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Saudi Arabia: Defence Budget and Procurements



Almost all Gulf Cooperation Council (GCC) countries devote a large share of their Gross Domestic Product (GDP) to military spending. Saudi Arabia is not an exception. Saudi Arabia's spending on defence has increased significantly the last two decades and as a result the GCC country has developed one of the world's most advanced arsenal, the military equipment of which has been mainly supplied by US,

France and UK. According to data provided by the Ministry of Finance in 2016, Saudi Arabia is going to allocate the biggest amount of budget on Military and Security Services for a total of 213.4 billion Saudi Arabian Riyal (SR) -approximately 56.9 billion US dollars. Education and training with 191.7 billion SR (approximately 51.1 billion US dollars), and Health & Social Development with 104.9 billion SR (approximately 28 billion US dollars) follow.



Source: https://www.mof.gov.sa/english

Compared to 2015 Saudi defence budget will be cut by 30% in 2016 as spending on the sector will fall from SAR307.0 billion (81.9 billion US dollars) in 2015 to SAR213.4 billion in 2016 (approximately 56.9 billion US dollars). This should be largely attributed to the falling price of oil and thus the potential for revenue shortfalls.

In the last decade, Saudi Arabia went through various procurements including among others, the purchase of F-15 aircraft, C-130J-30 Aircraft, Eurofighter Typhoons, KC-130J Air Refuelling Aircraft, UH-60M Black Hawk utility helicopters, Light Armored Vehicles (LAVs) and air missile defence systems.

The "shopping spree" for Saudi Arabia, began in 1985, when a Boeing-led consortium won the Peace Shield program. Peace Shield is a state-of-the-art C3I system developed for the Royal Saudi Air Force (RSAF). The Peace Shield system also links the networks of the Royal

Saudi Land Forces (RSLF), the Royal Saudi Naval Forces (RSNF) and Royal Saudi Air Defence Force [RSADF].

Another important program was the Al Yamamah program that was initiated in September 1985. It involved the supply and support of Tornado, Hawk and PC-9 aircraft and specialised naval vessels to Saudi Arabia. The UK Government's prime contractor for the project was BAE Systems plc.

Additionally, Saudi Arabia procured three Al Riyadh (F3000S) Class multipurpose anti-air warfare frigates, which were built by DCN of France. The frigates, based on DCN's stealth frigate design, are about 25% larger than the French La Fayette Class frigate and have additional capabilities, for example enhanced anti-air warfare and anti-submarine capability, to achieve the operational requirements of the Royal Saudi Naval Forces. The first of the three frigates, was officially handed to the Royal Saudi Naval Forces in the third quarter 2002.

Kyriazis Vasileios,

Epicos Newsletter Head Editor

Suadi Arabia: Defence Industry, Major Companies and Competences





Defence is one of the industrial and commercial sectors that Saudi Arabia is targeting for development. In order to achieve this, a growing emphasis has been placed in developing the country's indigenous

capabilities, through the formation of strategic synergies and partnerships with foreign firms and research institutions. Offsets, is one of the vehicles Saudi authorities are using in order to create such synergies. The progress made so far is demonstrated by the number and size of national defence companies that are founded through the abovementioned process. Currently there are 41 companies created through the Saudi offset program, employing 8,000 people and generating a revenue of 300 thousand SR (approximately 80 thousand US dollars), while the total sales of these companies amounted to 4 billion SR (approximately 1 billion US dollars).

Some of the companies created through the Saudi offset program are: Advanced Electronics Company (AEC), Aircraft Accessories and Components Company (AACC), Middle East Propulsion Company (MEPC) and International Systems Engineering (ISE).

Established in 1988, AEC is currently recognized as a leader in the field of electronics manufacturing, system integration and repair and maintenance services. The company's portfolio mainly serves the Military, Telecom & Industrial business sectors. Another company established through the Saudi offset program is AACC which offers aircraft component maintenance services. AACC, holds among others the ISO 9001:2008, ISO 14001:2004, BS OHSAS 18001:2007 and AS9110 certifications.

MEPC was established in 2001, in order to provide Maintenance, Repair, and Overhaul (MRO) services for the F100-PW-220 engine that powers the F-15 aircraft of the Royal Saudi Air Force (RSAF). Currently, MEPC provides MRO services for several other aircraft engines, including the Rolls-Royce's RB199 engine that powers the Tornado aircraft of RSAF. ISE was established in 1988 under the Peace Shield program. Currently, ISE delivers IT solutions, for the Defence and Aerospace sectors. Finally, Alsalam Aircraft Company offers, among others, maintenance, modification and technical support services for civil and military aircraft.

Another factor that helps towards the creation of a viable military industrialisation strategy is the heavy investment by the Saudi government in science and technology, which helps in the creation of a more attractive Research and Development (R&D) climate. One such example is the establishment of a decision support centre in Riyadh. The centre was established in December 2010 and the main partners were King Abdul Aziz City of Science and Technology (KACST) and Boeing. The centre carries out advanced modelling, simulation and analysis work on behalf of aerospace companies in Saudi Arabia.

In February 2013, Lockheed Martin also signed a partnership agreement with KACST. With this partnership the US company highlighted its commitment to enhancing job creation and transferring of technology and technological expertise to Saudi Arabia, thus further helping the country in building a viable aerospace sector.

More on that direction, King Abdullah University of Science & Technology (KAUST) in September 2014 announced the inauguration of a new Boeing Research and Technology office to be located at the University's research and technology office. The office mainly focuses on conducting research and development in aerospace technologies.

Saudi Arabia is expected to sustain high levels of investment in defence and security, continuing to be an attractive market for international companies. In parallel the government seems to be determined to continue helping the local defence industry in enhancing its position in the international market. This actually means that partnerships with Saudi entities (companies, R&D institutions, universities) such as the ones described above, will continue to be a common practise.

Kyriazis Vasileios,

Epicos Newsletter Head Editor

Epicos "Industrial Cooperation and Offset Projects"

Cpicos.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...

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Advanced modeling and analysis of UAV thermal signatures for management and optimization of thermal signature reduction



A company with extensive expertise in the space and nuclear fusion industries, specialized in thermal design, modeling and analysis, proposes to implement existing technology and know-how to analyze UAV thermal signatures and to develop solutions for managing and reducing such signatures.

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

Blue Force Tracking (BFT) System for Military Personnel and Military Vehicles



The network-centric ability to distinguish between friend and foe, a concept known as blue force tracking (BFT), is critical to conducting effective networkfocused military operations. Within this frame, a company with extensive expertise in developing Solutions for the aerospace industry, is proposing the utilization of the existing know how -mainly in complicated space missions- in the development of advanced Blue Force Tracking (BFT) and situational awareness capabilities into products and systems used

to identify and track friendly forces.

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

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News from our A&D Business Network

Rheinmetall to supply complete training equipment for new Embraer KC-390 transport plane





Brazil's Embraer, one of the world's largest aircraft makers, has contracted with Rheinmetall to develop and supply a full suite of training equipment for the new Embraer KC-390 transport plane. A framework agreement to this effect has just been signed. For

Rheinmetall, the programme should mean sales of well over €100 million spread out over the next ten to fifteen years.

Embraer Defense & Security's KC-390 made its maiden flight on 3 February 2015 and is now close to going into full-scale production. Experts see excellent opportunities for the new aircraft on the world market. The Brazilian Air Force has already ordered 28 planes, and the armed forces of a number of other Latin American and European nations have expressed serious interest in it.

Rheinmetall's Simulation and Training business unit will design, manufacture, deliver and support all training devices for Embraer's revolutionary new KC-390 aircraft, including cargo handling, procedure and maintenance trainers as well as flight and mission training systems, including full mission and flight simulators. Rheinmetall brings to the project its vast expertise in training systems, especially for military transport aircraft, and will provide proven, innovative simulation technology for future KC-390 pilots, mission crew, loadmasters and maintainers.

"Rheinmetall is honoured to have been selected as the training devices partner in the KC-390 programme", declared Ulrich Sasse, president of Rheinmetall's Simulation and Training business unit. "It's exciting to be able to demonstrate our commitment to Embraer and the entire KC-390 programme by providing proven, state-of-the-art simulation technology from Germany."

Embraer KC-390 is a tactical transport aircraft that sets new standards in its category, while offering the lowest lifecycle costs in the market. It can perform a variety of missions, such as cargo and troop transport, troop and cargo air delivery, aerial refuelling, search and rescue and forest fire fighting. Embraer expects certification of the KC-390 jet by the end of 2017, with first deliveries of the aircraft scheduled for the first half of 2018.

"We look forward to building on our recent fruitful cooperation with Rheinmetall and are confident that our partnership will result in a first-class KC-390 Training Media Suite that will definitely contribute to the overall success of the KC-390 programme", stated Jackson Schneider, president and CEO of Embraer Defense & Security.

A member of the globe-spanning Rheinmetall Group, Rheinmetall Defence Electronics GmbH has over 40 years' experience in developing and manufacturing simulation systems and

providing training services. RDE is a leading supplier of military training solutions and highly skilled in the field of flight simulator and flight training device development and support as well as training services. Based in Bremen, Germany, Rheinmetall Defence Electronics has 1,200 highly qualified employees working on various projects in simulation and training worldwide.

Leader in the Latin American aerospace and defence industry, Brazil's Embraer Defense & Security offers a complete line of integrated solutions, including Command, Control, Communication, Computers and Intelligence (C4I) applications, leading-edge technologies in the production of radars, advanced information and communication systems, integrated systems for border monitoring and surveillance, as well as military and government transportation aircraft. With a growing presence in the global market, Embraer Defense & Security products are present in more than 60 countries.

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Embraer and Horizon Air sign a contract for 30 E175 jets



Embraer and Horizon Air have signed a firm order for 30 E175 jets. The contract also includes options for another 33 aircraft of the same model. The value of the contract, which will be included in

Embraer's 2016 second-quarter backlog, is USD 2.8 billion, based on current list prices, if all the options are exercised.

The deliveries will start in the second quarter of 2017 and the aircraft will fly exclusively for Alaska Airlines. The E175 is not new for Alaska customers, who may have flown on the regional plane in 16 markets operated by Capacity Purchase Agreement (CPA) partner SkyWest Airlines.

"To be chosen by Horizon to expand their fleet with the E175, is a great honor for Embraer. It recognizes the great economics that this aircraft offers," said Paulo Cesar Silva, President & CEO, Embraer Commercial Aviation. "The Alaska Airlines brand is known for its highstandards of service, having received many awards for their superior customer service, which bring us even greater responsibility to deliver a state-of-the-art product, with the best cabin for passengers in the 76-seat jet segment."

"The E175s position Horizon for growth beyond our current West Coast destinations while providing better customer utility in the growing Alaska Airlines network," said Horizon Air President, David Campbell. "The spacious E175 offers a passenger experience, that's on par with much larger jets. This aircraft opens up tremendous new opportunities to fly to new places that would not have been feasible with our existing aircraft."

With this contract, Embraer has sold 332 E175s to airlines in North America since January 2013, earning more than 80% of all orders in this class. The E175s for Horizon Air will feature aerodynamic enhancements introduced by Embraer in 2014, such as new wingtips and other technical improvements that reduce fuel burn. The 76-seat aircraft will be configured in a three-class layout, with 12 first class seats, 16 in premium class, and 48 in the main cabin.

Since entering revenue service in 2004, the E-Jets family has received more than 1,700 orders and over 1,200 have been delivered. The aircraft are flying in the fleets of 70 customers in 50 countries. The versatile 70 to 130-seat family is flying with low-cost airlines as well as with regional and mainline carriers.

About Horizon Air

Horizon Air is a subsidiary of Alaska Air Group and flies to 39 cities across the United States and Canada. Read Horizon Air's news release at <u>alaskaair.com/newsroom</u>.

About Embraer

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Embraer is a global company headquartered in Brazil with businesses in commercial and executive aviation, defense & security. The company designs, develops, manufactures and markets aircraft and systems, providing customer support and services.

Since it was founded in 1969, Embraer has delivered more than 8,000 aircraft. About every 10 seconds an aircraft manufactured by Embraer takes off somewhere in the world, transporting over 145 million passengers a year.

Embraer is the leading manufacturer of commercial jets up to 130 seats. The company maintains industrial units, offices, service and parts distribution centers, among other activities, across the Americas, Africa, Asia and Europe.

For Further Information Click Here

Epicos NewsRoom

epicos.com CAE signs commercial aviation training contracts valued at more than C\$200 million and concludes fiscal year with 53 full-flight simulators sold

CAE announced today a series of training solutions contracts, including the sale of 14 fullflight simulators (FFS) to airlines and aircraft operators worldwide including Southwest Airlines and Uzbekistan Airlines. These agreements, valued at more than C\$200 million, cover a broad range of CAE's training solutions, from the delivery of innovative training equipment to commercial pilot training programs.

CAE concludes its fiscal year 2016, which ended March 31, 2016, with a total of 53 FFS sold, a new benchmark for the industry. The FFSs are at list prices, which include the value of OEM aircraft-specific data, parts and equipment. In the case of these contracts, some customers are providing part of the OEM content.

The contracts include:

- Training equipment, including the sale of 14 full-flight simulators
- Five Boeing 737 full-flight simulators to Southwest Airlines in North America
- One Boeing 767 full-flight simulator to Uzbekistan Airlines in Asia
- One Boeing 737NG full-flight simulator to Avenger Flight Group in North America
- One A320 full-flight simulator to Sofia Flight Training in Eastern Europe
- Six full-flight simulators, including one Boeing 737NG, one Boeing 787, three A320s, and one MD11F to undisclosed airlines and aircraft operators in North America

Pilot Training

Two training agreements for commercial pilot training with leading European airlines. "The commercial aviation market has seen solid demand this past year, and these contracts reaffirm CAE's position as global training partner of choice," said Nick Leontidis, CAE's Group President, Civil Aviation Training Solutions. "We are privileged to support our long-standing customers' growth with these agreements and we are committed to supporting our partners' training needs long into the future."

Southwest Airlines: Boeing 737NG full-flight simulators

CAE announced today the conclusion of a training equipment contract to support Southwest Airlines' training needs. The agreement includes five CAE-built Boeing 737NG 7000 full-flight simulators, equipped with the latest innovative CAE Tropos 6000XR visual systems, offering unprecedented realism. "As our long-time partner, CAE continues to be our training provider of choice," said Joe Marott, Director of the Flight Operations Training Center at Southwest Airlines. "We have been relying on CAE for providing state-of-art training equipment for many years and we are confident they will continue to deliver innovative solutions."

"We are extremely honoured to support our partner Southwest Airlines' training needs by supplying the most-advanced training solutions for its Boeing fleet," said Nick Leontidis. "This order of five full-flight simulators is a testament to our dedication as the leading training partner, worldwide. We look forward to our continued relationship with Southwest Airlines." All five full-flight simulators will be delivered at Southwest Airlines' training centre in Dallas and will be ready for training for summer 2017. Southwest Airlines has been a customer of CAE since 2004 and with this order, the airline now has over 13 CAE-built full-flight simulators in training and on order.

Uzbekistan Airways: Boeing 767 full-flight simulator

Uzbekistan Airways has signed a contract for the deployment of a Boeing 767 full-flight simulator to be delivered to the airline's training centre in Tashkent, Uzbekistan. It will be ready for training in November 2016.

Avenger Flight Group: Boeing 737NG full-flight simulator

Avenger Flight Group, a new CAE customer, has ordered one Boeing 737NG full-flight simulator which will be delivered at its training centre in Dallas, Texas (USA). The CAE 7000XR Series FFS will be equipped with the latest CAE Tropos 6000XR visual system and will be ready for training in September 2016.

Sofia Flight Training: A320 full-flight simulator

Sofia Flight Training has selected CAE for the provision of another A320 full-flight simulator, Airbus standard 1.9 to support its growing training needs in the region. The CAE 7000XR Series full-flight simulator will be equipped with the latest CAE Tropos 6000XR innovative visual system, offering unprecedented realism. The CAE 7000XR FFS equipped with both CFM56 and IAE V2500-series engine options will be delivered to Sofia Flight Training in Sofia, Bulgaria and will be ready for training in February 2017. Sofia Flight Training has been a CAE customer since 2009. This represents Sofia Flight Training's third CAE full-flight simulator.

About CAE

CAE is a global leader in the delivery of training for the civil aviation, defence and security, and healthcare markets. We design and integrate the industry's most comprehensive training solutions, anchored by the knowledge and expertise of our 8,000 employees, our world-leading simulation technologies and a track record of service and technology innovation spanning seven decades. Our global presence is the broadest in the industry, with 160 sites and training locations in 35 countries, including our joint venture operations, and the world's largest installed base of flight simulators. Each year, we train more than 120,000 civil and defence crewmembers, as well as thousands of healthcare professionals. www.cae.com

Source: Epicos, CAE

F-35 Joint Program Office Awards Pratt & Whitney LRIP 9 Contract for F135 Engines

The U.S. Department of Defense has awarded Pratt & Whitney a contract valued at approximately \$1.4 billion for the production of the ninth lot of F135 propulsion systems powering the F-35 Lightning II. The ninth low rate initial production (LRIP) contract covers 66 total production engines, including spare engines, spare modules, and spare parts for the field, as well as program management, engineering support, production non-recurring effort, and tooling.

The LRIP 9 production contract include 53 conventional takeoff and landing (CTOL) and 13 short takeoff and vertical landing (STOVL) propulsion systems for the United States Air Force, Navy and Marine Corps as well as five countries - Italy, Norway, Israel, Japan and the United Kingdom.

"The latest agreement with the F-35 Joint Program Office continues a reduction in costs associated with engine production, and demonstrates our commitment in providing affordable and dependable propulsion for the global F-35 program," said Mark Buongiorno, vice president, Pratt & Whitney F135 Engine Program. "We remain laser-focused on reducing costs, meeting our delivery schedule commitments, ensuring dependable engine performance, and preparing for global sustainment of the F-35 fleet."

The F135 engine maintains a 96 percent full mission capability requirement, and new production engine reliability is exceeding 90 percent, well ahead of key 2020 requirements.

To date, Pratt & Whitney has delivered 273 production engines. Production of the first LRIP 9 engine is underway, with deliveries of LRIP 9 engines scheduled to begin in the second quarter of this year. Pratt & Whitney is working with the F-35 Joint Program Office to finalize details regarding LRIP 10 engine production and expects an award of that contract by the end of April 2016.

For Further Information Click Here

Source: Epicos, Pratt & Whitney

Boeing Completes Satellite for NASA TDRS Constellation Ahead of Contract Schedule

Boeing has completed, and delivered to storage, the last in a series of satellites for NASA's Tracking and Data Relay Satellite (TDRS) constellation. TDRS-M is the sixth Boeing-built satellite for the NASA network providing high-bandwidth communications to spacecraft in low Earth orbit. Programs using the system include those supporting human space flight, the International Space Station, the Hubble Space Telescope, the Earth Observing System and several launch vehicles.

This is the second block of Boeing-built TDRS spacecraft. The company delivered the first three (TDRS-H, -I and –J) in 2000-2002. The first two satellites of the second block (TDRS-K and –L) were launched in 2013 and 2014. The last satellite, TDRS-M, was completed ahead of the contract schedule and within budget at the end of 2015.

"Boeing's advanced TDRS satellites provide NASA with greater bandwidth at an affordable cost, helping them provide additional capacity for this critical communications relay network," said Dan Hart, vice president, Boeing Government Satellite Systems. "We are continuing to invest in technologies that could enable communications for future NASA near-Earth, moon, Mars and deep space missions." NASA has given Boeing its formal "consent to store" the satellite at Boeing's Satellite Development Center in El Segundo, Calif., until it's ready for deployment. TDRS-M is expected to launch on a United Launch Alliance Atlas V rocket in 2017.

Boeing has provided space communication services to NASA for more than 40 years, and has been NASA's sole provider of tracking and data relay satellites since 1995. Boeing and its heritage companies have been advancing satellite technology for more than 50 years. Continuing investments in space are helping the company retain its industry leadership as it begins its second century in 2016.

In 2016 Boeing celebrates 100 years of pioneering aviation accomplishments and launches its second century as an innovative, customer-focused aerospace technology and capabilities provider, community partner and preferred employer. Through its Defense, Space & Security unit, Boeing is a global leader in this marketplace and is the world's largest and most versatile manufacturer of military aircraft. Headquartered in St. Louis, Defense, Space & Security is a \$30 billion business with about 50,000 employees worldwide. Follow us on Twitter: @BoeingDefense

Contact:

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Jet Aviation Singapore receives FAA approval and certification from the Thailand Department of Civil Aviation (DCA) for the Gulfstream G280

Jet Aviation Singapore recently received approval from the Federal Aviation Administration (FAA) to support the Gulfstream G280 aircraft. The company also obtained approval from the Thai civil aviation authority to add the G280 to its certificate.

Jet Aviation Singapore recently received the two approvals in quick succession. As a Factory Authorized Service Center and Warranty Repair Facility for the Gulfstream series, the company is now prepared and able to support G280 aircraft in the region. The scope of this authorization extends up to 8C (96 Month) inspections, including all avionics, interior maintenance and upgrades within the company's approvals.

"Our goal is provide comprehensive, quality services within geographic proximity to demand so it will not be necessary for local aircraft owners and operators to fly their aircraft long distances in order to be serviced," said John Riggir, vice president and general manager of the MRO and FBO facility. "We are confident that this certification capability here at Jet Aviation Singapore will significantly raise the profile of the G280 aircraft in the region and we fully intend to add more country approvals as demand for support of this aircraft develops."

In August 2015, Jet Aviation Singapore received full FAA approval for its new Interior Shop. One month later, it secured maintenance approval from the Civil Aviation Administration of China (CAAC) to support Chinese operators of Bombardier and Gulfstream aircraft. At the inaugural Asian Business Aviation Association (AsBAA) 2015 Gala Awards held in Hong Kong that November, Jet Aviation Singapore was named the Best Operational Support Services Company. Established at Seletar Airport as an Authorized Service Center (ASC) for Gulfstream aircraft in 1996, Jet Aviation Singapore celebrated its 20th jubilee of exceptional service delivery in February at Singapore Airshow 2016.

Jet Aviation Singapore provides scheduled and unscheduled maintenance, aircraft repair, defect troubleshooting and rectifications and aircraft modifications. In addition, the company offers interior refurbishment, avionics modification and exterior painting services. Jet Aviation Singapore holds repair station approvals from various countries, including FAA #J8MY465N and EASA #145.0461. It is a Factory Authorized Service Center and Warranty Repair Facility for the Gulfstream series, an Authorized Service Center for the Nextant 400XT aircraft and a Boeing BBJ line maintenance station. It further supports Bombardier Challenger 300 / 600 / 601 / 604 / 605 series, Bombardier Global Express and XRS, Global 5000, 6000, and Bombardier Learjet 30 / 35 / 40 / 45 / 50 / 60 series aircraft. Located at Seletar Airport, the company also offers FBO services in Singapore at Seletar and Changi International airports.

Jet Aviation, a wholly owned subsidiary of General Dynamics (NYSE: GD), was founded in Switzerland in 1967 and is one of the leading business aviation services companies in the world. Close to 4,500 employees cater to client needs from more than 25 airport facilities throughout Europe, the Middle East, Asia and North and South America. The company provides maintenance, completions and refurbishment, engineering, FBO and fuel services, along with aircraft management, charter services, aircraft sales and personnel services. Jet Aviation's European and U.S. aircraft management and charter divisions jointly operate a fleet of more than 250 aircraft. Please visit <u>www.jetaviation.com</u> and follow on twitter: <u>http://twitter.com/jetaviation</u>.

Source: Epicos, Jet Aviation Singapore

RUAG will manufacture structures for the Vulcan rocket

Colorado Springs. RUAG Space will supply carbon structures for United Launch Alliance's (ULA's) new Vulcan Centaur launch vehicle. This was announced by both companies at the Space Symposium in Colorado Springs on Tuesday. An agreement to this effect was signed by U.S. launch manufacturer United Launch Alliance and RUAG, and is an expansion in the supplier partnership enabling significant future savings in composite structures.

The agreement governs the supply of various carbon-fiber-reinforced structures for ULA launchers. Back in August, RUAG and ULA announced a strategic partnership with the objective of building a new RUAG production location in the ULA plant in Decatur, Alabama.

RUAG Space has been supplying carbon-fiber-reinforced components for ULA's Atlas V launcher for over a decade, and this new agreement signals a major expansion of this supplier relationship. Starting in 2019, RUAG will supply a second type of payload fairing that will be smaller than the one it currently delivers. Both fairings are to be used on ULA's new Vulcan launcher as well. Located at the tip of the launcher, the payload fairing houses the satellites, gives the rocket its aerodynamic shape and protects the delicate cargo. Over the long term, RUAG Space is planning to produce all these components for the U.S. launchers in Decatur, Alabama. A suitable production location is already being set up and production of the first flight hardware in Decatur is scheduled to start in 2018.

The Atlas V launcher is designed to carry medium to heavy payloads and is suitable both for government and commercial space missions. In developing Vulcan, ULA is lining up the successor to the Atlas V. The new launcher is scheduled to enter service by the end of the decade.

For Further Information <u>Click Here</u>

Source: Epicos, RUAG