HEMS ALL-PRODUCT GUIDE

Helicopter Emergency Medical Services

Solutions for HEMS Missions

Aerial View of the Bell Helicopter Development Facility in 1940 - Gardenville, New York - Bell Aircraft Corporation

HISTORY OF HEMS

On January 15, 1945, a Bell test pilot parachuted from a damaged fighter plane and made his way to an isolated farmhouse; he needed medical attention.

Floyd Carlson used ship number two to fly 20 miles from the Bell Aircraft facility in Gardenville to a point just south of Lockport, New York and landed on a road to pick up Dr. Thomas Marriott. Carlson covered five miles in a few minutes and deposited the physician in the yard of the farmhouse.

This is believed to be the first time in the United States a doctor used a helicopter on a mercy mission.

Bell NC-1H, the World's first commercially certified helicopter, father of the Bell 47 series, with Floyd Carlson demonstrating its stability (circa 1943)

Bell H-13 Sioux helicopter on a HEMS mission during Korean War.

HEMS IN KOREAN WAR

The U.S. Army Aviation's helicopters made significant life-saving contributions during the Korean War.

In January 1951, four helicopter detachments were assigned to the 8th U.S. Army surgeon, and on the third day of that month, 1st Lt. Willis G. Shawn and 1st Lt. Joseph L. Bowler flew the first Army aerial medical evacuation (MEDEVAC) missions.

Dubbed the "Angel of Mercy" by soldiers on the battlefront, the aviators used the Bell H-13 to transport 18,000 of the war's total 23,000 casualties to forward deployed mobile Army surgical hospitals.

As the iconic symbol of the MEDEVAC mission during the Korean War, the H-13 Sioux helicopter became familiar to American television audiences years later when it was shown in the background title shot of the "M.A.S.H" series, which aired from 1972 to 1983.

HEAR FROM OUR CUSTOMERS

Air St. Luke's
Bell 429

Classic Air Medical
Bell 407

Careflite
Bell 407

BELL 407GXi

Certified IFR Capability

The Bell 407GXi's speed, smooth flight characteristics, and incredible useful load make it a trusted platform for single engine helicopter users across the globe. More than 6 million global flight hours and newly certified IFR capability create a versatile aircraft to meet any HEMS mission needs.

AIRCRAFT FEATURES

Patient Monitoring

- Behind the head seating for excellent airway management
- Crew seat flexibility and ability to include additional crew members
- Maximum utilization of space
- Neonatal Transport

Communication Options: Pedestal, Console, or Aft Med Wall Mounted

- Typical Patient Transport
- Scene Pick up
- Satellite Communications
- Dial/Text

BELL 407GXi TECHNICAL SPECIFICATIONS[1]

Engine	Rolls-Royce 250-C47E/4
Avionics	Garmin G1000H NXi
Max Cruise Speed	133 knots, 246 KM/H
Range	337 NM, 624 KM
Useful Load:	
Internal (Standard)	2,300 lbs. / 1,043 kg
Internal (IGW)	2,550 lbs. / 1,157 kg
Seating	1+6

[1] All technical specifications are based on the basic configuration Calculations at sea level ISA, Range at V_{LRC}

The Bell 407GXi Single Pilot IFR kit has been approved by the US (FAA) and Brazil (ANAC); approvals by China (CAAC) and European Union (EASA) are pending.

EMS INTERIOR OPTIONS

LifePort Customizable interiors starting at 228 lbs.

Spectrum Aeromed Contact Bell or vendor for options and weights.

United Rotorcraft Contact Bell or vendor for options and weights.

Scan to view EMS interior options

BELL 429

Fast and Powerful

The Bell 429 delivers ultimate versatility to air medical service providers worldwide. The 429 airframe design incorporated EMS customer and operator feedback into its design process making it the ultimate EMS solution for effective patient care.

BELL 429 TECHNICAL SPECIFICATIONS[1]	
Engine	2x Pratt & Whitney Canada PW207D1/D2
Avionics	Bell BasiX Pro™
Max Cruise Speed	150 knots, 278 KM/H
Range	372 NM, 688 KM
Useful Load:	
Internal (Standard)	2,535 lbs. / 1,150 kg
Internal (IGW)	3,014 lbs. / 1,367 kg
Seating	1+7

[1] All technical specifications are based on the basic configuration Calculations at sea level ISA, Range at V_{LRC}

AIRCRAFT FEATURES

- The cabin can accommodate:
  - 2 patients and 2 medical crew or
  - 1 patient and up to 3 medical crew or
  - A neonatal EMS unit and up to 3 medical crew
- The largest door opening in its class with 62 in. wide openings on both sides
- A large open cabin with a total contiguous cabin volume of 204 ft^3
- Optional aft clamshell doors offer aft patient loading capability to simplify complex loading problems
  - Doors snug up against aircraft when open
- Deck height designed to match litter height and minimize crew strain during loading and unloading
- Smooth ride from hover to max cruise speed from Liquid Inertia Vibration Elimination system
- Modular architecture for quick change mission adaption from rescue to specialty (ECMO, NICU, Heart pump, etc.) calls
- High main rotor height for enhanced safety for loading and unloading at the scene
- High ceiling for ample headroom and easier mobility
- Access to lower half of the patient

EMS INTERIOR OPTIONS

Aerolite Customizable interiors starting at 245 lbs.

United Rotorcraft Contact Bell or vendor for options and weights.

Spectrum Aeromed Contact Bell or vendor for options and weights.

Scan to view EMS interior options

SUBARU BELL 412EPX

Rugged and Reliable

The 412EPX integrates advanced technology to improve safety, reliability, maintainability for flight operations, and lowers operating cost through increased component life. It incorporates the same basic fuselage proven over years of operations while providing the newest dynamic components (rotors, transmission, drive system, and engines) and avionics available today. This combination of proven fuselage and new technology dynamics provides superior results.

SUBARU BELL 412EPX TECHNICAL SPECIFICATIONS[1]	
Engine	Pratt & Whitney Canada PT6T-9 Twin-Pac®
Avionics	Bell BasiX Pro™
Max Cruise Speed	123 knots, 228 KM/H
Range	361 NM, 669 KM
Useful Load: Internal	5,385 lbs. / 2,443 kg
Seating	1+14

[1] All technical specifications are based on the basic configuration Calculations at sea level ISA, Range at V_{LRC}

EMS INTERIOR OPTIONS

Spectrum Aeromed Contact Bell or vendor for options and weights.

LifePort Customizable interiors starting at 262 lbs.

Scan to view EMS interior options

GLOBAL CUSTOMER SOLUTIONS

Industry-Leading Support

As the industry leader in customer support, we at Bell pride ourselves on supporting our customers around the world at every step of your aircraft's life cycle. We are committed to providing customers with an extensive range of support and service capabilities to ensure safe and reliable operation of our products, enhance mission execution, and keep you flying.

CUSTOMER ADVANTAGE PLANS (CAP)

CAP provides a holistic coverage solution with predictable maintenance cost, priority access to parts and assemblies, and enhanced part forecasting capabilities among other benefits.

GLOBAL SUPPORT NETWORK

Available 24/7/365 to provide technical assistance to our customers.

BELL TRAINING ACADEMY

We provide industry-leading training combined with state-of-the-art resources for both pilots and maintenance technicians.

REPAIR SERVICES

Offering post-delivery and spares fulfillment assistance, our in-region service professionals are committed to helping you maintain the operational readiness of your aircraft.

CUSTOMIZATION

Working with our sister brand, Aeronautical Accessories, we can design a tailored solution for your needs.

bell.co/HEMS