

Comprehensive Helicopter Completions

www.metroaviation.com



Installing full air medical, corporate, utility, law enforcement and offshore support packages and providing routine to complete refurbishment services.



Metro Aviation, Inc., is a highly respected, internationally recognized leader in the aviation industry. We routinely provide package, custom or turnkey helicopter services, including:

- Flight operations management, especially in the Air-Medical Transport field.
- Routine maintenance or major modifications on helicopters.
- Avionics installation and service.
- Innovative helicopter completion services and aftermarket products tailored to specific needs.
- Paint and upholstery.

Through innovation, experience and high standards of quality, Metro Aviation has become the leading completion facility for the **EC-135, AS350, EC-130, EC-155** and **EC-145** throughout the world. Using aggressive project management, we have attained a high degree of design, engineering and production efficiency that enables us to produce mission-ready aircraft with features, comfort and performance comparable to higher-cost helicopters, at surprisingly competitive prices.

Our reputation for excellence is founded upon attention to detail, a dedication to quality, a focus on safety and a stubborn insistence on customer satisfaction. The Metro Aviation team has the knowledge, real-world experience and the desire to exceed your highest expectations. Whether you operate a single corporate helicopter or an operational specific fleet, by using Metro Aviation, you'll always fly with confidence.

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Depend upon the professionals of Metro Aviation to develop a helicopter completion that combines the critical elements of safety, comfort, speed and economy. Our total commitment is to uphold the highest quality standards of the industry, always exceeding all FAA requirements.





Law & Emergency Medical Systems (LEMS) – STC SR09164RC

- Our design allows the AS350 to be used for five passenger law enforcement activities or three passenger plus lightweight pivoting patient litter for EMS calls.
- Patient litter pivots up to 17 inches outboard for easy patient loading and unloading.
- Conversion to and from either role can be accomplished in under one minute.
- All components, including the litter or the quick-change co-pilot seat option, are stowed on board the aircraft.
- LEMS fully accommodates all thermal imaging installations without impeding full use of littler or seating.

No. 350M-380 LEMS Kit for the AS350

Item No.	Description	Standard	Optional	Models
350M-380	LEMS Litter Kit with Collective Barrier		X	ALL



Astar EMS Kit – STC SH866ISW

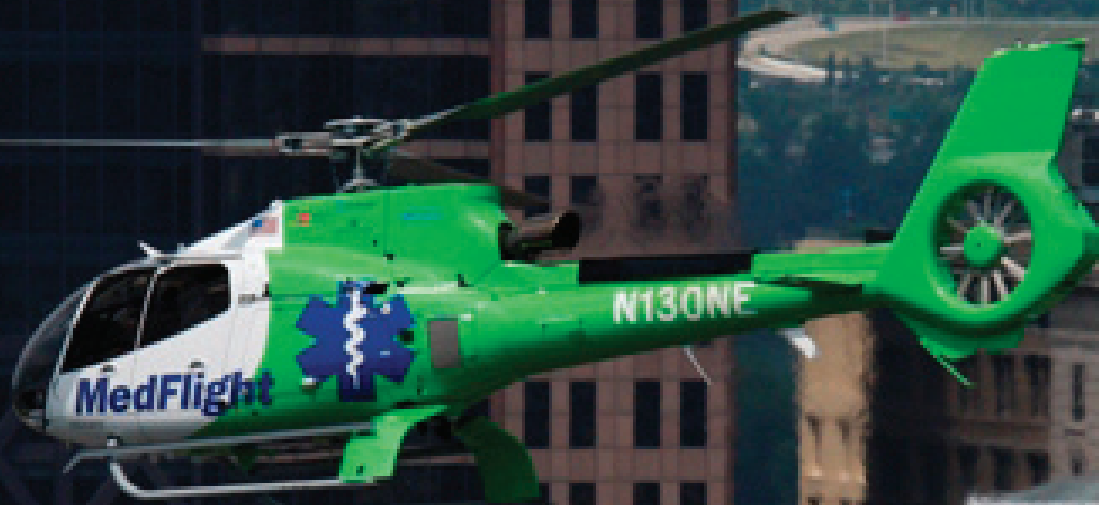
- Lightweight, pivoting single-litter (up to 17 inches outboard for easy patient loading and unloading) on a tracking carriage.
- Easy-to-maintain transfill oxygen system with two outlets.
- One or two positionable attendant seats with 4-point restraint system.
- One tracking/pivoting attendant seat with 4-point restraint system.



LEMS Litter (350M-380)

No. 350M-100 EMS Kit for the AS350

Item No.	Description	Standard	Optional	Models
350M-100	EMS Kit			ALL
350M-200	EMS Floor	X		ALL
350M-300	Litter Support	X		ALL
350M-380	LEMS Litter		X	ALL
350M-400	Single Positionable Seat	X		ALL
350M-400	Second — Fourth Positionable Seat		X	ALL
350M-450	Storage Bag Rack Assy.		X	ALL
350M-600	Rotating Seat Assy.		X	ALL
350M-700	Remote Equipment Bulkhead		X	ALL
350M-800	Oxygen System		X	ALL



Metro Aviation's Aircraft Completion Center installs full air medical kits for new and existing customers. Our highly trained and dedicated staff is available during the entire completion process as we build your new aircraft to your precise specifications. Our primary equipment installations aid in the evacuation or transport of critically ill persons, and optional equipment can be installed to enhance the operational efficiency of the aircraft medical crew or the flight crew.

Emergency Medical System

- Med Floor consists of sealed carbon fiber floor with a fluid dam.
- A pilot isolation barrier is incorporated.
- Metro/Lifeport PLS consists of MAI PLS Mount Assembly, the LifePort AeroSled CF 16G Litter (TSO-C39b Approved) and the LifePort MedDeck System.
- EMS seating arrangements include four seats, an existing left hand pilot seat, two existing fixed passenger/medical seats and a RH medical seat.
- The medical panel installation consists of an overhead enclosure in the main cabin, accessible by the medical crew and cabin passengers.
- The medical gas panel installation consists of an enclosure located on the aft cabin bulkhead, providing controls for the optional medical equipment and LOX oxygen system.
- Digital control of all aircraft mounted medial support systems and ICS/air to ground communication.

No. 130M-100 EMS Kit for the EC-130

Item No.	Description	Standard	Optional	Models
130M-200	Floor Pallet	X		ALL
130M-250	Isolation Barrier	X		ALL
130M-300	Metro/Life Port PLS	X		ALL
130M-400	Seating	X		ALL
130M-500	Medical Panel	X		ALL
130M-800	Medical Gas Panel	X		ALL
130M-110	Junction Box		X	ALL
130M-125	Electrical (schematic)		X	ALL
130M-640	LOX (10 liter)		X	ALL
130M-700	Remote Equipment Mount		X	ALL
130M-710	Storage Restraint Provisions		X	ALL
130M-720	Medical Suction		X	ALL
130M-730	Medical Air Pump		X	ALL
130M-810	RH IV Support		X	ALL
130M-900	Medical Inverter		X	ALL



Medical Panel (130M-500)



Medical Gas Panel (130M-800)



130M-300 METRO/LIFEPORT PLS Install

The METRO/LIFEPORT PLS consists of the MAI PLS Mount Assembly, the LifePort AeroSled CF 16G Litter (TSO-C39b Approved) and the LifePort MedDeck System.

- **PLS Mount Assembly** — The PLS Mount assembly consists of a plate on which two pieces of track are mounted. The tracks are for the rollers on the lower plate of the Trolley Assembly. The lower retractable pins of the Trolley engage the PLS Mount tracks to stop the inboard/outboard travel of the Trolley. The PLS Mount assembly is attached to the cabin floor with a quick pin at each outboard end of the track, which keeps the Trolley Assembly from coming out of the tracks when the lower pins are retracted.
- **AeroSled CF** — The AeroSled CF is made of a carbon fiber main body and backrest with an aluminum tube and machined component frame that wraps around the perimeter of the body. It is equipped with fittings on the bottom to engage the locking towers on the upper deck. The backrest is adjustable and activated by paddles on the backrest that activate a gas spring. The stretcher is also equipped with shoulder and body restraints as well as a foot bag to restrain the patient in a crash situation. The litter is installed in-line with the flight direction, with the patient feet positioned forward or rotated approximately 20 degrees with patient feet positioned forward and to the right.
- **MedDeck System** — The MedDeck System offers an articulating mounting surface for the LifePort AeroSled. The trolley can translate and rotate to numerous positions prior to flight for ease of loading non-ambulatory patients. The MedDeck System is made up of a Trolley Assembly and Upper Deck Assembly.



EC-130 Optional Equipment

- Additional installation options give owners the freedom to design and engineer mission-specific aircraft essential to its operation.



LOX Install

No. 130M-OPT Optional EMS Kit for the EC-130

Item No.	Description	Standard	Optional	Models
130M-105	Blackout Curtain		X	ALL
130M-111	Junction Box		X	ALL
130M-140	Portable Oxygen Mount		X	ALL
130M-164	Cabin Lighting		X	ALL
130M-167	LH Cargo Light		X	ALL
130M-168	RH Cargo Light		X	ALL
130M-169	Aft Cargo Light		X	ALL
130M-170	Loading Light		X	ALL
130M-185	Auxiliary Landing Light		X	ALL
130M-195	Controllable Searchlight		X	ALL
130M-550	Medical Equipment Rack		X	ALL



Medical Equipment Rack (130M-550)



Touch Screen Panel





Emergency Medical System – STC SR09164RC

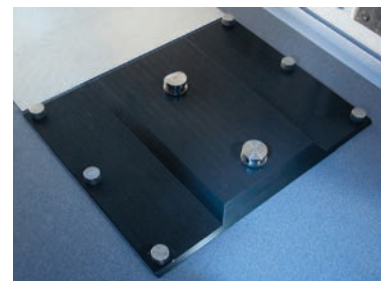
- One or two primary litters featuring one-person loading and Metro’s single-point “Posi-Lock” system.
- Two aft-facing attendant seats, fixed or track and swivel, with 3-point restraint system.
- Stowable, crash-attenuating third attendant seat.
- Single or Dual External space saving and easy to maintain transfill oxygen system.
- External LOX.
- Options available to meet your mission requirements.



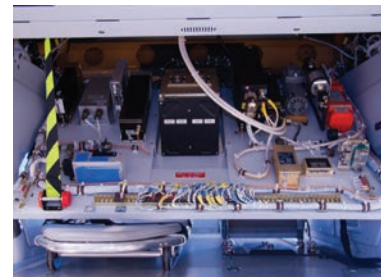
Seat Installation LH (135M-410)

No. 135M-100 EMS Kit for the EC-135

Item No.	Description	Standard	Optional	Models
135M-100	EMS Kit			ALL
135M-200	Floor Pallet	X		ALL
135M-300	Litter	X		ALL
135M-410	Seat Assy. L/H	X		ALL
135M-150	Avionics Shelf		X	ALL
135M-350	Litter Assy. L/H		X	ALL
135M-400	Seat Assy. R/H		X	ALL
135M-420	Seat Assy. Aft		X	ALL
135M-440	Track and Swivel Seat (RH)		X	ALL
135M-445	Track and Swivel Seat (LH)		X	ALL
135M-500	Med Control Panel		X	ALL
135M-600	Oxygen System (original)		X	ALL
135M-610	Oxygen System		X	ALL
135M-630	Oxygen System (dual)		X	ALL
135M-640	External 7.5 Liter LOX System		X	ALL
135M-700	Medical Inverter System		X	ALL
135M-720	Medical Suction System		X	ALL
135M-800	Gas Panel		X	ALL
135M-900	Window Storage		X	ALL



Floor Pallet Assy (135M-200/220)



Avionics Shelf Modification (135M-150)



Vapor Cycle Air Conditioning System —STC SR09163RC

- Total cabin cooling through a mechanically-driven, Freon 134A, vapor cycle air conditioning system.
- True dual evaporator system with separate cockpit and cabin controls.
- Twelve positionable outlets throughout cockpit and cabin.
- Low electrical load that places no power or electrical limitations on aircraft.
- Operational throughout take-off, flight, landing and hot loading and unloading.
- Provides rapid cool down of the entire cockpit and cabin, usually achieving the desired comfort range before take-off.



No. 135AC-00-011 Vapor Cycle Air Conditioning System for EC-135

Item No.	Description	Standard	Optional	Models
135AC-00-011-1	Vapor Cycle Air Conditioning System			ALL



Single Pilot IFR Kit — STC SRO9354RC

- The latest fully-featured communication and navigation systems integrated with the basic EC-135 autopilot system on the Sextant MEGHAS displays.
- Extremely pilot-friendly avionics platform and an ergonomically arranged cockpit.
- Cross equipment training with EC-145.
- Ideal for existing fleets with similar equipment that wish to stay with one avionics manufacturer.

Note: ECD Flight control Display System and Autopilot with SAS must be installed.

No. 135M-150 Single Pilot IFR Option for EC-135

Item No.	Description	Standard	Optional	Models
135M-150	Single Pilot IFR System			ALL
	Dual Garmin GNS 430 GPS/NAV/COM	X		ALL
	Garmin GNS 430/530 GPS/NAV/COM		X	ALL
	Honeywell KT 70 Transponder	X		ALL
	Garmin GTX-330 Transponder		X	ALL
	Honeywell KR21 Marker Beacon	X		ALL
	Garmin GI-106A Standby Nav Ind	X		ALL
	Mid Continent MD222		X	ALL
	Honeywell Radio Altimeter KRA 405B	X		ALL
	NAT Dual Audio System	X		ALL
	Honeywell DME CDM451	X		ALL
	Honeywell RDR 200 Radar		X	ALL
	• Honeywell RMD85MFD		X	ALL
	• Garmin GMX200 MFD with GDL69		X	ALL



EC-135 Optional Equipment – STC SRO9354RC

- Aftermarket innovations engineered by Metro Aviation.
- FAA approved and designed to meet factory specifications.
- Engineered for long service life at a much more reasonable cost.

No. 135M-OPT Optional Equipment for the EC-135

Item No.	Description	Standard	Optional	Models
135M-120	Accessory Mounting Panel		X	ALL
135M-129	Accessory Bar Mount		X	ALL
135M-130	Accessory Bar Mount		X	ALL
135M-140	Portable Oxygen Mount		X	ALL
135M-160	Portable Oxygen Mount		X	ALL
135M-170	Loading Lights		X	ALL
135M-176	ZOLL Mount		X	ALL
135M-180	Supplemental Strobe Lighting		X	ALL
135M-185	Auxiliary Lighting		X	ALL
135M-190	PROPACK/PROPACK MD Mount		X	ALL
135M-195	Controllable Search Light		X	ALL

No. 135M-980 Clamshell Door Window Kit for the EC-135 — STC SR09193RC

Item No.	Description	Standard	Optional	Models
135M-980	Clamshell Door Window Kit		X	ALL



Metro Aviation does more than provide you with an EMS configuration. We are the world's foremost completion center for EC-145. Our innovative specialists design and build assemblies matched perfectly to your mission requirements. Each installation demonstrates effective pre-project planning, state-of-the-art design and components and service after the sale.

Note: Metro Aviation, Inc., has now added CATIA 3-D modeling capabilities to "pre-design" interior modifications.





Emergency Medical System

- LOX or gaseous transfill oxygen system.
- Custom equipped to your specifications, including:
 - Medical panels
 - 110AC and 12V DC power
 - Storage
 - Patient examination lighting
 - Machined aluminum or composite floor
 - Special requests
- Custom cabin configuration, including:
 - 2 medical attendants and 2 positionable litters
 - 4 medical attendants, 1 positionable litter and 1 isolette or 1 balloon pump
 - Optional dual-mission cabin to satisfy both law enforcement and EMS roles
 - Other layouts to meet your requirements



Seat Assy L/H
(145M-410)

No. 145M-100 EMS Kit for the EC-145

Item No.	Description	Standard	Optional	Models
145M-100	EMS Kit			ALL
145M-200	Floor Pallet	X		ALL
145M-300	Litter	X		ALL
145M-410	Seat Assy. L/H	X		ALL
145M-150	Avionics Shelf		X	ALL
145M-350	Litter Assy. L/H		X	ALL
145M-400	Seat Assy. R/H		X	ALL
145M-420	Seat Assy. Aft		X	ALL
145M-440	Track and Swivel Seat (RH)		X	ALL
145M-445	Track and Swivel Seat (LH)		X	ALL
145M-500	Med Control Panel		X	ALL
145M-551	Medical Equipment Rack		X	ALL
145M-610	Oxygen System		X	ALL
145M-630	Oxygen System (dual)		X	ALL
145M-650	LOX Oxygen System		X	ALL
145M-700	Medical Inverter System		X	ALL
145M-720	Medical Suction System		X	ALL
145M-800	Gas Panel		X	ALL
145M-900	Window Storage		X	ALL



Oxygen System (145M-610)

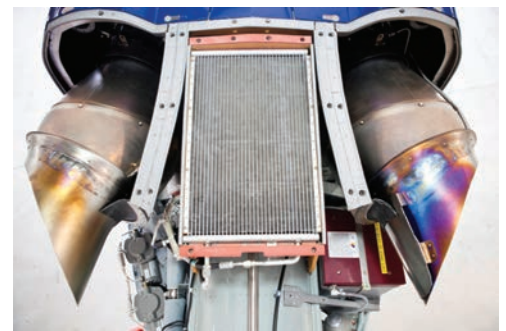


Medical Equipment Rack
(145M-551) — Installed in 100
U.S. Army LUH LAKOTA Aircraft.



Dual Cooling Unit Freon Air Conditioner — STC SH3880SW

- Provides cockpit and cabin comfort during all operations, both on the ground and in the air.
- Comfort levels may be obtained after reaching flight idle on one engine and need not be turned off until the engines are shut down at the termination of the flight.
- Thermostatically controllable temperature (optional).
- Individual cabin and cockpit evaporator and fan assemblies, each with a fan speed selection.
- Fan only operation mode.
- Generator fail override feature.
- No TOT or torque increase during operation thus increasing engine life.
- Five to ten day installation.
- 60,000 BTUH Rating (min.)
- 3.0- 4.5 HP requirements; 37 amps at 28 VDC electrical load
- Freon (R-134A Refrigerant) System
- ECD Factory Option



No. 117MM-100 Air Conditioning Kit for the EC-145

Item No.	Description	Standard	Optional
117MM-100-2	Vapor Cycle Air Conditioning System		
	• Standard Aft Evap	X	
	• EMS Aft Evap w/Storage		X
	• VIP Standard Aft Evp		X
	• Mid-Cabin Evap		X



Single Pilot IFR Kit

- The latest fully-featured communication and navigation systems integrated with the basic EC-145 autopilot system on the Sextant MEGHAS displays.
- Extremely pilot-friendly avionics platform and an ergonomically arranged cockpit.
- Economical solution to higher-priced, older technology on other medium twin engine helicopters.
- Ideal for existing fleets with similar equipment that wish to stay with one avionics manufacturer.
- Single- or dual-sided Thales compatible.
- Includes WAAS LPV capability.

Note: ECD Flight control Display System and Autopilot with SAS must be installed.

No. 145M-150 Single Pilot IFR Option for the EC-145

Item No.	Description	Standard	Optional	Models
145M-150	Single Pilot IFR System			ALL
	Dual Garmin GNS 430 GPS/NAV/COM	X		ALL
	Garmin GNS 430/530 GPS/NAV/COM		X	ALL
GRX-330	Garmin Transponder	X		ALL
	Honeywell KR21 Marker Beacon	X		ALL
GI-106A	Garmin GI-106A Standby Nav Ind	X		ALL
	Mid Continent MD200/222 Nav Ind		X	ALL
	Honeywell Radio Altimeter KRA 405B	X		ALL
	NAT Dual Audio System	X		ALL
	Honeywell DME CDM451	X		ALL
	Honeywell RDR2000 Radar		X	ALL
	Honeywell RDM850 MFD	X		ALL
	Avidyne EC500 MFD		X	ALL

EC-145 Optional Equipment

- Aftermarket innovations engineered by Metro Aviation.
- FAA approved and designed to meet all FAA and Type certificate holder specifications.
- Engineered for long service life at a much more reasonable cost.



Side Flood Light System (145M-182)

No. 145M-OPT Optional Equipment for the EC-145

Item No.	Description	Standard	Optional	Models
145M-OPT	General Arrangement			ALL
145M-185	Auxiliary Lighting		X	ALL
145M-129	Window Accessory Bar Mount		X	ALL
145M-180	Supplemental Strobe Light		X	ALL
145M-195	Controllable Search Light		X	ALL
145M-110	Junction Box		X	ALL
145M-164	Cabin Lighting		X	ALL
145M-167	Aft Cargo Lighting		X	ALL
145M-130	Accessory Bar Mount		X	ALL
145M-140	Portable Oxygen Mount		X	ALL
145M-160	Portable Oxygen Mount		X	ALL
145M-190	Pro Pack Mount		X	ALL
145M-176	Zoll Mount		X	ALL
145M-182	Side Flood Lights		X	ALL
145M-183	Tail Flood Lights		X	ALL



Tail Flood Lights (145M-183)
Installed in 100 U.S. Army LUH LAKOTA Aircraft.



Aft Cargo Lighting (145M-167)



In cooperation with the University of Michigan, Metro Aviation designed the first dedicated, U.S.-based and operated EC155B1 Helicopter Emergency Medical System. The system addresses the challenges of a multi-mission, multi-configuration program and the ability for each crew member, regardless of the seating position or clinical function, to control all lighting, medical life support controls and intercom systems independently.




Emergency Medical System

- EMS kit includes a junction box install that will be the central location for electrical distribution for EMS equipment.
- Electrical power is distributed for EMS equipment through a circuit breaker panel.
- Numerous storage installations make medical equipment easily accessible for EMS crews.
- Various light installations illuminate the cabin during operation.
- The floor pallet is constructed with machined aluminum with a hard anodized surface.
- A single patient litter along with a loading system capable of tracking and pivoting is installed.
- The EMS seating arrangement includes five seats. The seats are longitudinal tracking and swivel-capable seats.

No. 155M-100 EMS Kit for the EC-155

Item No.	Description	Standard	Optional	Models
155M-110	Junction Box	X		ALL
155M-111	Circuit Breaker Panel	X		ALL
155M-129	Accessory Bar Mount		X	ALL
155M-133	Fwd Storage Cabinet		X	ALL
155M-135	Aft Storage System		X	ALL
155M-136	Aft Cargo Net		X	ALL
155M-140	Portable Oxygen Mount		X	ALL
155M-164	Cabin Flood Lights		X	ALL
155M-165	Cabin Reading Lights		X	ALL
155M-166	Load Lights		X	ALL
155M-180	Supplemental Strobe Lights		X	ALL
155M-195	Super Nightscanner		X	ALL
155M-197	PROPAQ MD Mount		X	ALL
155M-198	Ventilator Mount		X	ALL
155M-250	Cabin Floor	X		ALL
155M-300	Pivoting Litter System	X		ALL
155M-320	Secondary Patient Restraint		X	ALL
155M-400	Seating	X		ALL
155M-500	Cabin Overhead Module		X	ALL
155M-551	Medical Equipment Rack		X	ALL
155M-640	LOX (526-RTI Aero ORB)		X	ALL
155M-700	Remote Equipment Mount		X	ALL
155M-720	Medical Suction		X	ALL
155M-730	Medical Air		X	ALL
155M-800	Gas Tower		X	ALL
155M-810	IV Support		X	ALL
155M-900	Medical Inverter		X	ALL



Founded in 1982, Metro Aviation, Inc., is internationally recognized for excellence in helicopter aviation.

Our operations began modestly at a single general aviation "T" hangar at Ryan "Metro" Airport in Baton Rouge, LA, and soon thereafter, moved to a 5,000 square foot hangar at the Downtown Airport in Shreveport, LA. Over the past 30 years, Metro Aviation has swelled from three employees to more than 600, with the acquisition of Paradigm Aerospace in Pittsburgh.

In November 2007, on the anniversary of our 25th year in operation, Metro Aviation moved into a state-of-the-art, 160,000 square foot facility. The new facility increased the floor space from the 32,000 square foot previously available in a patchwork of hangars at the Downtown Airport. This facility allows us to integrate all aspects of helicopter equipment design, manufacturing, modification and maintenance under one roof to meet the needs of our clients quickly.

Our facilities include:

- 45,000 sq. ft. Completion and Maintenance Work Floor & Hangar
- 25,000 sq. ft. Production Shop Floor
- 4,500 sq. ft. Avionics Design and Assembly Area
- 3,000 sq. ft. Maintenance Office and Customer Delivery Area
- 3,000 sq. ft. Engine Overhaul Shop
- 5,000 sq. ft. Climate Controlled Inventory Area, in addition to 5,000 sq. ft. Caged Inventory Area
- 3 Climate Controlled Paint Booths
- Production and Engineering Office with a 3-D CATIA and 2-D AutoCAD Capability
- Full Capability CNC Machine Shop
- Overnight quarters for transient pilots
- 10,000 sq. ft. office and administration with the company Operational Control Center, which also serves as the afterhours AOG response, field service and Part 135 operations and records
- FAA-certified Helistop, including two helipads and fuel system
- Conveniently located just ½ mile from Shreveport's Downtown Airport (DTN)
- Paradigm Aerospace in Pittsburgh, specializing in paint finishes, helicopter completions, reliable helicopter maintenance repairs, overhauls and well designed avionics installations.





Flight Operations Division

- Air Medical program management and support services for single or multiple aircraft operations.
- Rotary and fixed-wing operations.
- Committed to financial stability, cost-efficiency, safety and service quality.

Completions and Maintenance Division

- Innovative custom and package helicopter designs, systems and completions for Air-Medical Transport, Law Enforcement, Search & Rescue, Offshore, Utility, Media and Corporate Cabin.
- Helicopter maintenance and overhaul services, including airframe and engine maintenance, overhaul and repair.
- Helicopter aftermarket products.
- VFP and IFR avionics sales, installation and maintenance.
- Custom aircraft services.
- Paradigm Aerospace Corporation (PAC), Authorized Bell Service Center.

Aircraft Sales Division

- Aircraft sales and leasing services

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