

Click here or visit www.epicos.com

Volume 6 Number 19 - Wednesday, 07 May 2014

Part I

Special Focus: The Netherlands

- 1. Dutch Defence Exports, Efficiency in Diversity
- 2. Interview with Mr. Richard Brandwijk CEO of Egmond Plastic B.V.
- 3. Epicos "Industrial Cooperation and Offset Projects"
- 4. Design, manufacture and testing of high precision engineered components and assemblies for A&D applications
- 5. Low power data acquisition system for UAVs
- 6. News from our A&D Business Network

Part II

Epicos Newsroom

- 1. Airborne Early Warning and Control aircraft bolsters self-defense capabilities
- 2. New Zealand to Raise Defence Spending
- 3. US trade gap narrows in March on export jump
- 4. Boeing Delivers 75th 747 to Lufthansa
- 5. Europe aviation agency urges extending black box life

Dutch Defence Exports, Efficiency in Diversity





The Dutch Defence exports have been dramatically increased throughout the years. The result is that the Netherlands is currently the 12th country in arms exports, for the period 2008-2013 according to the Stockholm International Peace Research Institute (SIPRI) a Swedish think tank. This actually delineates

the fact that dutch companies have managed to establish themselves as some of the most important and trustworthy in the globe. Biggest markets for Dutch industries are related with naval, sensors and systems integration. One of the reasons why the Netherlands is a major supplier is that Dutch MoD sells a lot of used or even new equipment which is not in service anymore, such as the Leopard tanks, many vehicles, vessels, F-16 aircraft and the Dutch defence industry plays a major role in upgrading them.

During the period 2008-2013 Dutch exports reached the amount of 158,099 US\$ m. expressed at constant (1990) prices.

Exports (expressed in US\$ m. at constant 1990 prices)

	2008	2009	2010	2011	2012	2013	Total 2008 - 2013
India	1867	1996	2897	3566	4524	5581	20431
China	1992	1453	943	1020	1631	1534	8573
Pakistan	1047	1210	2201	1051	962	1002	7473
United Arab Emirates	749	560	605	1213	1154	2245	6524
Korea, South	1647	815	1242	1469	1039	188	6399

Source: SIPRI Publications, Arms Transfers Database

The five (5) first countries that imported Defence Equipment from The Netherlands, based on the amount of funds allocated are: India, China, Pakistan, United Arab Emirates and South Korea. This actually denotes that the Netherlands is mainly exporting in Asia as four (4) out of the five (5) first countries are from this continent.

Additionally it is worth mentioning that Dutch companies export a wide variety of defence equipment. Ship vessels are the predominant area of exports for the period 2008-2013 covering the 47% of the total exported items. Sensors are the second area of exports covering 28% of the total exports, whereas armored vehicles and aircraft follows with 11% and 10% respectively.

Kyriazis Vasileios, Epicos Newsletter Head Editor

Interview with Mr. Richard Brandwijk CEO of Egmond Plastic B.V.





Mr. Richard Brandwijk CEO of Egmond Plastic B.V. gave an exclusive interview to Epicos, regarding the position of the company in the international and national markets. Among others he stated that: "Egmond Plastic is the worldwide specialist in the field of the plastic core method. Through

this method, we manufacture numerous complicated hollow products (without welding joints) for critical applications. In other words, we make the impossible possible".

1. Could you please describe the current position of Egmond Plastic in the national and international market?

Egmond Plastic is an injection moulding company of thermoplastics, specialized in the sectors of aerospace and defence. We process all different type of thermoplastics. However, our main focus is on the engineered plastics such as Ultem and PEEK with or without glass and carbon fibres.

We are involved in major aerospace programs such as the Eurofighter, A400M, Tigre Helicopter as well as all the Airbus aeroplanes, including the A380 and A350 and Boeing 747-800 and 787.

Our scope of supply towards the civil as well as the defence aerospace industry is:

- Interior parts such as Passenger Service Unit panels
- Interior lighting,
- Exterior lighting
- Fuel system components
- Water management components
- Waste water management components
- Structural parts







Egmond Plastic is the worldwide specialist in the field of the plastic core method. Through this method, we manufacture numerous complicated hollow products (without welding joints) for critical applications. In other words, we make the impossible possible. Our focus lies on the production of small series, which must conform to EXTREMELY high demands and must be visually perfect. Egmond Plastic is certified according to the highest available standard, AS-9100 and AQAP-2110 (pending).

With a proven record on on-time delivery and high quality ratings, Egmond Plastic is a level "A" supplier towards the aerospace and defense industry. Our objective is to reduce weight (at least 50%) and price for our customers products (in comparison with aluminium components).

2. Could you please briefly describe the history of the company?

Egmond Plastic was established in January 1968. The company founders were the brothers J. Egmond and A. Egmond, who with a single injection-moulding machine started the production of large chains of plastic products from a workshop in the city of Alkmaar. Their activities quickly increased to include the creation of moulds and the chemical vapour deposition of mould-injected thermoplastics.

In 1980, spacious offices and production and storage areas were set up in the De Beverkoog industrial park, Alkmaar. The entire production process takes place, until today, at this location.

Egmond Plastic become an important supplier of plastic windsurfing accessories – under the brand name 'Serpent', and via its own company Cantonal Itd, diabolos, leeboards and booms are also manufactured. Egmond Plastic also manufactures the handy banana hangers and the famous Efteling (the Dutch fairy-tale theme park) ducats and eggs.

The company is constantly involved with technical innovations. Distinguished businesses appreciate this, and in this way Egmond Plastic became the main supplier to Fokker in the early 1980s, for which Egmond Plastic makes practically all technical plastic parts for the Fokker F28, the Fokker 50 and the Fokker 100.

At the end of the 1980s, Egmond Plastic again faced a challenge, and at this time it focused on the manufacture of high-tech thermoplastic products, using high quality precision moulds and new technologies, such as plastic core technology.

Contacts were established with the German company AOA, with whom Egmond Plastic, along with BASF, supplies pump houses made of the high-quality plastic PEEK (polyaryletheretherketon) for the Eurofighter.



3. Could you please name the main customers of Egmond Plastic?

Egmond Plastic has supplied companies such as Secondo Mona, Eaton, Parker Aerospace, ASG, UTC, EFW, AOA, Airbus, Airbus Helicopters, Fokker Technologies, OIP Systems, Avibank, Leuze Electronic, Cognex, Zodiac Aerospace, providing these businesses with technical parts and components for jet fighters (including the Eurofighter Typhoon), Airbus Helicopters (NH90 and Tigre) and Airbus aeroplanes.

4. Could you please describe the main services and/or products the company provides?

Egmond Plastic specialises in:

- the injection moulding of thermoplastics;
- the construction of the moulds required;
- Post machining activities such as vacuum vaporizing, screen-printing, heat stamping, ultrasonic welding, tampon printing, painting and CNC machining.

5. Is the company currently investing in a new technology?

As mentioned before, Egmond Plastic is the specialist in the lost core technology which allows us to manufacture parts which normally cannot be produced with injection moulding due to undercuts. We are investing in optimizing this technology for higher production volumes. Our main objective is to replace as much as possible metal with thermoplastics in order to reduce the weight of a component with more than 50%.

6. Is there a specific country or region Egmond Plastic is planning to expand in the near future?

Egmond Plastic is investing heavily in developing products for the defense industry to maximize the effectiveness of the soldiers during an operation.

For additional information please visit Egmond Plastic's website at: http://www.egmondplastic.nl/en

Or contact the company's Sales Department at:

Telephone: +31-72-5614644 Email: Sales@egmondplastic.nl

Epicos "Industrial Cooperation and Offset Projects"

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

For Further Information Press Here

Design, manufacture and testing of high precision engineered components and assemblies for A&D applications



An international supplier of precision engineering components, assemblies, modules and equipment is willing to undertake the design, prototyping, testing and production of components to be used in aerospace and defence applications. The company can act as a subcontractor for complex machined parts and mechanical, electromechanical and opto-mechanical assemblies and is able to supply a complete engineering solution in partnership with some other Engineering company.

For Further Information Contact our ICO Department Mail at: g-menexis@epicos.com

Low power data acquisition system for UAVs



A company designing, developing and supplying embedded computer hardware and software for civil and defence use is looking to expand its activities in the aerospace and defence sectors and in particular in the field of UAVs. The company has a long standing experience in developing advanced HW and SW products and equipment according to international A&D standards. In particular, the company has

developed a low power data acquisition system for use in e.g. UAVs. This small, embedded control system can perform several tasks in the areas of health monitoring, data storage and auto pilot. It can automatically delete recorded data on its own (independent of software) in case of an aircraft crash, thus preventing the enemy from gathering sensitive information. In the context of this system, the company would be interested in expanding the use of its data acquisition capability, to new UAV platforms. The system could be adapted for a specific UAV upgrade program, or the development of a new UAV.

For Further Information Contact our ICO Department

Mail at: g-menexis@epicos.com

News from our A&D Business Network



PHOTONIS Introduces NOCTURN Gigabit Ethernet Low Light Camera



PHOTONIS Digital Imaging introduces a new Gigabit Ethernet camera optimized for low-light conditions. The new camera model provides GigE Vision® functionality into its NOCTURN line of products, offering new standard connectivity options for video management and dissemination in military ground vehicles and other localized surveillance networks. The model, NOCTURN-GV, will be shown at the PHOTONIS booth (#1213) at the upcoming

SPIE Defense, Security and Sensing show in Baltimore, MD (USA) in early May.

The NOCTURN family of low light cameras provides day-through-night imaging, capturing images in extreme lighting conditions from daylight through quarter-moon darkness. The cameras are ideal for surveillance, security, man-portable and mobile applications where low power and small size is essential such as for UAVs, rifle scopes, border patrol and remote monitoring.

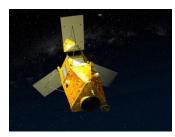
The NOCTURN family of products, including the new GV model, are powered by the Lynx CMOS imaging sensor, a solid-state sensor that offers less than 4e- read noise, with SXGA (1280x1024) resolution at frame rates up to 100 Hz.

PHOTONIS USA President and CEO, Gregory Bell commented, "Our camera customers are increasingly asking for a variety of connectivity options using standard interfaces. The new NOCTURN-GV camera fulfills that requirement while still offering our unique low-light capabilities."

The NOCTURN-GV model is the result of a previously-announced development partnership with Pleora Technologies to utilize its iPORT™ camera interface with the NOCTURN camera. The Pleora iPORT™ products optimize video transmission due to their light-weight, off-the-shelf cabling, networking capabilities, and ability to support a range of different computing platforms.

PHOTONIS Digital Imaging is a new business unit of PHOTONIS Technologies, exclusively concentrating on the research, design, development and manufacture of digital low-light imaging technologies. PHOTONIS is a multinational high-technology group, with more than 40 years' experience in manufacture, sales and innovation, specializing in photo sensor technology. The Group operates internationally in the Night Vision, Industrial, Scientific and Medical Imaging and Nuclear Instrumentation markets. PHOTONIS USA designs and manufactures a wide range of custom and standard components and assemblies for mass spectroscopy and power tubes as well as other medical, bio-medical and scientific instruments and holds several patents in these fields.

KazEOSat-1 satellite launched with Airborne Aerospace panels



Last Tuesday night the KazEOSat-1 satellite was successfully launched from Kourou Space Port on French Guiana on top of a Vega rocket. Airborne contributed to the building of this satellite by delivering the solar-array substrate panels as a subcontractor to Dutch Space. The KazEOSat-1 is an Earth Observation satellite that was built by Airbus Defence & Space as part of their AS250 commercial platform family. Airborne

was selected to manufacture panels for four of these AS250 satellites to date.

The KazEOSat-1 high-resolution observation satellite is being built by Airbus (formerly Astrium) for the ERSSS (Earth Remote Sensing Satellite System) of the government of the Republic of Kazakhstan. Weighing 900 kg at launch, the KazEOSat 1 satellite was launched by Arianespace's Vega light launcher into a Sun-synchronous orbit at an altitude of about 750 km. Using images acquired by the KazEOSat 1 satellite from the entire planet, the system will provide very-high-quality panchromatic and multi-spectral products for a wide range of applications, including cadastral surveys, management of natural resources, environmental monitoring and homeland surveillance.

Earlier this year, Airborne celebrated the successful launch of Sentinel-1A and in 2012 the launch of the first AS250 application, the SPOT-6 satellite. For these Satellites Airborne also delivered the solar-array substrate panels as a subcontractor to Dutch Space.

Epicos Newsroom



Airborne Early Warning and Control aircraft bolsters self-defense capabilities

Boeing [NYSE: BA] this week delivered, on schedule, the second Peace Eagle Airborne Early Warning and Control (AEW&C) aircraft to the Turkish Armed Forces, further improving the country's self-defense capabilities.

The AEW&C aircraft arrived at Konya Air Base, the fleet's main operating base.

The first Peace Eagle AEW&C aircraft was delivered Jan. 31, and a third will be delivered later this year. Boeing is scheduled to deliver the fourth aircraft for the program in 2015.

In addition to the four aircraft, the Peace Eagle program includes ground support segments for mission crew training, mission support and system maintenance. Turkish Aerospace Industries, Turkish Airlines, HAVELSAN and MiKES are key suppliers on the program.

Contact:

Dave Sloan

Global Services & Support Office: +1 253-657-8008 Mobile: +1 206-280-6649 david.a.sloan@boeing.com

Chantal Dorange

Boeing International Corporate Communications

Mobile: +34-91-426-4504 chantal.dorange@boeing.com

Source: Epicos, Boeing

New Zealand to Raise Defence Spending

Defence Minister Jonathan Coleman says the Government is committed to strengthening the New Zealand Defence Force (NZDF), and will be investing \$100.9 million of operating funding in 2014/2015.

"This significant investment in our Defence Force, combined with the savings and reinvestment achieved through recent reforms, means the Government is addressing the long term funding gap which we inherited," Dr Coleman says.

"We greatly value the ongoing work and commitment of NZDF personnel. The NZDF's work is vital to wider New Zealand interests, and the tempo of activity is high. Recent examples include the Air Force delivering aid to the Solomon Islands, and supporting the international effort to search for the missing Malaysian Airlines plane MH370.

"The frigate Te Mana deployed to the Gulf of Aden to conduct anti-piracy operations, and the Navy continues to support a range of Government agencies within our Exclusive Economic Zone. Army personnel serve internationally in a range of missions, and closer to home, they recently supported storm relief efforts on the West Coast."

Budget 2014 confirms the NZDF's funding approach agreed by Cabinet in November 2013 after the Defence Mid-Point Rebalancing Review.

"The Government's investment of \$100.9 million in 2014/2015 is the first stage of an allocation of \$535.5 million operating funding for the NZDF over the next four years," Dr Coleman says.

"It is vital that the NZDF can continue to meet the Government's requirements, whether it is carrying out humanitarian assistance and disaster relief work at home or in the Pacific, or contributing to wider global security efforts.

"This is why the Government is funding the people and equipment needed to deliver on the 2010 Defence White Paper – enabling the NZDF to protect and advance New Zealand's interests at home, in the South Pacific and globally."

The Defence White Paper signalled that new money would be required over time to maintain and improve NZDF capabilities. The Government commissioned the Defence Mid-Point Rebalancing Review to look at the costing of various combinations of capabilities that would enable the NZDF to meet the Government's expectations.

The new funding outlined in Budget 2014 will enable the NZDF to maintain and improve its current mix of capabilities, and sustain and grow personnel numbers over time. It also allows the Government to continue to modernise and upgrade the NZDF's capability.

"There has been considerable investment in defence under this Government. In the last year, we purchased new naval helicopters, army trucks and a pilot training package," Dr Coleman says.

"What's more, the Government will shortly be awarding the contracts for a new battle training facility for the New Zealand Special Air Service (NZSAS) and a systems upgrade for the Navy's frigates. A decision will also be taken on a replacement for the Navy's tanker Endeavour."

Epicos 2014

Since 2010, the NZDF has operated within fixed baselines, reflecting the tough fiscal environment. At the same time, the NZDF successfully delivered significant reform with a

focus on delivering back-office efficiencies.

"The NZDF has made significant progress on its savings and redistribution programme since

2010, and \$204 million has been reprioritised across the NZDF," Dr Coleman says.

"The NZDF remains committed to making ongoing savings and efficiencies as part of its

future planning. This is vital in order for the NZDF to sustain its capability."

Source: Epicos,

US trade gap narrows in March on export jump

Jumps in exports of aircraft and automobiles and a fall in the oil import bill helped narrow

the US trade deficit in March, Commerce Department data showed Tuesday.

Exports rose by \$3.9 billion from February to \$193.9 billion and imports gained \$2.5 billion

to \$234.4 billion, leaving the deficit at \$40.4 billion.

Capital goods, including often volatile numbers for aircraft, led the export gains, while

imports rose on an increase in consumer goods -- a sign, analysts said, of a pickup in

spending by US consumers after the economy's winter freeze.

The overall deficit trend however was little changed, with the first quarter showing a modest

narrowing by \$425 million.

Analysts said the data was not particularly surprising but, that coupled with revisions to

February's data, it would reduce last week's estimate of first quarter growth pace, which

was 0.1 percent.

High Frequency Economics said the data would mean growth for the January-March period

was zero -- but the analysts said the second quarter would show a rebound to a 4 percent

pace.

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

Boeing Delivers 75th 747 to Lufthansa

Boeing and Lufthansa celebrated the delivery of the German airline's 75th 747 on Wednesday.

"Lufthansa is proud to share this milestone with Boeing," said Nico Buchholz, executive vice president, Lufthansa Group Fleet Management. "The 747 is an amazing airplane and will continue to delight our passengers for many years to come, and provide them with the ultimate in comfort and efficiency."

Lufthansa is the launch customer for the 747-8 Intercontinental jetliner and took delivery of the first one in April 2012. The airplane delivered Wednesday is Lufthansa's 13th 747-8 Intercontinental. The airline currently flies the 747 to 22 destinations in 10 countries. Over the years, Lufthansa has ordered a total of 81 747s. Lufthansa's first 747 – a 747-100 – was delivered in 1970. The airline was also the first to order the 747-200 Freighter.

"Boeing and Lufthansa have a long and proud history of working together to bring new innovations to the airline industry," said John Wojick, senior vice president, Global Sales, Boeing Commercial Airplanes. "We are pleased to continue that tradition with the 747-8 Intercontinental."

The 747-8 has accumulated 120 orders for passenger and cargo versions, 68 of which have been delivered.

Contact:

Beatrice Bracklo
Boeing Communications Germany
Beatrice.Bracklo@boeing.com
+49(30)77377-106

Chamila (CJ) Jayaweera
Europe Communications
Boeing Commercial Airplanes
chamila.s.jayaweera@boeing.com
+44(0)7557 160 645

Carrie Ann Berry
747 Communications
Boeing Commercial Airplanes
carrieann.berry@boeing.com
+1 425-717-8585

Source: Epicos, Boeing

Europe aviation agency urges extending black box life

Europe's aviation safety watchdog on Tuesday called for the life of black box flight recorders to last three times as long, as the hunt for the missing Malaysia Airlines plane yields no results.

In a statement, the European Aviation Safety Agency urged "the extension of the transmission time of underwater locating devices (ULD) fitted on flight recorders from 30 days to 90 days".

The black box refers to the cockpit voice recorder and flight data recorder on planes, which are crucial in determining what triggered a plane crash but can be very difficult to locate, as has been the case with the Malaysia Airlines flight that disappeared at sea on March 8 carrying 239 people.

The agency also suggested that all large planes flying over oceans be equipped with a new type of ULD with a longer locating range.

"The tragic flight of Malaysia Airlines MH370 demonstrates that safety can never be taken for granted," said Patrick Ky, EASA's director.

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