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Finnish defence industry is small but agile and highly competent. The main focus of it is in the domains of CBRN, armoured vehicles, soft- and hardware development. Finland has a fairly new industrial strategy,

which according to the ministry of defence is that: "The Finnish defence and security industry is specialized, competitive and networked in the international market. It contributes to security, national and international military capabilities as well as security of supply". Therefore, the Finnish defence industry is in a process of further integrating into the global markets. The main way through which is trying to achieve it, is by rapid networking with large international companies. Additionally, is trying to create a technological and economical competitive edge that will help the national defence forces to fulfil their purpose. Furthermore Defence Forces and industry are trying to commit to share long-term planning in order to improve industrial capacities.

Throughout the years the Finnish defence industry has created an outstanding competitiveness in Europe and even worldwide in the production of specific weapon systems. Additionally the industry has demonstrated its ability to adapt to new global challenges created by the differentiation of the international status quo. Therefore, innovative Finnish companies have much to offer to their foreign partners and can easily create partnerships with international enterprises.

The cooperation between Finland and the other Nordic countries is a fine example that illustrates the aforementioned ascertainment. Despite the fact that the role of the defence industry is different in each Nordic country, several Finnish companies have been able to



find partners in different Nordic countries. Nammo, is most probably the best example. Nammo was founded in 1998 from a merger of ammunition activities of three major Nordic defence companies; Celsius AB, Patria Industries Oyj and Raufoss ASA. Currently the company has about 1900 employees and an annual turnover of 3 billion Norwegian Krone (NOK).

Finnish industry plays a vital role regarding security of supply of the national defence forces. For every army is essential that domestic integration and maintenance capacities can be guaranteed as well as crisis repair expertise and the Finnish defence industry can definitely play this role. Additionally, it is trying to create new and innovative solutions. It is indicative



that during the period 2002-2007 approximately EUR 30 million from the annual budget of the defence forces had been dedicated to R&D and according to estimations

these money saved at least 500 million in defence procurement expenditures.

Most of the important defence companies of the country formed the Association of Finnish Defence and Aerospace Industries (AFDA), in order to collectively take action. AFDA is a non-profit organization financed by yearly contributions from its members. The AFDA was established in 1994 as a Branch of the Association of The Federation of Finnish Technology Industries. The AFDA has about 85 members covering the defence, aviation, space and security industries in Finland.

Kyriazis Vasileios,

Epicos Newsletter Head Editor





Finnish company Robonic Ltd Oy is the premier UAV launcher manufacturer in Europe. A wholly-owned subsidiary of Sagem (a company of the Safran Group), it has a track record in pneumatic UAV launching technology which spans more than three decades. Based in Tampere in Southern Finland, the company also operates a dedicated cold climate UAV test flight centre at Kemijärvi, in Finnish Lapland.

Robonic provides a complete launch product solution for UAV types from 10 to 500 kg, with its top end systems capable of generating a maximum power output of 8,500 kW. The systems are operationally proven, deployed by multiple customers in a wide range of environments around the world and used in conjunction with propeller and turbine engine UAVs, and with high performance target drones.

Robonic has cooperation arrangements in place with a variety of UAV manufacturers and systems providers for current and future programs to ensure availability of highly capable launch solutions that meet all customer defined specifications.

The company provides services from initial design to product development, from product delivery to training life cycle support. It approaches all projects as a co-development opportunity, ensuring that the launcher architecture is an integral part of the overall system

and fully meets all performance requirements associated with UAV take-off speed, aircraft weight variations, acceleration targets, and planned growth margins.

Robonic's development methodology begins with the simulation of launcher performance requirements to guide the optimisation of existing launcher designs or development of new hardware, with this process in a close partnership with the customer. Subsequent system testing includes a jointly developed weight, speed, pressurisation, reload and handling trials program to confirm launch parameters and overall system integration.



The SELEX Galileo Falco being launched off the Robonic MC2555LLR at the RATUFC range

Operator requirements are a key element of the design, development and delivery aspects of all launcher projects. Robonic has developed a highly optimised human-machine interface for its full launcher range with this intended to ensure safe and reliable operation in all

environmental types, ranging from deep Arctic snows to windswept equatorial deserts. On delivery Robonic provides a detailed operator training course incorporating both theoretical and practical aspects of pneumatic launcher operations which also supports the customer's own acceptance and qualification trials processes. Robonic systems are designed to provide high reliability with low maintenance requirements. Through life support planning for the full pneumatic launcher range incorporates regular standardised checking and overhaul cycles. If required Robonic offers deployable field support to its customers.

Robonic's record of achievement includes launching the Sagem Defence Systems Sperwer- A and B as well and Elbit's Hermes 450 using its third generation hardware. The Finnish Defence Forces have used Robonic launchers in support of tactical operations with its



Sagem Patroller ready for take-off at the Robonic Arctic Test UAV Flight Centre (RATUFC) at Kemijärvi

Ranger UAV since 2000 with this following stringent acceptance testing above the Arctic Circle. Robonic systems ability to support high performance targets was verified in February 2001 with the launch of a Flight Refuelling Ltd Falconet at the DERA test range in the Hebrides, United Kingdom, using a modified Finnish Defence Forces pneumatic target launcher. Robonic launchers are baselined or available as options for a variety of current production UAV types through a variety of business models.

The company welcomes the opportunity to discuss new generation UAV development projects from established as well as new and emerging companies in the unmanned systems

sector. Robonic is continually investing in its underlying technological base with research and new product development an ongoing process central to the company's business outlook. The growth of the global UAV industry is widely expected to provide extensive new opportunities as regulators such as EUROCAE and EASA establish an operational environment that allows for expanded airspace access and the development of civilian applications.

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The Robonic UAV test flight centre (RATUFC) at Kemijärvi, Finland provides facilities for the development, test and evaluation of ground launched targets and tactical UAV's, as well as supporting operational training. The range, located just inside the Arctic Circle some 90 km east of the town of Rovaniemi, accommodates catapult and runway launched air vehicles. The range flight envelop comprises some 11 000 km2 of air space with UAV flights conducted in segregated airspace. The main field has a 1400 m sealed runway and basic airfield infrastructure that supports year round civil and military flying operations. RATUFC offers an excellent opportunity to test whole systems in Arctic environments to ensure full functionality in a wide range of conditions including extremes of cold and dryness





On the 17th of November the EADS Defence & Security Systems and the Government of Finland have announced the official approval of a (4) year Offset project for the integration of up to 45 Finnish Aerospace, Defence, Dual-use and Advanced Technology companies into the (2) leading international e-business platforms for the Aerospace

and Defence industry, Epicos and Exostar. Through this project Aerospace, Defense and Dual-use large, Small and Medium-size Enterprises (SMEs) have actively participated and received a comprehensive package of services, offered via the Epicos and Exostar e-business platforms, that strengthened their competitive advantages within the global Aerospace & Defence industry.

Currently, the project is in an ongoing process. Epicos have managed to provide quality services to the Finnish Aerospace & Defence industry as Finnish companies gained direct visibility and promotion to the international Aerospace & Defence community and especially in some of the major procurement centers around the world. Additionally, through this project Finnish companies gained access to critical business intelligence information concerning new business opportunities and government procurement from many countries. Finally, Epicos provided specialized e-tools that gave them the ability to look for new

partners as well as connect buyers and suppliers to conduct e-business activities.

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As part of this process Epicos, in close cooperation with the participating Finnish

companies, has created a unique database with proposal ideas for international industrial cooperation and export business opportunities. Through this the project promotes the internationalisation and exports of Finnish Aerospace and Defence companies.

Finland is the 14th country which has adopted the National Industry Development Project. Currently several other countries followed Finland's example. This clearly illustrates the maturity of the conception of the whole project and the fact that Epicos National Defence Industry Development Projects have already been elected as the main inclination of integration national aerospace and defense industry to the international scene.

Epicos Project Opportunities

epicos.com Epicos "Project Opportunities" provides a unique set of online tools the structure, identification and implementation 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

Customised actuators for best possible control of movement for new generation all terrain **UGV (Unmanned Ground Vehicle) systems and unattended sensors**



A company with extensive experience in designing and manufacturing precision actuators is proposing the implementation of the existing technology to new generation UGV systems and unattended sensors. The solution includes the initial customised design of automatic actuators, motor, sensor control electronics as well as field bus solutions for the UGV designs.

For Further Information Contact our ICO Department

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Design and prototyping of wrist-top/wearable computer for specialized Future Soldier applications



A leading technology provider, designer and manufacturer of handsfree communication solutions for demanding use, is proposing the design and prototyping of a unique and energy efficient wristtop/wearable computer that can be used in several Future Soldier (FS) applications.

For Further Information Contact our ICO Department

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Finnish Defence Forces, by Frederic P. Miller, Agnes F. Vandome, John McBrewster





The Finnish Defence Forces are a cadre army of 16,500, of which 8,700 are professional soldiers (officers), extended with conscripts and reservists such that the standard readiness strength is 34,700 people in uniform. This book is trying to delineate the most important matters of the Finnish Defence Forces such as conscription, military ranks, equipment, the Jäger troops and the Finnish Rapid Deployment Force.

Finnish Air Force: Finnish Defence Forces, Finnish Rapid Deployment Force, Aerial warfare in the Winter War, List of military aircraft of Finland, List ... II aces from Finland, White Guard (Finland), by Frederic P. Miller, Agnes F. Vandome, John McBrewster





In the modern battlefield air forces play an important and distinguish role. Therefore they are a different branch of the national forces. The same fragmentation exists and in the Finnish Air Army. This book is trying to delineate the tasks of Finnish Air Forces. Its peacetime tasks are airspace surveillance, identification flights, and production of readiness formations for wartime conditions. As a separate branch of the military, the Finnish Air Force is one of the oldest in the world, having existed officially since 6 March 1918.

Epicos Newsroom



France eyes five billion euro defence cuts

France will trim about five billion euros (6.1 billion dollars) from its defence budget, Defence Minister Herve Morin said Monday.

The defence budget cuts over the next three years are part of overall belt-tightening measures in the wake of the Greek debt crisis.

"There is a difference of close to five billion euros over three years" between the draft defence budget and the ceiling for expenses set by Prime Minister François Fillon, the minister told La Tribune newspaper.

The draft defence budget called for expenses of 377 billion euros.

Fillon last month announced that France will impose a freeze on central government spending for three years from 2011.

The minister told journalists at a defence industry trade show that France still wants to provide its armed forces with new military equipment.

"We will continue to consider that equipping our forces is a priority," said Morin at the trade show near Paris.

Source: 2009 AFP, Agence France-Presse (AFP)

Russia to buy 10 billion euros in foreign arms by 2016

MOSCOW, June 15 (RIA Novosti) - The Russian Defense Ministry may spend up to 10 billion euros on European and Israeli weaponry in the next five or six years, Russian daily Vedomosti reported on Tuesday. An investigation carried out by military experts from Center for Analysis of Strategies and Technologies estimated foreign purchases of weaponry for Russian Armed Forces over the next two years at some 4 billion euros. This sum includes four major deals. * the discussed acquisition of four Mistral-class helicopter carriers from the French naval shipbuilder DCNS estimated at 1.5 billion euros. * a 1.5 billion-euro contract to be concluded with Italian company Iveco on the assembly of 3,000 Light Multirole Vehicle (LMV) armored vehicles at the Russian Kamaz plant * an expected contract with Israel Aerospace Industries (IAI) on licensed production of three models of unmanned aerial vehicles - I-View MK150 short range aircraft, Searcher II short-range drones and Heron long-range drones - which the experts said could be worth up to \$300 million * a 300 million-euro deal with France's Thales and Safran groups on supplies of additional lots for assembling thermal imaging systems and aircraft targeting containers To bring the halfdecade total up to 10 billion euros, the think tank experts included the possible joint development and procurement of warships from DCNS, armored vehicles from French and German firms as well as military electronics from Israel, Vedomosti reported. Despite beginning to import weaponry from Western countries in significant volumes, Russia will also remain a large-scale exporter of weapons. In 2009, deliveries to foreign customers were worth \$8.5 billion. However, Igor Korotchenko, head of Center for Analysis of Global Arms Trade think tank, said arms imports were not likely to exceed 2.5-3 billion euros over the next five or six years, as the issue remains politically sensitive in Russia and depends both on relations with exporting countries and environment at 2011-2012 political election. The Russian government is caught between the need to modernize its military and to support its defense sector, which lacks the capacity to fulfill the army's needs after years of underinvestment.

Source: RIA Novosti

Bulgaria prioritizes Nabucco over South Stream gas pipeline

ATHENS, June 13 (RIA Novosti) - The European Nabucco gas pipeline project is more important for Bulgaria than the Russia-backed South Stream project, Bulgaria's deputy foreign minster said. Bulgarian media cited Marin Raykov as saying on Saturday that the Russian project "raises a lot of questions," while the Nabucco is an innovative project, which may serve as an example of an efficient state-private partnership in energy sphere. "Bulgaria will work with its European partners to complete by the end of 2010 all the procedures necessary to start the construction [of the Nabucco pipeline]," Raykov said. The diplomat added that his country would strive to become "independent and efficient" in its energy policy. The 3,300-kilometer Nabucco pipeline construction project is estimated at \$7.9 billion, and will transfer natural gas from the Caspian region through Azerbaijan, Georgia, Turkey, Bulgaria, Hungary, Romania, and Austria, bypassing Russia. The pipeline is to pump 20-30 billion cubic meters of gas annually. The EU-backed Nabucco pipeline is widely considered a rival to the South Stream project, which will pump 63 billion cubic meters of Russian natural gas annually to Bulgaria, Italy and Austria and is part of Russia's efforts to cut dependence on transit nations, particularly Ukraine and Turkey. Bulgaria said on Friday that two other joint projects with Russia - the Burgas-Alexandroupolis oil pipeline and a nuclear power plant in Belene - were "economically unprofitable and unreasonable." Bulgarian Prime Minister Boiko Borisov said the country could reject plans to develop the Burgas-Alexandroupolis oil pipeline project with Russia and Greece due to environmental concerns and fold the nuclear power plant construction, which was being carried out by Russia's AtomStroyExport, because of a lack of investors.

Source: RIA Novosti

Boeing 737 Production Rate Increases to 35 per Month

SEATTLE, June 15 /PRNewswire-FirstCall/ -- Boeing (NYSE: BA) today announced a second production rate increase on the Next-Generation 737 program, taking the rate from the previously announced 34 airplanes per month to 35 in early 2012.

In May, Boeing cited continued strong demand for the Next-Generation 737 as reason to ramp-up production from 31.5 to 34 airplanes per month and indicated plans to study further increases. Today's announcement acknowledges the anticipated long-term growth in this market segment and the continued pressure to raise airplane output to match expected market demand.

"Our customers continue to show their preference for the Next-Generation 737 by exercising order options as well as by placing new orders," said Boeing Commercial Airplanes President and CEO Jim Albaugh. "We've managed our current backlog efficiently and increasing rate is the product of our comprehensive planning and preparation. We will continue to monitor demand as we go forward."

Boeing and its suppliers will prepare for the rate increase over the next 18 months, assessing readiness and ensuring an orderly ramp-up from the current 31.5 airplanes per month. The rate increase is not expected to have a material impact on 2010 financial results.

The Next-Generation 737 program continues to innovate in the areas of improved navigation, performance and passenger comfort. The program will deliver its first 737 Boeing Sky Interior in October and is progressing with its implementation of a package of performance improvements by early 2012 that are expected to reduce fuel consumption by 2 percent.

Forward-Looking Information Is Subject to Risk and Uncertainty

Certain statements in this report may be "forward-looking" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "expects," "intends," "plans," "projects," "believes," "estimates," "targets," "anticipates," and similar expressions are used to identify these forward-looking statements. Forward-looking statements are based upon assumptions about future events that may not prove to be accurate. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Actual outcomes and results may differ materially from what is expressed or forecasted in these forward-looking statements. As a result, these statements speak to events only as of the date they are made and we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by federal securities laws. Specific factors that could cause actual results to differ materially from forward-looking statements include, but are not limited to, statements we make regarding our guidance relating to future financial and operating performance, the effect of economic conditions in the United States and globally, and general industry conditions as they may impact us or our

customers, as well as the other important factors disclosed previously and from time to time in our other filings with the Securities and Exchange Commission.

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Source: Epicos, Boeing

IMF concerned over Russia's 2010 budget amendments

MOSCOW, June 15 (RIA Novosti) - The International Monetary Fund (IMF) expressed concern on Tuesday over amendments to Russia's 2010 budget that were presented to the lower house of the Russian parliament last week. The head of the IMF's mission Russia, Paul Thomsen, told a news conference on the results of Russia-IMF consultations that the amendments could aggravate the current deficit of the federal budget. He added that, according to the IMF's estimates, Russia's budget deficit in 2010 will reach 5.9% of gross domestic product (GDP), rather than 5.4%, as Russian experts have predicted. Thomsen linked this to lower forecasts for mid-year oil prices than had originally been expected. He also said that despite a dramatic improvement in the macroeconomic situation in Russia, the government should expand the monitoring functions of the Central Bank, including in the credit services sphere.

Source: RIA Novosti