ARCHIVED REPORT

For data and forecasts on current programs please visit www.forecastinternational.com or call +1 203.426.0800

Kamov Ka-60/62

Outlook

- First flight of the Ka-62 took place in April 2016
- Service entry is planned for 2020
- No forecast is issued, pending further information

Orientation

Description. Twin-turboshaft-powered transport / utility helicopter.

Sponsor. Russian Helicopters, the parent firm of Kamov and Progress Arsenyev.

Status. Development of the Ka-62.

Total Produced. Through 2017, one Ka-60, one Ka-60U, and two Ka-62s were produced. One Ka-62 static test article was also built.

Application. Civil applications include transport, search-and-rescue, utility, emergency medical services (EMS), law enforcement, and energy and mining support. Military applications include troop transport, battlefield support, border patrol, pilot training, and forward observation.

Price Range. Ka-62, approximately \$10 million in 2018 U.S. dollars.

Page 2 Rotorcraft Forecast

Kamov Ka-60/62



Ka-62

Source: Russian Helicopters

Contractors

Prime

Kamov	http://www.russianhelicopters.aero, 8A Ulitsa 8 Marta, Lyubertsy, Moscow Region, Russian Federation, Tel: + 7 495 700 34 04, Fax: + 7 495 700 30 71, Prime
Progress Arsenyev Aviation Company	http://www.russianhelicopters.aero, 5 Ploshchad Lenina, Arsenyev, Primorsky Krai, Russian Federation, Tel: + 7 42361 45232, Fax: + 7 42361 45591, Prime

Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; rich.pettibone@forecast1.com

Technical Data

(Ka-62)

Design Features. The twin-turbine Ka-62 is equipped with a single main rotor with five blades. The helicopter also employs an 11-blade Fenestron tail rotor. The airframe is composed of more than 50 percent polymeric composite materials. The Ka-62 is fitted with retractable tricycle type landing gear.

The Ka-62 has side-by-side seating for a pilot and a copilot/passenger. As many as 15 passengers can be accommodated in the cabin, which is accessible by sliding doors on each side of the fuselage.

	<u>Metric</u>	<u>U.S.</u>
Dimensions		
Length (with main rotor turning)	15.70 m	51.51 ft
Main rotor diameter	13.80 m	45.28 ft
Tail rotor diameter	1.40 m	4.59 ft

Kamov Ka-60/62

Weight Max takeoff weight Max internal payload Max external payload	6,500 kg 2,000 kg 2,500 kg	14,330 lb 4,409 lb 5,511 lb
Performance Cruise speed Max speed Operational ceiling Range	290 km/h 308 km/h 5,700 m 770 km	157 kt 166 kt 18,701 ft 415 nm

Propulsion

Ka-62 (2) Safran Ardiden 3G turboshaft engines rated 1,324 kW (1,776 shp) each.

Variants/Upgrades

Ka-60. Military transport. First flight of a prototype occurred in 1998. The standard configuration is capable of accommodating up to 14 infantry troops.

Optional armament on the Ka-60 includes two sevenround 80mm rocket pods or two 7.62mm or 12.7mm gun pods. The armament is suspended on detachable pylons installed on the fuselage to the rear of the cabin doors.

Ka-60U. Trainer version configured with dual navigation and pilot displays. A Ka-60U prototype was completed in 2003 and made its initial flight in September 2007. It crashed during a test flight in June 2010.

The Ka-60 and Ka-60U prototypes were each powered by Saturn RD-600V turboshaft engines.

Ka-62. Civil passenger transport version of the Ka-60. The Ka-62 can accommodate one or two crew and up to 15 passengers. The helicopter is powered by a pair of 1,324-kW (1,776-shp) Safran Ardiden 3G turboshaft engines.

The Ka-62 is equipped with the KBO-62 integrated avionics system from the Russian company TAV. The transmission of the Ka-62 is supplied by the Austrian company Zoerkler Gears. Zodiac Aerospace of France manufactures the helicopter's fuel system.

Program Review

Background. The Ka-60 was selected over the Mil Mi-36 in 1982 to be the new multipurpose transport/utility helicopter for the Russian military. Development of the Ka-60, however, was impacted by changes in program priority and funding dictated by the Russian Ministry of Defense.

Commercial Development

In 1992, with a grant from the Russian Program for Civil and Military Aviation, development began of a commercial variant of the Ka-60, designated Ka-62. Designed to compete with the Eurocopter AS 365 and the Sikorsky S-76, the Ka-62 was envisioned as a low-cost, reliable, low-maintenance helicopter. A Ka-62 mockup was displayed at the Moscow Air Show in September 1993. Another mockup was displayed at the HeliRussia exhibition in May 2012.

Initial flights of the Ka-60 and Ka-62 were intended for 1993 and 1995, respectively. Neither target date was met, however. Program delays for the Ka-60 were caused in part by sporadic funding of the program

throughout the mid-1990s and late delivery of critical components by subcontractors. Initial flight of the Ka-60 did not occur until December 1998.

Meanwhile, construction of a Ka-62 prototype began in 1990, but this helicopter was not completed. A Ka-62 static test prototype, apparently utilizing a different airframe, was displayed in August 2013 at the MAKS 2013 air show. An initial flight test prototype made its first flight in April 2016.

Ardiden Power

In May 2011, Russian Helicopters placed an order with the French company Turbomeca for 40 Ardiden 3G turboshaft engines for use on the Ka-62. The order was the first under an April 2011 agreement between the two companies for the supply of at least 308 Ardiden 3G engines for installation on Ka-62 helicopters.

Turbomeca is currently known as Safran Helicopter Engines.



Page 4 Rotorcraft Forecast

Kamov Ka-60/62

Timetable

Month	<u>Year</u>	Major Development
Dec	1998	First flight of Ka-60
Sep	2007	First flight of Ka-60U
Aug	2013	Ka-62 prototype displayed at MAKS 2013
Apr	2016	First flight of Ka-62
-	2020	Service entry of Ka-62 planned

Forecast Rationale

The initial Ka-62 flying prototype first took to the air in April 2016. This flight was essentially a hover test. In May 2017, the prototype made its first horizontal flight. Including this helicopter, Russian Helicopters intends to use three flying prototypes in the Ka-62 flight test program. The company plans to have all three prototypes flying by the end of the first quarter of 2018.

Russian certification and service entry of the Ka-62 are scheduled for 2020. Approval by the European Aviation Safety Agency (EASA) will also be pursued, thus potentially opening up sales opportunities in the lucrative EU market to the new helicopter.

Production plans call for up to 35 Ka-62s to be built annually. Capacity could be expanded should market demand warrant a higher build rate.

In 2012, the Brazilian company Atlas Taxi Aereo signed a contract for seven Ka-62s plus seven options. In 2013, the Colombian operator Vertical de Aviacion signed an agreement for five Ka-62s. However, the current status of either deal is uncertain. Both operators had intended to use their Ka-62s in oil and gas operations.

The Ka-62 is designed for use in a wide range of roles, including passenger and cargo transport, offshore energy operations, emergency medical services, law enforcement, and search-and-rescue. Its sales competitors include other intermediate twins such as the Airbus Helicopters H160, the Leonardo AW139, and the Sikorsky S-76D.

The Russian Aerospace Forces may acquire the Ka-62, but would only procure a Ka-62 version built solely with Russian components. The current Ka-62 model incorporates various Western components (such as Safran Ardiden 3G engines) that would need to be swapped for Russian equipment.

One possibility for a Russian powerplant for the Ka-62 could be the Saturn RD-600V. This engine was used to power prototypes of the Ka-60 and Ka-60U military utility/training helicopters. The Ka-62 was derived from the Ka-60 design. Development of the Ka-60 was essentially suspended in 2010.

Pending further news, no forecast is presently issued for the Ka-60 or Ka-62.

* * *