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R44 Raven II Lands at South Pole

(Above) Smith and Brooks enjoy first trip to South Pole. (Right) R44 amongst international flags at South Pole.

An R44 Raven II helicopter piloted by Quentin Smith and co-pilot Steve Brooks landed at the South Pole on January 18, 2005. This was another historic first for the two British pilots, as they were the first to land an R44 helicopter at the North Pole in June 2002.

Smith and Brooks began their journey in Buenos Aires on December 29, 2004 and reached the world's southernmost city, Ushuaia, Argentina, after a week of flying. To arrive at their next destination, Argentina's Antarctica base in Jubany, the pilots had to fly past Cape Horn and across the Drake Passage. Smith described this portion of the journey as "480 miles of the most treacherous weather in the world".

On January 17, after several days of preparation and weather delays, the pilots flew the R44 to within 5 nautical miles of the South Pole. They waited for weather conditions to improve to get approval to land at the South Pole. "Everything in the interior is white, lifeless, and too harsh for life," said Smith. "Flying is dependent on having good contrast in the texture of the snow, weather is critical".

The two pilots built igloos and spent the night in sub-zero weather encased in fog. On the morning of January 18 they received permission to fly to the South Pole. With the temperature -25°C, they built a small igloo around the Raven II's engine compartment. Using an avgas-cooking stove inside the igloo, *(continued on page 4)*

Robinson Sales Soar

Sales at Robinson Helicopter Company, once again, exceed expectations. In 2004, Robinson produced 690 new helicopters, a 63% increase over the 422 helicopters produced in 2003. RHC shipped 234 R22s and 456 R44s, an all time high for the company. To date, Robinson has manufactured over 3,780 R22s and 2,100 R44s.

Moving forward in 2005, strong demand for both R22 and R44 helicopters has led to a large backlog of orders. In response, Robinson plans to increase production from 15 to 20 new helicopters per week. An additional 215,000 square foot new manufacturing building will help facilitate the increased production rate.

The worldwide increase in R22s and R44s also led to a record 1,011 pilots attending the Robinson three and a half day safety course in 2004. The growing interest in the course prompted Robinson to create a new, larger training facility within the new building. Class size was expanded to 65 pilots and the class schedule increased from once to twice per month. RHC anticipates approximately 1,300 students will attend the 2005 safety course.

With all of the recent growth, Robinson has the capabilities to increase production beyond numbers that were achieved in 2004. Frank Robinson, President of RHC says that he expects "2005 to be as good as, or better than 2004."

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Robinson Adds New Facility

(Above) The new facility increases Robinson's manufacturing floor space by 215,000 ft
(Below) Robinson now has the capability to powder coat metal parts, giving them added protection from corrosion.

Robinson Helicopter Company started off the 2005 year in its new production facility. Completed in August 2004, the factory was added to meet the increased demand for Robinson R22 and R44 helicopters. The 215,000 square foot expansion brings the total size of the manufacturing facility to 475,000 square feet and includes more than 100 new machines. Along with the new equipment, Robinson has increased the number of employees to over 1,100.

The new factory is also being used for manufacturing processes previously performed off site such as powder coating, aluminum heat treating, gun drilling, laser and water jet cutting.

Powder coating applies a more durable finish to metal parts and is more effective preventing corrosion than previously used aircraft and marine primers. The new machine provides maximum coating efficiency with complete and uniform coverage on parts with corners or deep recessions.

The largest piece of equipment, the aluminum heat treating furnace, was custom built to RHC specifications.

Custom built to RHC specifications, the aluminum heat treating furnace will allow RHC more control over part production.

Having this process on site reduces turnaround time on hundreds of aluminum parts and provides Robinson with more control over its production schedule.

RHC is also using high technology laser cutting and water jet cutting machines for both tooling and production. These machines cut continuously without switching cutting tools and can easily manufacture prototype parts without the need to create new tooling. This allows engineering to incorporate product improvements more rapidly into production.

With the addition of the new machines and in-house processes, Wayne Walden, VP of Manufacturing, "expects to be more efficient and able to increase production."

Lebanese Flight Training Boosted With R44

Executive officials from the Lebanese Army arrived at Robinson Helicopter Company to take delivery of their first two Robinson R44 Raven II Helicopters. General Nouhad Zebian, Lebanese Air Force Commander, was accompanied by Generals Ghassan Al Mahtar and Antoine Bou Jawdeh, Colonel Gaby el Kahi, and Major Imad Moubarak for a tour of the Robinson facility and acceptance flights in their new aircraft. General Zebian, a certified helicopter pilot, was pleased to have the opportunity to fly one of the two ships that will soon be shipped to Lebanon and immediately integrated into the pilot training program at the Lebanese Air Force Base.

The students at the Rayak Air force Base in Bekka Valley will enhance their military training by learning to fly in a Robinson R44 helicopter during the second year of their program. "We think it is a good machine for students to complete their first 100 hours of flying," General Zebian said of the R44 Raven II. "This will provide students with extensive knowledge and in-flight experience to prepare them for their third year of training with larger, military helicopters."

General Nouhad Zebian takes his first flight in the R44 Raven II.

In the past, the program consisted of a simulator program during the first year followed immediately by in-flight instruction in large military helicopters. This has proven to be very costly with regard to fuel, maintenance and manpower. It is also quite risky to allow an inexperienced student to fly such a large aircraft before having sufficient hours of flight training. Using the R44 helicopters in the program will allow students to become experienced pilots before moving on to fly larger aircraft.

During the months when no military training programs are taking place, the Army will take advantage of the light Robinson helicopters by using them in many other capacities. The helicopters will be used to control border and coastal areas, survey fires, search out illegal drug plantations, provide medical assistance, media access, and VIP transport. If the demands for helicopters in these functions are as high as expected, General Zebian stated he plans to request several more Robinson helicopters to meet the demand.

A Place in History

The new Smithsonian National Air and Space Museum at Dulles Airport, home to some of the most historic aircraft in history, now includes a Robinson R22 and R44 helicopter. Prominently on display in the SW section of the aviation hanger, the R22 and R44 represent two milestones in aviation history.

The aviation hanger of the museum features many space artifacts and over 90 aircraft. Hanging from the ceiling is R22 serial number 0002, the prototype used to obtain the original R22 type certificate from the FAA. This two-person, piston engine helicopter was designed and built in the nineteen seventies with the main focus on reliability and efficiency. Following several years of extensive testing and technical analysis, this prototype R22 received FAA certification in March 1979 and the design entered serialized production. The Robinson R22 quickly became the top-selling civil helicopter in the world, with over 3,780 delivered to date. It holds the major performance records in its weight class including speed and altitude, and was used as the basic design by Robinson to develop the larger R44 helicopter. Aircraft 0002 flew a total of 5,985 hours before retiring to the Air and Space Museum.

Just below the R22 sits the four-person Robinson R44 helicopter flown by British grandmother Jennifer Murray in her record setting trips around the world. In the R44, Jennifer became the first woman to circumnavigate the world by helicopter, traveling 30,000 miles in 97 days. Facing sandstorms, cyclones, and smoking volcanoes in a piston engine helicopter not only landed her in the record books but also raised approximately 500,000 pounds for the Save the Children Foundation. "Today the R44 is known for what it is – great performance, reliability, comfort and 270 degree visibility - the most popular helicopter in the world," said Jennifer Murray of the helicopter, which entered production in 1993 and surpassed the R22 in 1998 to become the number one selling helicopter in the world.

Jennifer Murray at the controls of her R44.

Hong Kong Club Goes Vertical

Tim Tucker (center) with pilots attending first Robinson safety course held in Hong Kong.

The Hong Kong Aviation Club, which existed since the early 1920's, literally had the rug pulled out from under it. The only aviation training program in the small former British territory, most of the club's facilities at Kai Tak Airport were demolished following the 1998 opening of Hong Kong's new international airport on Lantau Island.

The club was forced to move their operations to the Peoples Republic of China's Shek Kong military airport. Here, the club's civilian operations were only allowed on weekends and only when they did not interfere with military activities. As a result, the Club's membership began to dwindle and it began to look like over 80 years of civilian aviation was coming to an end.

It was at this time that a few members turned to the R22. The first R22 in Hong Kong can be traced to 1992, but it wasn't until a small number of club members went to the United States and United Kingdom for helicopter training that the R22 was seriously considered. The R22 would enable the club to operate out of its original facility on the old downtown Kai Tak property. The club took delivery of its first R22 in mid 2003, which became so popular another R22 was ordered in late 2004. Along with two privately owned R22's and an R44, the club has grown to over 40 helicopter pilots, 4 helicopter instructors and their own helicopter pilot examiner.

In early November the Hong Kong Aviation Club sponsored the first Asian R22/R44 Safety Course. Tim Tucker, Chief Instructor of Robinson's Safety Course, presented the 3-day flight and ground training course to the club's pilots. "I was really impressed with the attitude, enthusiasm and just plain enjoyment members have with the R22," said Tucker. Thanks in large part to the R22, civilian aviation is back in Hong Kong and the club's future looks bright.

R44 at South Pole

(continued from page 1) they warmed the engine to +2°C. "The engine started the first time with no difficulty," reported Smith.

The South Pole is 9,300 feet above sea level but to arrive at this destination Smith was required at times to fly the R44 at 14,000 feet density altitude. At the time of landing, however, the conditions were perfect; the temperature was -26°C and it was a beautiful blue sunny day. The two pilots spent some time picture taking and enjoying their accomplishment before beginning their return journey.

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