

Bell 430 *Additional Information*

economics

(2003 Bell 430)

HOURLY DIRECT OPERATING COSTS

- Fuel (\$7.38 per gal): \$649.44
- Maintenance labor (at \$95 per flight hour): \$249.85
- Parts, airframe, engine, avionics: \$235.90
- Inspections, component overhauls, life limited parts: \$150.66
- Engine restoration: \$297.26
- Misc. expenses
 - Landing and parking fees: \$10
 - Crew expenses: \$44.24
 - Supplies & catering: \$8.04

TOTAL VARIABLE FLIGHT COSTS PER HOUR: \$1,645.39

- Average speed: 122 knots
- Cost per nautical mile: \$13.49

ANNUAL FIXED OPERATING COSTS

- Crew salaries (estimates)
 - Captain: \$107,000
 - Copilot: \$62,000
 - Benefits: \$50,700
- Hangar rental (typical): \$6,300
- Insurance (insured hull value = \$2.2 million)
 - Hull (2.25% of value): \$49,500
 - Single limit liability: \$22,000
- Recurrent crew training: \$27,800
- Aircraft modernization (avg per year): \$35,000
- Navigational chart service: \$398
- Refurbishing: \$9,000
- Computer maintenance program: \$3,700
- Aviation weather service (typical): \$700

TOTAL FIXED COST PER YEAR: \$374,098

ANNUAL BUDGET-BASED ON 48,000 NM

(Utilization: 393 hours)

- Variable cost: \$646,638
- Fixed cost: \$374,098

TOTAL FIXED COST (WITHOUT DEPRECIATION): \$1,020,736

- Per hour: \$2,597
- Per nautical mile: \$21.27
- Per seat nautical mile: \$4.25

Total cost (without depreciation): \$1,020,736

- Book depreciation (10% per year): \$220,000

TOTAL COST (WITH BOOK DEPRECIATION): \$1,240,736

- Per hour: \$3,157
- Per nautical mile: \$25.85
- Per seat nautical mile: \$5.17

Total cost (without depreciation): \$1,020,736

- Market depreciation: \$110,000

TOTAL COST (WITH MARKET DEPRECIATION): \$1,130,736

Per hour: \$2,877

- Per nautical mile: \$23.56
- Per nautical seat mile: \$4.71

Source: Conklin & de Decker, Orleans, Mass.

specifications

(2003 Bell 430)

CABIN DIMENSIONS

- Height: 4.8 ft
- Width: 4.8 ft
- Length: 8.3 ft
- Volume: 158 cu ft
- Door height: 4 ft
- Door width: 3 ft

BAGGAGE:

- Internal: 37 cu ft

TYPICAL SEATS CREW/PASSENGERS: 2/5

MAXIMUM WEIGHTS

- Takeoff: 9,300 lb
- Basic operating: 6,398 lb
- Usable fuel: 1,655 lb
- Maximum payload: 2,902 lb
- Payload with full fuel: 1,247 lb

performance

(2003 Bell 430)

RANGE (VFR NBAA 30 minutes reserve fuel)

- Seats full: 280 nm
- Ferry range: 289 nm

RATE OF CLIMB

- 1,890 fpm
- One engine not operating: 380 fpm

CRUISE SPEED

- Max: 140 kt
- Long range: 132 kt

SERVICE CEILING

- Both engines at MTOW: 14,600 ft
- One engine: 6,200 ft

Source: Conklin & de Decker, Orleans, Mass.

FAIR MARKET VALUE

Price comparison of competitive 2003 models

	Bell 430	Eurocopter EC 155B	Sikorsky S-76C+
New	\$6.325M	\$8M	\$8M
Now	\$1.85M	\$2.825M	\$3.9M

Prices are for models equipped with key options. Used prices represent average resale figures for mid-time aircraft. Source: HeliValue\$

BELL 430 COMPARED WITH OTHER HELICOPTERS

Model	First year produced	Variable cost/hour	Seats exec/max	Range (nm)	Normal cruise (kt)	Max takeoff weight (lb)
Bell 430	1996	\$1,645	5/9	280	140	9,300
Eurocopter EC155B1	2000	\$1,999	6/13	351	151	10,692
Sikorsky S-76C+	1996	\$1,861	6/13	335	139	11,700

Assumptions: Aircraft are 2003 models. Jet fuel \$7.38/gal; variable cost: fuel plus maintenance reserves; four passengers; NBAA VFR 30 min. reserve fuel; passenger weight 200 lb includes baggage; one pilot.

Cost source: Conklin & de Decker Life Cycle Cost

Performance source: Conklin & de Decker Aircraft Performance Comparator, Orleans, Mass.



SUPPORT & SERVICE | BELL AND COMPETITORS

Model	Overall Average 2013	Overall Average 2012	Authorized Service Centers	Factory Service Centers	Parts Availability	Cost of Parts	Aircraft on the Ground Response	Warranty Fulfillment	Technical Manuals	Technical Reps	Aircraft Reliability
Bell	7.1	7.8	4.8	5.3	7.1	6.0	7.6	7.0	8.1	8.3	8.1
Eurocopter	5.5	6.7	5.2	3.8	5.1	4.4	4.9	5.1	6.2	6.4	7.1
Sikorsky	6.3	6.6	5.4	5.6	5.6	5.3	5.7	6.3	6.3	7.2	7.7

Source: Aviation International News 2013 Product Support Survey

Rating scale - 1 to 10: 1-inadequate; 3-poor; 5.5-average; 8-good; 10-excellent.