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Issue 1 2012

Is Europe on Track?  
Political masters in Brussels are warning EU nations to work far harder or risk seeing the Single European Sky fail. ATM asks why performance targets are not being met, highlights examples of achievement and examines the implications of state control ... or the lack of it

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Should DFS take a large stake in NATS, would German and UK air traffic control have the clout to bring about true rationalisation of Northern European airspace?

Yes, they could do it on their own

Yes, but they will need help from other providers

No, it won't happen

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## Des Moines debuts low level copter ops

Posted on May 1, 2012 by Aimee Turner

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The US Federal Aviation Administration (FAA) has approved an Instrument Flight Rules (IFR) low level helicopter infrastructure for use by Mercy Medical Center in Des Moines, Iowa.

The infrastructure consists of five helipads in key locations throughout central Iowa - one at Mercy Medical Center's Des Moines main campus, three at outlying hospitals, and one at a new Helicopter Emergency Medical Service (HEMS) landing zone in the town of Stuart, Iowa.

Air Methods Corporation will be conducting these new HEMS flight operations, which arose from a Government Industry Partnership (GIP) with Bell Helicopter, Mercy Medical Center, Air Methods, and the FAA's Global Navigation Satellite System (GNSS) programme.

A Copter Point-in-Space RNAV Approach Procedure and an Obstacle Departure Procedure was designed for each of the five landing sites along with a low altitude IFR enroute structure to connect them.

With the WAAS enabled avionics of aircraft such as the "Mercy One" Bell 429 helicopter, the approaches allow landings at these sites with visibilities as low as three quarters of a mile and with cloud ceilings as low as 300 feet.

The helicopter previously was not able to land at these heliports under low IFR conditions, but had to land instead at a nearby airport, if one was available, and transfer the patient to or from the helicopter by ground.

Also, before the network's approval, departing helicopter flights at the hospital were restricted to Special Visual Flight Rules (SVFR) departures with an ensuing IFR transition.

This required a cloud ceiling of at least 700 feet and at least two miles of visibility – restrictions that quite often grounded helicopter operations.

The new infrastructure allows IFR departures directly from the hospital during poor visibility with a departure minimum cloud ceiling of 500 feet and minimum visibility of  $\frac{3}{4}$  mile.

The network's enroute structure also allows transit between its five hubs at the lowest safe altitude, which mitigates conflicts with other IFR air traffic and reduces the risk of aircraft icing during cold weather.

"There are times with limited visibility and road conditions it may take an ambulance coming from the Stuart area 60 -90minutes to cover the 40-45 miles to the downtown Des Moines trauma centres," Jeff Howard, Paramedic Director, Stuart Rescue and EMS told the FAA's [SatNav News](#).

"The Mercy One helicopter can be at Mercy Medical approximately 12 minutes from the time they lift off at Stuart."

The approved approaches use WAAS Localizer Performance with Vertical guidance (LPV) procedures, which provide comparable performance to Instrument Landing System (ILS)

approaches, but without expensive ground based equipment at each landing site.

The WAAS signal is satellite based. "The new infrastructure represents a quantum leap forward for helicopter EMS IFR operations," said Joe Wahlig, a Mercy One pilot. "It vastly improves the viability and efficiency of IFR operations and greatly enhances safety."

The Mercy Medical Center programme, among the nation's first HEMS operations to gain approval for WAAS IFR navigation, was selected to be the test site for an FAA government industry partnership (GIP) project designed to collect performance data on WAAS procedures.

This data will help develop public use criteria of WAAS procedures and set the stage for broader future use of these procedures under the FAA's Next Generation Air Transportation System (NextGen) programme.

"In 2011, Mercy One completed over 1050 patient missions," said Jeff Johnston, a Mercy One flight nurse. "It is estimated that with the WAAS approach landing zones that we now have in place, we potentially would be able to complete another 50-65 missions that were missed due to weather conditions. In short, the new infrastructure adds another 'tool' for reaching that trauma or acutely ill patient in conditions that other IFR and VFR helicopters cannot, while maintaining the highest standards of medical helicopter operations and safety."

This entry was posted in CAAs/ANSPs, Navigation, News, NextGen and tagged RNAV, WAAS. Bookmark the permalink.

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