



The Value WAAS Brings to Vertical Flight

- ◆ WAAS allows for Point-in-Space (PinS) precision-like approaches at any location (currently SAAAR, public use criteria in-work)
- ◆ Satellite-based navigation allows shorter, more direct routes. *That means:*
 - Fuel cost savings
 - Maintenance cost savings – less wear and tear on engine and drive train components
 - Reduced carbon emissions – fly less and fly green!
- ◆ WAAS provides vertical guidance
 - Enables Localizer Performance with Vertical Guidance (LPV) approaches
- ◆ Space-based navigation allows pilots to choose closer alternate airports (landings in poor weather are not restricted to ILS-equipped airports)
- ◆ WAAS enables precision-like approaches without the installation of expensive ground-based equipment
- ◆ Future integration into congested fixed-wing air space
 - WAAS equipage will serve to increase air traffic controllers' confidence in aircraft so equipped
- ◆ Allows access to helipads in poor weather conditions
 - Vital for emergency medical flights
- ◆ WAAS eliminates requirement for pre-flight RAIM check



Bell Helicopter

The FAA has approved Instrument Flight Rules (IFR) arrivals and departures for use in the ongoing project by the "Mercy One" Bell 429 helicopter serving Mercy Medical Center in Des Moines, Iowa. The Mercy Medical Center program, among the nation's first Helicopter Emergency Medical Services operations to gain approval for Wide Area Augmentation System (WAAS) IFR navigation, was selected to be the test site for an FAA government-industry partnership (GIP) project with Bell Helicopter 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) program.

AAG

The FAA is working cooperatively with Associated Aircraft Group (AAG) to enhance enroute and terminal area helicopter operations at heliports and airports in the heavily congested New York metroplex area, utilizing Sikorsky S-76C++ helicopters.

Project focus is on WAAS-equipped helicopter integration into the high density fixed wing operations of the New York City area leading to development of advanced helicopter Terminal Instrument Procedures (TERPS) criteria.

CareFlite

The FAA is working cooperatively with CareFlite, an EMS operator in the Dallas-Fort Worth Metroplex area, to develop low level IFR routes. This will support the recently approved LPV PinS approach procedures to trauma centers being served by CareFlite and its AgustaWestland A109E helicopter.

For more information on these projects, please contact Dave Peterson (Dave.Peterson@faa.gov), FAA Operational Implementation Manager for satellite navigation.

<http://gps.faa.gov>

The Federal Aviation Administration is working closely with the helicopter community to provide new capabilities and benefits for aircraft equipped with the Wide Area Augmentation System (WAAS).