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Angola: Defence Budget and Future Procurements

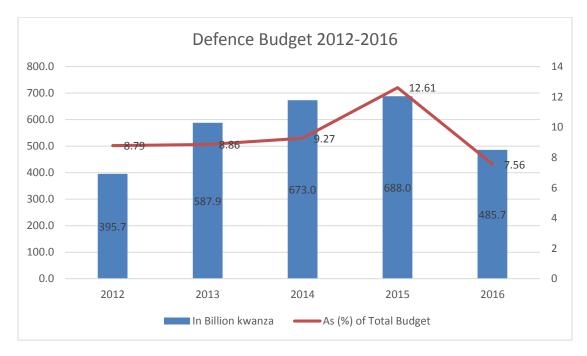
minden.gov.ao

Ministério da Defesa Nacional

Angola, budgeted 688 billion kwanza (4.2 billion US dollars) on defence in 2015. The



Southwest African country, the continent's second-largest crude oil producer after Nigeria mainly finances its defence budget through oil revenues. However, the crash in oil prices obliges the country to review its budget allocation. This is the reason why, in 2016 the defence budget is expected to be contracted by approximately 30% reaching 485 billion kwanza. Nevertheless, Angola still spends a considerable amount of funds on defence (about 7.5% of its state budget) as it attempts to further modernise its armed forces and to obtain the appropriate operational capabilities that will enable the deployment of more troops to African-Union and UN peacekeeping operations.



Source: http://www.minfin.gv.ao

The breakdown of spending in 2015 was according to data provided by the Ministry of finance as following: 51% personnel's costs, 14.14% acquisition of goods and services, 22.2% current (financial) transfers and 9.78 capital investments. According to official estimations in 2016 the breakdown is expected to be as following: 61.3% personnel's costs, 7.95% acquisition of goods and services, 25.17% current (financial) transfers and only 2.07% capital investments.

| | PERSONNEL'S COSTS | ACQUISITION OF GOODS AND SERVICES | % CURRENT (FINANCIAL) TRANSFERS | CAPITAL INVESTMENTS |
|------|----------------------|---|---------------------------------------|------------------------|
| 2014 | 43,80% | 27,03% | 12,25% | 14,55% |
| 2015 | 51% | 14.14% | 22.2% | 9.78% |
| 2016 | 61.3% | 7.95% | 25.17% | 2.07% |

Source: http://www.minfin.gv.ao

Epicos 2016

Angola's army is considered to be one of the best equipped and trained in Africa. However local armed forces in several cases suffer from inadequate maintenance. Angola's army is mainly armed with Russian, Soviet and ex-Warsaw pact equipment. The majority of such equipment was procured during the 80s and 90s.

On the other hand, the country's air force with an inventory of approximately 300 aircraft is one of the most advanced in the continent. One of the latest acquisitions of Angolan air force is that of 12 Su-30K, fighter aircraft. Deliveries are expected to be concluded within 2016, enhancing the existing fleet of Sukhoi aircraft, notably the Su-22 and Su-24. Moreover Angola purchased six A-29 Super Tucano military aircraft from Embraer, in order to use them in border surveillance missions to prevent illegal immigration.

Angolan navy is rather neglected and underequipped. Since has country has a 1600 km long coastline which should be protected the navy currently is under modernization process. Under this context, in 2015, Israel Aerospace Industries received a contract to supply four Super Dvora Mk 3 Fast Patrol Boat to the Southwest African country. Additionally, in 2016, it was reported by some news agencies that Angola has bought patrol boats and radar systems from Italy in order to improve its maritime surveillance capabilities. This was confirmed by the Angolan defence minister Mr João Lourenço, to the Angolan journalists after meeting with the Italian counterpart, Mrs Roberta Pinotti, in June 2016. More specifically, Mr Lourenço said that he was negotiating "concrete projects for Angola" with Leonardo-Finmeccanica.

Additionally, in September 2014, Angola signed a Memorandum of Understanding (MoU) with Brazil. The technical assistance provided by the Brazilian navy will help Angola to implement its Maritime Power Development Program (Pronaval). Additionally, according to the agreement Angola's navy will purchase seven patrol vessels that will be produced by the Brazilian Navy's Empresa Gerencial de Projetos Navais (Emgepron).

Kyriazis Vasileios Epicos Newsletter Head Editor

Angola: Defence Industry, International Cooperation schemes





Angola does not have a defence industry in its full and proper sense. However, its government have explicitly stated that creating a viable defence industry that will cover the needs of armed forces, is a priority. Under this context, local authorities, have promoted the creation of cooperative schemes with foreign partners, in order to

further enhance the technological level of the local

defence industry.

In September 2014, Angola signed a Memorandum of Understanding (MoU) with Brazil. The technical assistance provided by the Brazilian navy through the MoU will help Angola to implement its Maritime Power Development Program (Pronaval). Additionally, according to the agreement Angola's navy will purchase seven patrol vessels that will be manufactured by the Brazilian Navy's Empresa Gerencial de Projetos Navais (Emgepron). Four of these vessels will be built in Brazil, and three in Angola. More on that EMGEPRON will oversee the building of a shipyard in Angola and provide training to the associated industrial and naval personnel.

Additionally, Angola has signed a similar agreement with Portugal in 2009. The agreement provides for the development and implementation of joint projects between the defence industries of Portugal and Angola, as well as for the mutual use of scientific capabilities.

Russia is one of the countries with which Angola has formed a tight bond in the field of defence, as it provides support in the modernization and rebuilding efforts of the Angolan Armed Forces. The strengthening of military-technical cooperation between the two countries was further discussed on 28 March 2014, in a meeting between the Angolan Defence minister, Mr. Cândido Pereira Van-Dúnem and his Russian counterpart Mr. Sergei Shoigu.

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

Design and manufacturing of advanced retractable light weight landing gear for Medium Altitude Long Endurance (MALE) Unmanned Aerial Vehicle (UAV) systems and general aviation aircraft under FAR PART 23



A company with long extensive experience in providing cutting edge technological services and products for the aeronautical and automotive markets is proposing, in the frame of an offset program, the collaboration with Aerospace and Defense Prime contractors for the design and manufacturing of advanced retractable light weight landing gear for Medium Altitude Long Endurance (MALE) Unmanned Aerial Vehicles (UAV) systems.

For Further Information Contact our ICO Department Mail at: a-kintis@epicos.com

Cable harnessing for military, aeronautical and space applications



A company with long standing experience in the field of cabling for industrial and communication purposes is willing to expand the activities in the field of specialized cabling for military and aerospace applications.

For Further Information Contact our ICO Department

Mail at: a-kintis@epicos.com

News from our A&D Business Network



Dassault Aviation will renovate the Mirage 2000D aircraft of the French Air Force



The French defense procurement agency DGA has decided to give Dassault Aviation the responsibility of renovating 55 Mirage 2000D aircraft in service with the French Air Force. This decision reflects the trust DGA places in the

know-how of Dassault Aviation and its industrial partners in upgrading aircraft. The Mirage 2000D entered service in 1993 and is specialized in ground attack. The modifications it is to undergo (gun pod, Mica missiles and weapon system improvement) illustrate the upgradability of Dassault aircraft based on operational lessons learned.

About Dassault Aviation:

With more than 8,000 military and civil aircraft delivered to more than 90 countries over the past 60 years, and having logged nearly 28 million flight hours to date, Dassault Aviation can offer recognized know-how and experience in the design, development, sale and support of all types of aircraft, from the Rafale fighter to the Falcon range of high-end business jets, as well as military unmanned air systems. In 2015, Dassault Aviation reported revenues of €4.20 billion. The company has almost 12,000 employees. In 2016, Dassault Aviation is celebrating the first centennial of its history, which started in 1916 with Marcel Dassault and the Éclair propeller.

www.dassault-aviation.com

Follow on Twitter: @Dassault_OnAir

SAAB to Supply Kleinport Port Management System to Curacao Ports Authority



Defence and security company Saab has been awarded a contract from the Curacao Ports Authority to install the latest version of Saab's KleinPort for the Authority's new Harbour Management System. Curacao Ports will be using KleinPort to manage its multi-harbour operations.

System functionality includes the scheduling of vessel traffic and services, the dispatch of pilots and tugs, the recording of cargo data, full tariff billing and provision of comprehensive management reporting.

"Curacao Ports required a new harbour management system that also met the needs of its tug subsidiary, KTK. We had a number of specific requirements including vessel scheduling at the different harbours on the island as well as mobile access for tugs, pilot boats and pilots. In addition, accounts for the port and tug company had to be segregated for invoicing and reporting. The proven KleinPort product was able to deliver all of our required functionality and Saab provided very effective best practices guidance as a result of their years of experience in the industry", said Urvin Inocente, IT Manager, Curacao Ports Authority.

"KleinPort is one of the most advanced port management information systems available today and is expected to significantly increase the efficiency of the harbours", says Anders Carp, head of business unit Traffic Management within Saab business area Surveillance.

The Curaçao Ports Authority (CPA) manages all of Curaçao's ports. CPA owns the container and cruise terminal, most of the wharves and properties adjacent to the harbour, which are leased to private operators. CPA also coordinates pilotage and regulates all vessel movements in the ports. Moreover, CPA is responsible for commercial development of the ports and for overseas promotion. KleinPort is a product of the Maritime Traffic Management product area of Saab, a leading provider of Maritime Enterprise Software.

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Saab serves the global market with world-leading products, services and solutions within military defence and civil security. Saab has operations and employees on all continents around the world. Through innovative, collaborative and pragmatic thinking, Saab develops, adopts and improves new technology to meet customers' changing needs.

Epicos NewsRoom





Orbital ATK, Inc, a global leader in aerospace and defense technologies, announced today it has entered into a long-term aerospace supply agreement with FLY S.p.A. of Italy, a division of the Forgital Group. Under the \$68 million agreement, FLY will provide metallic case components through 2026 for the Rolls-Royce Trent XWB-84k engine that powers the Airbus A350-900. FLY will supply to Orbital ATK the seamless metallic V-groove ring assembly for the composite fan containment case manufactured by Orbital ATK. The agreement ensures a stable supply of the V-groove ring with an international partner capable of manufacturing the complex metal structure and advances Orbital ATK's supply chain maturity through the duration of the Rolls-Royce XWB program.

"As a result of Orbital ATK's commitment to Rolls-Royce's high standards for quality, performance and cost-competitiveness, Orbital ATK and FLY have strengthened our relationship to ensure our mutual success," said Steve Earl, Vice President and General Manager of Orbital ATK's Aerospace Structures Division. "This long-term supply agreement positions Orbital ATK as an important supplier on some of the industry's leading aircraft, while strengthening our business outlook in the years to come."

The Orbital ATK partnership with Rolls-Royce began in 2009 with the supply of aft fan cases for the Trent-XWB-97K engines and expanded in 2013 with an agreement to provide an increased supply through 2024. FLY is currently Rolls-Royce's supplier of titanium forgings for other fan case modules in the Trent XWB engines.

Both suppliers have received the Rolls-Royce Aerospace Supplier of the Year Award for outstanding overall program execution results in producing either composite or metallic structures for the Trent-XWB-84K engine program. Orbital ATK received the award in 2013; FLY received the award two years later, in 2015.

About Orbital ATK

Orbital ATK is a global leader in aerospace and defense technologies. The company designs, builds and delivers space, defense and aviation systems for customers around the world, both as a prime contractor and merchant supplier. Its main products include launch vehicles and related propulsion systems; missile products, subsystems and defense electronics; precision weapons, armament systems and ammunition; satellites and associated space components and services; and advanced aerospace structures. Headquartered in Dulles, Virginia, Orbital ATK employs approximately 12,000 people in 18 states across the U.S. and in several international locations. For more information, visit www.orbitalatk.com.

Source: Epicos, Orbital ATK

United Arab Emirates - Munitions, Sustainment, and Support

The State Department has made a determination approving a possible Foreign Military Sale to the United Arab Emirates for munitions, sustainment, and support. The estimated cost is \$785 million. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale on July 15, 2016. The Government of the United Arab Emirates (UAE) requests approval to procure seven thousand seven hundred (7,700) GBU-10 guidance kits with seven thousand seven hundred (7,700) Mk-84/BLU-117 bombs, five thousand nine hundred forty (5,940) GBU-12 guidance kits with five thousand nine hundred forty (5,940) Mk-82/BLU-111 bombs, five hundred (500) GBU-31V1 guidance kits with five hundred (500) Mk-84/BLU- 117 bombs, five hundred (500) GBU-31V3 guidance kits with five hundred (500) BLU-109 bombs, and fourteen thousand six hundred forty (14,640) FMU-152 fuzes. This sale also includes non-MDE munitions items. The total estimated value of MDE is \$740 million. The overall total estimated value is \$785 million.

This proposed sale contributes to the foreign policy and national security of the United States by helping the UAE remain an active member of the OPERATION INHERENT RESOLVE (OIR) coalition working to defeat the Islamic State in Iraq and the Levant (ISIL). These munitions will sustain the UAE's efforts and support a key partner that remains an important force for political stability and economic progress in the Middle East.

The proposed sale provides the UAE additional precision guided munitions to meet current and future threats. The UAE continues to provide host-nation support of vital U.S. forces stationed at Al Dhafra Air Base and plays a vital role in supporting U.S. regional interests. The UAE was a valued partner and active participant in OPERATION IRAQI FREEDOM (OIF), OPERATION ENDURING FREEDOM (OEF), OPERATION UNIFIED PROTECTOR (OUP), and now is a valued partner in OIR coalition operations. The proposed sale of this equipment and support will not alter the basic military balance in the region.

The UAE will have no difficulties absorbing these munitions into its inventory. The munitions will be sourced through procurement and the contractor determined during contract negotiations. There are no known offset agreements proposed in connection with this potential sale. There are no additional U.S. Government or contractor representatives anticipated to be stationed in the UAE as a result of this potential sale.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale. This notice of a potential sale is required by law and does not mean the sale has been concluded. All questions regarding this proposed Foreign Military Sale should be directed to the State Department's Bureau of Political Military Affairs, Office of Congressional and Public Affairs, pm-cpa@state.gov.

For Further Information Click Here

Source: Defense Security Cooperation Agency

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Cobham Books Large ASICs Order for Use in Mining & Tunneling

Cobham will provide Application Specific Integrated Circuits (ASIC) to Orica, a leading Australian mining services company for use in explosive detonation equipment utilized for

mining excavation.

Colorado Springs, CO - Cobham received an award for Application Specific Integrated Circuits

(ASIC) valued at several tens of millions of dollars from Orica, a leading Australian mining services company with global operations. Under the terms of the multi-year agreement, Cobham will provide ASICs to Orica for use in explosive detonation equipment utilized for

mining excavation. Work will be performed by Cobham Semiconductor Solutions, part of the

Cobham Advanced Electronic Solutions sector.

"When reliability and safety in very harsh environments are paramount to customers,

Cobham's microelectronics provide assured performance," said Jill Kale, President of

Cobham Advanced Electronic Solutions. "Leveraging our extensive spaceflight pedigree, Cobham's solutions for industrial and mining applications apply the lessons we have learned

over decades designing products to perform in the most challenging environments while

optimizing a network of suppliers to provide cost-competitive offerings," continued Kale.

"We seek to develop long-term, trusted relationships with our customers to enable their

success."

Cobham has been providing the latest innovations in digital and mixed-signal ASICs for over

thirty years for high reliability applications. The company's extensive intellectual property and design libraries allow for first-pass success and improved time to market for customers.

Cobham's on-site design, packaging, test, and reliability analysis capabilities provide a

complete solution for customers.

Orica is the largest provider of commercial explosives and blasting systems to the mining,

quarrying, oil and gas and construction markets, a global leader in the provision of ground support in mining and tunneling, and a leading supplier of sodium cyanide for gold

extraction.

Please visit www.cobham.com/HiRel for product information.

Source: Epicos, Cobham

Epicos 2016

Ultra Electronics awarded a five year Acoustic Countermeasure Contract worth up to \$34m

Ultra Electronics awarded a five year Acoustic Countermeasure Contract worth up to \$34m Ultra Electronics announced today that its Ocean Systems business, based in Braintree, MA USA, has been awarded a firm one year contract valued at just over \$4m from the US Navy

for the continuing production of the ADC MK2 Countermeasure.

Options to extend the contract for a further four years could increase this initial value to just under \$34m. The ADC MK2 is an expendable acoustic countermeasure launched from both ships and submarines to protect those platforms from torpedo threats. Ocean Systems has been producing the ADC MK2 since 1988 and has delivered over 20,000 devices to date. This fiveyear contract includes effort for design enhancements, development, production, and

support services.

Rakesh Sharma, Chief Executive of Ultra commented: "I am pleased that Ultra has been awarded this follow-on contract. It reinforces Ultra's position as a leader in the Undersea Defensive Warfare environment through the provision of highly complex countermeasure

capabilities to both the US Navy and international customers".

For Further Information Click Here

Source: Epicos, Ultra Electronics

NASA Jet Propulsion Laboratory Awards Mars Orbiter Study Contract to Northrop

Grumman

NASA's Jet Propulsion Laboratory (JPL) has awarded a contract to Northrop Grumman Corporation (NYSE:NOC) for one of several Next Mars Orbiter (NeMO) conceptual study

efforts to develop concepts for a potential future orbiter.

In the four-month study, the Northrop Grumman team is thoroughly evaluating a range of potential solutions using a variety of the company's production and heritage spacecraft platforms and designs. The study's focus is NeMO mission objectives and requirements,

including advanced communications and imaging, and robotic science exploration.

"NASA's Journey to Mars mission is a very exciting focus for anyone who has ever looked up at the stars," said Bob Mehltretter, vice president, military and civil space systems, Northrop Grumman Aerospace Systems. "Drawing on our history of successful manned and unmanned space programs, as well as our advanced communications technologies, we are excited to be working with JPL on the best design for a future Mars orbiter."

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Northrop Grumman is a leading global security company providing innovative systems, products and solutions in autonomous systems, cyber, C4ISR, strike, and logistics and modernization to government and commercial customers worldwide. Please visit www.northropgrumman.com for more information.

Source: Epicos, Northrop Grumman