Airline Operating Costs

By Peter Horder, Senior Vice President
SH&E Ltd

Prepared for:
MANAGING AIRCRAFT MAINTENANCE COSTS Conference

Brussels, 22 January 2003
Agenda

- Introduction
- Current Airline Environment
- Airline Cost Elements
- Indirect and Direct Operating Costs
- Overhead Cost Control
- Balance Sheet Effects
- Reference Sources
- Conclusions
Introduction

- Current airline environment

- Safety considerations and costs
  - Security restrictions
  - Insurance implications

- Cost reduction versus revenue increases
Airline Economic Affects from 11 September

SCHEDULED CARRIERS
- Frequency
- Routes
- Traffic
- Revenues
- Fares ?
- Profitability

Low Cost Carriers
- Fares
- Traffic
- Revenues
- Profitability

Low Cost Carriers have been clear winners since 2001
Airline Safety and Security

Safety is paramount
- Flight procedures
- Maintenance procedures
- Ground Operations

Security Impacts
- Cockpit security
- On board security
- Ground delays
  - Increased searches
  - Baggage X-ray

Security costs
- Airport charges
- Increased passenger charges
Operating Cost Comparisons Per ASK

Source SH&E, AEA, IATA, Form 41

Average Stage Length (Km)
Total Operating Costs

Source (ICAO 2001 World Average)
Some ICAO and F41 Cost Breakdown Percentages

- Braathens
- easyJet
- Air India
- JAL
- Continental
- Delta (F41)

- General & Admin
- Sales & Promotion
- Passenger Service
- User Charges
- Depreciation & Amortisation
- Maintenance
- Flight Operations
Labour Productivity has an Impact on Costs

Revenue per Employee (US$ 000)

Source: Annual Accounts, Form 41, AAPA 2001
Fuel Cost per ASK

Source SH&E 2001
Maintenance and Overhaul Costs as a Percentage of Total Operating Costs

Source: SH&E, ICAO 2000 Financial Data
Maintenance Cost per Flight hour

Source: Annual Accounts, Form 41, AAPA 2001
Cost of Sales per Passenger

Cost of Sales = commissions, ticketing, sales and promotion costs

Source: Annual Accounts, Form 41, AAPA 2001
Passenger Service Cost per Passenger

Source: Annual Accounts, Form 41, AAPA 2001
Where Low Cost Carriers Achieve Advantage

Cost per Available Seat KM

LCC cost advantage

- 30% Total crew cost
- 5% Landing & handling charges
- 50% Passenger related
- 70% Sales cost
- 60% Others (overheads)

Focus on sector lengths up to, say, 1,500 km driven by reducing cost advantage, increasing revenue need, decreasing acceptance of lack of service.
Direct Operating Costs

- Handling and dispatch fees: 11%
- Commissions: 5%
- Insurances: 1%
- Leases Charges: 12%
- Flight Crew: 12%
- Maintenance: 15%
- Passenger Service Costs: 8%
- Fuel and oil: 27%
- Airport fees: 4%
- Navigation fees: 5%

Source ICAO 2001
Indirect Operating Costs

- Depreciation and Interest: 46%
- Marketing Costs: 34%
- Staff Costs: 12%
- Administration Costs: 6%
- Other: 2%
# Cost Allocation by Network

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<thead>
<tr>
<th>Route</th>
<th>A - B</th>
<th>A – C</th>
<th>A - D</th>
<th>Total</th>
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Operating Profit: 55
Which Costs may be Controllable/Avoidable?

- All costs are variable over time

- Strategic and Tactical decisions can be taken
  - aggressive re-negotiation of contracts
  - Hedging instruments
    - E.g., fuel, currency
  - Outsourcing
  - Changes in accounting policies!

- Staffing
  - Replacement or increased efficiency?
  - Overtime

- Operating “unprofitable” routes
  - More economical flying through different routings, aircraft and airports
  - Allocation of indirect costs
  - Do you know which routes really are unprofitable?

- Levels of service
  - Low cost vs. full service model
Cost Data Sources

 Major Sources
  - Airline Annual reports
  - ICAO
  - US DOT Form 41

 Other Sources
  - IATA
  - AAPA
  - UK CAA (and other national regulators)

 Profit & Loss Statement
  - Revenues
  - Operating Costs

 Balance Sheet
  - Assets
  - Liabilities
Operating Cost Reporting - ICAO

- Flight Operations
  - Flight Crew Salaries, Expenses and Training
  - Aircraft Fuel & Oil
  - Insurance & Uninsured losses
  - Lease/Rental of aircraft
- Maintenance & Overhaul
- Depreciation & Amortization
- User Charges & Station Expenses
  - Landing & Airport Charges
  - Route facility charges
  - Station Expenses
- Passenger Services
- Ticketing, Sales & Promotion
- General & Administration
Financial Data from US DOT Form 41

- Direct Operating Expenses
  - Reported quarterly by fleet type

- Indirect Operating Expenses
  - Reported quarterly by carrier and allocated by ASM or other appropriate measure to each fleet

- Other Finance Related Data Reported
  - Traffic Statistics
  - Revenues
  - General Profit & Loss
  - Balance Sheet
Direct Operating Cost Details – US DOT Form 41

- **Flying Operations**
  - *Flight Crew Salaries, Expenses and Training*
  - *Aircraft Fuel & Oil*
  - *Insurance & Uninsured losses*
  - *Lease/Rental of aircraft*

- **Direct Maintenance**
  - *Labour*
  - *Repairs (by outside agencies)*
  - *Materials*
    [note, more detail than ICAO]

- **Depreciation & Amortisation**
  - *Flight Equipment*
  - *Expense of Interchange Aircraft*
  - *Other Depreciation & Amortization*
Comparison/Benchmarking Issues

**ICAO**
- Data for all ICAO carriers worldwide
- Profit & Loss and Balance Sheet

But,
- Not broken down by fleet
- Maintenance & Overhaul not subdivided
- Limited data on low-cost/regional carriers

**DOT Form 41**
- Broken down by fleet
- New data quarterly

But,
- Only for US carriers
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