On 15 March, Russia issued its type certificate for the R66 and ten weeks later on 31 May, Transport Canada followed suit.

This issue features:
- Robinson Celebrates 40 Years ...................................p2
- R44 Owner Rescues Trapped Moose ..........................p3
- R66 Serves as Pediatric Air Ambulance .....................p3
- U.S. Helicopter Accidents 2001-2010 ........................p4
Frank Lands on Walk of Fame

While the Hollywood Walk of Fame celebrates the stars of stage and screen, the Aviation Walk of Fame near Los Angeles International Airport (LAX) pays tribute to preeminent figures of aviation and aerospace.

In May, a plaque commemorating Frank’s contribution to aviation was added to the walk, which is on Sepulveda Boulevard just north of LAX.

Inducted with Frank were notable figures such as aerospace engineer Burt Rutan, designer of Voyager, the first plane to circumnavigate the globe without stopping or refueling.

Established in 1995, past honorees include aviator Howard Hughes, test pilot Chuck Yeager, and astronaut Sally Ride.

Robinson Helicopter Celebrates 40 Years

Forty years ago, Frank Robinson, unable to interest employers in his idea for a small affordable helicopter, quit his job at Hughes Helicopters and started Robinson Helicopter Company (RHC) in his Palos Verdes, California home. He, along with a handful of employees, designed and built the two-seat, piston-powered R22, a design that would become the blueprint for future Robinson models. FAA certification for the R22 came in March 1979. Later that same year, with a backlog of more than 500 orders, Robinson moved from a small hangar to a larger 44,000 sq. ft. manufacturing facility and began filling orders for the low-cost $40,000 helicopter.

In the early 1990s, as the market for small affordable helicopters expanded, Robinson introduced the four-seat R44. The popularity of the R44 grew, and by the late 1990s Robinson Helicopter Company was the world’s leading producer of light helicopters. The R44 became and remains the company’s best-selling helicopter.

In the late 1990s, recognizing a growing void in the industry for a mid-size, economical turbine helicopter, Robinson began developing the five-seat R66. In 2010, the R66 Turbine received FAA certification, and Robinson again expanded its manufacturing, adding a third production line. Today, RHC occupies twenty-eight acres on the Torrance Airport, employs over 1300 workers, and has delivered more than 10,000 helicopters worldwide.

Frank Awarded Guggenheim Medal

outstanding achievements in aeronautics. Orville Wright was the first recipient; other recipients include Charles Lindbergh, William Boeing, and Igor Sikorsky. The award is bestowed by the American Society of Mechanical Engineers, the Society of Automotive Engineers, and the American Institute of Aeronautics and Astronautics.

Robinson earned a BSME degree from the University of Washington in 1957. He is a Technical Fellow of AHS International, a full member of the Society of Experimental Test Pilots, an honorary member of Helicopter Association International, and a member of the U.S. National Academy of Engineering.

Among his numerous honors are the 1990 and 1991 AHS International’s Igor Sikorsky International Trophy; the 1997 Society of Experimental Test Pilot’s Doolittle Award; Aviation Week’s Laurels Hall of Fame Legend in 2000; the 2001 Fédération Aéronautique Internationale’s Paul Tissandier Diploma; the 2004 Southern California Aeronautical Association’s Howard Hughes Memorial Award; and the 2011 Living Legends of Aviation’s Lifetime Aviation Engineering Award.

Congratulations Frank.

2014

RHC Calendar
Photos Wanted

Send in your photos for the Robinson 2014 calendar. Please submit high resolution images (TIF, JPEG, or PDF files. No BMP files please).

Submit as many photos as you wish. Include where the photo was taken and the photographer’s name. Deadline for photos is 30 September 2013.

Email pr@robinsonheli.com. We look forward to hearing from you.
Canada & Russia Certify R66

After receiving the long-awaited news from the IAC AR (Russia’s FAA equivalent), Robinson immediately exported twenty-two R66 helicopters to Russia. Another eighteen R66s will be delivered to Russia later this year.

Thirteen U.S. registered R66 helicopters are currently operating in Canada and thirteen Canadian registered R66s will be delivered by the end of the year.

Certification in both countries reached a standstill until the FAA’s ELOS (Equivalent Level of Safety) finding, which effectively removed an exemption in the R66’s original type certificate.

During certification of the R66, the FAA granted Robinson an exemption from a regulation requiring hydraulic control systems be designed with an alternate or redundant system in case of failure. The exemption was granted based on the hydraulic system’s simple design and proven history (the R44’s hydraulic system is the same and has accumulated millions of flight hours without incident). In February 2013, after witnessing tests that demonstrated a pilot could easily maintain control of the aircraft in the event of a hydraulic failure, the FAA issued the ELOS.

Eric Gould of Aerial Recon, a longtime Robinson dealer in Canada, believes the R66 will give commercial operators a boost to their bottom line. “Having run a commercial company with over sixty aircraft, I believe that a more efficient and reliable turbine helicopter with lower annual operating costs is exactly what the industry needs right now.”

To date, twenty countries have certified the R66, including the U.S., Australia, Brazil, Canada, Japan, Russia, and South Africa. There are close to 400 R66 helicopters operating worldwide.

R66 Serves as Pediatric Air Ambulance

“If the mountain won’t come to Muhammad then Muhammad must go to the mountain” describes the doctors at the Cardiovascular Foundation of Colombia (FCV) hospital who use an R66 to reach sick newborns and infants in remote areas.

The back seat of the R66 was replaced, per FAA Form 337, with a bench, an incubator, and other essential equipment.

Previously, ground transportation from outlying medical facilities to the FCV took from four to nine hours. For some infants that was too long. The R66 reduced the average transit time to about an hour.

R44 Owner Rescues Trapped Moose

On 22 February 2013, Oleg Krikun was flying an R44 over Russia’s frozen Arantur Lake toward the town of Yugorsk when he noticed something unusual on the lake’s surface. As he descended to get a closer look, he observed the head of a moose struggling to stay above the icy water.

The female moose had apparently fallen into the freezing water after stepping onto fragile ice several hours earlier. Krikun quickly returned to his base to get help. He and two volunteers, Yuriy Zubenko and the R44’s owner Viktor Zavalypich, flew back to help the distressed moose.

Using clamps and straps, the three men pulled the 1300 lb (600 kg) moose from the freezing lake. After the moose was finally on solid ground, the rescuers massaged her cramped body and used their jackets to warm her. An hour later, the uninjured moose stood up and sauntered back into nearby woods.

Medical personnel transfer baby to R66

The pediatric air ambulance helicopter program was the brainchild of the hospital’s CEO Dr. Victor Raúl Castillo Mantilla. Prior to the availability of the R66, comparable helicopters were too expensive, but the R66’s purchase price and operational costs fit comfortably within the hospital’s budget. The power of the R66 was another important consideration due to the hospital’s location in Bucaramanga, a city at 3100 feet (945m) elevation in the Colombian Andes.

The program’s chief pilot is Jaime Lozano, a former Colombian Army pilot. Lozano has thirteen years of experience in larger turbines and was initially hesitant about flying the R66. He quickly overcame his skepticism and was pleasantly surprised by the R66’s performance and handling characteristics. Since December 2012, Lozano has completed more than fifty missions for the pediatric air ambulance program.
R66 Flies to North Pole

During the twelve-day journey, they logged seventy-five hours, flying 7170 nautical miles in arctic conditions. Temperatures varied, dropping to -30° Celsius. To prepare for the trip, the R66 was outfitted with an auxiliary fuel tank and bear paws, along with an extra battery and heater to start the engine. Neither the heater nor the battery were required. By all accounts, the R66 performed well in the harsh arctic conditions, exceeding the crew’s expectations.

U.S. Helicopter Accidents Ten-Year Period 2001-2010

<table>
<thead>
<tr>
<th>Model</th>
<th>Engine Type</th>
<th>Total</th>
<th>Pilot Error</th>
<th>Mechanical</th>
<th>Engine</th>
<th>Maintenance</th>
<th>Loss of Power for Unknown Reasons</th>
<th>Undetermined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robinson R22 Series</td>
<td>Piston</td>
<td>299</td>
<td>264 (88%)</td>
<td>10 (3%)</td>
<td>2 (1%)</td>
<td>8 (3%)</td>
<td>15 (5%)</td>
<td>0</td>
</tr>
<tr>
<td>Robinson R44 Series</td>
<td>Piston</td>
<td>129</td>
<td>113 (88%)</td>
<td>4 (3%)</td>
<td>2 (2%)</td>
<td>2 (2%)</td>
<td>8 (6%)</td>
<td>0</td>
</tr>
<tr>
<td>Hughes/Schweizer 269/300</td>
<td>Piston</td>
<td>165</td>
<td>124 (75%)</td>
<td>8 (5%)</td>
<td>9 (5%)</td>
<td>9 (5%)</td>
<td>17 (10%)</td>
<td>2 (1%)</td>
</tr>
<tr>
<td>Hughes/MD 369/500 Series</td>
<td>Turbine</td>
<td>121</td>
<td>79 (65%)</td>
<td>9 (7%)</td>
<td>14 (12%)</td>
<td>7 (6%)</td>
<td>10 (8%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Bell 47 Series</td>
<td>Piston</td>
<td>104</td>
<td>73 (70%)</td>
<td>9 (9%)</td>
<td>5 (5%)</td>
<td>8 (8%)</td>
<td>8 (8%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Bell 206 Series</td>
<td>Turbine</td>
<td>246</td>
<td>193 (78%)</td>
<td>6 (2%)</td>
<td>8 (3%)</td>
<td>19 (8%)</td>
<td>13 (5%)</td>
<td>7 (3%)</td>
</tr>
</tbody>
</table>

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

Source: April 2013 National Transportation Safety Board probable cause reports January 2001 - December 2010