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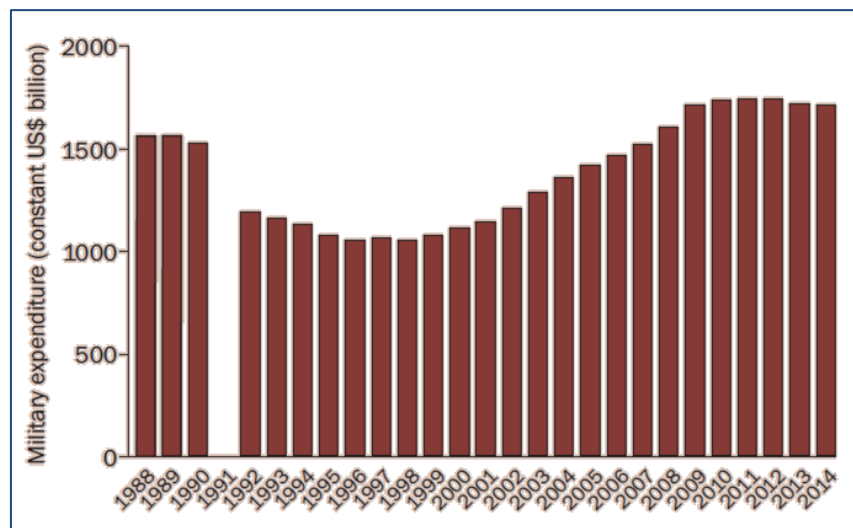
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## Global Defence Spending: Trends for 2014



According to a report published by Stockholm International Peace Research Institute (SIPRI) on 13th of April, global military expenditure in 2014 was an estimated \$1776 billion, representing a marginal fall of about 0.4% in real terms compared to 2013, equivalent to 2.3% of global gross domestic product (GDP). Nevertheless, we must take into consideration the fact that excluding the USA, the total military expenditure for the 'rest of the world' has increased continuously since 1998 and was up by 3.1% in 2014. In 2014, Global military expenditure followed the same pattern of the past few years, whereby overall military spending decreased in North America, Western and Central Europe, Latin America and the Caribbean, but rose in Asia and Oceania, the Middle East, Eastern Europe and Africa. Additionally, it is worth mentioning that the five biggest spenders in 2014 were the USA, China, Russia, Saudi Arabia and France.

Source: SIPRI



World military expenditure, 1988–2014

An interesting statistic is that in 2014 there were 20 countries, situated all in Africa, Eastern Europe and the Middle East spending more than 4% of their GDP on defence, a significant increase, when compared to 15 countries in 2013. Only 3 of these 20 countries are functioning democracies, and the rest of the countries were involved in some type of an armed conflict in 2013-14 or had a recent history of armed conflict.

Despite the fact that USA's military expenditure dropped by 6.5% in 2014, the country remains the world's largest military spender, at nearly three times the level of second-placed China. Russia and Saudi Arabia were the third and fourth highest military spenders, respectively. China's expenditure rose by 9.7%, Russia's spending was up 8.1% and Saudi Arabia's by 17%.

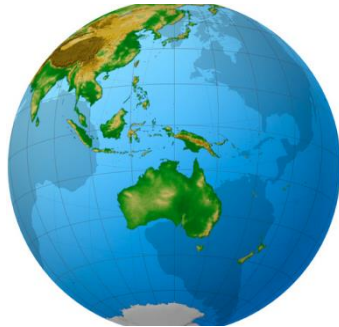
Among other countries Australia made a significant increase in spending of 6.8%, following three years of cuts, and there were small increases by India (1.8%) and South Korea (2.3%).

On the other hand Italy's expenditure fell by 8.8%; United Arab Emirates by 5.5%, Germany by 3.3% and Brazil by 1.7%.

Kyriazis Vasileios,  
Epicos Newsletter Head Editor



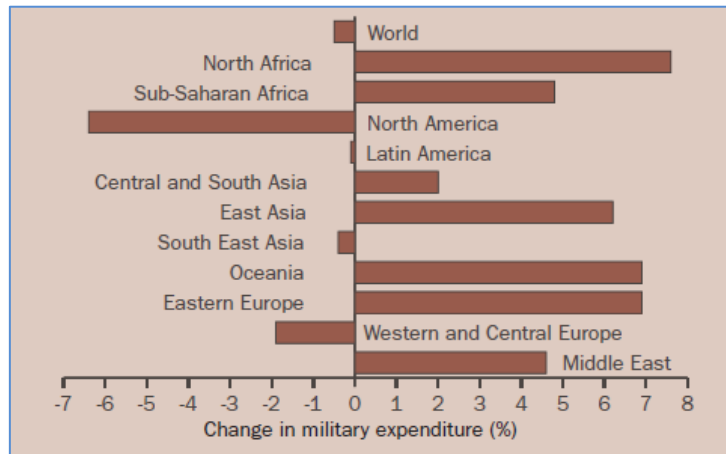
Defence Spending in Asia and Oceania



According to the Stockholm International Peace Research Institute (SIPRI), Asia and Oceania was one of the regions with the biggest increase in military spending in 2014. More specifically, the military spending increased by 5% compared to 2013 and by 62% between 2005 and 2014, reaching \$439 billion in 2014 at current prices and exchange rates. China’s growth of 9.7% dominated the regional trend, with the overall increase in the rest of the region standing at 1.2%. Vietnam also continued its rapid rise in military spending, with an annual increase of 9.6% in 2014, reaching \$4.3 billion.

The main spending sub-region in 2014 was East Asia with \$309 billion, followed by Central and South Asia with \$65.9 billion, South East Asia with \$35.9 billion and Oceania with \$28 billion.

Source: SIPRI



Changes in military expenditure, by region, 2013–14

Military spending in the area remains high, with all states in the region except Fiji, Japan and Laos increasing their spending since 2005. Nevertheless, the growth rate for most states has been substantially lower since 2009. For example, while China’s military expenditure doubled in real terms for the period 2004-2009, it increased by only 48% between 2009-2014. Following the same pattern, India’s military expenditure increased by 45% between 2004-2009, it has remained essentially flat since then, increasing by just 2%.

Kyriazis Vasileios,

Epicos Newsletter Head Editor

## Epicos "Industrial Cooperation and Offset Projects"



Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

[For Further Information Press Here](#)

### Development of a portable mission data acquisition Remote Terminal Unit (RTU) with advanced vehicle mission control and functions monitoring capability for UAVs



Unmanned Aerial Vehicles (UAVs) are systems for intelligence, surveillance & reconnaissance, as well as weapons' delivery. A company specialized in the design, development and manufacturing of UAVs, is proposing collaboration in the design and development and/or manufacturing of a portable mission data acquisition Remote Terminal Unit (RTU), with advanced vehicle mission control and functions monitoring capabilities that can be used in a wide range of Unmanned Aerial Vehicles (UAV) worldwide.

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

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### Helicopter landing training simulator / Ingress - Egress training



A company proposes the development and installation of a helicopter landing simulator which will provide complete training of soldiers/personnel on Ingress – Egress from/to helicopter under emergency and battle situations. Training will include emergency evacuation, search and rescue (SaR) missions, insertion/ extraction of special operation forces in/from "hot" battle zones, helicopter crashes with post-crash fires, and other relevant operational scenarios.

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

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*News from our A&D Business Network***Harris Corporation Receives \$74 Million in Orders from International Customer for Tactical Radio Modernization**

Harris Corporation has received \$74 million in orders from an international customer to deliver Falcon® tactical radios as the next phase of the country's tactical communications modernization program. Harris will provide the full range of communication capabilities from its Falcon series, including very high-frequency radios and high-frequency radios. The radios provide full software-defined combat net radio capabilities, including frequency hopping and secure digital voice. The nation is also acquiring Harris' HF manpack radio which delivers reliable beyond-line-of-site terrestrial voice and data communications, reduced size and weight, and extended battery life.

"Our tactical radios form the backbone of critically important systems that enable forces to communicate by voice and data in a range of missions, including defense and homeland security," said Brendan O'Connell, president, Tactical Communications, Harris RF Communications. "Harris offers the world's most advanced digital HF radio family that delivers highly reliable and secure communications for missions that require beyond-line-of-sight capabilities."

Harris RF Communications is the leading global supplier of secure radio communications and embedded high-grade encryption solutions for military, government and commercial organizations. The company's Falcon® family of software-defined tactical radio systems encompasses manpack, handheld and vehicular applications. Falcon III® is the next generation of radios supporting the U.S. military's Joint Tactical Radio System (JTRS) requirements, as well as network-centric operations worldwide. Harris RF Communications is also a leading supplier of assured communications® systems and equipment for public safety, utility and transportation markets — with products ranging from the most advanced IP voice and data networks to portable and mobile single- and multiband radios.

**About Harris Corporation**

Harris is an international communications and information technology company serving government and commercial markets in more than 125 countries. Headquartered in Melbourne, Florida, the company has approximately \$5 billion of annual revenue and about 13,000 employees — including 6,000 engineers and scientists. Harris is dedicated to developing best-in-class assured communications® products, systems, and services. Additional information about Harris Corporation is available at [www.harris.com](http://www.harris.com).

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## Honeywell Technology First to Proactively Manage Cyber Security Risk for Industrial Sites



Honeywell Process Solutions (HPS) today launched the first digital dashboard designed to proactively monitor, measure and manage cyber security risk for control systems for refineries, power plants and other automated production sites throughout the world that are at increasing risk of cyber-attacks. The Honeywell Industrial Cyber Security Risk Manager, is designed to simplify the task of identifying areas of cyber security risk, providing real-time visibility, understanding and decision support required for action. It monitors and measures cyber security risk in multi-vendor industrial environments.

The threat of cyber-attacks on industrial targets is a major concern according to a global survey on cyber security conducted by Ipsos Public Affairs in September 2014 on behalf of Honeywell. More than 5,000 adults in 10 countries were surveyed about the threat of cyber-attacks on critical industries in their countries. Three quarters of respondents said they were fearful that cyber criminals could hack into and control major sectors and elements of the economy. Two-thirds of those surveyed thought that the oil and gas, chemicals and power industries were particularly vulnerable to cyber-attacks.

"Industrial processors are increasingly challenged to understand their cyber security risks," said Jeff Zindel, global business leader Cyber Security, HPS. "And many times, they don't know what to do with the data they are provided or what to do if an incident occurs. Risk Manager changes that. It gives guidance on the potential impact of threats and vulnerabilities as well as possible resolutions, making it easier to manage cyber security risks."

Risk Manager uses advanced technologies that translate complex cyber security indicators into clear measurements and key performance indicators (KPI), and provides essential information through an easy-to-use interface. The intuitive workflow allows users to create customized risk notification alerts and perform detailed threat and vulnerability analysis so they can focus on managing risks that are most important for reliable plant operations.

"Industrial facilities have clearly become targets for cyber-attacks. Safety and operational continuity demand a clear understanding of these serious, dynamic risks and a program to ensure that they remain within acceptable levels. While most organizations recognize this need, operational people often lack the expertise to properly assess and manage cyber risks," said Sid Snitkin, vice president, ARC Advisory Group. "So, we applaud Honeywell's development of the Industrial Cyber Security Risk Manager. From what we've seen, it is a comprehensive, yet understandable, solution that should meet the needs of operational, automation, and manufacturing IT personnel."



"With Risk Manager, industrial customers don't need to be cyber security experts," said Zindel. "The easy-to-use interface allows users to prioritize and focus efforts on managing risks that are most important for reliable plant operations, protecting against vulnerabilities and threats such as insecure network and system configurations, rogue devices, intrusion attempts, malware, and the list goes on."

Honeywell has included proprietary cyber protection software for more than 10 years with its leading process automation solutions including Experion process controls, which are used at industrial sites such as refineries, chemical plants, gas processing units, power plants, mines and mills around the world. During that time, the Honeywell Industrial Cyber Security group has delivered more than 1,000 industrial cyber security projects globally.

Risk Manager monitors plant assets within and across all security zones of a plant, including third-party systems. By understanding security zones, Risk Manager is aligned with ISA 62443 and is able to calculate accurate risk scores. Risk Manager's real-time measurement of risk is in line with industry standard risk management methodologies so that risk scores can be used consistently and accurately throughout a corporation's risk and governance efforts. Risk Manager is the latest addition to Honeywell's end-to-end portfolio of professional and managed services for industrial environments.

For further details on Honeywell's industrial cyber security solutions, visit [www.becybersecure.com](http://www.becybersecure.com)

Honeywell Process Solutions ([www.honeywellprocess.com](http://www.honeywellprocess.com)) is a pioneer in automation control, instrumentation and services for the oil and gas; refining; pulp and paper; industrial power generation; chemicals and petrochemicals; biofuels; life sciences; and metals, minerals and mining industries. Process Solutions is part of Honeywell's Performance Materials and Technologies strategic business group, which also includes UOP, a leading international supplier and licensor of process technology, catalysts, adsorbents, equipment, and consulting services to the petroleum refining, petrochemical, and gas processing industries.

Honeywell ([www.honeywell.com](http://www.honeywell.com)) is a Fortune 100 diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes, and industry; turbochargers; and performance materials. For more news and information on Honeywell, please visit [www.honeywellnow.com](http://www.honeywellnow.com).



## Epicos Newsroom



### CAE selected by Southwest Airlines for the update of its simulator fleet with CAE Tropos™ 6000XR visual systems

CAE today announced at the World Aviation Training Conference and Tradeshow (WATS) that it has been awarded a contract by Southwest Airlines for the purchase of ten CAE Tropos™ 6000XR visual systems. Southwest's training centre in Dallas, Texas will update all its simulators to CAE-built visual systems starting in mid-2015.

"Southwest Airlines has been a long-time customer of CAE and we are proud of the fact that it has chosen us as its training partner of choice to equip its entire simulator fleet with the CAE Tropos™ 6000XR visual system," said Nick Leontidis, CAE's Group President, Civil Simulation and Training.

The CAE Tropos™ 6000XR visual system is a testament to CAE's commitment to training innovation. Featuring high-quality visual scenes enhancing the realism of pilot training, the latest evolution of visual solutions for civil aviation training also focuses on providing optimized design and tools for lifecycle and maintenance benefits.

Features include:

- Immersive and high-fidelity environment, simulating advanced weather effects, high-fidelity terrain, texture and models.
- The CAE ACE™ standalone utility which allows customers to generate ground traffic and scenarios at each airport according to their preferences or training needs without using simulation downtime.
- Shadow and lighting where scenes are enhanced with the addition of dynamic shadows generated by static planes and vehicles. Dynamic shadows correlate with the position of the sun and are cast on ground, buildings, moving vehicles and marshals.
- 4 million pixels LED (light-emitting diode) projectors delivering unprecedented visual realism and extended life time with minimized maintenance needs
- CAE True™ Airport service which provides more than 250 up-to-date airport databases online via an internet portal.
- Retrofits capability with simulators manufactured by other vendors and compatibility with previous CAE Tropos™ IG protecting existing database investments.

#### About CAE

CAE is a global leader in 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](http://www.cae.com)

Follow on Twitter @CAE\_Inc

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**Source:** Epicos, CAE

#### **Bombardier Wins Rail Control Signalling Contract in Poland**

Rail technology leader Bombardier Transportation, as consortium lead, has won the latest turnkey rail signalling contract awarded by PKP Polskie Linie Kolejowe S.A. for the Polish section of the E59 rail corridor. The contract has a total value of 210 million Polish Zloty (53 million euro, \$56 million USD), with Bombardier's share valued at approximately 93 million Polish Zloty (23 million euro, \$25 million US).

Bombardier, in a consortium with Krakowskie Zakłady Automatyki S.A., will deliver its BOMBARDIER INTERFLO 200 mainline solution for the Rawicz to Czempin section, which is the third and final conventional signalling project on the Wroclaw to Poznan line. This line is part of the E59 rail corridor that links the Czech capital of Prague with Copenhagen, Denmark. The contract's scope also includes the associated power supplies, telecommunications, CCTV and rolling stock detection systems, with final delivery scheduled for June 2020. Bombardier is also implementing this technology for the Wroclaw to Rawicz and Czempin to Poznan sections of the line.

Peter Cedervall, President, Rail Control Solutions, Bombardier Transportation, commented, "This order confirms Bombardier as a key supplier for the E59 line in Poland and adds to our

extensive and proven global mainline rail control project portfolio. A further important contract award in this market, it falls in our centenary year of delivering global rail control solutions, which includes nearly 90 years as a leading supplier of Poland's rail control."

The year 2015 is a milestone for Bombardier with its Rail Control Solutions (RCS) division celebrating its 100th anniversary of leadership in signalling and rail safety. Bombardier is committed to shaping the future of rail signalling and has pioneered many innovative and game-changing technologies. This includes the first computer-based interlocking system and the worldwide ERTMS/ETCS-standard balise technology as well as various high speed solutions and communications-based train control systems.

#### About Bombardier Transportation

Bombardier Transportation, a global leader in rail technology, offers the broadest portfolio in the rail industry and delivers innovative products and services that set new standards in sustainable mobility. BOMBARDIER ECO4 technologies – built on the four cornerstones of energy, efficiency, economy, and ecology – conserve energy, protect the environment, and help to improve total train performance for operators and passengers. Bombardier Transportation is headquartered in Berlin, Germany, and has a very diverse customer base with products or services in more than 60 countries. It has an installed base of over 100,000 vehicles worldwide.

#### About Bombardier

Bombardier is the world's leading manufacturer of both planes and trains. Looking far ahead while delivering today, Bombardier is evolving mobility worldwide by answering the call for more efficient, sustainable and enjoyable transportation everywhere. Our vehicles, services and, most of all, our employees are what make us a global leader in transportation.

Bombardier is headquartered in Montréal, Canada. Our shares are traded on the Toronto Stock Exchange (BBD) and we are listed on the Dow Jones Sustainability World and North America Indices. In the fiscal year ended December 31, 2014, we posted revenues of \$20.1 billion. News and information are available at [www.bombardier.com](http://www.bombardier.com) or follow on Twitter @Bombardier.

**Source:** Epicos, Bombardier

## General Dynamics NASSCO Launches World's First LNG-Powered Containership for TOTE; Celebrates 100th Ship Launch

On Saturday, General Dynamics NASSCO launched the world's first liquefied natural gas (LNG) powered containership at a ceremony at the company's shipyard in San Diego. The christening and launch ceremony also commemorated NASSCO's 100th ship launch.

U.S. Representative Duncan D. Hunter was the principal speaker. The ship's sponsor, Mrs. Sophie Sacco — wife of Michael Sacco, president of the Seafarers International Union of North America, AFL-CIO — christened the ship with a traditional champagne bottle break over the ship's hull. General Paul J. Selva, Commander of the U.S. Transportation Command, also spoke at the ceremony. The ship's name, Isla Bella, was unveiled during the ceremony. The ship was built for TOTE, a leading transportation and logistics company. "The launch of the Isla Bella signals a very significant milestone for the thousands of men and women at NASSCO. Not only does it commemorate NASSCO's 100th ship launch, it validates NASSCO's capability to break new ground in green ship technology and lead in the design, construction and conversion of ships to take advantage of the economic and environmental benefits of LNG," said Fred Harris, president of General Dynamics NASSCO.

As part of a two-ship contract signed in December 2012 with TOTE, the 764-foot-long Marlin class containerships will be the largest dry cargo ships of any kind in the world powered by LNG. This ground-breaking green ship technology will dramatically decrease emissions while increasing fuel efficiency as compared to conventionally powered ships. The ships will also include a ballast water treatment system, making them the greenest ships of their size anywhere in the world.

Upon delivery in late 2015, the Jones Act-qualified ships will operate between Jacksonville, Florida, and San Juan, Puerto Rico. As a complement to its government new construction business, which over the past decade has delivered 16 ships to the U.S. Navy, NASSCO maintains an extensive history of commercial shipbuilding. In the past decade, NASSCO delivered eleven commercial ships and currently has ten commercial ships under contract, including the two Marlin Class containerships for TOTE.

For its commercial work, NASSCO partners with South Korean shipbuilding power, DSME, for access to state-of-the-art ship design and shipbuilding technologies. NASSCO is the only major shipyard on the West Coast of the United States conducting new construction and repair.

For more information, visit [www.nassco.com](http://www.nassco.com).

**Source:** Epicos, General Dynamics NASSCO

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### Poland pre-selection of the Airbus Helicopters H225M Caracal

Marignane – Airbus Helicopters and its partner Heli Invest Services welcome the decision of the Polish Ministry of Defence to pre-select the H225M Caracal from Airbus Helicopters.

We are fully committed to providing Poland with the best product and support for this long-term strategic program. We believe our offer will deeply strengthen the defence capabilities of Poland by creating the most value operationally, industrially and technologically.

We are now preparing ourselves for the next steps of the tender process, cooperating during this test period to answer all requests and questions from the Polish armed forces, and further demonstrate that the Caracal matches all criteria of the tender and their operational needs.

For more information on Airbus Group's presence in Poland, visit the Airbus Group in Poland page.

» [Airbus Group in Poland](#)

### About Airbus Helicopters

Airbus Helicopters is a division of Airbus Group. The company provides the most efficient civil and military helicopter solutions to its customers who serve, protect, save lives and safely carry passengers in highly demanding environments. Flying more than 3 million flight hours per year, the company's in-service fleet includes some 12,000 helicopters operated by more than 3,000 customers in 152 countries. Airbus Helicopters employs more than 23,000 people worldwide and in 2014 generated revenues of 6.5 billion Euros. In line with the company's new identity, fully integrated into Airbus Group, Airbus Helicopters has renamed its product range replacing the former "EC" designation with an "H".

**Source:** Epicos, Airbus Helicopters

### Poland Selects U.S. Patriot System for “Wisła” Missile Defense Program

The U.S. Embassy welcomes today’s announcement by the Polish government that Poland has selected Raytheon’s Patriot system for Poland’s “Wisła” integrated air and missile defense program.

This announcement marks an important moment in the security partnership between Poland and the United States. With this decision, Poland will acquire the world’s best air and missile defense system. Poland’s Patriot system will be interoperable with NATO allies’ Patriot assets, and this will create multiple opportunities for joint training and deployments. As such, Poland’s “Wisła” program will significantly enhance Poland’s national defense capabilities, as well as NATO’s collective defense capabilities.

In addition, Poland’s selection of Patriot for “Wisła” intensifies U.S.-Poland industrial cooperation through the co-production and co-development elements of the program. Poland’s defense industry will help develop the next generation of Patriot system.

The United States greatly values Poland’s leadership on security issues and remains committed to strengthening Poland’s and NATO’s collective defense.

For Further Information [Click Here](#)

**Source:** Epicos, US Embassy, Warsaw-Poland