

PIAGGIO AVANTI

Additional information

economics

(2002 Piaggio Avanti)

HOURLY DIRECT OPERATING COSTS

- Fuel (\$6.86 per gal): \$932.96
- Maintenance labor (at \$90 per flight hour): \$141.70
- Parts, airframe, engine, avionics: \$126.63
- Inspections, component overhauls, life limited parts: \$190.60
- Engine restoration: \$292.02
- Misc. expenses
 - Landing and parking fees: \$12.33
 - Crew expenses: \$67.54
 - Supplies & catering: \$49.08

TOTAL VARIABLE FLIGHT COSTS PER HOUR: \$1,812.86

- Average speed: 342 knots
- Cost per nautical mile: \$5.30

ANNUAL FIXED OPERATING COSTS

- Crew salaries (estimates)
 - Captain: \$88,000
 - Copilot: \$53,000
 - Benefits: \$42,300
 - Hangar rental (typical): \$25,600
 - Insurance (insured hull value = \$2.7 million)
 - Hull (0.24% of value): \$6,480
 - Single limit liability: \$7,500
 - Recurrent crew training: \$29,800
 - Aircraft modernization (avg per year): \$30,000
 - Navigational chart service: \$2,246
 - Refurbishing: \$10,800
 - Computer maintenance program: \$5,950
 - Aviation weather service (typical): \$700
- TOTAL FIXED COST PER YEAR: \$302,376**

ANNUAL BUDGET—BASED ON 115,000 NM

(Utilization: 336 hours)

- Variable cost: \$609,121
- Fixed cost: \$302,376

TOTAL FIXED COST (WITHOUT DEPRECIATION): \$911,497

- Per hour: \$2,713
- Per nautical mile: \$7.93
- Per seat nautical mile: \$1.32

Total cost (without depreciation): \$911,497

- Book depreciation (10% per year): \$270,000

TOTAL COST (WITH BOOK DEPRECIATION): \$1,181,497

- Per hour: \$3,516
- Per nautical mile: \$10.27
- Per seat nautical mile: \$1.71

Total cost (without depreciation): \$911,497

- Market depreciation: \$162,000

TOTAL COST (WITH MARKET DEPRECIATION): \$1,073,497

- Per hour: \$3,195
- Per nautical mile: \$9.33
- Per nautical seat mile: \$1.56

Source: Conklin & de Decker, Orleans, Mass.

specifications

(2002 Piaggio Avanti)

CABIN DIMENSIONS

- Height: 5.8 ft
- Width: 6.1 ft
- Length: 14.9 ft
- Volume: 375 cu ft
- Door height: 4.4 ft
- Door width: 2.0 ft

BAGGAGE:

- Internal: 16 cu ft
- External: 44 cu ft

TYPICAL SEATS CREW/PASSENGERS: 2/6

MAXIMUM WEIGHTS

- Takeoff: 11,550 lb
- Basic operating: 8,000 lb
- Usable fuel: 2,802 lb
- Maximum payload: 1,800 lb

performance

(2002 Piaggio Avanti)

RANGE (IFR NBAA 200nm reserve)

- Seats full: 980 nm
- Ferry range: 1,440 nm

RATE OF CLIMB

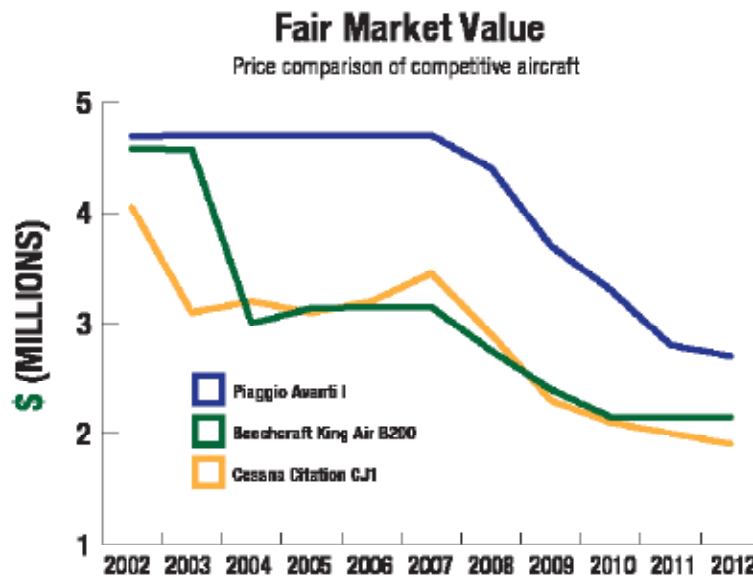
- 2,950 fpm
- One engine not operating: 756 fpm

CRUISE SPEED

- Max: 390 kt
- Long range: 310 kt

SERVICE CEILING

- Both engines: 41,000 ft
- One engine: 24,900 ft



PIAGGIO AVANTI COMPARED WITH OTHER AIRCRAFT

Model	First year produced	Variable cost/hour	Seats exec/max	Range (nm)	Normal cruise (kt)	Max takeoff weight (lb)
Piaggio Avanti	1988	\$1,813	6/9	1,300	354	11,550
King Air B200	1973*	\$1,556	6/15	1,164	283	12,500
Citation CJ1	1999	\$1,680	5/6	887	381	10,600

*King Air 200

Assumptions: Aircraft are 2002 models. Jet fuel \$6.86/gal; variable cost: fuel plus maintenance reserves; four passengers; NBAA IFR 200 nm reserve fuel; passenger weight 200 lb includes baggage; two pilots. Maximum cabin altitude, 8,000 ft.

Cost source: Conklin & de Decker Life Cycle Cost

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