



EIB World Trade Headlines

Evolutions In Business • www.eib.com • (978) 256-0438
Fax: (978) 250-4529 • P.O. Box 4008, Chelmsford, MA 01824

December 1, 2016 - Volume 8, Issue 22

GINA AWARD NOMINEES TO BE NAMED

Last call for 2016 GINA Award Nominees.

Nominees will be published the week of December 7th.

If you have an employee who is eligible, please let us know.

If you believe your company should be nominated for the company wide GINA award, please let us know.

More information about the GINA Award can be found here:

<http://www.eib.com/gina-criteria.html>

CRITERIA FOR INDIVIDUAL AWARD

The “GINA Award” is awarded individuals who with or without cooperation from their corporation have managed to implement in their company these “Best Practices” of a compliant exporting organization:

- Organize and Receive Export Education
- Classify products for ITAR Category and or EAR, ECCN
- Establish denied parties screening
- Establish accuracy in documentation
- Ensure proper record keeping
- Draft and Implement EMS or EMCP
- Demonstrate tenacity to see compliance through

*(*Continued On The Following Page)*

NEWSLETTER NOTES

* GINA AWARD...

*CBP Announces First Reimbursable...

*MIT, NASA Scientists Build 'Morphing' ...

*Massachusetts exporters brace for Trump...

*Oracle is buying New ...

*5 Key Insights from ...

* Sikorsky S-76A Helicopter Maintenance ...

*DEPARTMENT OF...

* Burma Gains New Export Preferences...

* New Items and Announcements

* Obama administration ...

*1st Certification for ...

* Copernicus' 2nd Eye is ...

* CMA-2082MC FMS for ...

- Attention to detail
- Courage to protect national security interests and to prevent unlawful exports
- Commitment to the law and regulations

Nominations for the “GINA Award” for Outstanding Export Compliance Individuals and the “GINA Award” for Corporate Export Compliance Commitment will be accepted from companies and individuals from around the country.

CRITERIA FOR CORPORATE AWARD

- Regulatory “buy in” from corporate
- Corporate wide respect and commitment to the letter and spirit of the law
- Speed at which the whole company is brought into full compliance
- Proper authority awarded to export compliance individuals
- Proper resources and funding given export compliance
- Receipt of Executive Awareness Training in matters of export compliance

CBP Announces First Reimbursable Services Program Agreement in Puerto Rico

SAN JUAN, Puerto Rico - U.S. Customs and Border Protection announced Wednesday the first agreement under the Reimbursable Services Program (RSP) with a Fixed Base Operator (FBO) located in the Rafael Hernandez International Airport in Aguadilla, Puerto Rico.

CBP Commissioner Gil R. Kerlikowskie signed a Memorandum of Agreement with Celso E. Lopez, President of Copeca Jet Center, LLC.

Pursuant to Section 559 of the Consolidated Appropriations Act, 2014, CBP is authorized to enter into partnerships with private sector and government entities to provide new or expanded services on a reimbursable basis. Reimbursable services include customs and agricultural processing, border security, support, and immigration inspection-related matters at ports of entry.

“We look forward to a continued partnership through the RSP Agreement with Copeca Jet Center to expand the hours of services provided by our agency in Aguadilla,” stated Marcelino Borges, Director of Field Operations for Puerto Rico and the US Virgin Islands. “I am confident that with this first agreement other stakeholders emulate this company by applying to this program when it opens again.”

(*Continued On The Following Column)

The RSP has proved to be a *win-win* venture; companies receive the benefit of CBP services and the agency is reimbursed for the costs of these services. This agreement will allow Copeca to offer international clearance process to their customers after normal business hours. In the past CBP did not provide these services due to limited resources.

“This agreement allows our company to provide seamless services to our corporate and general aviation clients that arrive from international destinations,” stated Celso E. Lopez, President of Copeca Jet Center, LLC. “

Associated costs may include the salaries of additional staff, overtime hours, administration, and transportation expenses.

[Copeca Jet Center, LLC](#) is a locally owned and operated FBO that provides services to corporate and general aviation at the Rafael Hernández International Airport.

Letters of application will be evaluated based on their individual merit and ability to satisfy the evaluation criteria posted on [CBP.gov](#). Applicants and interested parties may submit questions regarding the Reimbursable Services Program via email at 559reimbursableservices@cbp.dhs.gov.

The Reimbursable Services Program is a key component of CBP’s Resource Optimization Strategy. The program enables CBP to support additional requests for services while also managing rising volumes of travel and trade that are critical to our economy. In the first 18 months of the program, CBP was able to provide more than 93,000 additional processing hours at primary lanes and booths, which contributed to both increased border throughput and decreased border wait times.

For frequently asked questions check the CBP Site at <http://1.usa.gov/1PRTeCN>

Interested entities, located in Puerto Rico and the US Virgin Islands, please contact the CBP San Juan Field Office at 787-729-6950 for additional information on this program.

U.S. Customs and Border Protection is the unified border agency within the Department of Homeland Security charged with the management, control and protection of our nation's borders at and between the official ports of entry. CBP is charged with keeping terrorists and terrorist weapons out of the country while enforcing hundreds of U.S. laws.

MIT, NASA Scientists Build 'Morphing' Airplane Wings That Can Make Flight Efficient

Humans have built an aircraft that fly faster and higher compared to a bird, but they haven't been able to match the elegance of these natural aviators. With a flick of the wing, these crazy animals can dive, swoop, and glide. Planes, on the other hand, depend on complicated and clunky machines to change their angle of flight, turn, or slow down. Engineers at MIT and NASA now believe they can match the aviary resilience with a new type of bendable, "morphing" wing arrangement composed of eight tiny units made up of carbon fiber that are assembled by tiny robots. If the plan works, the system could make flight quieter, smoother, and additionally efficient. The new design could also ease the process of manufacturing and dramatically cut down fuel consumption by developing the wing's aerodynamics as reported by David Chandler at MIT News.

In the past, many experts have tried to create a reliant technique of deforming wings instead of using the traditional moving surfaces, but all those efforts had a really little impact, according to Neil Gershenfeld, director at MIT's Center for Bits and Atoms. The new 'morphing' wings are covered in a shiny orange flexible skin made by overlapping pieces that resemble feathers or scales. This gives the structure more flexibility and makes the surface smoother. The skin is composed of polyimide film with a thickness of 0.127 millimeter. Each of the subunits has varying degrees of stiffness, eventually giving each wing an adjustable flexibility. Two tiny motors can easily twist the whole wing, attuning the way it cuts while moving through the air.

These new building techniques will likely be implemented on unmanned aircraft and tiny drones. Researchers envision a future where some flights will use flapping wings, similar to that of a bird. The technology will alter the architecture of the aircraft completely, said Kenny Cheung, NASA's leader of the project.



Massachusetts exporters brace for Trump presidency impacts

In the wake of Donald Trump's election night win, manufacturing companies are bracing to see how the president-elect's positions on trade will affect exporting in Central Massachusetts.

"It is just really hard to say. When you hear campaign promises -- from 'we're going to tear up agreements' to 'we're going to renegotiate agreements' -- to renegotiate is one thing but tearing them up is another," said Julia Dvorko, Central Massachusetts regional director at the Massachusetts Export Center.

Over the course of the campaign, Trump repeatedly criticized U.S. trade policy, at one point calling the North American Free Trade Agreement "the single worst trade deal ever approved in this country." Trump's campaign website says he is in favor of renegotiating NAFTA and withdrawing from the Trans-Pacific Partnership, which hasn't yet been ratified, but his transition team's website doesn't mention any specifics under the "trade reform" section.

Earlier this week, President Barack Obama said pulling out of trade deals to protect domestic workers would be disruptive to the global supply chain, according to Politico.

Dvorko said since there's so much uncertainty surrounding what may or may not happen, it's business as usual for Central Massachusetts exporting manufacturers until action is taken.

"People here, in the manufacturing community, in the exporting community, they're in the 'wait and see' mode, trying to see what that will mean for them. It's only been a week."

In total, Massachusetts brought in about \$25.2 billion in export revenue in 2015, according to the Foreign Trade Division of the U.S. Census Bureau. According to the International Trade Administration, 111,875 U.S. jobs were supported by goods exports from Massachusetts in 2015, and 91% of these jobs were supported by manufactured goods exports. In that same year, exports to free-trade agreements markets accounted for 33 percent of Massachusetts exports, a figure that has grown by 46 percent since 2005.

Free trade agreements are usually good for small manufacturers, like many companies in Central Massachusetts, Dvorko said. Even if the president-elect rolls out substantial trade policies in his first 100 days in office, Dvorko said she thinks it will be a while before they are instituted.

"We are looking much longer term here, making it even more difficult to guess," she said.

Oracle is buying New Hampshire DNS provider targeted in October cyberattack

Software giant Oracle announced Monday its plans to acquire Dyn, a New Hampshire-based infrastructure-as-a-service company that was the target of an October cyberattack that brought down popular website such as Twitter, Spotify and Reddit.

5 Key Insights from the Commercial UAV Expo

From the quality of the presenters to the amazing new products and services that were on full display, the Commercial UAV Expo in Las Vegas exceeded my expectations in every respect. There were a number of things that stuck with me about the industry and the technology, and I was able to put together a few especially relevant items which should help us keep track of what's happening in the present in the industry to have a better understanding of the future.

To see more from the Expo, check out our complete coverage from the event.

Young Entrepreneurs are Making a Name for Themselves

The excitement of this new generation of entrepreneurs has really impressed me. These are the people have decided to make the drone industry part of their lives in a very significant way. They are from all over the world but share a passion for technology, engineering and innovation.

Attacking old problems with new approaches and fresh attitudes is one of their common traits. So many of them are looking for and finding unorthodox solutions that use fresh concepts in a constantly connected environment, and their innovations are accelerating exponentially.

One example is Damon Henry, 28 years old and CEO of Asylon, aerospace engineer from MIT who, with three colleagues from the same institution, decided to find a workaround for the limitation of flying time due to battery restrictions.

Another is Jonathan Hesselbarth from Germany, founding member of Wingcopter and the lead engineer behind the amazing aircraft that transitions from vertical to horizontal flight seamlessly in seconds; a problem that has been baffling experts for decades.

*(*Continued On The Following Column)*

What's happening today with the UAV industry can only be compared to the excitement of the 80s with the then nascent computer industry. Young entrepreneurs such as Bill Gates and Steve Jobs were creating new devices in their garages and starting companies from zero with just a great idea and some borrowed capital. Sounds familiar?

I firmly believe we are witnessing the next big revolution in human communication and transportation. This generation of young entrepreneurs really is the tip of this fast moving spear.

It would take too many pages to list all of the companies that had something especially exciting and revolutionary to show off, but you can easily see the list of exhibitors to find out who are the leading companies in this space and learn more about where the future of this industry is heading.

Part 107 has had a Major Impact on the Industry

The Commercial UAV Expo was one of the first commercial UAV shows to be held after the release of Part 107 by the FAA on August 29, and the immediate impact that this ruling is having across the industry was palpable at the event. A large percentage of the people attending the show had already received their licenses while plenty other had either applied or were in the process of completing the test.

What Part 107 brought to our industry in abundance is legitimacy. The feel on the floor of the conference is that drones are here to stay and now we have clear guidelines from the federal government to move forward and find new ways, under the law, to do our jobs better, faster, and at lower costs with less pollution. This ruling by the FAA will be a catalyst to our industry and will mark the beginning of an era in which more and more drones will enter our daily life in an orderly fashion and in full compliance with the laws that rule our shared airspace.

Exactly what this looked like was a topic of conversation in many sessions and panels, and the truth is we don't have all that many answers about specifics right now. However, there is a path in a way that didn't really exist previously, and it's one a lot of people are excited about.

*(*Continued On The Following Page)*

Big Players are Entering the Arena

Companies like Intel and Airbus were present at the Commercial UAV Expo, and their presence brought a hint of things to come. The beginnings of every industry is marked by the sudden creation of many small startups that bring new solutions and new products to the market, but consolidation is inevitable. Large corporations will play a key role when the technology reaches maturity.

Intel's strategic move to acquire Ascending Technologies and to create products specifically targeted at the drone industry is a clear indication of the immediate revenue potential of this new technology. Airbus currently has a large portfolio of unmanned vehicles for military use, but their big presence at the event along with their recent investment in R&D signals a strategic decision to focus on the commercial space.

Companies of all sizes have and will continue to see what kind of opportunities are presented by the technology, but seeing these big names and these big commitments is a sign of what the future has in store for them and for all of us.

LIDAR Technology has Become Smaller and More Affordable

I was pleasantly surprised at the new product releases from RIEGL, Velodyne and Phoenix Aerial Systems in which surveying-grade LIDAR units are now smaller and more affordable.

With weights that go from 590 to 1,500 grams and provide scanning speeds of up to 100 scans/second, this ground-breaking mapping technology is now accessible and less cumbersome. These new products allow surveying professionals to enhance and augment their portfolios and conduct faster and more precise jobs.

For a long while now, surveyors have understood the kind of advantages that drones possess, but because of logistics associated with weight and payload, they haven't been able to use them the way they want. Those logistical limitations are being removed which means a whole new application of drone technology is being opened up before our eyes.

Collision Avoidance Systems and UTM are the Future
*(*Continued On The Following Column)*

Even though Part 107 has opened up the sky in a very real manner, the constraint around having to operate within visual line of sight (VLOS) is a restriction that many see as still holding up development. Forcing operators to keep a constant view of the unmanned aircraft at all times is imposing a huge limitation in certain applications, especially when it comes to the size of the area that can be covered in one mission.

One technology that will help the industry, and the regulators, is the collision avoidance system being developed by ingenious entrepreneurs. If the FAA ever lifts the VLOS restriction, there's little doubt systems and capabilities that ensure the operator is aware, at all times, that the vehicle is not a danger to people and/or property will be essential. It's the sort of technology that ensures a safe and expeditious return to land is possible in just about any circumstance.

The more we can do to assure our unmanned vehicles are not a hazard, the better the chance of easing regulations and enhancing our ability to penetrate new areas of business. Sense and avoid capabilities along with the development of an unmanned aircraft systems traffic management (UTM) system will help ensure the airspace is and remains safe while also ensuring commercial development can proceed.

The innovators and innovations we saw this year at the Commercial UAV Expo prove that there are no limits in terms of what this technology can do, and we're only at the beginning of what is set to be a true revolution in various markets including construction, surveying, mining, agriculture and plenty more.

Sikorsky S-76A Helicopter Maintenance Trainer Advances Engineering Program

Sikorsky, a Lockheed Martin company, and the Saskatchewan Indian Institute of Technologies (SIIT) today celebrated the transfer of an S-76A™ helicopter maintenance trainer to the Saskatchewan Aviation Learning Centre. Valued at CAD 1.3 million (USD 945,000), the non-flying, twin-engine helicopter with associated equipment and documentation provides an important learning tool for students pursuing a career in aviation maintenance.

"The addition of the Sikorsky S-76 helicopter to our aircraft training fleet allows us to provide a greater hands-on experience to our students in a wide array of systems typical of modern helicopters," said Riel Bellegarde, SIIT President and CEO. "Our students will ultimately benefit in the workforce by gaining early first-hand knowledge of the inspection, maintenance, and repair of a fully rigged helicopter, including its electronic, mechanical, and hydraulic systems."

DEPARTMENT OF STATE [Public Notice: 9763]

Defense Trade Advisory Group; Notice of Open Meeting

SUMMARY: The Defense Trade Advisory Group (DTAG) will meet in open session from 1:00 p.m. until 5:00 p.m. on Tuesday, November 15, 2016 at 1777 F Street NW., Washington, DC 20006. Entry and registration will begin at 12:30 p.m. The membership of this advisory committee consists of private sector defense trade representatives, appointed by the Assistant Secretary of State for Political-Military Affairs, who advise the Department on policies, regulations, and technical issues affecting defense trade. The purpose of the meeting will be to discuss current defense trade issues and topics for further study.

Burma Gains New Export Preferences to the United States

On November 13th, Burma became eligible to export under the Generalized System of Preferences (GSP) as a least developed country, per President Obama's decision in September as part of State Counsellor Aung San Suu Kyi's visit to Washington, D.C. As a least developed GSP beneficiary country, Burma is now eligible to export a large number of additional products to the U.S. duty-free.

Burma's total exports to the United States continue to increase exponentially since trade reopened in 2012. Total first quarter imports in 2016 were almost double those of the same period in 2015, and third quarter imports in 2016 were three times the level of first quarter shipments in 2015. Burma continues to be a growing market for US exports, with exports up 17% for the first three quarters of 2016 over 2015, which was double the level of U.S. exports for all of 2014.

The Office of the United States Trade Representative (USTR) continues to work closely with the government of Burma to ensure that all communities within Burma continue to develop and benefit from our restored relationship and from the employment and income opportunities GSP will open up for them, including through outreach visits from American officials.



New Items and Announcements

Industry Notice: Paper Case Backlog (11.21.16)

The Directorate of Defense Trade Controls is currently experiencing IT related issues which are causing a delay in the processing of paper case submissions. We apologize for any inconvenience or delays, and appreciate your patience while we work to improve DDTC services. If you need assistance, please contact the DDTC Service Desk at (202) 663-2838, or email at DtradeHelpDesk@state.gov.

Industry Notice – Categories VIII/XIX Transition: (11.21.16)

On Monday, November 21st, 2016, DDTC published a final rule implementing revisions to Categories VIII and XIX of the United States Munitions List (USML), pursuant to the President's Export Control Reform initiative (see 81 Fed.Reg. 83,126). This final rule affects, inter alia, a narrow range of articles subject previously to the Export Administration Regulations (EAR) but which will become subject to the International Traffic in Arms Regulations (ITAR) as of December 31st, 2016, the effective date of the final rule. The impacted articles relate primarily to next-generation platforms and will be controlled principally in USML paragraphs VIII(h)(29) and XIX(f)(12). DDTC offers the following guidance regarding licenses or authorizations pertaining to these articles:

- Effective December 31st, 2016, for articles subject previously to the EAR but now subject to the ITAR under this rule, any unshipped balance under a Department of Commerce authorization will be null and void.
- Effective December 31st, 2016, the ITAR will regulate the reexport or retransfer of articles subject previously to the EAR but now subject to the ITAR under this rule.

DDTC expects the scope of impacted authorizations to be limited and will assist exporters in expeditiously obtaining appropriate authorizations under the ITAR. Impacted exporters are encouraged to contact the Office of Defense Trade Controls Licensing through the DDTC Response Team at (202) 663-1282 or DDTCResponseTeam@state.gov. as soon as possible to discuss specific transition impacts. (11.21.16) [Click here for more information.](#)

Obama administration expands elite military unit's powers to hunt foreign fighters globally

By Thomas Gibbons-Neff and Dan Lamothe November 25 at 11:06 AM

U.S. Special Operations forces travel through the village of Fatisah in the northern Syrian province of Raqqa on May 25, 2016. (Delil Souleiman/AFP/Getty Images)

The Obama administration is giving the elite Joint Special Operations Command — the same organization that helped kill Osama bin Laden in a 2011 raid by Navy SEALs — expanded power to track, plan and potentially launch attacks on terrorist cells around the globe, a move driven by concerns of a dispersed terrorist threat as Islamic State militants are driven from strongholds in Iraq and Syria, U.S. officials said.

The missions could occur well beyond the battlefields of places like Iraq, Syria and Libya where Joint Special Operations Command (JSOC) has carried out clandestine operations in the past. When finalized, it will elevate JSOC from being a highly-valued strike tool used by regional military commands to leading a new multiagency intelligence and action force. Known as the “Counter-External Operations Task Force,” the group will be designed to take JSOC’s targeting model — honed over the last 15 years of conflict — and export it globally to go after terrorist networks plotting attacks against the West.

The creation of a new JSOC entity this late in the Obama’s tenure is the “codification” of best practices in targeting terrorists outside of conventional conflict zones, according to the officials who spoke on the condition of anonymity to discuss administration deliberations. It is unclear, however, if



the administration of President-elect Donald Trump will keep this and other structures set up by Obama. They include guidelines for counterterrorism operations such as approval by several agencies before a drone strike and “near certainty” that no civilians will be killed. This series of presidential orders is known as the “playbook.”

[CIA drone strikes will get pass in counterterrorism ‘playbook’]

*(*Continued On The Following Column)*

The new JSOC task force could also offer intelligence, strike recommendations and advice to the militaries and security forces of traditional Western allies, or conduct joint operations, officials said. In other parts of the world, with weak or no governments, JSOC could act unilaterally.

The global focus is reminiscent of when U.S. forces first went after al-Qaeda in the months after the Sept. 11, 2001, attacks. As approaching U.S. troops forced militants to flee their safe havens in Afghanistan and scatter across the globe, the United States followed in pursuit, using CIA assets to grab suspected al-Qaeda operatives in dozens of countries, sometimes capturing, imprisoning and torturing them under murky legal authorities.

Some in the Pentagon hope to see the new task force working in tandem with the CIA, elevating a sometimes distant relationship to one of constant coordination to track and go after suspected terrorists outside of traditional war zones.

In recent years the agency’s involvement in global paramilitary operations has waned — with fewer strikes in Pakistan and Yemen, and its armed drones in Syria transferred to the Pentagon. It’s still unclear how much the CIA may be willing to cooperate with JSOC and more broadly with the Pentagon following the White House’s decision.

The agency, with its broad contacts overseas, espionage networks and long experience in covert operations still has much greater reach than JSOC.

The CIA declined to comment.

The new JSOC task force will report to the Pentagon through the U.S. Special Operations Command, or SOCOM, according to U.S. military officials, creating a hybrid command system that can circumvent regional commanders for the sake of speed.

In the past, units such as the Army’s Delta Force — which is part of SOCOM and its subordinate command JSOC — were usually deployed under those regional commanders, known as geographic combatant commands. The new task force, however, will alter that process by turning SOCOM’s chief, Army Gen. Raymond “Tony” Thomas, into a decision-maker when it comes to going after threats under the task force’s purview.

The task force will essentially turn Thomas into the leading authority when it comes to sending Special Operations units after threats.

“Now [Thomas] can request whatever he wants and ... unless there’s some other higher competing priority, the combatant commanders have to cough it up,” said a former senior defense official.

*(*Continued On The Following Page)*

Turning SOCOM into a command with a global reach has been on the table for the last 15 years. In 2001, Air Force Gen. Charles Holland, then SOCOM's commander, was hesitant to create a command structure that would effectively put SOCOM on the same level as the geographic combatant commanders. He believed it would cause too much friction with regional commanders. Instead, he decided that only in rare instances would SOCOM actually direct Special Operations forces.

It remains to be seen if the new organization will generate tensions between Special Operations Command and the generals in charge of U.S. forces in places such as the Middle East or Europe. In his March congressional confirmation testimony, Thomas suggested that assigning more authorities to SOCOM would allow for "synchronized operations" against nonstate threats that span geographic boundaries. But regional commanders, all four star generals, guard their turf carefully.

Officials hope the task force, known throughout the Pentagon as "Ex-Ops," will be a clearinghouse for intelligence coordinating and targeting against groups or individuals attempting to plot attacks in places like the United States and Europe.

According to officials familiar with plans for the task force, it will initially draw on an existing multinational intelligence operation in the Middle East that tracks foreign fighters, called Gallant Phoenix, and one of JSOC's intelligence centers in Northern Virginia.

While in the past the smaller task forces, such as Gallant Phoenix, were staffed by representatives from different intelligence agencies, the new task force aims to have decision-makers present, ensuring that the targeting process happens in one place and quickly.

"Layers have been stripped away for the purposes of stopping external networks," said a defense official. "There has never been an ex-ops command team that works trans-regionally to stop attacks."

The defense official said U.S. intelligence and law enforcement agencies will support JSOC personnel as they synthesize information and offer recommendations on how to handle specific threats.

Over the past decade JSOC has also built strong relations with police agencies in Germany, Britain, France and Turkey, as they have moved to combat the flow of foreign fighters returning to their home countries.

The number of participating intelligence agencies, both internationally and U.S.-based within the task force is in flux, the official added, as intelligence-sharing laws and internal friction have kept some on the periphery of the organization.

*(*Continued On The Following Column)*

JSOC — rarely mentioned by name by U.S. officials due to the clandestine nature of its work — was cited specifically by Defense Secretary Ashton B. Carter last month in Paris after he and Thomas met with defense ministers involved in the fight against the Islamic State. The command "has been put in the lead" of countering the Islamic State's external operations outside conflict zones, Carter said, surprising some defense officials in Washington.

The White House, asked to comment on the plan, issued a statement that did not use JSOC's name, but acknowledged the role Special Operations forces play in tracking foreign fighters away from the battlefield.

"These forces on the ground, operating in close concert with our partners, have gathered critical intelligence off the battlefield, and have shared that information with our coalition partners and allies," the statement said. "This information is helping us ramp up actions against [Islamic State] leaders and operatives planning attacks, track foreign fighters returning to their home countries and improve law enforcement actions aimed at interdicting potential plotters."

Adam Entous, Greg Miller, Dana Priest and Wesley Morgan contributed to this report.

1st Certification for Combined Vision Systems

The certification for the first HUD in the industry to blend synthetic and enhanced vision capabilities, CVS was awarded certification for Dassault Aviation Falcon 2000 series

Enlarge image - 1st Certification for Combined Vision Systems

enlarge image click to enlarge

Elbit Systems announced today that it was awarded certification by the European Aviation Safety Agency (EASA) and the Federal Aviation Agency (FAA) for its Combined Vision Systems (CVS), named FalconEye onboard the Dassault Falcon 2000S and LXS twinjet aircraft.

FalconEye is the first Head-Up Display (HUD) system to blend synthetic, database-driven terrain mapping and real-time enhanced video generated by the unique multispectral Enhanced Vision System (EVS), providing an unprecedented level of situational awareness to flight crews in all conditions of operation, day and night.

Copernicus' 2nd Eye is ready to meet its Launcher

Sentinel-2B, Europe's next Copernicus satellite in Space, has successfully finished its test programme at ESA's technology Centre ESTEC in Noordwijk, The Netherlands. The second Sentinel-2 Airbus built satellite will now be readied for shipment to the Kourou spaceport in French Guiana begin January 2017. It is scheduled for an early March 2017 lift-off on Vega. Copernicus, Europe's environmental monitoring programme, is led by the European Commission (EC) in partnership with the European Space Agency (ESA). The Copernicus Sentinels supply remote sensing data of the Earth, delivering key operational services related to environment and security.

Offering "colour vision" for the Copernicus programme, Sentinel-2B like its twin satellite Sentinel-2A will deliver optical images from the visible to short-wave infrared range of the electromagnetic spectrum. From an altitude of 786 kilometres, the 1.1 tonne satellite will deliver images in 13 spectral bands with a resolution of 10, 20 or 60 metres and a uniquely large swath width of 290 km. The optical design of the Multi Spectral Instrument (MSI) has been optimised to achieve state-of-the-art imaging quality across its very wide field of view. With its multispectral imager and wide swath coverage, the Sentinel-2 mission not only offers continuity, but with its more than 100 km increase in swath width, also expands on previous missions.

The telescope structure and the mirrors are made of silicon carbide, which provides very high optical stability and minimises thermo-elastic deformation, resulting in an excellent geometric image quality. This is unprecedented in this category of optical imagers. The data gathered are used for monitoring land use and changes, soil sealing, land management, agriculture, forestry, natural disasters (floods, forest fires, landslides, erosion) and to assist humanitarian aid missions. Environmental observation in coastal areas likewise forms part of these activities, as does glacier, ice and snow monitoring.

The Sentinel-2-mission is based on a constellation of two identical satellites, Sentinel-2A and Sentinel-2B, in the same orbit, 180° apart for optimal coverage and data delivery. The satellites are orbiting the earth every 100 minutes covering all Earth's land surfaces, large islands, inland and coastal

(*Continued On The Following Column)

*"You don't learn to walk by following rules.
You learn by doing, and by falling over."
- Richard Branson*

waters every five days. Sentinel-2A, which is identical in design, was launched on 23 June 2015. Since then the satellite has been performing excellently. A total of 51,762 users have self-registered on the Sentinels Scientific Data Hub. About 168,000 products are available for download, cumulating a total volume of 433 TB. Overall, a total volume of 1.9 Petabyte has been downloaded by the user communities.

The Sentinel-2 mission has been made possible thanks to the close collaboration between ESA, the European Commission, industry, service providers and data users. Its development has involved around 60 companies, led by Airbus Defence and Space in Germany for the satellites and Airbus Defence and Space in France for the multispectral instruments, while Airbus Defence and Space in Spain is responsible for the mechanical satellite structure.

CMA-2082MC FMS for USAF HH-60G Pave Hawk Helicopter

Esterline CMC Electronics (CMC) is pleased to announce that its combat-proven CMA-2082MC Flight Management System (FMS) was selected recently for a United States Air Force (USAF) upgrade program to replace legacy Control Display Units (CDU) currently flying on the USAF fleet of HH-60G Pave Hawk Search-and-Rescue helicopters. The contract was awarded to Esterline CMC through the Canadian Commercial Corporation (CCC), Canada's international government-to-government contracting organization. CCC was awarded the cost-plus-fixed-fee contract as a result of a sole source acquisition by the Air Force Material Command, Robins Air Force Base, Georgia.

Esterline CMC is on contract to deliver 50 non-developmental CDUs with the same form, fit and function as the existing CDU. CMC will also be providing non-recurring engineering to re-host the HH-60G CDU software from the legacy CMA-882 CDU to the new CMA-2082M CDU. The work will be performed at CMC's facilities in Montreal, Quebec and Ottawa, Ontario, and is expected to be completed by November 2018. The contract has options for additional quantities of up to 225 CDUs.

NOTE: In accordance with Title 17 U.S.C. Section 107, this material is distributed without profit or payment for non-profit news reporting and educational purposes only.

Reproduction for private use or gain is subject to original copyright restrictions.