

**Part I: India**

1. Indian Defence Procurements and Future Defence Budget
2. Indian Defence Industry: Capabilities, Turnover and International Cooperative schemes
3. Epicos “Industrial Cooperation and Offset Projects”
4. Development of a new generation ballistic protection vest, integrated with a lightweight Microclimate cooling and heating system, in order to meet Future Soldier requirements and applications
5. Machining services of ferrous and non-ferrous materials for the aerospace sector
6. News from our A&D Business Network

**Part II: Epicos Newsroom**

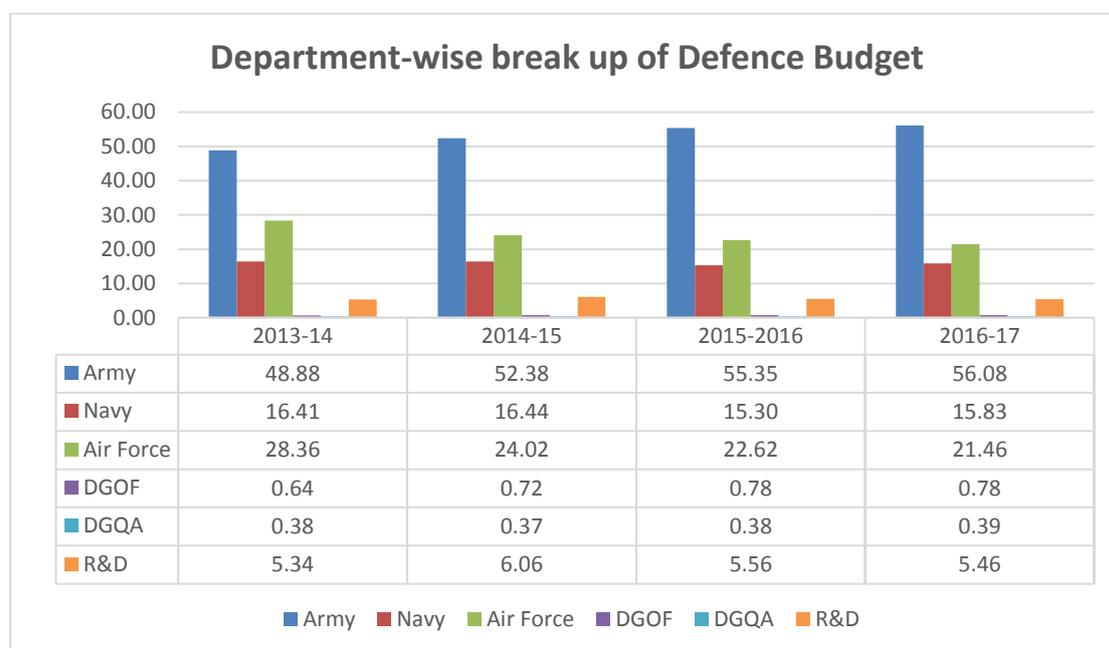
1. LEONARDO: Agreement with the Italian Ministry of Defence for the New M-345 Trainer Aircraft and for the Development of the New Exploration and Escort Helicopter
2. Flynas orders 60 Airbus A320neo Family aircraft
3. Elbit Systems Awarded Approximately \$17 Million Contract to Supply Ground Breaking BrightNite Systems to an Air Force in a NATO Country
4. Russian Helicopters to supply its first civilian rotorcraft to Pakistan
5. AAR Signs Extended PBH Contract with Bluebird Cargo

Indian Defence Procurements and Future Defence Budget



Due to the strained relations that India has with its neighboring countries and the growth of the uncertainty created by international terrorism, the Indian government has been investing heavily, upgrading its defence capabilities. Currently, India is one of the top military spenders in the world. According to the Stockholm International Peace Research Institute (SIPRI) Fact Sheet released in March 2014 India was the world's largest importer of major conventional weapons for the period 2008-13. India's imports of major arms were increased by 111% between 2004-2008 and 2009-13. This trend continued in the Financial Year (FY) 2016-17 defence budget, which is projected to reach Rs 249099 crore (36.6 billion US dollars).

Historically the army receives the highest amount of funds, when compared to other branches. It is indicative that in the FY 2016-17 the army is expected to receive approximately 56% of the total budget, the air force 21.46% and the navy 15.82%. The remaining funds are allocated to other authorities responsible for defence administration, to Research and Development (R&D) and to the Directorate General of Ordnance Factories (DGOF). This trend was also followed through the period 2013-2016 with marginal fluctuations.



Source: Ministry of Defence, Annual Report 2015-16

Modernisation of the Indian land forces remains one of the key focus activities of Indian authorities. Among others, Indian army received indigenously manufactured T-90 tanks. The local manufacturer of the tanks is the Heavy Vehicles Factory (HVF), located at Avadi in

Chennai in the Indian state of Tamil Nadu. More on that, a new futuristic Main Battle Tank is being conceptualised, while the BMP-II is been upgraded. The upgrade includes, among others, the installation of enhanced communication, night fighting capabilities, transmission systems and weapon platforms.

The modernisation process of the Indian Navy includes among others the construction of 6 submarines based on the *Scorpène* design (Kalvari class). Under a technology transfer agreement, the state-owned company Mazagon Dock Shipbuilders Limited (MDL) in Mumbai will manufacture the submarines. On 12 January 2017, *Khanderi*, the second of Kalvari class submarines with Scorpene design, was launched. Four other submarines will follow at intervals of nine months.

Additionally, MDL is also handling two more projects for the Indian Navy (construction of seven destroyers, and four frigates). A destroyer was delivered in 2016 and another destroyer is at an advanced stage of sea trials and is expected to be delivered in the near future. Moreover, a destroyer class ship "Vishakhapatnam" was commissioned in 2015 and the launch of another ship "Mormugao" is planned in the middle of F.Y. 2016-17. Finally, the contract for construction and delivery of frigates was signed during the previous year between MDL and the Indian government.

Moreover, currently, there are 14 warships under construction in the Garden Reach Shipbuilders and Engineers Ltd. (GRSE) facilities, which include two Anti-Submarine Warfare Corvettes (ASWC), eight Landing Craft Utility (LCU) ships and four Water Jet Fast Attack Crafts (WJFAC).

Additionally, India is currently manufacturing an aircraft carrier. Approval for the construction of the aircraft carrier was given in May 1999, but the first of the floating airfields, the INS Vikrant, is expected to be ready in 2023.

India has upgraded the majority of its aircraft assets. More specifically, in March 2015, Dassault Aviation and Thales delivered the first upgraded Mirage 2000 to the Indian Air Force. The upgrade included improved radar, avionics, a new electronic suite, weapons and a modern generation glass cockpit. Under the "Make in India" policy the rest of the Mirage 2000 fleet was agreed to be upgraded in Bangalore from Hindustan Aeronautics Limited (HAL) with the complete support and involvement of Dassault Aviation and Thales teams. Additionally, in 2015, Indian MiG-29 fighter jet modernized by Indian specialists took off into the sky. The modernisation process was carried out in India, while specialists from MiG Corporation, provided the necessary advice and technical assistance and know-how to Indian partners.

Another purchase of aircraft was finalised in November 2015, when the last Pilatus PC-7 Aircraft was delivered to the Indian Air Force (IAF), closing a delivering process which began in February 2013. In May 2012, Indian Ministry of Defence signed a contract with Pilatus for the delivery of 75 PC-7s.

Undoubtedly, the biggest procurement of the Indian air force was that of 36 Rafale aircraft. After a lengthy process in September 2016, France and India signed the contract for the acquisition of the aircraft. The Rafale is a twin-jet fighter aircraft able to operate from both

an aircraft carrier and a shore base and as of June 2016, 152 such aircraft had been delivered.

Moreover, it is worth mentioning that the rotary wing capabilities of the Indian Air Force have already seen a major boost with the induction of upgraded Mi-17 V5, which has better avionics, weapon systems and improved performance. Furthermore, India also procured in 2015, 15 CH-47F Chinook heavy-lift helicopters and 22 AH-64E Apache multirole combat helicopters from Boeing. The total value of the deal could be as high as \$3 billion. When operational the helicopters will enhance India's capabilities across a range of military and humanitarian missions. India is the 14<sup>th</sup> nation to select the Apache and the 19<sup>th</sup> nation to select the Chinook aircraft.

Kyriazis Vasileios,

Epicos Newsletter Head Editor

## Indian Defence Industry: Capabilities, Turnover and International Cooperative schemes



One of the main objectives of India, regarding defence equipment is the achievement of self-sufficiency in defence production. Currently the country is far from achieving this goal as according to estimations nearly 70% of the defence requirements are met through imports, with only 30% being met through domestic production. In order to achieve this, the Indian government has enhanced the services and products provided by the Ordnance Factories and Defence Public Sector Undertakings (DPSUs). The products manufactured include arms and ammunition, tanks, armoured vehicles, heavy vehicles, fighter aircraft and helicopters, warships, submarines, missiles, ammunition, electronic equipment, earth moving equipment, special alloys and special purpose steels.

Ordnance Factories is an industrial setup functioning under the Ministry of Defence. They include among others the following: 41 factories, 9 training institutes and 3 regional marketing centres. The 41 factories are geographically distributed as following:

Name of State/ Union Territory	Number of factories
Maharashtra	10
Uttar Pradesh	9
Madhya Pradesh	6
Tamil Nadu	6
West Bengal	4
Uttaranchal	2
Andhra Pradesh	1
Chandigarh	1
Orissa	1
Bihar	1

Source: <http://ofbindia.gov.in/>

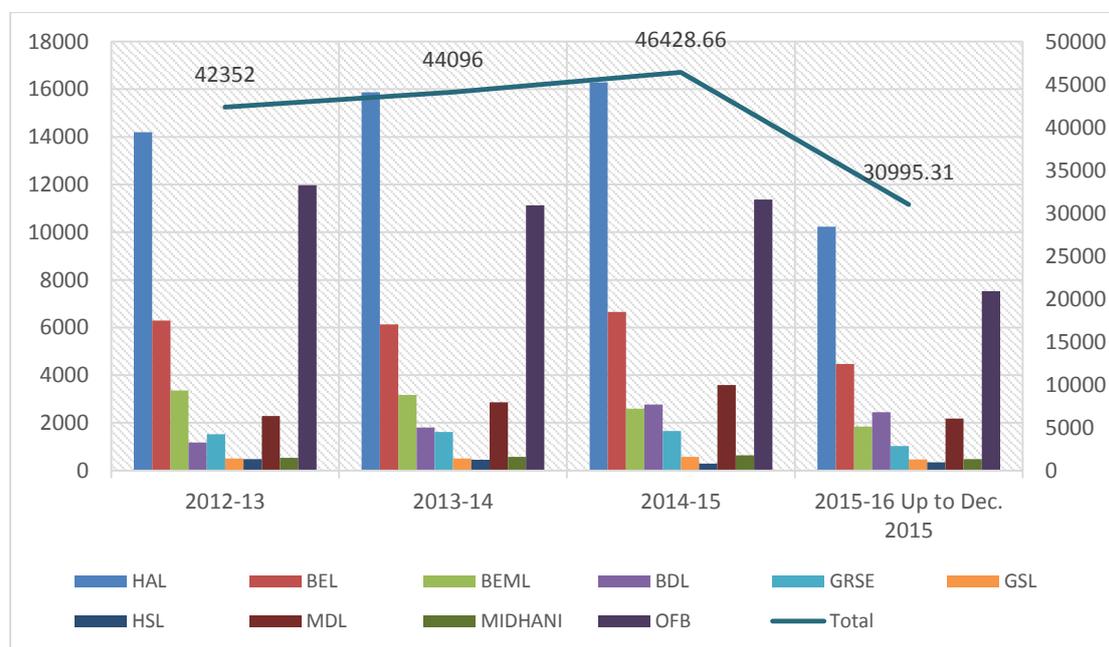
Hindustan Aeronautics Limited (HAL) is the largest DPSU. HAL has established itself as a comprehensive solution provider to the Indian Armed Forces in the field of aviation, providing products such as fighter aircraft, trainer aircraft and helicopters. The Indian Army is the biggest customer of HAL, as the vast majority (97%) of the company's sales are destined to cover the needs of the local army. HAL has 20 Production Divisions, 11 R&D Centres and one Facility Management Division.

Other important DPSUs are the following:

- Bharat Electronics Limited (BEL)
- Bharat Dynamics Limited (BDL)
- BEML Limited (BEML)
- Mishra Dhatu Nigam Limited (MIDHANI)
- Mazagon Dock Limited (MDL)
- Garden Reach Shipbuilders & Engineers Limited (GRSE)
- Goa Shipyard Limited (GSL)
- Hindustan Shipyard Limited (HSL)

The value of production of Defence PSUs & Ordnance Factories for the fiscal year 2013-14 was 43745 ₹ Crore (6.4 billion US dollars), while in 2014-15 it reached 46428.66 ₹ Crore (6.8 billion US dollars).

#### Value of Production of Defence PSUs and OFB in ₹ Crore



	2012-13	2013-14	2014-15	2015-16 (up to Dec, 2015)
HAL	14202	15867	16289	10228
Bharat Electronics Limited (BEL)	6290	6127	6659	4466
BEML Limited (BEML)	3360	3165	2599	1840
Bharat Dynamics Limited (BDL)	1177	1804	2770	2446.7
Garden Reach Shipbuilders & Engineers Limited (GRSE)	1529	1611	1651.31	1030.95
Goa Shipyard Limited (GSL)	507	509	569.55	465.09
Hindustan Shipyard Limited (HSL)	484	453	294.16	340.16
Mazagon Dock Limited (MDL)	2291	2865	3592.6	2174.64
Mishra Dhatu Nigam Limited (MIDHANI)	537	572	640.04	477.77
Ordnance Factory Board (OFB)	11975	11123	11364	7526
<b>Total</b>	<b>42352</b>	<b>44096</b>	<b>46428.66</b>	<b>30995.31</b>

Source: Ministry of Defence, Government of India, Annual Report 2015-2016

The value of exports of all DPSUs and OFB for the FY 2015-16 (up to December 2015) was ₹ 1379.42 crore (202.8 million US dollars) as compared to ₹ 994.04 crore (146.2 million US dollars) in the FY 2014-15. Some of the major export destinations for Indian defence products in 2015 were Algeria, Afghanistan, Israel, Ecuador, Russia, UK, Indonesia, Nepal, Oman, Romania, Belgium, Vietnam, Myanmar, South Korea and Sudan. While the main defence products exported were Personal Protective Items, Offshore Patrol Vessels, Spares for Radar, Cheetal Helicopters, Turbo Chargers and Batteries, Electronic Systems (EOPOD ALH System) and Light Engineering Mechanical Parts.

As it is already mentioned, one of the main political and socioeconomic objectives of India, regarding defence, is the achievement of self-sufficiency in defence production. Offsets is one of the “tools” Indian government is currently using in order to develop the indigenous defence industry and in the long term to achieve self-sufficiency. Currently offsets in India are evolving into a more sophisticated tool reflecting the political decision of the Asian country to further enhance the local industry, so as to be able to efficiently equip the defence forces of the country and to establish a firm access to the global defence supply chain. Being one of the biggest buyers of defence equipment, India can draw immense benefits from implementing a concrete and meticulously targeted offset policy.

Additionally, it is worth mentioning that the opening of the strategic defence sector for private sector participation has already helped foreign Original Equipment Manufacturers (OEMs) to enter into strategic partnerships with Indian companies and leverage the domestic markets and also aim at global business. Besides helping build domestic capabilities, this will bolster exports in the long term. Some cases of OEMs investing in India’s defence industry are the following.

### **Airbus**

Airbus Group exceeded the US\$500 million annual procurement mark from India in 2015. Over 6,000 people at more than 45 suppliers, both public and private, are directly engaged in providing Engineering & IT Services, Aero-structures, Detail parts & Systems, Materials and Cabins to the Group for several of its leading platforms including A380, A350 XWB, A320 Family, A330, C295W, A400M, Eurofighter, Tiger and NH90. The Group has now set its sights on exceeding US\$2 billion in cumulative procurement, covering both civil and defence, in the five years up to 2020. Last year’s figures represent a 15% growth over 2014. Overall, Airbus Group’s procurement from India has grown 16 times in the last decade. Today, every Airbus commercial aircraft being produced is partly Made-in-India.

Hindustan Aeronautics Limited (HAL) makes half of the entire global production of the A320 Family forward passenger doors. Dynamatic Technologies makes flap track beams for the A320 Family on a global single source basis and was given the contract last year to manufacture them for the A330 Family. Flap track beams are the assemblies on which the wings extend and retract every time the aircraft takes-off and lands.

Companies such as Tata, Mahindra and AEQUS, manufacture sub-assemblies and detail parts across Airbus programmes. AEQUS recently inaugurated a dedicated machining facility in Belagavi, the largest of its kind in India, adding to a pre-existing sheet metal, assembly and forging facility and special process operations for Airbus commercial aircraft programmes.

Tata Advanced Materials Ltd. (TAML) provides composite parts for the wing for the A350 XWB and A320 programmes while another Tata Group company, TAL Manufacturing solutions, supplied over 500 sheet metal and machined parts and sub-assemblies for the A320 programme. In addition, Tata Advanced Systems Ltd. (TASL) will supply refuelling pods for the A330 MRTT to Airbus Defence and Space via Cobham.

Wipro has received technology transfer from an Airbus Defence and Space Joint Venture company in Spain to manufacture more than 8000 aerospace actuators per year, which are then used in platforms such as A400M, CN235 and C295W. Another Indian company, Tech Mahindra provides consulting services on Quality and Business Support.

### **SAAB**

Saab and the Indian company Tata Power Strategic Engineering Division (Tata Power SED) have started the process of manufacturing Self-Protection Systems for Land-based Platforms. The partnership will also involve joint development of the next generation Self-Protection System. The process of Transfer of Technology (ToT) and the production of initial orders for Saab's global customers have already started at the Indian company's facility in Bangalore.

### **Boeing**

Under the "Make in India" initiative, Boeing is developing an indigenous aerospace and defence ecosystem in India, focusing on capitalizing on India's competencies to build a supply-chain capability that will be globally competitive. This ecosystem will on the long run, support the production of a wide range of Boeing's aerospace and defence programs.

Recently, the US giant formed a Joint Venture (JV) with the Indian company Tata Advanced Systems Limited (TASL). The scope of the JV is for the two companies to collaborate in aerospace and defence manufacturing and potential integrated systems development opportunities, including unmanned aerial vehicles.

In September 2014, Dynamatic Technologies and Boeing inaugurated a plant to manufacture critical parts for the Chinook Heavy Lift Helicopters. Additionally, TAL Manufacturing Solutions Ltd. manufactures complex floor beams for the Boeing 787-9 Dreamliner and ground support equipment for the C-17.

Moreover, Dynamatic Technologies and Tata Advanced Materials Limited (TAML) have delivered P-8I power and mission equipment cabinets, and TAML is on contract to provide P-8I auxiliary power unit door fairings and composite tailcones for the P-8I. Avantel has delivered the mobile satellite systems for the P-8I and Maini. Cyient (formerly Infotech) currently provides design and stress support on the 747-8 Freighter and the 787-8 and 787-9.

Additionally, Bharat Electronics Limited (BEL) has delivered the Indian-designed Data Link II for the P-8I, the identification friend-or-foe interrogator, a battle management system that enables the aircraft to distinguish friendly aircraft and forces. Finally, BEL is on contract to provide F/A-18 flight deck cockpit panels, while Electronics Corporation of India (ECIL) has provided the speech secrecy systems for the P-8I.

Finally, Hindustan Aeronautics Ltd. (HAL) was the single-source producer of 757 overwing exit doors. HAL has also manufactured the 777 uplock boxes, F/A-18 gun bay doors, F/A-18 wire harnesses, P-8I weapons bay doors, and P-8I identification friend-or-foe transponders.

### **BAE Systems**

Developing a supply chain in India is key to the company's vision to develop technologies and solutions in India for both the home market and for export. BAE Systems has been developing India as one of its five Home Markets since 2009, in addition to Australia, the Kingdom of Saudi Arabia, the United Kingdom and the United States.

Under this notion, Defence Land Systems India (DLSI), the company's joint venture with Mahindra & Mahindra, won an important order from the police in the Eastern state of Jharkhand for the company's mine protected vehicle. DLSI will use skills, technologies and knowledge transferred to the joint venture by BAE Systems South Africa. This is the first such vehicle to be indigenously designed and manufactured by a privately owned defence company in India.

### **Lockheed Martin**

Today, Lockheed Martin's largest program in India is the C-130J Super Hercules, the first major military contract between the U.S. and India in more than 40 years. India has joined the growing list of first time C-130 operators with 72 countries now operating the aircraft. In addition, Lockheed Martin and Tata Advanced Systems Limited (TASL) have formed a joint venture company in India, for manufacturing airframe components for the C-130J.

### **Israel Aerospace Industries (IAI)**

Israel Aerospace Industries (IAI) and India's Alpha Design Technologies have signed a teaming agreement for the production and marketing of mini-Unmanned Aerial Systems (UAS) in India. The IAI-Alpha cooperation includes IAI's Bird-Eye 400 and Bird-Eye 650 mini UAS as well as other mini-unmanned aerial systems, to accommodate the operational needs of Indian customers. Production of the systems will take place in India, while the marketing will be a joint effort of the two companies. Integration of additional applications and subsystems will be performed by Alpha in India with IAI's support.

Kyriazis Vasileios,

Epicos Newsletter Head Editor

## Epicos "Industrial Cooperation and Offset Projects"



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 a new generation ballistic protection vest, integrated with a lightweight Microclimate cooling and heating system, in order to meet Future Soldier requirements and applications



A company with extensive experience in the development and production of ballistic protection equipment is proposing the development of a new technology ballistic vest, integrated with an advanced lightweight microclimate cooling and heating system, in order to mitigate Future Soldiers' heat stress, allowing them to operate safely and more effectively in all terrains and under extreme weather conditions.

[For Further Information Contact our ICO Department](#)

Mail at: [a-kintis@epicos.com](mailto:a-kintis@epicos.com)

### Machining services of ferrous and non-ferrous materials for the aerospace sector



A company specializing in the supply of parts and services for the machining industry, is willing to collaborate with a Prime Contractor or a third party for the provision of its machining services of ferrous and non-ferrous materials, to be used in several applications within the aerospace industry.

[For Further Information Contact our ICO Department](#)

Mail at: [a-kintis@epicos.com](mailto:a-kintis@epicos.com)



## News from our A&D Business Network

### Embraer Signs Order with Wideroe for up to 15 E2 Aircraft



Embraer has signed a contract with Wideroe, the largest regional airline in Scandinavia, for up to 15 E2 family jets. The contract consists of three firm orders for the E190-E2 and purchase rights for 12 further E2 family aircraft. This flexible mix of purchase rights for E175-E2, E190-E2, and E195-E2 will give Wideroe the ability to grow their fleet with a family of aircraft from 80 to 130+ seats, to right size capacity to meet market requirements.

The order has a potential list price value of up to US\$873million, if all orders are converted. The three firm orders for E190-E2s were included in Embraer's fourth quarter 2016 backlog.

"It's always an important moment for Embraer when we add a new airline to our family of operators. It's even better to be part of a step change in that customer's operations - our next generation E190-E2s will also be the first jets in Wideroe's fleet. The opportunities for both Embraer and Wideroe as the airline seeks to expand and move beyond only turboprop operations, present an exciting future. A great way to start 2017", said Arjan Meijer, Chief Commercial Officer, Embraer Commercial Aviation.

Wideroe will configure the E190-E2s in a comfortable single-class layout with 114 seats. Deliveries are scheduled for 2018. This deal brings the E-Jets E2 backlog to 275 firm orders plus Letters of Intent, options and purchase rights covering another 415 aircraft giving a total of 690 commitments from airlines and leasing companies.

Stein Nilsen, Chief Executive Officer of Wideroe, said, "Our decision to choose the Embraer family of next generation E2 aircraft for our move into jet operations is based on the need for a high quality passenger experience, ease and flexibility of operations, and lowest through life costs. The result of our evaluation determined the E2 family of aircraft, coupled with Embraer's world class customer support, as the best solution for our airline. We're excited at the prospect of being among the first operators of Embraer's next generation of aircraft, which feature significant environmental improvements in both noise and fuel efficiency while still improving performance. The flexibility offered by Embraer's family of same type rated E2 aircraft will enable us to build a right sized fleet, as a supplement to our existing fleet, in accordance with market requirements."

Embraer is the world's leading manufacturer of commercial jets with up to 130+ seats. The Company has 100 customers from all over the world operating the ERJ and the E-Jet families of aircraft. For the E-Jets program alone, Embraer has logged more than 1,700 orders and over 1,300 deliveries, redefining the traditional concept of regional aircraft by operating across a range of business applications.

For Further Information [Click Here](#)

## CAE wins defence contracts on key platforms valued at more than C\$175 million



CAE today announced that it has won defence contracts on a range of customer platforms valued at more than C\$175 million to provide new simulation products, simulator upgrades and training support services for global military customers. Key contracts awarded during the third quarter of CAE's fiscal year 2017 include Babcock France to support pilot training for the French Air Force; Airbus Defence & Space ordering a new C295 full-flight simulator for its training centre in Seville, Spain, and continuing simulator upgrades as well as training support services on the MH-60 Seahawk for both the United States Navy and Royal Australian Navy.

"The contract with Babcock France is a strategic win in Europe that will provide the French Air Force with a modernised training solution for future fighter pilots," said Gene Colabatistto, CAE's Group President, Defence & Security. "We have been Airbus' long-time training partner on the C295 program and are pleased we will continue to support the training required on this platform, which now will also include the Royal Canadian Air Force following Canada's selection of the C295 for its Fixed-Wing Search and Rescue program. Global militaries and original equipment manufacturers continue to recognize CAE's expertise and experience as a training systems integrator on enduring platforms, and this continues to provide us a healthy pipeline of opportunities around the world."

### About CAE

CAE is a global leader in training for the civil aviation, defence and security, and healthcare markets. Backed by a 70-year record of industry firsts, we continue to help define global training standards with our innovative virtual-to-live training solutions to make flying safer, maintain defence force readiness and enhance patient safety. We have the broadest global presence in the industry, with 8,000 employees, 160 sites and training locations in over 35 countries. Each year, we train more than 120,000 civil and defence crewmembers and thousands of healthcare professionals worldwide. [www.cae.com](http://www.cae.com). Follow on Twitter @CAE\_Inc and @CAE\_Defence.



## **LEONARDO: Agreement with the Italian Ministry of Defence for the New M-345 Trainer Aircraft and for the Development of the New Exploration and Escort Helicopter**

Leonardo has signed, with the Italian National Armaments Directorate of the Italian Defence Ministry, two contracts for an initial batch of five Aermacchi M-345 trainer aircraft and for the first phase of development and delivery programme of the new exploration and escort helicopter (NEES) for the Italian Army. The combined value of the contracts is in excess of 500 million euro.

Mauro Moretti, Chief Executive Officer and General Manager of Leonardo, said: “The signing of these two contracts is the result of constructive discussions between the Italian Government and industry, which helped identify the requirements and the best technological answers. Thanks to this joint understanding, we’ll be able to deliver advanced solutions to our national customer by optimizing available financial resources and developing new technologies, skills and industrial processes in our country.”

The Italian Air Force has a total requirement for around 45 M-345s (designated as T-345 by the Italian Armed Forces) to progressively replace the 137 in-service MB-339 aircraft which entered into operation in 1982. The new aircraft will work alongside the fleet of 18 twin-engine Aermacchi M-346s already ordered and currently used by the Italian Air Force for the advanced phase of pilot training. Together, the two aircraft types will form the world’s most advanced training system for military pilots. The M-345, thanks to its high performance and advanced ground-based training systems, will provide the Italian Air Force with a significant boost in the effectiveness of training, improved efficiency and a reduction in operational costs. The first delivery is expected by 2019.

The multiyear contract for the new exploration and escort helicopter (NEES) of the Italian Army envisages the study, development, industrialization, production and testing of a prototype and three initial production aircraft. Through this new programme, based on a total requirement for 48 units, the Italian Army will be able to replace the current fleet of AW129 which are expected to be retired from service by 2025 following over 35 years in operations. The NEES programme will benefit from the long operational expertise gained by the Italian Army thanks to the AW129 and from the know-how of Leonardo in this specific helicopter sector. It will allow the service to introduce an even more technologically advanced product, with greater performance and lower operating costs, to meet arising needs in evolving scenarios for the next 30 years.

For Further Information [Click Here](#)

**Source:** Epicos, Leonardo

## Flynas orders 60 Airbus A320neo Family aircraft

Flynas, Saudi Arabia's leading low-cost carrier, has signed an agreement with Airbus for 60 A320neo Family aircraft. In addition to the 60 aircraft, Flynas has converted 20 A320ceo from a previous order to A320neo bringing the airline's total firm order to 80 A320neo. The deliveries are scheduled to take place during 2018-2026.

The agreement was announced today in Riyadh at a press conference attended by Ayed Al Jaaid, Chairman, NAS Holding, Bander Al Mohanna, Chief Executive Officer, NAS Holding Group and Fouad Attar, Managing Director, Airbus Middle East. Flynas, an all Airbus operator, currently has 26 A320ceo in service. Launched in 2007, the airline has successfully operated over 260,000 flights and carried more than 30 million passengers in the last ten years. Ayed Al Jaaid, Chairman, NAS Holding Group said, "Flynas has come a long way to establish itself as a highly reputed airline in Saudi Arabia. With the introduction of the new aircraft technology, we are confident of our ability to provide best services to our customers. We also look forward to being the first airline in the Kingdom to be successfully listed on the Saudi Stock exchange, which will offer equity ownership to the public and be a part of a great journey."

Bander Al Mohanna, Chief Executive Officer, NAS Holding Group said, "We have operated exceptionally well with our existing Airbus A320 fleet, which has allowed us to maintain high performance standards in operations and passenger experience. We have an ambitious growth vision and the new A320neo order will further support our plans to be a leading low-cost carrier with the most advanced and efficient technology and will allow us to strengthen our offerings within and outside of Saudi Arabia."

In 2016, Flynas set a new record by carrying 6.3 million passengers contributing to a 14% year-on-year increase. The A320neo will provide Flynas unbeatable efficiency and comfort in both high-density domestic segments as well as thinner routes. "The additional A320neo aircraft will continue to support Flynas' growth plans as a leading low-cost carrier in Saudi Arabia's fast-growing aviation sector," said John Leahy, Chief Operating Officer - Customers, Airbus. Today's agreement further consolidates the aircraft's popularity that has been endorsed by operators worldwide. The aircraft will offer a unique combination of unbeatable economics, fuel and cost efficiency and outstanding passenger comfort."

The A320neo Family is the world's best-selling single aisle aircraft with more than 5,000 orders from 90 customers since its launch in 2010. It incorporates latest technologies including new generation engines and Sharklet wing tip devices, which together deliver more than 15 percent in fuel savings from day one and 20 percent by 2020 with further cabin innovations. The A320neo also offers significant environmental performance with nearly 50 percent reduction in noise footprint compared to previous generation aircraft.

For Further Information [Click Here](#)

**Source:** Epicos, Airbus

## Elbit Systems Awarded Approximately \$17 Million Contract to Supply Ground Breaking BrightNite Systems to an Air Force in a NATO Country

Elbit Systems Ltd. announced today that it was awarded a contract to supply ground breaking, multi spectral BrightNite systems to an air force in a NATO country. The contract, in an amount of approximately \$17 million, will be performed over a thirty-month period.

Low-flying helicopters are especially vulnerable to threats such as difficult terrain, enemy fire and obstacles in the flight path. Sorties must be performed both day and night and often carried out in DVE conditions, adding to the already heavy workload. Prior to BrightNite, flight crews have had to rely on night vision goggles (which have limited capabilities) to accomplish their mission. Factors like complete darkness, poor weather conditions, brownouts, whiteouts and sandstorms limit the pilots' Field of View (FOV). Lightweight, compact and cost-effective, BrightNite delivers a crystal clear visual of the landscape, flight data and especially the mission data, directly to both eyes of the pilot, enabling intuitive flight in a head-up, eyes-out orientation in pitch dark and other DVE and low visibility landing conditions.

Bezhael (Butzi) Machlis, President and CEO of Elbit Systems commented, "We are proud to have won this contract which enables helicopter pilots to gain highly advanced operational capabilities by flying in more than 90% of the nights and in adverse weather conditions. The BrightNite revolutionary solution is suitable for a variety of missions such as Special Forces and search and rescue. Given the important role helicopters are playing in the modern battlefield and the necessity of operating at night, we hope other customers will follow this selection by a NATO country's air force."

### About Elbit Systems

Elbit Systems Ltd. is an international high technology company engaged in a wide range of defense, homeland security and commercial programs throughout the world. The Company, which includes Elbit Systems and its subsidiaries, operates in the areas of aerospace, land and naval systems, command, control, communications, computers, intelligence surveillance and reconnaissance ("C4ISR"), unmanned aircraft systems, advanced electro-optics, electro-optic space systems, EW suites, signal intelligence systems, data links and communications systems, radios and cyber-based systems. The Company also focuses on the upgrading of existing platforms, developing new technologies for defense, homeland security and commercial applications and providing a range of support services, including training and simulation systems.

For Further Information [Click Here](#)

**Source:** Epicos, Elbit Systems

### Russian Helicopters to supply its first civilian rotorcraft to Pakistan

Russian Helicopters, part of State Corporation Rostec, has won an international tender and signed a contract with Balochistan provincial government to supply a Mi-171 helicopter. The helicopter is expected to be delivered in the first part of this year.

The government of Balochistan will use its first Russian civilian Mi-171 for transporting passengers and cargo, sanitation tasks, patrolling and emergency response.

"Our victory in the tender is a natural indication that Russian helicopters are most suitable for use in this region. We expect that the Pakistani authorities will continue to increase the volume of deliveries of Russian rotorcraft in the future. There are preconditions for that already," - said Russian Helicopters Deputy CEO for Marketing and Business Development Alexander Shcherbinin.

The Mi-17-type helicopter was chosen for Balochistan due to its proven reliability and efficiency in a wide variety of climates, ability to store without a hangar, ease of maintenance and operation in areas with limited development of ground infrastructure.

The Mi-17-type helicopters are produced at Russian Helicopters' Ulan-Ude Aviation Plant and Kazan Helicopter Plant. As of 2014, more than 12 thousand units have been made, which is a world record for twin-engine helicopters. They were delivered to more than 100 countries and their total flight time totals about 100 million hours.

For Further Information [Click Here](#)

**Source:** Epicos, Russian Helicopters

### AAR Signs Extended PBH Contract with Bluebird Cargo

AAR (NYSE: AIR) has been awarded a contract extension for Bluebird Cargo's fleet of five B737CL aircraft, which the aviation services company has been supporting since 2007.

"AAR's robust European logistics network and mainland distribution center in Brussels has ensured that we have been able to continually support Bluebird Cargo for over 10 years," said Nick Price, Senior Vice President – Operations, Commercial Programmes, AAR. "Bluebird Cargo has tight schedules and specific deadline targets, and we are proud to say that AAR has exceeded those and helped Bluebird Cargo deliver the best possible customer service worldwide."

"AAR's successful renewal of Bluebird Cargo's B737CL agreement shows the effectiveness of our supply chain hub in Europe and why more and more EMEA airlines are choosing to partner with AAR for component support," said Deepak Sharma, President, International Supply Chain, AAR.

Based in Reykjavik, Iceland, Bluebird Cargo operates internationally, providing freight services via its extensive network and ACMI and Wet Lease services throughout Europe, Asia and North America.

For Further Information [Click Here](#)

**Source:** Epicos, AAR