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PROVEN

News From the World of the C-130

New era of personnel recovery takes flight

The brand new Lockheed Martin HC-130J personnel recovery aircraft took to the air for the first time ever July 29 at Lockheed Martin's facility in Marietta, Ga.

With unique features that deliver increased versatility and operational capability to the warfighter, this new member of the C-130 family is capable of worldwide operations requiring rapid deployment to austere airfields and denied territory for all-weather personnel recovery.

Due for delivery to Air Combat Command in September 2010, the HC-130J is scheduled to reach initial operational capability in 2012. An Air Force Special Operations Command MC-130J variant of this aircraft will fly in early 2011.

The completed HC-130J rolled-off the Lockheed Martin production line in April, after making its floor made its debut on the C-130J final production line in October 2009.



Lockheed Martin's first HC-130J made its inaugural flight on July 29 in Marietta, Ga. This plane is scheduled for a September 2010 delivery to Air Combat Command. (Photo by Todd McQueen)

C-130J showcases Herculean abilities at 2010 Farnborough Air Show

By Staff Sgt. Heather Norris, 52 Fighter Wing Public Affairs

Approximately 285,000 spectators caught a glimpse of the C-130J Super Hercules cargo plane at the Farnborough International Air Show, July 19-25.

A lot of work went into bringing the premier cargo giant from Ramstein Air Base, Germany, to participate in this week-long air show. In addition to a static display, Lockheed Martin leased the plane for demo performances throughout the week.

According to Capt. Samuel Bartron, 37th Airlift Squadron C-130J Super Hercules pilot, long before any of the events start coordination of diplomatic clearances, fuel and flight plans, and services needed, as well as determination of equipment provided and aircraft parking and security.

Most people's idea about the U.S. military is fighter pilots putting bombs on target and fast-flying jets. However, the C-130J Super Hercules aircraft offers a unique look at the Department of Defense's mission.



A Ramstein Air Base C-130J was on hand for the 2010 Farnborough Air Show in England. (Photo by Staff Sgt. Jerry Fleshman)

"Once they set foot on our aircraft, they have a different appreciation for what we can do," said Bartron.

The mission of the C-130J Super Hercules is combat airlift
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Final C-130J delivered to Norway early

Story courtesy of Air Force News

The Royal Norwegian Air Force took delivery of its fourth C-130J Super Hercules a full 60 days earlier than the projected delivery date on July 1.

The agreement between the U.S. Air Force and the Royal Norwegian Air Force was the first sale of a C-130J via the Foreign Military Sales process. The case included four aircraft, spare parts, technical publications and training at a cost of \$519 million.

“From the very beginning, this case has served as an example of how to conduct foreign military sales,” said Lt. Col. Peter Eide, 657th Aeronautical Systems Squadron commander. “The Air Force Security Assistance Center, the Warner Robins Air Logistics Center, Lockheed Martin, the Air Force Security Assistance Training squadron, along with the people here in our program office have all worked extremely hard to deliver this vital capability to an important international partner.”

Beginning in mid-2007, this case got a quick start when the Air Force Security Assistance Center turned the request from the Norwegian Ministry of Defense in less than half the normal processing time. This start allowed the process to beat milestones along the way to conclude with the final aircraft delivery two months early.

With an additional 15 feet of fuselage increasing usable space in the cargo compartment, the C-130J incorporates state-of-the-art technology to reduce manpower requirements, lower operating and support costs, and provide life-cycle cost savings compared



Norway's fourth C-130J, named Siv (front), leaves the Lockheed Martin facility in Marietta on July 1. A Canadian C-130J shares the runway with Siv. (Photo by David Key)

to earlier C-130 models. Compared to older C-130s, the J model climbs faster and higher, flies farther at a higher cruise speed, and takes off and lands in a shorter distance.

This newly built aircraft includes an advanced two-pilot flight station with fully integrated digital avionics; color multifunctional liquid crystal displays and head-up displays; state-of-the-art navigation systems with dual inertial navigation system and global positioning system; fully integrated defensive systems; low-power color radar; digital moving map display; new turboprop engines with six-bladed, all-composite propellers; digital auto pilot; improved fuel, environmental and ice-protection systems; and an enhanced cargo-handling system.

C-130J's forecast: 100 percent chance of rain

Story and photo by John Rossino, Lockheed Martin

About once every 10 days it rains for about two hours inside the B-1 building at the Aeronautics-Marietta site. Not from Mother Nature, but during a water leak test performed on the C-130J aircraft.

“The test verifies the leak integrity of the Hercules,” Mike O’Brien, director of C-130J production, said. “The plane has to be water tight before we can proceed with the next process inside trim.”

In the past, the test took place in the C-130 paint facility on the south side of the Marietta campus, but recently was moved to its new position in the B-1 building.

“In order to get to the new production rate of building C-130Js, we had to move the operation,” O’Brien said. “So, late last fall we trenched the B-1 floor next to the C-130 production line, put in drains, and built stands with Rainbird water sprinkler heads.”

During the test, the sprinkler system sprays water over the entire body of the aircraft at once, while sheet metal mechanics watch for leaks and imperfections in the aircraft’s skin both internally and externally.



A brand new J undergoes leak testing before heading off to the trim shop.

“Leaks can be caused by a number of things, but mainly from a bad seam seal,” said Tina Corbett, a senior sheet metal mechanic. “It’s generally an easy fix, and then we pass the plane off to the trim shop.”

The leak check is just one of the many steps in the production of the Hercules.

“Because of the high quality of our rigorous testing on the aircraft, we have been able to deliver the last 22 planes to our customers around the world with zero defects,” O’Brien said. “That’s something of which we can all be proud.”

772nd EAS set significant airdrop record

By Tech. Sgt. Renni Thornton, 451st Air Expeditionary Wing Public Affairs

The men and women of the 772nd Expeditionary Airlift Squadron (EAS) at Kandahar Airfield have made historic contributions in the area of responsibility (AOR) by conducting combat airdrop missions and delivering more than 8.5 million pounds of supplies to troops at forward operating bases over a 16-month period.

The 41st Airlift Squadron (AS) from Little Rock Air Force Base, Ark., is home to the deployed unit providing forces to the 772nd EAS since March 2009, said Lt. Col. Gilberto Martinez, commander of the 772nd EAS. He is also the commander of the 41st AS at Little Rock AFB and deployed to KAF with his unit.

The men and women of the 41st AS have been the sole supporters of the 772nd EAS, providing planes and people since March 2009.

“The 41st AS received the tasking to begin operations at KAF in 2009. We stood up the 772nd EAS on March 15, 2009, and conducted our first combat airdrop mission April 24, 2009,” Martinez said. “Our squadron has been performing this mission ever since.”

The 772nd’s primary mission sets include airland, aeromedical evacuation and airdrop missions. To date, the unit has conducted



C-130Js deployed to the 772nd Expeditionary Airlift Squadron taxi to their loading spots July 16 at Kandahar Airfield. The C-130Js and crew are deployed from Little Rock Air Force Base, Ark., which has been deployed to Kandahar since March 2009. (Photo by Staff Sgt. Chad Chisholm)

nearly 9,000 sorties and continues to meet mission requirements. They have transported more than 85,000 personnel and 25,000 tons (50 million pounds) of cargo throughout the U.S. Central Command AOR.

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and is very different from strategic airlift. Training for high altitude, low opening Army parachute drops, equipment drops, and landing on short runways occurs regularly, but the focus at Ramstein also includes humanitarian missions.

Staff Sgt. Thomas Parritt, 37th Airlift Squadron loadmaster, describes the humanitarian missions for orphanages in Bulgaria and Romania as a project that involves the entire base community from collection of items to delivery. Many underdeveloped countries we deal with don’t have the privileges afforded to others with ease of shipping methods or the infrastructure to facilitate the process, Parritt said.

“The C-130J a lot of times is the only aircraft that can reach remote locations other larger planes cannot,” said Bartron. “The American flag goes a long way in some parts of the world. People see these cargo planes and love Americans for the supplies we are bringing. We are building relationships that in the future benefit everyone.”

Part of the mission at Ramstein includes flying with our European partners. According to Bartron, the C-130J Super Hercules mission overlaps into building partner coalitions through flying with the African air forces and teaching them important airlift skills.

“We spend a lot of time in other countries building that relationship,” said Parritt. “Since I’ve been in Europe, I have

seen 36 countries and the list keeps growing. With the newer ‘J’ model, everyone wants to see it. It’s endless.”

According to Parritt, sharing mission scope with other countries strengthens allied bonds. Bringing this aircraft to Farnborough accomplishes just that.

“It’s great to show all the different things we can do,” said Bartron. “Every day you are doing something different, flying to different places and learning new things. With a fighter jet the public will only get to look inside the cockpit or sit in it if you’re lucky, but it is a different experience to walk inside a cargo plane.”

According to Bartron, air shows are a great opportunity to see what aircraft different countries are flying. The sheer size of the cargo bay with the C-130J Super Hercules and the equipment that can be carried is what spectators are interested in seeing.

“The C-130J does the job and is an excellent aircraft,” said Alan Key, an aviation journalist. “I played football in the back of a Canadian one until they asked us to stop as they couldn’t balance the aircraft. It’s an old plane but its history speaks for itself. Nearly every major air force in the world has them or will have them.”

“We still seem to be surprising a lot of people on what we can do,” said Parritt. “I am proud to know that we can fly any aircraft anywhere in the world at a moment’s notice.”

First time for MAFFS II fighting Calif. fires

Courtesy of Air National Guard

California Air National Guard firefighting aircrew from the 146th Airlift Wing flew the first-ever MAFFS II wildfire mission July 16 at about 6:45 p.m. dropping 3,000 gallons of retardant on the Skinner wildfire near Riverside.

“This is the first time we have dropped on an actual fire with the MAFFS II equipment and it performed flawlessly,” said Col. Paul Hargrove, 146th Airlift Wing commander. “The MAFFS II opens so many doors to new concepts in military firefighting, making it less costly and more efficient than ever.”

The Skinner fire started July 16 at 3:42 p.m. and had burned 200 acres as of 6 p.m. officials said.

“With MAFFS II we are able to operate seamlessly alongside commercial tankers using virtually any U.S. Forest Service heavy air tanker base in the country to reload,” Hargrove said.

MAFFS, an acronym for modular airborne firefighting systems, are units designed to roll into and out of C-130 aircraft, including the newest J-model at the 146th Airlift Wing. For the first time in more than 30 years, the original MAFFS systems are being replaced by a second-generation design that is more effective, more efficient, and safer, officials said.

The removable MAFFS II units include a tank that holds up to 3,000 gallons of retardant and an on-board air compressor, allowing the retardant to spray out of a large nozzle placed out of the left paratroop door. MAFFS II is also now capable of using various new advancements in retardant technology, which are injected into the retardant fluid as it is dispensed.

New safety features and greater retardant coverage levels are included in the system’s list of improvements.

“The MAFFS II with its built-in on-board compressor system saves time and money by eliminating the need for ground support compressors, adding flexibility to where aircraft can land to reload retardant before their next drop,” said Lynn Ballard, public information officer for the U.S. Forest Service. In addition, engineering designs have reduced the amount of retardant splashed on the exterior of the plane during aerial drops, which saves time and money previously allocated to cleaning excess retardant from the plane, he said.



A C-130J from the 146th Airlift Wing based at Point Mugu Naval Air Station, Calif., drops water over the treetops during annual training in South Carolina in April. The unit was the first to transition to the MAFFS 2 system in 2008, and it remains the only unit flying the new system on the C-130J aircraft. (Photo by Airman 1st Class Nicholas Carzis)

The U.S. Forest Service has purchased nine MAFFS II units, and both the 146th Airlift Wing in California and the 302nd Airlift Wing in Colorado Springs have full complements of MAFFS II qualified aircrews ready to be called upon when needed. The 153rd Airlift Wing in Cheyenne and the 145th Airlift Wing in Charlotte will migrate to the new system when resources become available to make that happen, officials said.

Trained military units with MAFFS equipment are available to supplement other firefighting aircraft if needed during periods of high wildfire activity. Over the last ten years, military C-130s equipped with MAFFS systems have dropped a total of approximately 9.1 million gallons of retardant on wildfires, an average of about 910,000 gallons per year.

MAFFS is a partnership between federal land management agencies and the military to provide supplemental air tankers to assist in fire suppression efforts nationwide during times of high fire activity. There are two units assigned to each of four military wings, with a total of eight aircraft available to support civilian agencies when needed. Since 1974, National Guard and Air Force Reserve pilots have flown 6,500 firefighting missions, dropping 167 million pounds of fire retardant around the western United States, officials said.

Busy, busy, busy



Lockheed Martin’s C-130J factory in Marietta, Ga., is buzzing with activity. Here, the third C-130J for India leaves the paint facility while a KC-130J for the U.S. Marine Corps undergoes flight tests nearby. (Photo by John Rossino)

A new variant is born



The first two MC-130Js are taking shape. MC-130Js bring increased capability for special operations missions requiring clandestine infiltration and resupply and exfiltration of special operations forces. The first two MC-130Js will be delivered to the Air Force Special Operations Command in early 2011. (Photo by John Rossino)

Precision Red kicks off at RAAF Base Townsville

Story courtesy of the Royal Australian Air Force

Exercise Precision Red is under way at Royal Australian Air Force (RAAF) Base Townsville, recreating the conditions experienced by personnel during frontline operations.

Held from 25 June until 11 July 11, the exercise is closely modelled on the RAAF's experiences in the Middle East Area of Operations. It will involve two C-130J Hercules flying missions to a number of airfields in the Shoalwater Bay and Townsville Field Training Areas.

Squadron Leader Shane Peacey is a Qualified Flying Instructor on the C-130J Hercules for No. 285 Squadron, and said the exercise is a final test for Hercules crews before they fly in the Middle East Area of Operations.

"Everyone will draw on their collective training to ensure the missions are conducted safely and effectively, using the tactics and methods that we employ on operations," Peacey said.

A robust and advanced tactical transport, the C-130J Hercules can carry up to 128 personnel or up to 20 tonnes of cargo to remote, unsurfaced airfields. Air Force has amassed 20,000 flying hours on different C-130 types in the Middle East since they began a continuous deployment there in February 2003.

"The Hercules is crucial to the Australian Defence Force when it's deployed on the frontline, which makes our practice during Exercise Precision Red all the more important in supporting our flying during operations," Peacey said.



An airfield defence guard from No. 2 Airfield Defence Squadron takes up position having disembarked from a No. 37 Squadron C-130J at Benning Field airstrip in Townsville Training Area. (Photo courtesy of the RAAF)

Equally important is how the Hercules is supported by ground elements during Exercise Precision Red. Squadron Leader John Absolon said a concurrent activity, Exercise Precision Support, would deliver a deployed headquarters at RAAF Base Townsville and three working remote airfields in the training area.

"It will take a multitude of skillsets to make Exercise Precision Support work – everything from airfield engineering and air load teams to communications and airfield infrastructure, as well as health, logistics, and information support," Absolon said.

Joint Battlefield Airspace Controllers will also safely direct air traffic in the exercise areas. Of the 485 participants in Exercise Precision Red and Precision Support, approximately 292 will be in the field.

Dyess on deck



The next two Lockheed Martin C-130Js for Dyess Air Force Base, Texas, near completion at the company's Marietta, Ga. facility. The aircraft will soon enter flight test prior to delivery later this year. Dyess will receive 28 new Super Hercules to be flown by the 317th Airlift Group, making it the world's largest single C-130J operator. (Photo by John Rossino)

Many of the missions often crisscross the Middle East from places in Iraq and Afghanistan to many remote bases in country.

Assigned to the 451st AEW, the 772nd EAS works closely with the 451st Expeditionary Aeromedical Evacuation Squadron to provide time-critical, lifesaving support to the warfighter.

The 451st EAES medical teams are responsible for transporting injured service members, Afghan locals and coalition forces members from different areas in Afghanistan to more stabilized medical care. They do so by providing stabilizing medical care in flight, normally aboard C-130s.

The AE mission is about 15 percent of the 772nd's flying mission, Martinez said. Since, the squadron has transported approximately 500 to hospitals at KAF and Bagram Airfield and from forward operating bases throughout Afghanistan.

Another of the unit's unique accomplishments is the airdrop mission, said Maj. Jason Priddle, operations officer at the 772nd EAS. As it stands, it only accounts for about 5 percent of the unit's mission, but it is what sets the 772nd EAS apart from other units.

"In 2009, we dropped more than 2,000 containerized delivery system bundles between April and December 2009. That is nearly 4 million pounds of supplies to the war fighter. As of June 2010, the 772nd EAS has already exceeded that," said Major Priddle.

At the current rate, the unit expects to drop more than 5,000 bundles in 2010.

The types of supplies vary, said Staff Sgt. Chris Tyree, loadmaster and joint airdrop inspector. Supplies could be anything from food and water to fuel to ammunition to trucks and trailers -- just about anything and everything.

The airdrops the unit conducts have more impact on the war fighter, Tyree said. "We are directly supplying people assigned to the FOBs. They are getting the things they need to continue their daily mission."

Of the airdrop missions flown in the AOR, the unit can account for almost one quarter of the AFCENT total, Martinez said. Worthy of noting is the recovery rate the unit holds. The recovery rate refers to the number of loads dropped that landed in the intended location and were recoverable by the troops on the ground. "Right now we have a recovery rate of 97.2 percent, up from 94.2 reached in 2009," Martinez said.

How airdrops work

Airdrops begin with taskings from Air Mobility Division, Air Forces Central Command, said Capt. James Speakes, deputy operations officer, and officer in charge of tactics for the unit.

One of the best things about the job is being able to support the war fighter on the ground, said Captain Speakes.

"One night, we got an emergency airdrop tasking. The crew was already on alert so we were able to recall them. Two hours later, they had their briefing and we sent them out the door. That night, the crew dropped 20 pallets of supplies to ground troops, who had been engaged in a fire fight with enemy forces.

Speakes said that another unique aspect to the job is the humanitarian airdrops the unit has participated in. In the past three months, the unit has delivered several humanitarian drops of food, water, and other supplies to local Afghan communities. The special part about these missions is how the supplies are delivered--using coordinates only, not to normal, specialized drop zones.

"We know that those drops are helping people in the surrounding area (of the drop)," he said. "Most of our drops are to the war fighter but we also know that our mission here is to provide Afghans with assistance as well."

Speakes is assigned to the 61st Airlift Squadron, also from Little Rock AFB, Ark. He volunteered for this deployment to supplement the normal 41st AS manning because, he said, it is an opportunity to broaden his skills. As a navigator on the C-130H model aircraft, working as chief of tactics here allows him to use his planning skills in the combat zone.

What is unique about the C-130J unit is the fact that they have carried out the mission at KAF since March 2009. Routinely, other units from different bases would share the mission and rotate in and out of the expeditionary unit after a few months but the 157-person squadron at Little Rock AFB has consistently provided pilots, loadmasters, maintenance and other staff members for the past 16 months straight.

"The families of the men and women at the 41st AS have sacrificed so much by being without their loved ones during this period of time," Martinez said. "I couldn't be more proud of the people in our unit. They have done a superior job this past year-and-a-half and I couldn't nor wouldn't ask them to change anything. This has been a job well done and an experience we will never forget. We have been a part of history here and I am very proud of all of them."



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