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Latvia: Defence Budget and Future Purchases



Until 2014 Latvia's defence expenditure remained stable in real terms and as a percentage of Gross domestic product at a level of around 1%. This dramatically changed in 2015, as the Country committed to increase its defence budget in order to reach 2% of its Gross Domestic product (GDP) by 2018. In 2015 defence budget increased by 21 million Euros, reaching 254 million, the equivalent of 1.02% of GDP. Defence budget was further increased in 2016 to 368 million Euros or about 1.4% of GDP. According to the Law on Medium-Term Budget Framework for 2017 and 2018, the approved budget expenditure will be equivalent to 1.7% of GDP in 2017 and 2% in 2018, reaching 473 and 590 million Euros respectively.

The breakdown of defence spending for 2016 according to data provided by the Latvian Ministry of Defence will be as following: 28% investment, 27% maintenance, 45% personnel. In compliance with the NATO instructions, Latvia will try to maintain a balanced defence expenditure structure by allocating less than 50% to expenditure on personnel and administration, 30% to expenditure on maintenance and a minimum of 20% to the procurement of new equipment. Therefore, according to projections in 2018 the breakdown will be as following: 41% investment, 26% maintenance, 33% personnel.

During the period 2014-2017 the following major activities was and/or will be implemented:

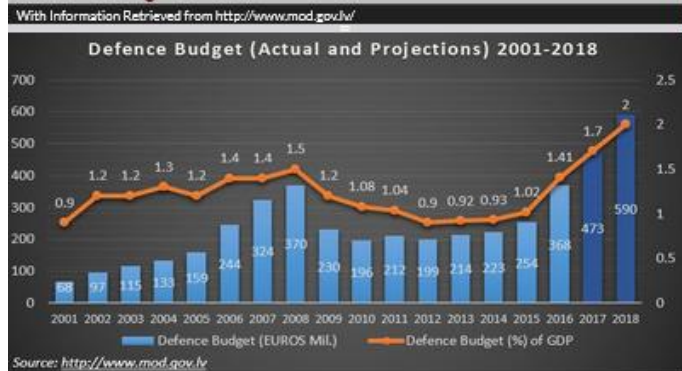
- Enhancement of the high readiness of the national armed forces and presence of allies (allocated budget- in 2015: 5.0 million Euros, in 2016: 11.5 million Euros and in 2017: 12.0 million Euros);
- Enhancement of the intelligence, air surveillance and air defence capabilities (allocated budget- in 2015: 3.7 million Euros, in 2016: 14.0 million Euros and in 2017: 26.2 million Euros);
- Enhancement of the National Guard capabilities and creation of high readiness subunits (allocated budget- in 2015: 3.3 million Euros, in 2016: 7.3 million Euros and in 2017: 30.1 million Euros);
- Reorganization of soldiers' remuneration packages (allocated budget- in 2016 and 2017: 10.0 million Euros);
- Establishment of a NATO Centre of Excellence for Strategic Communications (allocated budget in year 2014: 3.3 million Euros, in year 2015 and year 2016: 3.1 million Euros annually);
- Creation of a mechanised infantry brigade (allocated budget in year 2014: 2.2 million euros, in year 2015: 14.6 million euros and in year 2016: 18.6 million euros);
- Strengthening of the National Guard's capacities and improvement of efficient reserve system (allocated budget in year 2014: 1.4 million euros, in year 2015: 7.7 million euros and in 2016: 6.6 million euros).

In 2016 the bulk amount of money spend on the procurement of new equipment will be allocated to the purchase of military personal equipment (25.8 million Euros). An additional 18.6 million Euros will be allocated to the used for the mechanization of land forces infantry brigade and 17.4 million to the development of reconnaissance, airspace surveillance and anti-air defence capabilities.

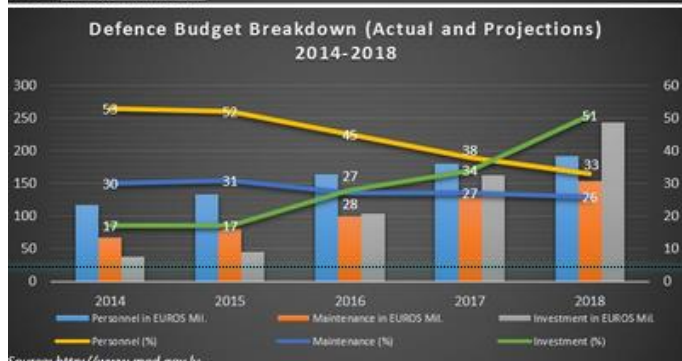
As it is already mentioned Latvian authorities have and will spend a significant amount of



funds for the creation of an infantry brigade. Under this context, Latvia purchased 123 Combat Vehicle Reconnaissance (CVR) from UK. The vehicles will be renovated and upgraded before the delivery. The total cost of the procurement will reach 48.1 million Euros and deliveries will be concluded in 2020. Latvia will also purchase Spike anti-tank missile systems which will be installed on the CVRs.



The development of an air-defence system is also a priority for Latvia. Armed forces should have the proper capabilities to “see” beyond the country’s borders. In order to achieve this, Latvia purchased three (3) TPS-77 Multi-Role Radars (MRR) from Lockheed Martin significantly enhancing its early warning and situational awareness capabilities. More on that direction Latvia purchased Mk2 missiles for a total value of 3.67 million Euros. Deliveries will be concluded within 2016, while the country retains the option to purchase further missile quantities.



Latvia purchased in September 2015 four Improved Sentinel AN/MPQ-64 F1 air defence radars from ThalesRaytheonSystems



that will complement the country’s existing defence network by detecting, identifying and tracking airborne threats including: fixed and rotary wing aircraft, cruise missiles and unmanned aerial vehicles. The radar is also the primary sensing component for alerting and cueing of targets for NASAMS (National Advanced Surface to Air Missile Systems).

One of the reasons why Latvia’s authorities decided to enhance the country’s defence capabilities is that Russia has extensively developed its military infrastructure in the direct

vicinity of Latvia's border. Under this context, Latvia is deliberately trying to enforce cooperation with other Baltic States, so as together to tackle with security challenges in a coordinated manner and to strengthen the common security in the region.

In accordance with this policy in September 2015, Defence Minister of Latvia Mr Raimonds Bergmanis and National Defence Minister of Lithuania Mr Juozas Olekas agreed to collaborate to synchronise procurement of military equipment and signed a joint communique laying out the agreement. The document will serve as a framework for the countries' close cooperation in developing combat capabilities which would strengthen regional security.

Kyriazis Vasileios,
Epicos Newsletter Head Editor



Latvia: Defence Industry



**Federation of Security and
Defence Industries of Latvia**

Taking into consideration the limited demand of the Latvian forces, we can understand that it will be rather difficult and not economically viable for the country to form a defence industry in a full blown scale. Nevertheless, the country needs to establish a viable defence industrial base that will be able to minimise dependency on deliveries of munitions and equipment from other countries in a crisis situation. According to a study conducted by the Institute of Economics of the Latvian Academy of Sciences named "Development of Defence and Related Industries in Latvia" the defence products and/or capabilities that could potentially be developed are the following: pilotless aircraft, wireless technologies, technologies for water, energy accumulations technologies, microclimate conditioning systems integrated in clothing and others.

Additionally, the same study pinpointed metal products, the manufacture of specific electrical and optical and communication equipment and IT are as some of the industries/sectors that could potentially export products and/or services to NATO and EU member states. Nevertheless, there is still a long way ahead for Latvian companies to operate as subcontractors in the defence industry supply chain. According to a statement made by Elīna Egle, Chairwoman of the Board of FSDI Latvia, according to the data of the NATO Support and Procurement Agency, other Baltic countries have outperformed Latvia in terms of supply volume, as its supply volume accounted for 0.01% of the available 2%, while Estonia has achieved 0.037% and Lithuania 1.09%."

Towards this direction, and in order to further stimulate the development of the local defence industry, the MoD collaborates with Latvian scientific institutions and professional associations structuring research projects. From 2005-2008 the Latvian MoD funded the following number of such projects:

- 15 projects in 2005;
- 23 projects in 2006;
- 22 projects in 2007;
- 24 projects in 2008.

Additionally, Latvia has been strong in developing space technologies. Currently, Latvian companies develop and produce products for the European Space Agency (ESA) such as radiation detectors, cryogenic isolation materials, chronographs, ultrasonographic bones diagnosis, and satellite laser ranging systems. Latvia was the first country from the Member States that entered European Union in 2004 that approached ESA. In March 2004, an ESA delegation visited Latvian organisations dealing with navigation and space applications. In 2013 Latvia signed the European Cooperating State Agreement with ESA.

In 2013, the Federation of Security and Defence Industries of Latvia (FSDI Latvia) was established with the goal of representing the local defence industry to national and international fora. The founders of the Federation are the Komercentrs Dati Group, Valpro, Latvijas Mobilais telefons, Lattelecom, Latvijas Dzelceļš, Felix Holding, D Dupleks, Datakom,

Grandeg, Baltic Id, Tilde, the LAC Service, KMM Metal, the HSM Frēzēšanas darbnīca, and the Rīga Technical University. In order to further develop its international footprint, FSDI has signed several agreements with other European defence industry associations.

On November 25, 2015, FSDI signed a Memorandum of Understanding (MoU) with Danish Defence and Security Industries Association (FAD), which sets the foundation for the future co-operation of the defence and security industries of the two countries. Another such MoU was signed on May 14, 2015 with UK Aviation, Defence, Security and Space Industries (ADS Group).

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](#)

Body and Chassis manufacturing, using steel alloys technology for Light to Medium and Heavy (MRAP) Weight Armoured Wheeled Vehicles



A company with long standing experience in manufacturing of metallic (high strength and stainless steel) components and parts for the automobile industry, is willing to expand its activities in the manufacturing of Body & Chassis, using steel alloys technology, for a wide range of military vehicles, from Light to Medium Weight Armoured Wheeled Vehicles, up to heavy Mine Resistant Ambush Protected (MRAP) vehicles.

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

Mail at: g-menexis@epicos.com

Radiological Field Food Tester Turn Key solution



A company with significant experience in the development and production of chemical defence instruments and nuclear reconnaissance systems, is proposing representation of its Turn Key Solution Radiological Field Food Tester, to foreign companies, specializing on NBC systems, in order to gain access to new markets.

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

Mail at: g-menexis@epicos.com



News from our A&D Business Network

BAE Systems to Provide Battle Management Systems to Danish CV90 Infantry Fighting Vehicles



BAE Systems has signed a contract with the Danish Defence Acquisition and Logistics Organization (DALO) for the installation of Denmark-specific battle management radio systems across its fleet of 44 CV9035 Infantry Fighting Vehicles (IFV). The CV90 is a family of tracked combat vehicles designed and built by BAE Systems Hägglunds, with more than 4.5 million engineering hours contributing to the development and system integration of the advanced and modern IFV.

“CV90 is a well demonstrated solution, combat proven by the Danish Army in Afghanistan,” said Peter Nygren, director of business development at BAE Systems Hägglunds. “As a member of NATO, Denmark needs to have the CV90s in top condition. Crew survivability and interoperability are of primary importance to all armed forces, and we are proud of the confidence the Danish government has shown in us to upgrade these vehicles.

“The CV90’s open electronic architecture allows for the integration of any country’s chosen system and regular updates of all key electronic systems. BAE Systems can tailor the fit of C4ISR systems for each customer and vehicle variant,” Nygren added.

The contract includes comprehensive industrial cooperation between BAE Systems and industrial partners in Denmark. BAE Systems’ industrial solution provides a foundation for job creation, technology transfer, and investment, paving the way for economic development and national growth. Since 2009 our industrial activity has delivered close to €300M into the Danish economy as part of the commitment to use Danish companies to support the CV90 fleet.

CV90s have successfully operated worldwide, including in United Nations and NATO missions. The vehicle provides interoperability, high tactical and strategic mobility, air defence, anti-tank capability, and high survivability and lethality in any terrain or tactical environment.

There are nine CV90 variants in service, with more than 1,280 vehicles operated by seven European countries, including four NATO members. The latest variant is in production for Norway.

For Further Information [Click Here](#)

Rockwell Collins wins new contract for common use check-in platform at John F. Kennedy International Airport



In a highly competitive bid, Rockwell Collins has been awarded a contract by International Airlines Group to replace the current check-in technology in Terminal 7 (T7) at John F. Kennedy International Airport (JFK) with the company's common use passenger processing platform (CUPPS). Under the terms of the agreement, Rockwell Collins will provide its ARINC vMUSE™ solution at the airport's T7 international terminal, used by over 10 major international carriers, to provide an enhanced check-in experience for passengers and their baggage.

The new contract also includes the use of Rockwell Collins' ARINC AviNet® network and message solution which provides a secure, fast and efficient way to communicate flight operation, aircraft maintenance and other critical messages that have a direct impact on airline operational efficiency.

"JFK is the busiest international airport gateway into the United States and Terminal 7 is a premier location for flights into and out of the U.S.," said Paul Hickox, head of Airport Systems Sales for Rockwell Collins. "ARINC vMUSE provides the type of services—like a fast and convenient check-in experience – that international travelers have come to expect from the world's leading airports."

About Rockwell Collins

Rockwell Collins is a pioneer in the development and deployment of innovative aviation and high-integrity solutions for both commercial and government applications. Our expertise in flight deck avionics, cabin electronics, mission communications, simulation and training, and information management is delivered by a global workforce, and a service and support network that crosses more than 150 countries. To find out more, please visit www.rockwellcollins.com.



Harris Corporation Receives \$55 Million Contract to Sustain US Air Force Electronic Warfare Technology for Large Aircraft

Harris Corporation has received a four-year, \$55 million contract to perform sustainment work on the electronic warfare system used by the U.S. Air Force to protect B-52s and C-130s from radar-guided threats. The contract was received during the first quarter of Harris' fiscal 2017.

Harris will redesign one of the ALQ-172's Line Replaceable Units (LRU-1) as part of wider efforts to increase the electronic warfare suite's reliability, supportability and availability.

"Hostile air defense systems are becoming more sophisticated and accessible in global conflict zones," said Ed Zoiss, president, Harris Electronic Systems. "With the B-52 set to remain a key component of U.S. strategic airpower for the next two decades, it is essential that it be equipped with innovative electronic warfare technology capable of defeating future threats."

In addition to a new LRU design, Harris will develop software, support customer testing and other solutions for the U.S. Air Force. In 2015, Harris received a series of orders to perform similar redesigns of other ALQ-172 subsystems, including LRU-4, LRU-7 and LRU-8.

About Harris Corporation

Harris Corporation is a leading technology innovator, solving customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports customers in more than 100 countries and has approximately \$7.5 billion in annual revenue and 21,000 employees worldwide. The company is organized into four business segments: Communication Systems, Space and Intelligence Systems, Electronic Systems and Critical Networks. Learn more at harris.com.

Source: Epicos, Harris

Orbital ATK Selected to Build NASA's Next Civilian Land Remote Sensing Satellite

Orbital ATK, Inc, a global leader in aerospace and defense technologies, today announced that it has been awarded a contract by the National Aeronautics and Space Administration (NASA) to design and build Landsat 9, an advanced land surface mapping satellite to be operated by the United States Geological Survey (USGS).

The Landsat 9 satellite will extend the Landsat program's record of global terrestrial imagery to half a century. Under the contract, Orbital ATK will design and manufacture the satellite, integrate the two government furnished instruments with the spacecraft and support launch, early orbit operations and on-orbit check-out of the observatory. Landsat 9 is scheduled for launch in December of 2020.

Orbital ATK has a long history of supporting Landsat satellites including the success of the company-designed and built Landsat 8 satellite, which was launched in 2013 and is delivering high quality images in quantities exceeding mission requirements. The company was also responsible for the successful Landsat 4 and Landsat 5 satellites launched in 1982 and 1984.

"Orbital ATK is honored to have been selected to build the next Landsat satellite," said Steve Krein, Vice President of Science and Environmental Programs at Orbital ATK. "Landsat represents over four decades of imagery, providing valuable data for agriculture, global change research, emergency response, and disaster relief. We're proud to build upon the success of our previous Landsat projects with the delivery of this new satellite."

Landsat 9 is based on the company's LEOStar-3 platform, the medium-class low-Earth-orbit spacecraft successfully flown on Landsat 8 and NASA's Fermi and Swift Gamma-ray astrophysics observatories. This is also the platform under contract for the upcoming ICESat-2 Earth science satellite and the Joint Polar Satellite System (JPSS)-2 spacecraft. Landsat 9 will be designed, manufactured and tested by Orbital ATK's Space Systems Group at its facilities in Gilbert, Arizona, the same location and production team that executed the Landsat 8 program.

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

Raytheon Chooses US Site to Manufacture Air Force Jet Trainer

Raytheon Company plans to build the T-100 Integrated Air Training System on a shovel-ready site in Mississippi. Should the U.S. Air Force approve the company's proposal for the Advanced Pilot Training program, Raytheon would establish a Final Assembly and Check-Out facility in Meridian.

"Our process determined that the best location for building the T-100 is Meridian, Mississippi," said Rick Yuse, president of Raytheon Space and Airborne Systems. "It provides the right blend of infrastructure, proximity to our customers, government support and a talent base that's ready for the high tech jobs critical to our success."

Raytheon has manufactured products in Mississippi for more than three decades. The company manufactures Active Electronically Scanned Array radars at its facility in the city of Forest.

"Mississippi's existing partnership with Raytheon is one reason we are a global leader in advanced manufacturing for the defense industry," said Mississippi Governor Phil Bryant. "With a firm understanding of the significance of the advanced pilot training mission, we are excited about the possibility of expanding that partnership and creating hundreds of new, high-paying jobs supporting our brave men and women who serve this country."

The T-100 Integrated Air Training System is a comprehensive, next-generation training solution customized to meet and exceed the U.S. Air Force's mission requirements. Based on the Aermacchi M-346, it combines cutting-edge, ground-based simulators with computerized classroom training to prepare the next generation of pilots. Leonardo-Finmeccanica, CAE USA and Honeywell Aerospace have partnered with Raytheon to offer the T-100 to the U.S. Air Force.

About Raytheon

Raytheon Company, with 2015 sales of \$23 billion and 61,000 employees, is a technology and innovation leader specializing in defense, civil government and cybersecurity solutions. With a history of innovation spanning 94 years, Raytheon provides state-of-the-art electronics, mission systems integration, C5ITM products and services, sensing, effects, and mission support for customers in more than 80 countries. Raytheon is headquartered in Waltham, Massachusetts. Follow on Twitter [@Raytheon](#).

For Further Information [Click Here](#)

Source: Epicos, Raytheon

Operational evaluation commences for RAF Typhoon fleet enhancements under project Centurion

An initial phase of enhancements to ensure that the Royal Air Force's (RAF) Eurofighter Typhoon fleet is ready to take on the role currently performed by Tornado aircraft has entered the Operational Evaluation stage. Phase 1 Enhancements Further Work (P1Eb FW) is an evolution of the current Tranche 2 Typhoon aircraft in service with the UK. The P1Eb standard Typhoons entered service last year.

P1Eb FW is the first part of the UK's Project CENTURION, the package of enhancements which aims to deliver a seamless transition of capability from Tornado to Typhoon by the end of 2018. The upgrades will bring numerous new capabilities, including additional Human-Machine Interface technologies and additions to the aircraft's Air to Surface targeting capability. P1Eb FW has successfully undergone trial installation and Operational Evaluation with 41 Squadron, the Royal Air Force's Test and Evaluation Squadron at RAF Coningsby, is now underway.

Flt Lt Luke Gili-Ross, from the RAF's 41 (R) Squadron (TES), said: "The integration of P1Eb FW is an important and necessary incremental step towards Phase 2 Enhancements (P2E) for the aircraft. On the surface, P1Eb Further Work appears to deliver quite small improvements, but for the operator they may be significant in terms of the aircraft's continued effectiveness".

Paul Ascroft, Technical Manager for the P1E and P3E capability, and overall BAE Systems Technical Lead for Project CENTURION, said: "The achievement of the delivery of P1Eb FW capability is an important milestone. Working with 41 Squadron, we are now undergoing Operational Evaluation and this is progressing well. The work is providing lessons learnt for the forthcoming packages, while achieving the first step on the journey and setting the standard of how the RAF and industry can work effectively together".

Following the achievement of P1Eb FW, the first tranche of upgrades as part of Project CENTURION will continue with the delivery of P2E, which provides additional Human-Machine Interface and availability improvements, along with the initial integration of the Meteor Beyond Visual Range Air to Air missile and the Storm Shadow stand-off Air to Surface weapon.

The next and final upgrades deliver P3E which includes the final integration of Storm Shadow and Meteor capabilities, as well as the introduction of the Brimstone 2 close air support Air to Surface capability. Each of these enhancements will move through joint customer and industry initial installation, Operational Evaluation and squadron training before being declared operational.

For Further Information [Click Here](#)

Source: Epicos, Eurofighter Typhoon

RUAG completes 10-year inspection of Nigeria-based Dornier 328

RUAG Aviation has successfully completed a 10-year inspection on an African based Dornier 328-300 business jet, finishing the project on schedule, within budget, and to full customer satisfaction. The major check was carried out at RUAG Aviation's Dornier 328 Service Centre in Berne. Full transparency and a quick and reliable turnaround time remain essential criteria for the Nigerian customer, Air Peace. 24/7 availability for communication throughout the project provided additional support for customer interests.

"We are confident in RUAG as an MRO partner, as it is absolutely crucial for us to have a maintenance provider we can rely on: one that understands how we do business and treats our timing and availability requirements with dedication," says Alex Iheuwa, Director of Maintenance and Engineering for Air Peace.

When the Nigerian airline's Dornier 328-300 was approaching its 10-year inspection, it turned to the proven Dornier 328 expertise of the specialists at RUAG Aviation in Berne, Switzerland, and the one-stop shop services they provide. "Our Dornier 328-300 serves as the private business aircraft of our airline's owner," he continues. "It was therefore essential for our MRO provider, and for their reputation, that the Dornier be completed as quickly as possible. We trust RUAG to prioritise quality and our interests."

A landing gear overhaul for the Dornier 328, in December 2015, confirmed RUAG Aviation as a proven and reliable partner for Air Peace. RUAG succeeded in troubleshooting and repairing an issue with the nose gear that had confounded other providers. Specialists at RUAG followed-up the project with a full overhaul of the landing gear, supplying the Nigeria-based Dornier 328 with a loaner-set while the work was carried out. RUAG Aviation operates an in-house component shop for landing gear in Interlaken, Switzerland, specialising in Dornier 328 and ATR landing gear.

The business aviation service provider has an excellent reputation, in particular for heavy maintenance checks, C checks, modifications, refurbishments and turnkey package solutions. Top performance and an emphasis on customer support are viewed as contributing factors. "We are firmly committed to aircraft availability. Timely delivery is how we demonstrate that commitment," affirms Simon Hafele, General Manager Site Berne, RUAG Aviation. "Absolute transparency in terms of both customer communication and project management is fundamental to fulfilling this promise."

RUAG Aviation provides one-stop shop solutions for business jets, including MRO, cabin interiors, aircraft painting, system upgrades, component services, FBO, AOG, and support and Consulting.

RUAG Aviation is a leading supplier, support provider and integrator of systems and components for civil and military aviation worldwide.

Servicing aircraft and helicopters throughout their entire life cycle, the company's core competencies include maintenance, repair and overhaul services, upgrades, and the development, manufacturing and integration of subsystems.

RUAG is an authorised service centre for OEMs of renown, such as Airbus Helicopters, Bell, Bombardier, Cirrus, Cessna, Diamond, Dassault Aviation, Embraer, Leonardo-Finmeccanica (AgustaWestland), Piaggio, Sikorsky, Pilatus, Piper, and Mooney, as well as a service centre for 328 Support Services, Hawker Beechcraft, Viking und MD Helicopters. RUAG Aviation is also a partner to the Swiss Armed Forces and other international air forces.

The company is also the manufacturer (OEM) of the Dornier 228, a versatile aircraft for challenging special missions and passenger and cargo operations.

RUAG Aviation is an approved Part 21/J EASA Design Organisation, Part 21/G EASA Production Organisation, and Part 145 EASA Maintenance Organisation.

For Further Information [Click Here](#)

Source: Epicos, RUAG Aviation