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R66 Passes Long-Awaited Snow Test

On November 13th, in Spray Lakes, Canada, Robinson's R66 passed the FAA's and Transport Canada's test to allow flight in snow conditions. The stringent test requires extended flight in weather conditions that are difficult to find even in Canada. Robinson has been waiting for the right combination of visibility, temperature, and storm duration for several winters.

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RHC's Chief Pilot Racks Up 20,000 Flight Hours

In August 2015, Robinson's Chief Pilot Doug Tompkins surpassed 20,000 flight hours. The majority of those hours have been in Robinsons testing both production and experimental aircraft.

In the early '90s Tim Tucker, Robinson's Chief Safety Course Instructor,

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Autopilot Now Available on R44



R44 equipped with autopilot and Aspen's 1000H Primary Flight Display.

HE same Genesys Aerosystems HeliSAS (Helicopter Stability Augmentation System) and autopilot that was FAA approved on the R66 earlier this year is now available on Robinson's top selling R44.

The autopilot option works the same in the R44 as in the R66 and offers the same workload-reducing features including basic stability augmentation, heading hold, altitude hold, navigation signal tracking, and approach guidance.

The difference is the autopilot now works in conjunction with Aspen's 1000H Primary Flight Display (PFD). The Aspen PFD fits in a standard 8-hole panel and is a lighter, less expensive display than Garmin's G500H which installs in a larger console. The G500H is only available on the R66 while the Aspen PFD is available on either the R66 or the R44. With either installation, the autopilot controls are located in the avionics stack with additional trim and off buttons installed on the cyclic.

The price for an autopilot installation with an Aspen PFD is \$60,200. A Garmin GTN navigator is also required and is not included in the above price (pricing for GTNs varies by model).

R44 Pilot Rescues Plane Crash Survivors

Pilot Irina Didenko

On March 7th, while returning from a leisurely flight in her R44, famed Russian pilot Irina Didenko received information that an Aeroprakt A22 airplane had crashed on the bank of Siberia's Ob River. She quickly adjusted her course and headed toward the crash. Didenko spotted the ill-fated airplane resting on a snowy land mass completely surrounded by water. The ambient temperature was -12°C. She landed her R44 approximately 10-15 meters from the crash and rescued both occupants who were cold but uninjured.

Didenko won the Belgium Open Helicopter Championship in 2013, the German Open in 2014 and a bronze at the FAI World Helicopter Championship in 2015. She is one of the few women pilots in Russia and the only woman pilot in Siberia.

Former Olympian Flies R44



Olympian Thomas Morgenstern with Robinson dealer Wolfgang Pitterle of P&B Helitrade.

Ski-jump champion and R44 pilot Thomas Morgenstern won the junior division at this year's 15th FAI World Helicopter Championships. Morgenstern, 29, a two-time World Cup champion and three-time Olympic gold medalist took up helicopter flying after retiring from ski jumping. He earned his private pilot certificate and purchased his R44 from P&B Helitrade of Austria.

R66 Brings Assistance to Cyclone Victims



Vanuatu Helicopter's R66 in a village after the cyclone.

R44/R66 tourist operator, Andy Martin of Vanuatu Helicopters, the only helicopter operator on the remote South Pacific Vanuatu archipelago used his R66 to help victims after a devastating cyclone.

On Friday, March 13th, tropical cyclone Pam, which was compared to a category 5 hurricane, slammed down on Vanuatu for almost 24 hours. The devastating storm tore through villages leaving residents without food, water or any means of communication. Martin immediately contacted the National Disaster Management Office offering his helicopter services. The first to provide air support, Martin used his R66 to deliver assessment teams from different aid agencies and satellite phones to the worst hit areas. He transported seriously injured victims to hospitals and delivered equipment, supplies and shelter kits wherever needed. Martin logged over 130 hours during the initial relief effort and continues to offer his services in the ongoing recovery.

Russians Set Formation Flying Record

On June 6, 2015, twenty-five Robinson helicopters piloted by private Russian pilots set the Guinness World Record for formation flying when they formed a diamond shape over Bunkova Village in Russia. Led by Evgeny Kabanov, the official flight time was twenty-six minutes and one second.

The fleet consisted of seven R66s and eighteen R44s; training for the record flight took over a year and included two practices every weekend, weather permitting.

The previous record belonged to Italian military pilots who flew sixteen Breda Nardini NH-500-E helicopters in 2005.



Twenty-five Robinson helicopters in a diamond formation set a new Guinness World Record.

R66 Passes Long-Awaited Snow Test

The test was conducted during a heavy snow storm with low visibility at freezing temperatures. These conditions have been historically shown to produce worst-case snow accumulation at the helicopter turbine engine intakes. The test was flown by Canadian-based pilot Marty Charbonneau and consisted of a 100% engine ground run for 20 minutes, IGE hover for 5 minutes, and 60 minutes of cruise flight. Robinson flight test engineer Dan Callinan and Transport Canada certification engineer Greg Oucharek monitored performance using pressure instruments and a live video feed from a camera mounted near the engine air filter.

Passing the test requires that snow build-up not block the engine air intake or adversely affect engine operation. Despite the extreme weather conditions, no snow build-up occurred in the engine intake area and no decrease in engine performance was detected.

Passing the test is significant as it allows Robinson to eliminate the existing limitation in the R66 Pilot's Operating Handbook which prohibits flight in falling or blowing snow.

Robinson thanks Canadian dealer Eric Gould of Aerial Recon and his staff who were instrumental in facilitating the joint FAA/Transport Canada test.

Robinson Upgrades R66 Police Helicopter



R66 Police Helicopter cockpit shown with standard and optional equipment.

The R66 Turbine Police Helicopter with the FLIR Systems Ultra 8000 Infrared Camera and the Spectrolab SX-7 searchlight has been reconfigured to include a multitude of upgrades. The 4-place police helicopter comes standard with a Garmin G500H Primary and Multifunction Display System, a Garmin GTN 635 touch-screen navigator, and a Garmin GTR 225A COM radio. Also standard are Boland's 10.4" LCD monitor and two 6-channel audio controllers. With the new G500H panel, the aircraft can be flown from either seat and dual audio controllers allow for independent radio monitoring and transmitting by the pilot or copilot.

Robinson also expanded the R66 Police options list to include the Genesys Aerosystems HeliSAS autopilot, Garmin's GTN 650/750 navigators, Free Flight's RA-4500 radar altimeter, Technisonic's TDFM 9000 radio and AeroComputers' moving map system with View Sync 3D capability.

Base price for the R66 Police Helicopter is \$1,185,000.

Robinson Hosts USHST Meeting



Flight safety instructors & accident investigators

In August 2015, Robinson hosted the U.S. Helicopter Safety Team's (USHST) Executive Committee meeting along with the USHST Training Working Group's two-day conference.

The USHST is a team of industry and government leaders working to improve civil helicopter safety in the United States. Using the expertise of helicopter safety professionals from across the country, the USHST develops fact sheets, tool kits, presentations and videos aimed at enhancing safety for pilots, instructors, mechanics, and all others in the helicopter community.

Tim Tucker, RHC's Chief Instructor is a member of both the Executive Committee and the Training Working Group. Prior to the conference, Tim introduced the Group to the "Vuichard Recovery" a recovery technique used in the Vortex Ring State otherwise known as settling with power. Robinson is a strong proponent of the Vuichard Recovery so after Tim's PowerPoint presentation, he and Doug Tompkins, Robinson's Chief Pilot, took each attendee for a flight in an R66 to demonstrate why the technique is the preferred method of recovery. The Training Working Group unanimously voted to endorse the Vuichard Recovery.

For more on the Vuichard Recovery, see *Flying Through the Vortex* by Tim Tucker, Rotor & Wing Magazine September 2015.

To learn more about the USHST or the International Helicopter Safety Team, go to www.ihst.org. continued from page 1

RHC's Chief Test Pilot Racks Up 20,000 Hours

contacted Tompkins, who he knew to be an excellent pilot, and asked him to teach Robinson's once-a-month Pilot Safety Course. During that same time period, Robinson's R44 was in the final stages of development and Frank Robinson needed a test pilot (other than himself). Although not particularly interested in the job, Doug was persuaded and in May 1991 joined Robinson full time.

Test pilots are a special breed; cool under pressure, confident, and willing to push the envelope. Experimental flying is about testing the limits of the aircraft.



Doug Tompkins

Cutting the engine to idle power at 14,000 feet and waiting one very long second before lowering the collective, low-G pushovers (abrupt forward input of the cyclic) and height velocity (HV) diagram maneuvers are a few of the very dangerous, but necessary tests required during certification.

Ideally aircraft perform as expected, but a good test pilot must always be prepared for the unexpected. Tompkins was the primary test pilot for the R44 and the R66 and has had his share of the "unexpected." During a routine test with the R44, the cooling fan exploded; shrapnel sliced through a push-pull tube eliminating all pedal control. As the aircraft developed a severe nose-right yaw, Doug remained calm, opted not to enter auto rotation and instead executed a running landing on a vacant street. More recently, while testing the limits of the R66 Marine, a fully inflated float broke away from the skid and began beating the side of the aircraft, smashing a rear window and narrowly missing the main rotor blades. Cool and in control, Doug managed to land safely.

When he's not doing experimental test flying, Doug oversees the company's production test flying. He occasionally teaches the flight portion of Robinson's safety course and is always on hand to provide his expertise whenever needed. Doug holds a commercial rating, an ATP rating, a Certificate of Authority from the FAA, is a member of the Society of Experimental Test Pilots and is a Designated Pilot Examiner.

Meet Two High-Time R22/R44 Pilots

Robinson would like to recognize two high-time and exemplary R22/R44 pilots, John Huddlestone and Geoff Stevens.

Geoff Stevens has been an instructor at Heli-College Canada Training Inc., in Langley, British Columbia since 1994. He has an estimated 22,100 hours instructing in



Geoff Stevens

Robinsons, all accident, incident and violation free.

John Huddlestone has nearly 40 years of flying experience and has accumulated 15,400 hours in Robinsons with 6800 hours in R22s and



John Huddlestone

8600 hours in R44s. He holds ratings on at least 10 different types of helicopters. Huddlestone owns Helicopter Charter and Training in Port Elizabeth, South Africa.

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OR CURRENT RESIDENT

