



Robinson Selects Rolls-Royce Turbine Engine for R66

At the 2007 Heli-Expo, Frank Robinson provided details on the long rumored R66, a five seat turbine-powered helicopter. Along with ending speculation about what the company's next helicopter would be, Robinson announced the new Rolls-Royce Model 300 engine was selected as the R66's power plant.

Developed in consultation with Robinson, and optimized for the R66, the Model 300 is a modernized derivative of the Rolls-Royce Model 250 line. The new model number coincides with takeoff power rating of the 300-shaft horsepower. This take-off rating is lower than for the Model 250 line, resulting in lower turbine temperatures that will allow a 2,000-hour TBO of the turbine to match the 2,000-hour airframe overall planned for the R66, a minimum standard on all Robinson products.

The Model 300 also features a simplified single-stage centrifugal compressor that, along with a lower acquisition cost, is expected to result in lower maintenance costs.

The R66 will retain many proven design features of current Robinson aircraft including a two-bladed rotor, T-bar cyclic, and the same open cabin configuration found in the R44. Seating will accommodate two adults in the front and three in the back. New to the R66 is a dedicated baggage compartment large enough to hold golf clubs or a professional chain saw and tools.

While a detailed development schedule is still uncertain, the R66 is expected to enter into production in three to five years. The R66's projected price is between \$400,000 and \$1 million, which is more than a fully equipped R44 Raven II, but less than the Bell Jet Ranger.

2006 R44 Sales Surpass 2005

In 2006 Robinson Helicopter Company delivered 652 R44 Raven I, Raven II, and Clipper helicopters, 89 more R44s than the 563 sold in 2005. In addition to the R44s, 97 R22s were delivered for a total of 749 helicopters in 2006.

While total unit sales in 2006 were less than the 806 helicopters delivered in 2005, the increase in R44s, particularly in the R44 Raven II line, pushed last year's revenue above that of 2005.

For 2007, the sales trend appears to be continuing, with 159 orders in the first quarter for the R44 Raven II alone. At the current production rate of 17 helicopters per week; 12 R44 Raven IIs, 3 R44 Raven Is and 2 R22 Beta IIs; Robinson is already sold out through September of this year.

R44 Pilot Named 2006 Doctor of the Year

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R44 Pilot Named 2006 Doctor of the Year

Dr. David Nichols, medical doctor and R44 Raven II pilot, received the 2006 *Country Doctor of the Year* award for his dedicated care of the people of Tangier Island, Virginia, USA. Presented by physician-staffing agency Staff Care, the award recognizes the physician who best exemplifies the spirit, skill, and dedication of America's medical practitioners to rural communities of 20,000 or less.

Dr. Nichols relies on his R44 Raven II for commuting to the tiny island isolated in the middle of the Chesapeake Bay and accessible only by boat or aircraft.



Twenty-seven years ago, Nichols began visiting the island on his days off to treat patients. He promised the island's 700 residents that he would come every week, come hell or high water. Nichols proved



Dr. David Nichols relies on his R44 Raven II to serve the people on Tangier Island, Virginia.

to be a man of his word. In 27 years, rarely has bad weather kept him from his appointed rounds. "If I can't get there by helicopter, I go by boat."

Just as Tangier Island counts on Dr. Nichols, he depends on his Raven II to fly to the island. "The R44 is a wonderful machine. It's made my practice on Tangier a lot easier," said Nichols. He flies from the local airport to his office in White Stone, Virginia to pick up personnel and supplies. Fifteen minutes later, he's on Tangier.

Nichols is as committed to safe flying as he is to the people of Tangier Island. He has taken the Robinson Safety Course three times to keep his piloting skills sharp. The most important thing he's learned? "Always fly within your abilities and within the capabilities of the helicopter," he says.

Nichols, who has over 800 hours in a Robinson, received his helicopter training and has purchased all (This is his fourth Robinson) of his helicopters from Hampton Roads Charter Service, a Robinson dealer in Chesapeake, Virginia.

Following Robinsons Around the World



Helibiz, a Robinson dealer in Australia, safely concluded a helicopter safari of southern Australia. A fleet of 12 R44s participated in the five-day adventure.



Actor Ernest Borgnine, wife Tova, and Bob Beggs toured the RHC factory escorted by Frank Robinson.



HelISAE's R44 Astro lands in front of the lighthouse on the Isle of de Santa Barbara, Brazil.



Alfred Chane-Pane's R22 over a volcano on Reunion Island, located east of Madagascar in the Indian Ocean.



A custom-made weather vane that resembles an R44.

Topeka Police Replaces Bell with R44 Police Ship

Faced with an aging fleet of police helicopters and their high maintenance costs, the Topeka Police Department chose to replace its helicopters with two new Robinson R44 Raven II Police Helicopters.

Replacing a Bell OH58, their first R44 Raven II Police Helicopter is outfitted with state-of-the-art equipment including a FLIR Ultra 8500 thermal imaging camera system with auto tracking, Spectrolab 15-20 million candlepower searchlight, P/A speaker and siren, and with a Motorola 800 MHz radio for police communication. Also, the new R44 includes air conditioning, which Kansas police pilots and observers really appreciate on hot days.

Topeka Police Sergeant and Pilot Mike Boucher along with Robinson Helicopter Company dealer Chuck Schreiber (president of Schreiber-Air, Wichita, Kansas) ferried the helicopter from the Robinson plant in Torrance, Calif., to Topeka.

"I had been eye-balling the R44 for awhile. I flew with Fontana (Calif.) in their R44 at an ALEA training event and was really impressed," said Boucher. "We're pretty excited. We think this is going to be a good ship for us."



Robinson dealer Chuck Schreiber and Topeka Police Pilot Mike Boucher begin ferry flight of R44 Raven II Police Helicopter from Robinson Helicopter factory to Topeka, Kansas.

Topeka covers 35 square miles of flat, prairie that gets hot and humid in the summer. Used primarily as a two-man patrol helicopter, Boucher says "Turbine helicopters are overkill for Topeka. They're high maintenance and consume a lot of gas. We're not doing rescues or long line lifting."

Next on the Topeka Police Department's replacement list is the 30-year-old Schweizer 300C. City officials have approved the purchase of another R44 Raven II Police Helicopter similarly equipped to their first R44. Delivery is scheduled for July 2007, just in time for summer.

Municipalities Benefit from Sharing R44 Police Helicopter

In the heart of Mississippi, police departments in Jackson, Madison and Ridgeland along with the sheriffs in Hinds and Madison counties joined forces to obtain the crime fighting advantages of the R44 Raven II Police Helicopter.

The collective agreement gives each municipality access to the same airborne

police technology normally reserved for large metropolitan areas.

"The simple fact is this helicopter is the most efficient, effective way to support our local law enforcement. We could not have put together this program and expected the same reliability, safety, service, and efficiency with any other helicopter,"

said Coyt Bailey who put together the program. Bailey owns Mercury Aviation, Robinson's dealer and service center in Jackson, that owns, schedules, and dispatches the helicopter.

The helicopter flies six days per week, twelve hours per day, and usually three hours per shift. By selecting a set of municipalities within an approximate 1,700 square mile area, Coyt felt he could optimize the R44's range and abilities. "We've been especially successful in pursuits and in quick searches of large areas."

In just three months, the R44 Police Helicopter responded to 280 calls, participated in 65 pursuits, conducted 68 searches with 42 of those involving the FLIR Ultra 8000 infrared camera, captured 31 fugitives, and performed 230 separate municipality patrols.

"We have been successful in gaining ground officers' support and trust. They appreciate the backup and the quick response time of the Metro One helicopter," adds Bailey.



HID Landing Lights Now Available

Optional 28-volt Xenon High Intensity Discharge (HID) landing lights are now available on new R44 Raven IIs. A 12-volt version for the R44 Raven I and R22 Beta II helicopter is also being developed and is expected to be available on new aircraft delivered in the fall of 2007.

HID bulbs use a high-voltage electrical arc to ignite Xenon gas within the lamp. The lights produce a distinctive blue-tinged white light that generates a brighter, smoother light than filament bulbs. The absence of a metal filament eliminates susceptibility to vibration and

significantly increases bulb life. Also, HID bulbs produce less heat, consume less energy (35 watts versus 100 watts per bulb) and last longer, considerably longer.

Compared to less than 20 hours of use for conventional landing lights, HID lights have an expected operating life of more than 2200 hours, allowing the lights to be on continuously for safety and improved in-flight visibility.

With this in mind, the HID reflectors were optimized for helicopter operations. The two-bulb combination has a high-angled bulb that provides a similar light

pattern to the standard bulb and a low-angled bulb that throws a wide light spread for improved visibility when taxiing.

The installation of HID lights adds one pound to the weight of the aircraft. Due to modifications required in the instrument console, HID landing lights are not available as a field retrofit kit.

Current list price to upgrade to the HID landing lights is \$850 US. For more information, please contact your local Robinson dealer.

U.S. Helicopter Accidents (Five-Year Period 2001 - 2005)

Model	Engine Type	Total	Pilot Error	Mechanical*	Engine	Maintenance	Loss of Power (Unknown Reason)	Undetermined
Robinson R22 Series	Piston	167	144 (86%)	6 (4%)	1 (1%)	5 (3%)	8 (5%)	3 (2%)
Robinson R44 Series	Piston	43	36 (84%)	1 (2%)	0 (0%)	1 (2%)	2 (5%)	3 (7%)
Hughes/Schweizer 269/300 Series	Piston	96	67 (70%)	5 (5%)	1 (1%)	9 (9%)	13 (14%)	1 (1%)
Hughes/MD 369/500 Series	Turbine	69	46 (67%)	4 (6%)	7 (10%)	4 (6%)	6 (9%)	2 (3%)
Bell 47 Series	Piston	68	46 (68%)	6 (9%)	3 (4%)	5 (7%)	7 (10%)	1 (1%)
Bell 206 Series	Turbine	153	112 (73%)	6 (4%)	7 (5%)	9 (6%)	11 (7%)	8 (5%)

*Includes airframe, rotor system, control system, drive system, etc.

Note: The low engine failure rates for the R22 and R44 are attributed to their RPM and power limits being derated to those used in airplane applications.

Source: February 2007 National Transportation Safety Board probable cause reports for Jan. 2001 - Dec. 2005.

