

R44[®] RAVEN II NEWSCOPTER

SPECIFICATIONS

WEIGHTS

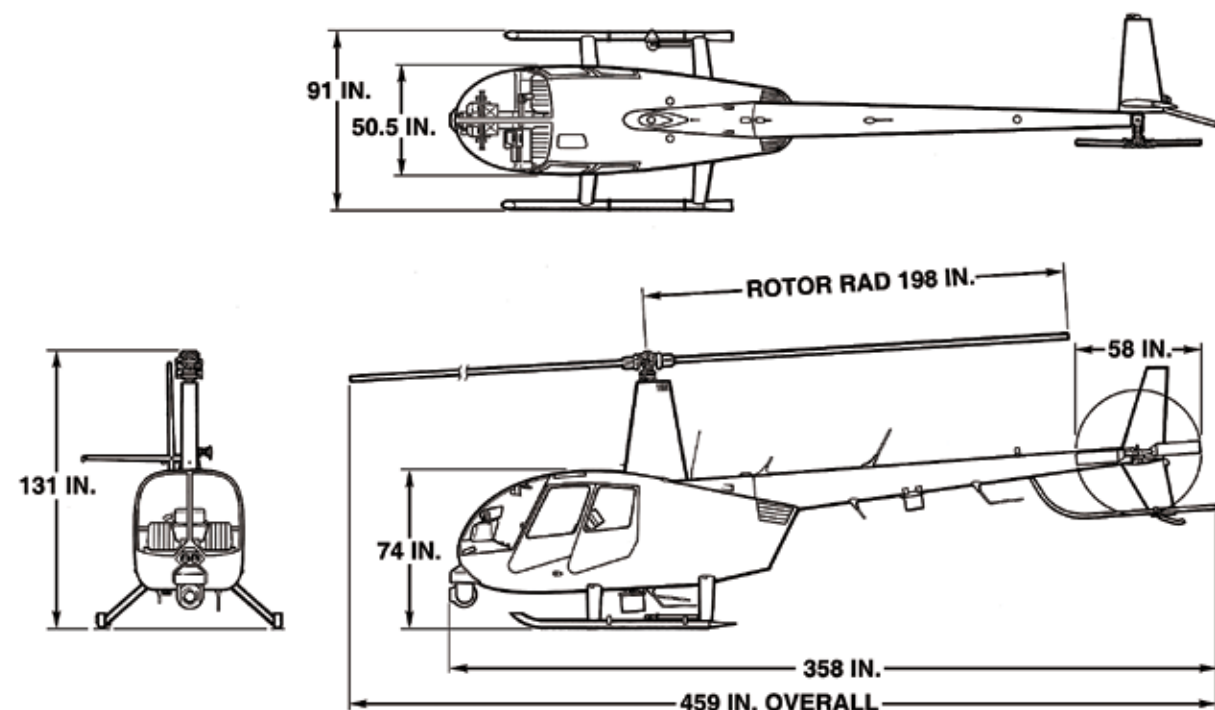
- Gross Weight:
2,500 lb
- Empty Weight (include oil & avionics):
1,506 lb
- Standard ENG Package:
162 lb
- Standard Fuel (30.6 gal):
184 lb
- Auxiliary Fuel (18.3 gal):
110 lb
- Passengers and Cargo with Full Fuel:
648 lb

PERFORMANCE

- Cruise Speed:
Up to 130 mph (113 kts)
- Max. Range:
Over 300 miles (261 nm)
- Hover Ceiling IGE @ 2500 lb:
8,950 ft
- Hover Ceiling OGE @ 2300 lb:
7,500 ft
- Hover Ceiling OGE @ 2500 lb:
4,500 ft
- Max. Rate-of-Climb @ 2500 lb/6000 ft:
Over 1000 fpm
- Max. Operating Altitude:
14,000 ft

ENG CAMERA

- Format:
2/3", 1080i, IT, 50 Hz or 60 Hz
- Gain (dB):
0 to +18dB
- Effective Pixels:
1920 (horizontal) x 1080 (vertical)
- Sensitivity:
2000 lux @ f8
- Video Output:
HD SDI
- Zoom Lens:
Canon HJ22 x 7.6
- Zoom Ratio:
22x (44x with extender)
- Filters:
3000K, 5600K, 5600K + 1/32 ND



ROBINSON HELICOPTER COMPANY

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R44[®] RAVEN II NEWSCOPTER



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**THE BROADCAST
TECHNOLOGY YOU NEED
... IN THE HELICOPTER
YOU WANT.**

INTEGRATED DESIGN

The **ROBINSON R44 RAVEN II NEWSCOPTER** is a fully integrated Electronic News Gathering (ENG) helicopter capable of transmitting, receiving, and recording live audio and video in breathtaking High Definition (HD). Built to meet the demands of the global TV news industry, the Newscopter's ENG equipment is designed, tested, and FAA-approved to optimize work flow and provide an airborne, broadcast-quality studio.

Front and center is an aerodynamic nose-mounted, gyro-stabilized Ikegami HD digital camera system that captures the news in striking detail and vivid color. Additional standard ENG gear includes in-cabin talent and tail-mounted micro cameras, video switcher, Geneva audio system, four color video monitors, and a complete microwave transmission package.

Well equipped, yet affordable, the R44 Raven II Newscopter does the job for half the cost of larger turbine ENG helicopters. The Newscopter's economical purchase price and low operating costs provide small TV stations access to state-of-the-art news gathering technology, and enable broadcasters in large media markets to field multiple ENG helicopters for more extensive coverage.

PERFORMANCE

In today's 24/7 news industry, being first on-scene and broadcasting live reports are how TV stations achieve larger audiences, better ratings, and higher ad revenues. The R44 Raven II Newscopter is designed for just this mission.

Lycoming's IO-540 engine delivers a cruise speed of up to 130 mph to get the R44 Newscopter on scene fast. A fully-fueled Newscopter provides up to three hours of flight endurance for continuous live news coverage. During extended stays over a breaking story, the Newscopter's hydraulic controls reduce pilot workload and supply precision handling. Aerodynamic rotor-blade tip caps lower flyover noise for a less intrusive neighborhood presence.

While the Newscopter's performance is impressive, the helicopter's reliability and safety record is equally remarkable. The R44 Raven II Series operates for 100 hours between inspections, and up to 2,200 hours or 12 years between overhauls. All R44s are backed by the Robinson Helicopter Company two-year/1000-hour limited aircraft warranty. Reliability also results in safety. NTSB statistics confirm the R44 helicopter has fewer accidents due to aircraft or engine failure than other light helicopters.

ENG EQUIPMENT

GYRO-STABILIZED HD DIGITAL CAMERA SYSTEM

Light, compact, and entirely digital, the five-axis gyro-stabilized camera system features a full-bandwidth Ikegami 1080i HD Camera matched with a Canon HD Series 22x (44x with extender) zoom lens for crisp images. Camera and lens are housed in a rugged nose-mounted gimbal that rotates 360° to track subjects and to film from any angle.

CENTRALIZED ENG WORKSTATION

The camera is operated through a full-function, laptop console located in the rear passenger/ENG workstation compartment. Along with all of the camera functions, features include joy stick control for X, Y, and Z-axis movements, snap-zoom, transmit, intercom, and video switches.

An integrated control panel next to the camera operator gives ready access to an FM radio, Geneva audio system, video switcher, and microwave controls. Within easy reach is an on-air TV tuner and equipment such as AM/FM receiver, scanner, or video recorder.

Camera images display on an eight-inch HD monitor that together with a five-inch monitor lets the camera operator view and transmit live or prerecorded material. The video switcher allows rapid on-air selection between the gimbal camera and micro "lipstick" cameras located on the aft stabilizer and inside the cabin.

ANALOG, DIGITAL OR HD MICROWAVE BROADCAST EQUIPMENT

A BMS 2/2.5 GHz analog transmitter is standard. For stations ready to receive digital and HD transmissions, optional digital COFDM transmitter and HD transmission packages are available. The standard omni-antenna (6 dB gain) transmits up to 40 miles. An optional directional antenna broadcasts between 60 and 90 miles. A GPS data modem that allows the station's receive antenna to track the Newscopter may be purchased as an add-on. Optional microwave receivers come in analog or digital. A receiver enables the R44 Newscopter to acquire and record transmissions, or to act as a mobile relay station.



ONBOARD REPORTING AND MORE

In the forward cabin, an adjustable micro camera, talent light, second FM radio, and transmit switch enable live newscasts by a front seat reporter. Two flat-screen, five-inch monitors above the pilot's instrument console simultaneously display the on-air broadcast and the gimbal camera's image stream for viewing by pilot and reporter.

Additionally, the pilot, reporter and camera operator have separate audio panels to monitor or to transmit independently on any of the COMM, FM and AM/FM radios, scanner, or TV tuner.

