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The Future of Norwegian Defence Procurements



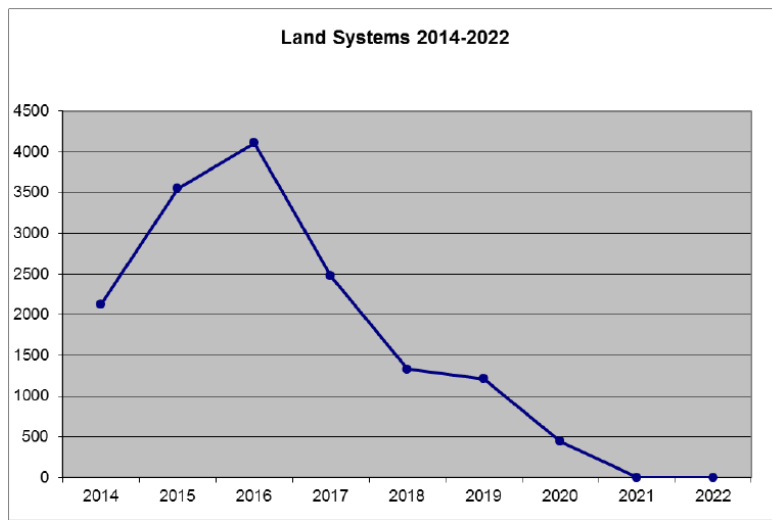
The government of Norway continues to give considerable priority to the Country's Armed Forces, and one of its main priorities is to ensure a predictable and stable foundation for further modernization of the Defence sector. This is highlighted by the fact that in 2014 the budget for defence procurements is kept at a high level comprising about 21% of the total defence

budget. With these funds Norway is planning to purchase a wide variety of equipment. For period 2014-2017 the procurement process is dominated by the on-going F-35 acquisition as well as investments in Land and Naval systems.

More specifically, four (4) F-35 aircraft will be delivered to Norway. Regarding land systems the main investments will be carried out in the mechanized units (new combat vehicles (CV90) and upgrades of existing combat vehicles (CV90 and M113). Within Naval systems the main investment is a new ocean going Cost Guard vessel, as well as the new maritime helicopter (NH90) that will be delivered within this timeframe.

For 2018-2022 period the main investment activity will be the F-35 program and naval systems. The main delivery of the F-35 aircrafts will start in 2017 and continue beyond 2022. Regarding, naval systems the main investment will be the addition of two more vessels of the new ocean going Cost Guard vessel class as well as the investment in the project "Submarine capability beyond 2020".

Annual allocation of funds (NOK mill.)



Ministry of Defence Norway

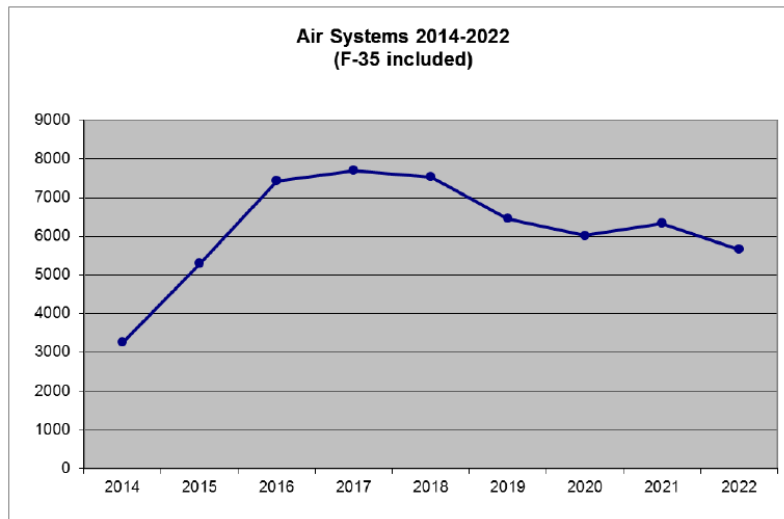
More specifically, during the period 2014-2022, the main investments in the land forces will be the following:

- Combat vehicles and artillery (medium-weight, standard armored vehicles CV90, armored reconnaissance systems (CV90)).
- Life extension program on the Main Battle Tank Leopard 2A4 and new Combat Service vehicles on Leopard 2 chassis (Recovery-, Bridge layers and Engineer vehicles).
- Other investments include M-113s, various types of remotely operated weapon stations for vehicles, MLU SISU plus a number of smaller investments.

Furthermore, the main investment in the navy will be the following:

- Naval Strike Missile (NSM).
- Deliveries of NH90 maritime helicopters for the frigates and the Coast Guard.
- New lightweight torpedoes for frigates, helicopters and maritime patrol aircraft.
- Upgrades of Air Defence missiles.
- The Ula-class submarines will be undergoing upgrades throughout the period.
- Submarine Capability post 2020.
- Procurement of Ocean going Coast Guard Vessels.
- Evolved Sea Sparrow Missile Block II.

Annual allocation of funds (NOK mill.)



Ministry of Defence Norway

Finally, the Norwegian air force will mainly carry out the following acquisitions:

- Preparations for the acquisition of the F-35 combat aircraft. According to the current plan an initial delivery of training aircraft will take place in 2015, followed by the main deliveries during the period 2017-2024.
- Replacement of air surveillance radars and required contributions to NATO Airborne Early Warning and Control Force (NAEW&C Force).
- Participation in the acquisition of a NATO owned and operated airborne ground surveillance capability – Alliance Ground Surveillance (AGS).

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Norwegian Defence Industry: New Capabilities & Export Markets



Although the Norwegian defence industry is rather limited compared to the defence industries in other European countries, it has a wide span of technological competencies and a broad portfolio of

products, as it is consisted of approximately (140) heterogeneous companies. Additionally, it is worth mentioning that Norwegian defence companies export the majority of their production as they receive on average more than half (60%) of their revenues from foreign clients. It is indicative that in 2012, the Norwegian defence industry had a significant amount of exports reaching €570 million Euros (780 million USD).

The main products of the Norwegian defence industry are ranging from tactical communications and crypto solutions to ammunitions and military explosives, as well as tents and protective suits to components for aircraft, vehicles, vessels and submarines. The main areas/sectors the indigenous industry is active are the following:

- Command, Control, Information, Decision support and Combat systems
- Systems integration
- Missile technology and related sensors and Fire Control systems
- Underwater sensors and autonomous underwater systems
- Ammunition, fire guidance systems, remotely operated weapon stations, missile propulsion and military explosives
- Advanced materials developed or adapted for military purposes
- Life Cycle support for military aircraft and naval vessels

The main areas where Norwegian defence companies export its products are Europe and North America. Nevertheless, throughout the last decade, new markets have been developed in Asia and South America.

Finally, the Norwegian authorities are deliberately trying to enhance the capabilities of the Norwegian companies through the realization of a wide variety of innovation and internationalization related



support programs, directed primarily towards small and medium sized (specialized suppliers) companies. One of the “pillars” through which this is achieved is the implementation of the defence industrial policy. The Norwegian MOD, supports the defence industry primarily through acquisition - related R&D support programs and export stimulating offset agreements, which often benefit companies with a broad technological competency base.

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...

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Portable, Semi-Automatic Heavy Gun Barrel Cleaning System



A well-established developer and producer of barrel cleaning solutions, is proposing the implementation of an advanced semi-automatic and environmental-friendly cleaning system to support military and peace keeping operations, in harsh environments worldwide.

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

Mail at: g-menexis@epicos.com

Utilizing LED Technology for Aerospace and Defence applications



A leading supplier of LED solutions, mainly for commercial applications, is willing to expand its line of business in the Aerospace and Defence (A&D) sector, offering state-of-the-art solutions and products, as well as additional services and support.

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

Mail at: g-menexis@epicos.com

News from our A&D Business Network**SkyWest, Inc. Confirms Firm Order for Seven E175 jets**

Embraer S.A. and SkyWest, Inc. (SkyWest), have confirmed a firm order for seven E175 jets. The aircraft will be flown by SkyWest Airlines under a Capacity Purchase Agreement (CPA) with Alaska Airlines. The value of the firm order, which will be included in Embraer's 2014 fourth-quarter backlog, is estimated at USD 301 million, based on 2014 list prices. These aircraft are part of SkyWest's previous order for 100 (40 firm and 60 reconfirmable), E175 current generation E-Jets – with an additional 100 options – placed in May 2013, taking the firm order number to a total of 47. The E175s for Alaska Airlines will be configured with 76 seats including 12 First Class seats. Deliveries are scheduled to begin in the second semester of 2015.

"This order confirmation reinforces the superior economics, performance and passenger appeal of the E175 in the U.S. market," said Paulo Cesar Silva, President & CEO, Embraer Commercial Aviation. "SkyWest's agreement with Alaska Airlines is a wonderful endorsement of the aircraft and adds a prestigious new operator to our list. In addition, the Embraer E-Jet will be introduced to passengers in a new region of the country."

"We're pleased to expand our relationship with Embraer," said SkyWest, Inc. President Russell "Chip" Childs. "With 15 E175s already flying in the SkyWest network, we couldn't be more pleased with the design and performance of these state-of-the-art E-Jets."

SkyWest is the largest regional airline group in the world and is the parent company of SkyWest Airlines and ExpressJet Airlines. Both companies have long histories with Embraer and were early customers for the Embraer EMB 120 Brasilia turboprop aircraft. SkyWest Airlines operates a fleet of approximately 15 E175 and 39 EMB 120 Brasilia aircraft. ExpressJet Airlines operates 226 aircraft of the ERJ 145 family and is the largest ERJ operator in the world.

In a separate deal with Embraer, announced in June of 2013, SkyWest became the launch customer of the E175-E2, ordering 100 aircraft with 100 additional options, for deliveries beginning in 2020. As the leader in the 70 to 130-seat segment, Embraer continues to invest in the E-Jets family, which is flown by some 65 airlines from 45 countries.

About SkyWest, Inc.

SkyWest, Inc. is the holding company for two scheduled passenger airline operations and an aircraft leasing company, and is headquartered in St. George, Utah. SkyWest's scheduled passenger airline operations consist of SkyWest Airlines, also based in St. George, Utah, and ExpressJet Airlines, based in Atlanta, Georgia. SkyWest Airlines operates as United Express, Delta Connection, American Eagle and US Airways Express under contractual agreements with United, Delta Air Lines, Inc. ("Delta"), American Airlines, Inc. ("American") and US Airways, Inc., respectively. SkyWest Airlines also operates flights for Alaska Airlines under a contractual agreement. ExpressJet Airlines operates as United Express, Delta Connection, and American Eagle under contractual agreements with United, Delta and American, respectively. System-wide, SkyWest serves markets in the United States, Canada, Mexico and the Caribbean with approximately 3,900 daily departures and a fleet of approximately 740 regional aircraft.

About Alaska Airlines

Alaska Airlines, a subsidiary of Alaska Air Group (NYSE: ALK), together with its partner regional airlines, serves more than 100 cities through an expansive network in Alaska, the Lower 48, Hawaii, Canada and Mexico. Alaska Airlines ranked "Highest in Customer Satisfaction Among Traditional Network Carriers" in the J.D. Power and Associates for seven consecutive years from 2008 to 2014. Alaska Airlines' Mileage Plan also ranked highest in the 2014 Airline Loyalty/Rewards Program Satisfaction Report. For reservations, visit www.alaskaair.com. For more news and information, visit the Alaska Airlines Newsroom at www.alaskaair.com/newsroom

About Embraer Commercial Aviation

Embraer is the world leader in manufacturing commercial jets with up to 130 seats. About 900 airplanes of the ERJ 145 family of regional jets with 37, 44, and 50 seats, have been delivered to airlines since the aircraft were introduced to the market in 1996. The E-Jets family includes four aircraft that have from 70 to 130 seats. With their advanced engineering, high level of efficiency, ergonomic and spacious cabins with two seats on either side of the aisle, and attractive operating economics, the E170, E175, E190, and E195 established a new standard in their category. Since E-Jets entered service in 2004, Embraer has received more than 1,500 firm orders. Over 1,000 E-Jets have been delivered and are in service with some 65 airline companies from 45 countries. Embraer E-Jets are also popular with leasing companies – nearly thirty have added the aircraft to their portfolios. E-Jets are flying with mainline carriers, low-cost and regional airlines, and scheduled tour companies.

In 2013, Embraer launched the second generation of E-Jets, E-Jets E2, consisting of three new airplanes – E175-E2, E190-E2, and E195-E2 – in the 70 to 130 passenger segment. The

E190-E2 is scheduled to enter revenue service in the first half of 2018 followed by the E195-E2 in 2019 and the E175-E2 in 2020.

For Further Information [Click Here](#)

Airborne signs agreement with NHI for maintenance NH-90 rotor blades



Airborne Services signed an agreement for the maintenance of the NH-90 rotor blades with NHIndustries. Airborne will be first approved for ML1 and ML2 activities for operators of the NH90 helicopter. In the next phase, the company should be able to offer ML3 maintenance as a subcontractor of Airbus Helicopters. The agreement is a result of a public and private collaboration. The frequent contacts between NHIndustries and the NIDV “helicopter platform”, led by Fokker, together with the Ministry of Economic affairs, supported this cooperation between the Dutch Defence Industry and the Original Equipment Manufacturers.

During the event in Rotterdam the Commander of the Logistic Center Woensdrecht, Air Commodore Schevenhoven, expressed his support for this initiative. The RNLAF is actively partnering with companies in order to improve the availability of platforms and reducing cost of maintenance. Airborne is working in close cooperation with the RNLAF and has the capabilities to offer rotor blade maintenance services on other military platforms. In the future civil helicopter blades could be added to the scope of activities.

For Further Information [Click Here](#)

**UK confirms first F-35 jet orders**

Britain on Monday announced it had signed a contract with US manufacturer Lockheed Martin to buy the first of 14 F-35B combat jets.

The four Lightning II stealth combat aircraft will operate from both of the Royal Navy's forthcoming new aircraft carriers and from Royal Air Force land bases, with another 10 due to be ordered over the next five years. The first batch is expected to be delivered in 2016 and will take up station in 2018.

"The investment we are making in the F-35 aircraft will ensure we are securing the skies for decades to come, providing the UK with the latest stealth technology and multi-role aircraft capability," said Philip Dunne, minister for defence equipment support and technology.

The planes feature short take-off and vertical landing (STOVL) technology and the latest stealth and intelligence surveillance, target acquisition and reconnaissance (ISTAR) technology. The British government has long planned to provide its air and naval forces with F-35Bs and signed an agreement in principle to buy the four jets last month.

The F-35 should have appeared at this year's Farnborough International Airshow near London, but was grounded by technical problems and could not cross the Atlantic Ocean. Britain's navy is currently without an aircraft carrier but a new carrier, HMS Queen Elizabeth, is due to go into service in 2020 with another, HMS Prince of Wales, to follow.

Source: 2014 AFP, Agence France-Presse (AFP)

US Frontier Airlines orders nine Airbus A321s

European aerospace giant Airbus said Monday it had signed a deal worth around \$1.0 billion to furnish nine medium-haul A321s to low-cost US carrier Frontier Airlines.

"This is the first time Frontier has ordered the largest member of the Airbus A320 family," Airbus said in a statement. The deal is worth \$990.9 million (797 million euros) according to the list price for the aircraft.

The Denver-based airline "began its transition to an all-Airbus fleet when it took delivery of its first Airbus aircraft in 2001. Since that time, the Airbus single-aisle family has allowed the airline to expand its route network while minimising operating costs," the statement said. For their part, Frontier CEO David Siegel said Airbus enabled the airline to "fulfil our mission of providing low fares through low operating costs."

Source: 2014 AFP, Agence France-Presse (AFP)

Frontrunners emerge for top Pentagon job

A pair of frontrunners have emerged to take charge at the Pentagon after President Barack Obama announced the departure of Defense Secretary Chuck Hagel.

If former under-secretary Michele Flournoy gets the nod, she would be the first woman to hold the role, and neither she nor former deputy secretary Ashton Carter have served in uniform.

Now working as policy academics, Flournoy and Carter have been mentioned for years as possible Pentagon leaders.

Both have served under Democratic presidents going back to the 1990s, and both received support from both sides of Congress after Obama announced Hagel's resignation.

Republican Senator Lindsey Graham, a member of the Senate Armed Services Committee which would vet the nominees, said in a tweet that both Flournoy and Ashton are "solid choices."

- Policy wonk –

Flournoy, 53, has been a face in and around the Department of Defense for decades, a civilian woman make headway in an agency filled with men and military veterans.

"She has really had a fine career and is an excellent candidate for this job," said Kathy Crandall Robinson, a senior director at nonprofit Women's Action for New Directions in Washington.

Robinson said women have led in foreign policy for years, but breaking the gender divide in defense has been difficult.

"There have been a number of women coming up, but in the actual Defense Department it's breaking new ground so that would be really exciting," she said on Flournoy's potential nomination.

First serving in defense in Democrat Bill Clinton's administration, Flournoy has made a name for herself in bipartisan defense circles as a policy wonk and strategist in Washington's think tank world. She worked at the government's National Defense University, and the Center for Strategic and International Studies before co-founding the Center for a New American Security in 2007.

CNAS is seen as the DC think tank closest to President Barack Obama's administration, and Flournoy and her colleagues have used it as a launching pad for top administration positions. Staff at CNAS fashioned themselves as experts on the currents of strategy from the nation's two recent wars in Iraq and Afghanistan.

In 2009, Flournoy left the think tank and made waves when she took a top tier defense department post as undersecretary of defense for policy, the highest-ranking woman in the Pentagon's history.

In her position she was central in fashioning the country's plan for a surge of forces in Afghanistan to try to bring a form of conclusion to a war that has stumbled on for more than a decade.

The counterinsurgency-focused plan had mixed results and increased casualty rates among US forces.

Since leaving the defense department in 2012, Flournoy has worked at the Boston Consulting Group.

Flournoy signaled her interest in reentering the political world this year when she returned to CNAS as its chief executive in May.

- Nuclear policy –

Also rumored to being considered for the Pentagon's top spot is former defense hand and physicist Ashton Carter.

The 60-year-old has served twice in Obama's administration, first as technology and acquisition undersecretary from 2009 to 2011 and then as the Pentagon number two, deputy secretary of defense.

A Yale graduate with a degree in physics, Carter served in the Clinton administration and assumed a role crafting the country's nuclear weapons policy after the collapse of the Soviet Union.

Carter is an academic policy expert with deep knowledge of the Defense Department's workings, particularly in science and technology and in budget issues during recent military cutbacks.

He is known for expediting procurement for the military in the Iraq and Afghanistan wars. Carter directed the Center for Science and International Affairs at Harvard University in the early 90s, taught physics at Oxford and has various fellowships and board positions based on his defense and science credentials.

Carter lives in Washington and holds a non-resident position at Harvard.

Also reportedly under consideration for secretary of defense is current Deputy Secretary of Defense Robert Work. Work is a military veteran who is a policy and budget expert.

Previously Work was undersecretary of the navy and in 2008 he worked on Obama's defense transition team.

US Senator from Rhode Island and military veteran Jack Reed has distanced himself from the competition for the post after early reports that he was under consideration.

Source: 2014 AFP, Agence France-Presse (AFP)

Boeing Delivers Sixth P-8I Maritime Patrol Aircraft to India

Boeing [NYSE: BA] delivered the sixth P-8I maritime patrol aircraft to India, on schedule, on Nov. 24, arriving at Naval Air Station Rajali to join five others being used by the Indian Navy.

The P-8I is part of a contract of eight awarded in 2009. The final two deliveries are scheduled for 2015. "The P-8I's arrival in India is another key milestone for the program and marks our final delivery of the year," said Dennis Swanson, vice president, Boeing Defense, Space &

Security in India. “The Indian Navy is currently conducting missions with the first five aircraft, and this newest P-8I will begin flight trials in the coming months.”

Based on the company’s Next-Generation 737 commercial airplane, the P-8I is the Indian Navy variant of the P-8A Poseidon that Boeing builds for the U.S. Navy. The P-8I incorporates not only India-unique design features, but also Indian-built sub-systems that are tailored to meet the country’s maritime patrol requirements. The P-8I features open systems architecture, advanced sensor and display technologies, and a worldwide base of suppliers, parts, and support equipment. “We have a great partnership with India, which has helped us keep the program on schedule and on budget,” said Mark Jordan, Boeing P-8 International program manager. In order to efficiently design and build the P-8I and the P-8A, the Boeing-led team is using a first-in-industry, in-line production process that draws on the company’s Next-Generation 737 production system. P-8I aircraft are built by a Boeing-led industry team that includes CFM International, Northrop Grumman, Raytheon, Spirit AeroSystems, BAE Systems and GE Aviation.

Boeing has been active in India for 70 years with its commercial airplanes providing the mainstay of India’s civil aviation sector. More recently its military aircraft have started to play an important role in the modernization and mission-readiness of India’s defense forces. Boeing is focused on delivering value to its Indian customers with its advanced technologies and performance driven aircraft underscored by life-cycle support services. Boeing is also committed to creating sustainable value in the Indian aerospace sector - developing local suppliers, pursuing business partnerships and shaping research and technical collaborations with Indian companies and institutions. For more information, visit www.boeing.co.in.

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Source: Epicos, Boeing Defense, Space & Security

Boeing Delivers First Direct Purchase 737-700 to Ruili Airlines

Boeing (NYSE: BA) and Ruili Airlines today celebrated the arrival of the airline's first direct purchase Next-Generation 737-700. Ruili is a newly established private airline based at Changshui International Airport in Kunming, the capital city of China's Yunnan province.

"This is a momentous step forward for Ruili Airlines as we continue to enhance our fleet," said Ma Zhanwei, president, Ruili Airlines. "We hope that the competitive advantages offered by the 737 will enable us to grow from a start-up airline to a driving force in China's aviation industry."

The new airplane is the first of 14 737 orders and commitments from Ruili Airlines, including eight 737-700s and six 737 MAXs. The carrier currently operates two 737-700s and one 737-800 serving seven domestic routes in China.

"We are honored to celebrate this milestone delivery with Ruili Airlines," said Ihssane Mounir, vice president of Sales for Northeast Asia, Boeing Commercial Airplanes. "Our Next-Generation 737 delivers market-leading efficiency, reliability, and operating costs, which will all contribute significantly to the successful growth of Ruili Airlines."

Known for its reliability, fuel efficiency and economical performance, the 737-700 has been selected by leading carriers throughout the world, and has contributed more than 1,200 orders to the strong success of Next-Generation 737 family orders.

Ruili Airlines obtained its public air transport enterprise business license from the Civil Aviation Administration of China (CAAC) in February 2014, marking the formal establishment of the carrier. The start-up airline is the first private carrier approved by CAAC after the regulator relaxed restrictions on new carriers in 2013. According to its development plan, Ruili Airlines plans to increase its fleet to 30 Boeing airplanes by 2020, with around 120 daily flights on 60 to 70 routes.

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Source: Epicos, Boeing