Eurosam and US-listed Raytheon Co have also submitted offers, but several recent statements by Turkish officials have indicated the Chinese may be the front-runner.

Defence Minister Ismet Yilmaz, in a written answer to a parliamentary commission, sparked speculation that CPMIEC was the winner by saying no new official bid had been received from rivals and its system could be used without integrating with NATO systems.

Yet there are serious concerns over the compatibility of CPMIEC's systems with NATO missile defences, as well as strategic worries about a key member of the military alliance concluding such a big deal with Communist-ruled China. Other officials said talks were continuing with all bidders.

"This is not a done deal," said Sinan Ulgen, visiting scholar at Carnegie Europe in Brussels. "It is totally wrong to assume that Turkey made its final decision to buy missile defence systems exclusively from China. American and European firms are still in the game," he told AFP.

Nihat Ali Ozcan, security expert at the Ankara-based TEPAV think tank, said Turkey was doing all it could to secure a better deal by promoting the Chinese bid.

"Talks are continuing at the bargaining table. We are talking about a lucrative deal," he said. "In my opinion, the Europeans and the Americans are the frontrunners, not the Chinese."

- 'Harmony important' -

NATO says missile systems within the alliance must be compatible with each other and has urged Ankara to take this factor into account.

"It is up to each nation to decide what military capabilities they acquire," a NATO official told AFP.

"We have to look into the particulars of what our Turkish allies have decided and whether this decision is final," the official said.

"It is important for NATO that the capabilities allies acquire can operate together."

Turkish presidential spokesman Ibrahim Kalin insisted Turkey would make the missile system harmonious and integrated with NATO infrastructure.

But analyst Ulgen said that while the Chinese system could be integrated with Turkey's national defence system it would be "half blind" due to compatibility issues.

"How can you expect NATO's radar system in Kurecik in eastern Turkey to work at full capacity with a would-be Chinese system integrated into Turkish defence architecture?" said Ulgen. "It would be a paradox."

What is not a paradox is that the Chinese are offering very favourable terms, including joint production, which is key element of any deal as Turkey wants to build its own long-range air defence and anti-missile architecture to counter enemy aircraft and missiles.

"China is a strong candidate and in a more advantageous position compared to other bidders," a Turkish government official told AFP, saying the Chinese offer was half the price and came with technology sharing.

The issue has also come to a head as worries grow about the country's future orientation under President Recep Tayyip Erdogan, with Turkey's historically strong ties with the West showing signs of severe strain.

Selecting a Chinese company that has been hit by a series of US sanctions over the past decade following accusations it sold arms and missile technology to Iran and Syria in defiance of an embargo would be unlikely to go down well with NATO partners. US embassy officials in Ankara told AFP they would "not speculate on China's bid status, but understand the overall selection process is ongoing."

# - Shadow of anniversary -

Commentators have also suggested Turkey may not select a winner for its contract before April 24, the 100th anniversary of mass killings of Armenians in World War I.

Turkey could use the deal as a card to prevent the West putting pressure on Ankara to recognise the killings as a genocide and adopting tough positions on the highly sensitive issue.

"Turkey is trying to secure a better deal not only commercially but also politically," said Ozcan. France angered Turkey in 2012 when it pushed ahead with a contentious bill to criminalise denial of the Armenian genocide, prompting Ankara to suspend military and political cooperation with Paris. The bill was later struck down by France's top constitutional court.

# Ireland seeks further commitments over Aer Lingus

The Irish government said Tuesday it would not sell its stake in airline Aer Lingus to British Airways owner IAG without additional commitments.

IAG's 1.35 billion euros (\$1.5 billion) bid for Aer Lingus needs the support of Dublin, which maintains a 25.1 percent stake in the former national carrier.

Transport minister Paschal Donohoe said further clarity was needed on the implications for employment and connectivity from Irish airports.

A five-year pledge not to dispose of the airline's lucrative landing slots at London's Heathrow airport is not considered long enough, Donohoe added.

In a statement, he said the existing proposals do "not at present provide a basis on which the government could give an irrevocable commitment to accept an offer to dispose of its shares".

Last month, the board of Aer Lingus said it was "willing to recommend" a takeover approach worth 2.55 euros per share -- subject to certain conditions.

IAG has made a number of "legally-binding" commitments on the future of the airline, promising to maintain the brand and a head-office based in Dublin as well as ensuring the airline's Heathrow slots would not be sold.

But the potential sale has become a hot topic for Dublin, with severe opposition within the junior government coalition party, Labour.

The announcement will come as a blow to IAG chief executive Willie Walsh who on Monday met with Aer Lingus unions and earlier this month appeared before a parliamentary committee to answer questions on the proposals.

IAG said it would "consider" Donohoe's statement in "due course."

Earlier Tuesday, Aer Lingus reported a net loss in 2014 of 95.8 million euros due to a one-off payment to resolve a legacy pension dispute.

Operating profit before exceptional items meanwhile jumped 17.8 percent to 72 million euros.

Revenue rallied 9.2 percent to 1.56 billion euros and passenger numbers rose 1.5 percent to 9.76 million, the Dublin-based carrier added.

In the results statement, the carrier's chairman Colm Barrington reiterated the board's support for the IAG offer.

"To enhance these excellent results and to accelerate Aer Lingus' growth, it is the board's strong belief that the company should now take the opportunity to combine with IAG," Barrington said.

"These significantly positive benefits will de-risk Aer Lingus' future, strengthen its operations and enhance the future success of the company," he added.

Tuesday's results statement was published one week after Aer Lingus appointed chief strategy and planning officer Stephen Kavanagh as successor to chief executive Christoph Mueller.

Mueller steps down on February 28 and Kavanagh -- who has 26 years' service with the airline -- will pick up the reins from March 1.

# French defence minister in India to salvage Rafale deal

French Defence Minister Jean-Yves Le Drian held talks with his Indian counterpart on Tuesday on his second visit to New Delhi in as many months as he tries to salvage a deal to sell 126 Rafale fighter jets.

France is hoping to save the deal, which has been snagged for three years and now faces new questions over cost, before a visit to Paris by Prime Minister Narendra Modi in April.

"The two delegations met today for 45 minutes. The meeting went well," said Indian defence ministry spokesman Sitanshu Kar without giving further details.

French company Dassault Aviation won the right in January 2012 to enter exclusive negotiations with India to supply 126 Rafale fighters, with experts saying a final deal could be worth \$12 billion.

The idea is for Dassault to supply 18 of the twin-engine fighters later this year while the remaining 108 would be made by state-run Hindustan Aeronautics Ltd under technology transfer agreements with India.

But negotiations have proved fraught, both under Modi's government and its Congress predecessor, while a committee looking into the deal has reportedly found that it was not the cheapest option.

Le Drian's visit comes a week after France signed an agreement with Egypt for the first foreign sale of its Rafale fighters, which it hopes will prompt others to snap up its premier combat jet.

Paris is also eyeing possible deals with Qatar and Malaysia, although the Rafale has lost out to foreign competitors in South Korea, Singapore, Morocco, Switzerland and Brazil.

France's defence ministry said before Le Drian's arrival late Monday that the talks would give the governments a chance to discuss "international affairs and defence industry issues", but there was little doubt the Rafale would dominate proceedings.

Modi's right-wing government, which won power in elections last May, has been blowing hot and cold about the progress of discussions.

While his government has pledged to push forward with purchases which stalled under Congress, Modi wants to end India's status as the world's number one defence importer and to have 70 percent of hardware manufactured domestically by the turn of the decade.

A defence ministry spokesman said during Le Drian's visit in December that outstanding differences "would be resolved in a fast-track manner".

But the government has also commissioned a report about the project costs, adding yet more uncertainty.

Speaking at an air show in Bangalore last week, India's Defence Minister Manohar Parrikar said he expected the contract negotiation committee (CNC) to submit its report within weeks.

"I have asked the CNC to speed up the process of completion of the report for us to take a decision on the acquisition of Rafale," he told reporters.

Le Drian arrived in New Delhi late Monday and left on Tuesday afternoon after meeting Parrikar.

## Boeing, Royal Australian Air Force Test Extended Range Weapon

The Boeing Joint Direct Attack Munition Extended Range (JDAM ER) demonstrated significant range increase while maintaining its expected accuracy during flight testing conducted by Boeing and the Royal Australian Air Force (RAAF).

The testing centered on a new wing kit that, when used in conjunction with the weapon's guidance kit, increases the bomb's range from approximately 15 miles (24 kilometers) to more than 45 miles (72 kilometers), as shown during tests above the Woomera Test Range in Australia.

"The JDAM ER wing kit takes advantage of the conventional JDAM aircraft interface and Small Diameter Bomb glide technology," said Beth Kluba, vice president, Boeing Weapons and Missile Systems. "This keeps integration, development and sustainment costs low while bringing customers the range increase needed to neutralize current and future threats."

The 500-pound (227-kilogram) winged JDAM, jointly developed by Boeing and Australia's Defence Science and Technology Organisation, was dropped from RAAF F/A-18 Classic Hornets from altitudes ranging from 40,000 feet (12,190 meters) down to 10,000 feet (3,048 meters). The weapon deployed its wing kit successfully during each test and flew to a predetermined aim point, impacting within meters of its target.

"The extended range wing kit will allow the Australian Defence Force to employ JDAM more flexibly and safely in the target area," said Rear Adm. Tony Dalton, responsible for the acquisition of Guided Weapons in Australia. "Additionally, the program also stands to significantly benefit local Australian industry."

Epicos 2015

Boeing will produce and integrate JDAM ER wing kits for the RAAF under a contract awarded in 2011. Following additional flight and certification testing, production and initial deliveries of JDAM ER to the RAAF are planned for 2015.

Ferra Engineering supplies major sub-assemblies for the JDAM ER modular wing kit to Boeing from its facility in Brisbane, Australia.

JDAM is a low-cost guidance kit that converts existing unguided bombs into near- precision weapons. Including the JDAM ER wing kit, Boeing designed JDAM technology to accept a variety of upgrades such as a laser sensor, improved immunity to GPS jamming, and an all-weather radar sensor. Boeing has built more than 260,000 JDAM tail kits in its St. Charles, Mo., facility since production started in 1998. JDAM is used by 27 international militaries.

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#### Contact:

Katie Kelly Weapons and Missile Systems

Office: +1 314-232-3947 Mobile: +1 314-288-4619 kathleen.a.kelly@boeing.com

James O'Callaghan Boeing Defence Australia Office: +61 7-3005-1266

james.m.o'callaghan@boeing.com