

MD 600N®

FEATURES AND BENEFITS

1.0 FEATURES AND BENEFITS.

Advanced design for superior performance and value.

The MD 600N® is a light, single-turbine engine helicopter that provides high performance and increased capacity to give the customer greater versatility. All with low operating costs. It flies faster, hovers higher, and provides the agility and exceptional handling for which the MD 500® Series is known. With its advanced NOTAR® anti-torque system, the MD 600N® is a member of an exclusive class of the safest, quietest helicopters in the world.

Greater room and versatility.

A versatile performer, the MD 600N® may be configured for a wide variety of uses. With its wide, double, center-opening doors measuring 157 cm (62 in), both passengers and cargo may be loaded with ease. The aft cabin features 1.83 m (6 ft) of flat floor for carrying cargo, an advantage no other helicopter in its class provides.

A workhorse that can carry 2000 lbs of useful load, this six-bladed helicopter features room for up to seven passengers, in a variety of seating configurations. It also offers other advantages for both pilots and passengers, including new flight instruments that are internally lit, and new seating for versatility.

Enhanced safety and power.

The airframe structure features clean, aerodynamic lines. A rigid, three-dimensional truss-type structure increases crew safety by means of its “A-frame” design.

A Rolls-Royce 250-C47M engine with FADEC powers the MD 600N® and has a thermodynamic rating of 808 shp. The engine is derated to 600 shp for takeoff and 530 shp for maximum continuous operation. Derating provides substantial horsepower at sea level, and reserve power for hot day and high altitude operations.

MD 600N®

FEATURES AND BENEFITS

A revolution in directional control.

The patented NOTAR® (No-Tail-Rotor) anti-torque system has revolutionized helicopter design by eliminating the tail rotor. The system consists of an enclosed variable-pitch fan driven by the main transmission, a circulation control tailboom, direct jet thruster and vertical stabilizers.

In hover flight, the circulation control tailboom provides a significant amount of the required main rotor anti-torque. The thruster provides the remaining anti-torque and maneuverability for yaw control and directional changes.

In forward flight, the vertical stabilizers, in conjunction with thruster, provide the required anti-torque and directional control.

NOTAR® Anti-torque System.

Revolutionary in thinking and design, the NOTAR® system is a patented innovation for helicopter anti-torque control. The NOTAR® system eliminates the tail rotor, and along with it, the negative characteristics associated with the tail rotor. Specifically, the NOTAR® system eliminates the hazards associated with tail rotor strikes, both in flight and on the ground; the objectionable noise found in conventional tail rotor systems; and the vibrations generated by tail rotors which reduce component life, increase maintenance costs and add to pilot fatigue.

Since the NOTAR® system uses low pressure air in the tailboom, this air has less sensitivity to air leaks, pressure loss and low temperatures. With few high speed moving parts and low pressures, field experience has shown the NOTAR® system to be virtually unaffected by rain, snow or erosion.

Studies have shown that the NOTAR® system is less vulnerable to foreign object damage than the tail rotors of conventional helicopters.

NOTAR® is a registered trademark of The Boeing Company.

MD 600N®

FEATURES AND BENEFITS

Best-performing in its class.

With the elimination of the exposed tail rotor, the MD 600N® is fun to fly. It provides superior speed and hovering performance, exceptional handling and payload capability and a smoother ride.

The NOTAR® system also reduces overall helicopter vibrations, which lowers pilot fatigue and increase passenger comfort. In addition, the six-bladed main rotor adds to the smooth performance of the MD 600N®.

NOTAR® system means safety.

U.S. FAA, NTSB data and U.S. Army studies have shown as much as 21% of all accidents are due to tail rotor strikes and loss of tail rotor effectiveness. The NOTAR® system eliminates accidents caused by the exposed tail rotor striking objects in flight and significantly reduces ground incidents with people or equipment.

MD 600N®

FEATURES AND BENEFITS

The quietest helicopters in the world.

NOTAR® system-equipped helicopters are not only the safest in the world; they're also the quietest – up to 50 percent quieter than the competition. This lower noise signature makes the MD 600N® a “good neighbor” when used in areas where noise is objectionable. The MD 600N® exhibits a measured 79.0 dbA (SEL) noise signature during a 500-foot AGL fly-over, with a maximum level of 71.5 dbA, per FAA Appendix J.

Ease of maintenance.

The MD 600N® incorporates improvements to a proven design, and retains the state-of-the-art features that are unsurpassed for design simplicity, safety, reliability and ease of maintenance. The MD 600N® retains the mechanical control system of the MD 500® Series. The same design approach applies to the NOTAR® anti-torque system. The fan is located inside the fuselage, away from hazards such as foreign object damage.

The mechanical simplicity of the six-bladed main rotor system provides high reliability at low opportunity cost. Main rotor blades are retained by an exclusive strap pack system that accommodates main rotor blade flapping and feathering. Fewer parts result in higher reliability. The simple blade retention system has no grease fittings. Individual blades are easily replaced. The new 600-shp-rated main transmission has only four gears and two gear meshes. It is rugged for maximum reliability. The transmission can be changed without removing any other component on the rotor head.

All this adds up to the MD 600N® having the lowest direct operating cost of any helicopter in its class.