

MD EXPLORER®

FEATURES AND BENEFITS

1.0 FEATURES AND BENEFITS

MD Helicopters, Inc. (MDHI) was guided throughout the design and development of the MD Explorer' helicopter by suggestions provided by an international industrial advisory group consisting of turbine helicopter operators/owners from all market segments. It was our common goal to produce a multipurpose twin-engine helicopter setting new standards for performance, affordability, dependability, and safety.

2.0 CERTIFICATION

Initial certification under FAR Part 27, VFR day and night occurred in December 1994, along with the first deliveries. Joint Aviation Authorities (JAA) validation, which led directly to JAR Part 27 Type Certification in all 27 member countries, was awarded in July 1996. Category A certification, which incorporates 45 additional Part 29 design and performance regulations, supports deliveries of a JAR-OPS 3 performance Class 1 aircraft.

- **NOTAR® ANTI-TORQUE SYSTEM** provides lower pilot workload, significantly lower noise levels, increased safety in confined areas, and is less susceptible to service environment damage. It also eliminates traditional, high-maintenance tail rotor/fan gearboxes and drive shafts.
- **CABIN SIZE.** With the largest functional cabin in its light-twin class, the MD Explorer's cabin size equals that of medium-twin class helicopters. Integrated optional avionic systems are easily accessible. Large 52-inch (1.32 m) cabin door openings on both sides of aircraft allow unrestricted ingress/egress.
- **VISIBILITY** is enhanced by the use of MD Helicopters' computer-aided human ergonomics cockpit design and unsurpassed transparency field of view.
- **BEARINGLESS, COMPOSITE ROTOR SYSTEM,** consisting of fewer parts than other fully-articulated systems, requires no lubrication. The system is uniquely integrated to provide unparalleled low vibration levels throughout the flight regime.
- **CATEGORY A** performance certification, consistent with JAR-OPS 3 Class 1 performance operations. (From a confined or elevated heliport, one engine may be lost and the remaining engine provides sufficient power reserves to enable the pilot to have the option of either continuing to fly or return to the point of take-off.) This designation for MD Explorer® with Category "A" certification is the MD 902.
- **HIRF AND LIGHTENING STRIKE PROTECTION** meet the latest FAR/JAR certification requirements.
- **MAINTENANCE** steps, platforms and hand-holds are built-in.
- **NO MAGNESIUM** is used anywhere on the airframe, transmission or engines. Composite airframe is resistant to corrosion in a hostile marine environment.

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- **INTEGRATED INSTRUMENTATION DISPLAY SYSTEM (IIDS)** reduces the size, weight, and life cycle cost of power and airframe related instrumentation. All of the flight data is provided in both digital and analog for ease of instant pilot understanding. Rotor track and balance software is built in. The computer records all exceedances, and provides engine performance trend analysis. All recorded data can be easily downloaded by maintenance personnel.
- **SEATING** flexibility includes 3 aft-facing and 3 forward-facing energy absorbing passenger seats.
- **COLLECTIVE-MOUNTED FADEC** override controls provide the pilot with the option of direct mechanical control of the engine fuel control unit.
- **SINGLE-PILOT IFR** utilizing the state of the art Honeywell Bendix/King EFIS 40 and KFC 900 autopilot.
- **ENERGY ABSORBING** undercarriage, along with the stroking crew and passenger seats, provides protection to 30 gs at 30 ft per second.
- **HEAVY DUTY CARGO HOOK** permits a 3,000-pound external load (optional).

