Airbus Helicopters'

EC155B1 ADDITIONAL INFORMATION

economics

(Eurocopter EC 155B1)

HOURLY DIRECT OPERATING COSTS

- Fuel (\$7.25 per gal): \$688.75
- Maintenance labor (at \$90/hour): \$215.10
- Parts, airframe, engine, avionics: \$229.01
- Inspections, component overhauls,
 life limited parts: \$150.53
- Engine restoration: \$356.34
- Misc. expenses

Landing and parking fees: \$11.87

Crew expenses: \$46

Supplies & catering: \$8.34

TOTAL VARIABLE FLIGHT COSTS PER HOUR: \$1,705.94

Average speed: 126 knots

- Cost per nautical mile: \$13.54

ANNUAL FIXED OPERATING COSTS

- Crew salaries (estimates)

Captain: \$107,000 Copilot: \$62,000

Benefits: \$50,700

- Hangar rental (typical): \$5,700
- Insurance (insured hull value = \$11.56 million) Hull (1.25% of value): \$144,500

Single limit liability: \$22,000

- Recurrent crew training: \$27,800
- Aircraft modernization (avg per year): \$23,333
- Navigational chart service: \$398
- Refurbishing: \$10,800
- Computer maintenance program: \$3,700
- Aviation weather service (typical): \$700

TOTAL FIXED COST PER YEAR: \$458,631

ANNUAL BUDGET-BASED ON 45,000 NM

(Utilization: 357 hours)

- Variable cost: \$609,021
- Fixed cost: \$458,631000

TOTAL FIXED COST (WITHOUT DEPRECIATION): \$1,067,652

- Per hour: \$2.991
- Per nautical mile: \$23.73
- Per seat nautical mile: \$3.95

Total cost (without depreciation): \$1,067,652

Book depreciation (10% per year): \$1,156,000

TOTAL COST (WITH BOOK DEPRECIATION): \$2,223,652

- Per hour: \$6,229
- Per nautical mile: \$49.41
- Per seat nautical mile: \$8.24

Total cost (without depreciation): \$1,067,652

- Market depreciation: \$578,000

TOTAL COST (WITH MARKET DEPRECIATION): \$1,645,652

Per hour: \$4,610

- Per nautical mile: \$36.57
- Per nautical seat mile: \$6.10

Source: Conklin & de Decker, Orleans, Mass.

Specifications and Performance					
Passengers (executive)	6				
Pilots	2				
Range	373 nm				
Cruise speed	Max: 151 kt				
	Long range: 144 kt				
Cabin	Height: 4.39 ft				
	Width: 6.72 ft				
	Length: 8.37 ft				
	Volume: 235 cu ft				

Economics			
Total variable flight costs per hour	\$1,706		
Total fixed cost per year	\$485,361		

2004 Eurocopter EC155B1 Pricing

New: \$8 million Now: \$2.825 million

Note: Fair market prices assume mid-time engines, typically equipped helicopters. Add \$1 million—\$2 million to prices for an executive interior. Source: HeliValue\$ Inc

Product Support						
Manufacturer	Rank	Overall Score				
Bell	1	7.1				
Sikorsky	3	6.3				
Eurocopter	4	5.5				

Source: Aviation International News 2013 Product Support Survey. Rating scale—1 to 10: 1-inadequate; 3-poor; 5.5-average; 8-good; 10-excellent.

EC155B1 COMPARED WITH OTHER AIRCRAFT

Model	First year produced	Variable cost/ hour	Seats exec/max	Range (nm)	Normal cruise (kt)	Max takeoff weight (lb)
EC155B1	2000	\$1,706	6/13	351	151	10,846
S-76C++	1996 (C+) 1979 (all)	\$1,050	6/13	335	139	11,700
2003 Bell 430	1996	\$1,009	5/9	280	140	9,300

Assumptions: Jet fuel \$7.25/gal; variable cost: fuel plus maintenance reserves; 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.

specifications

(Eurocopter EC155B1)

CABIN DIMENSIONS

- Height: 4.39 ft
- Width: 6.72 ft
- Length: 8.37 ft
- Volume: 235 cu ft
- Volumo. 200 cu m
- Door height: 4.4 ft
- Door width: 5.3 ft

BAGGAGE:

- Internal: 88 cu ft

TYPICAL SEATS CREW/PASSENGERS: 2/6

MAXIMUM WEIGHTS

- Takeoff: 10,846 lb
- Basic operating: 7,351 lb
- Usable fuel: 2,224 lb
- Maximum payload: 3,495 lb
- Payload with full fuel: 1,271 lb

performance

(Eurocopter EC155B1)

RANGE (VFR 30 min. reserve)

- Seats full: 373 nm
- Ferry range: 438 nm

RATE OF CLIMB

-1,163 fpm

CRUISE SPEED

- Max: 151 kt
- Long range: 144 kt

SERVICE CEILING

- At max takeoff weight: 15,000 ft

Source: Conklin & de Decker, Orleans, Mass.