



ECLIPSE 550

Guide to Operating
Economics

INTRODUCTION

This Guide to Operating Economics is a tool for estimating the cost of operating a new, typically-equipped, Eclipse 550. The actual operating cost of an aircraft will vary according to mission profiles flown, types of airports used, maintenance practices, geographical location and utilization. Cost can be higher for optional items ordered with the aircraft. All information in this document comes from the Aircraft Flight Manual of the Eclipse 550 Jet.



ECLIPSE AEROSPACE

2015

ECLIPSE
AEROSPACE

OPERATING CHARACTERISTICS

STAGE LENGTH	ALTITUDE	BLOCK SPEED	CRUISE SPEED
<i>(Nautical Miles)</i>	<i>(feet)</i>	<i>(knots)</i>	<i>(knots)</i>
300	30,000	319	371
500	35,000	331	369
700	37,000	334	363
1,000	41,000	327	346

STAGE LENGTH	ALTITUDE	BLOCK FUEL FLOW	CRUISE FUEL FLOW
<i>(Nautical Miles)</i>	<i>(feet)</i>	<i>(US gal/hr)</i>	<i>(US gal/hr)</i>
300	30,000	84	83
500	35,000	73	69
700	37,000	68	63
1,000	41,000	58	51

Block speeds are based on cruise at Max Continuous Thrust (MCT) for various stage lengths. Block speeds include climb, cruise, and descent. Block Fuel allows for taxi and takeoff. Cruise altitudes shown are usual altitudes for the stage lengths.

LABOR ESTIMATES

	YEAR 1 (per hour)	YEAR 2 (per hour)	YEAR 3 (per hour)	YEAR 4 (per hour)	YEAR 5 (per hour)
Man-Hours	0.25	0.4	0.5	0.54	0.54
Labor Dollars	\$24.50	\$39.20	\$49.00	\$52.92	\$52.92
Shop Rate Assumption	\$98	\$98	\$98	\$98	\$98

Based on 400 hours of annual use and take into consideration the applicable warranty of the aircraft without CPI.

PARTS ESTIMATES

YEAR 1 (per hour)	YEAR 2 (per hour)	YEAR 3 (per hour)	YEAR 4 (per hour)	YEAR 5 (per hour)
\$24.00	\$55.65	\$55.65	\$55.65	\$55.65

Parts cost are based on typical aircraft utilization. This price will include consumables, unscheduled repairs & avionics for an hourly rate. Transportation labor, engine parts, fluids, and in-flight consumables to have mx completed is not included. Costs do not reflect CPI.

ENGINE RESERVES

CUMULATIVE ENGINE HOURS	RATE (2 ENGINES)
0-1,000 Total Hours	\$205.45
1,001 Total Hours and Up	\$228.70

Based on Pratt & Whitney Gold ESP Plan. CPI not included.

INSPECTION COSTS

INSPECTION	RATE
24 mo / 300 hr Airframe	\$8,250
48 mo / 1,200 hr Airframe	\$10,300
Above 2 Inspections at Same Time	\$13,300 (discounted \$5,250)
48 mo Fuel Tank Internal	\$5,400
12 mo / 300 hr Engine	\$775
6 mo System Start and Battery Capacity	\$395
12 mo ELT 91.207	\$146
12 mo Fire Extinguisher	\$49

Based on EAI Platinum Service Center shop rate. Inspection prices subject to change. Inspection costs not built into annual operating costs.

DIRECT OPERATING COST

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fuel (\$5.60 per US Gallon)	\$414.40	\$414.40	\$414.40	\$414.40	\$414.40
Labor (\$98.00 shop rate)	\$ 24.50	\$ 39.20	\$ 49.00	\$ 52.92	\$ 52.92
Parts	\$ 24.00	\$ 55.65	\$ 55.65	\$ 55.65	\$ 55.65
Engine Reserves	\$205.45	\$205.45	\$205.45	\$228.70	\$228.70
Total Direct Cost/hr	\$668.35	\$714.70	\$724.50	\$751.67	\$751.67
\$/nm (331 kt block speed)	\$ 2.02	\$ 2.17	\$ 2.19	\$ 2.27	\$ 2.27

FIXED ANNUAL COSTS

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Hangar Rental (\$1,000/month)	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
Hull Insurance (.37 of \$2.15MM)	\$12,127	\$12,127	\$12,127	\$12,127	\$12,127
Liability & Medical Insurance	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
War Risk (Hull & Liability)	\$ 780	\$ 780	\$ 780	\$ 780	\$ 780
Initial / Recurrent Pilot Training	\$ 0	\$ 7,840	\$ 7,840	\$ 7,840	\$ 7,840
Total Fixed Cost per Year	\$27,907	\$35,747	\$35,747	\$35,747	\$35,747

TOTAL ANNUAL BUDGET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Cost (400 hours)	\$267,340	\$285,880	\$289,800	\$300,668	\$300,668
Fixed Cost	\$ 27,907	\$ 35,747	\$ 35,747	\$ 35,747	\$ 35,747
Total Annual Cost	\$295,247	\$321,627	\$325,547	\$336,415	\$336,415
\$/nm (132,400 nm)	\$ 2.23	\$ 2.43	\$ 2.46	\$ 2.54	\$ 2.54

Based on 400 hours of annual utilization with a 331 kt block speed. Does not estimate for CPI. Does not include the cost of inspections.

INPUTS FOR BELOW CALCULATIONS

Average Fuel Cost
Fuel Burn Rate (gal/hr)
Annual Usage (hrs)
Labor Rate
ESP Program per Engine Hour (2 Engines)
Pilot Benefits (%)
Insurance
Insurance Premiums (Estimates)

TOTAL VARIABLE COSTS EXPECTED PER HOUR OF FLIGHT TIME

Fuel
Scheduled & Unscheduled Maintenance (Airframe, Avionics, Engines)
Parts
Labor
Engine HSI & Overhaul Coverage (2 Engines)
Total Variable Costs Per Flight Hour

TOTAL FIXED COSTS THAT OCCUR ANNUALLY

Pilot
Pilot Benefits
Insurance
Hangar
Other (Landing Fees, Handling)
Jeppesen Electronic Nav Data & Approach Charts
XM WX Satellite Weather, Aviator Ed.
Recurrent Training
Total Fixed Costs Per Year
Total Fixed Costs Per Hour

Total Operating Costs Per Hour: