



TRAINING & FLIGHT SERVICES

Calculating The Value of Improved Operational Control



LIFECYCLE
SOLUTIONS

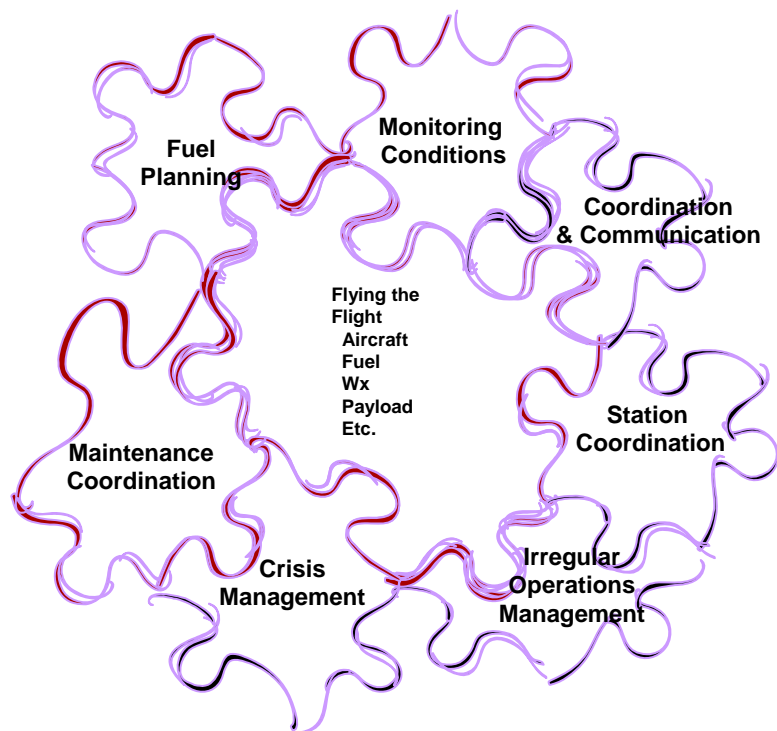
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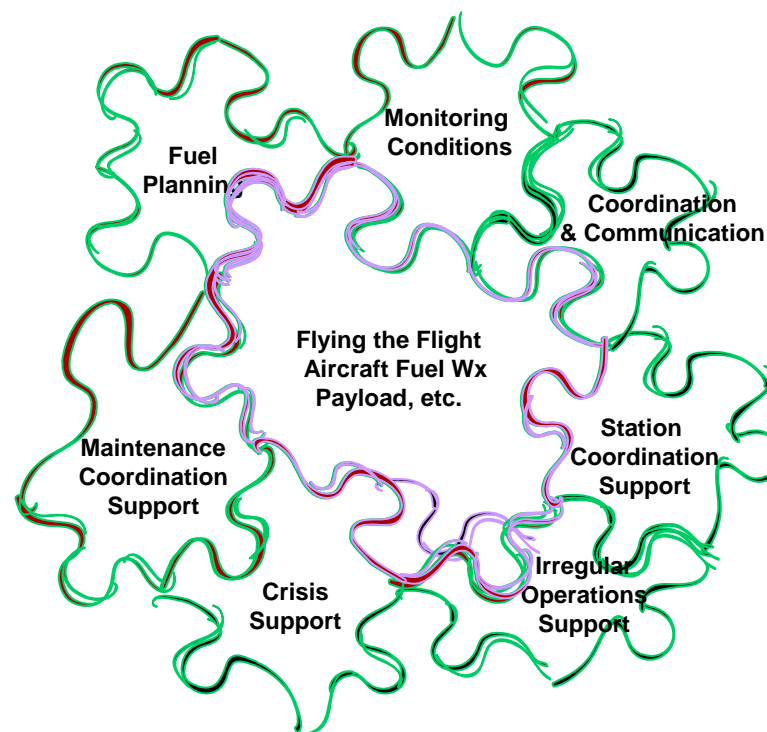
May 2011

The Value of Shared Responsibilities



Pilot

Pilot and Dispatch/Operations Support



Example Areas of Value?

- Reduction in fuel carried
- Increase in payload
- Reduced cost of planning
- Improved information flow and decision making reduces the impact of disruptions
- Better operations management yields additional revenue
- *Others?*

Calculations

Reduction In Fuel Carried (example)

- A reduction in fuel carried reduces fuel burned to carry it, resulting in operating cost and emission reductions
- Some ground rules:
 - Lbs not carried
 - Tanker-fuel burn per hour rate
 - Flight Segments per day
 - % of flights impacted
 - Price of fuel
- For a narrow-body aircraft averaging 1.5 hour flights, 1,000 lbs not carried can save \$30,000 or more per aircraft

Note: Figures shown are for demonstration purposes only. Each airline's actual numbers will vary, based on their type of operation, as well as type and size of fleet

Calculations

Reduced cost of planning

- Using Dispatchers or Professional Flight Officers to plan flights as opposed to pilots, cost is reduced
- Some ground rules:
 - Dispatch pay rate
 - Pilot pay rate
 - Time spent per flight in planning
 - Flight segments
- Savings can exceed \$40,000 per year per aircraft

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Calculations

Increase in payload

- With a reduction in fuel carried on weight critical flights, additional revenue may be carried
- With improved load planning and flight planning, extra revenue may also be carried
- Some ground rules:
 - Extra revenue per flight
 - Number of flights
 - % of flights carrying extra revenue
- Just \$100 in extra revenue could yield over \$200,000 in additional revenue per aircraft

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Calculations

Improved information flow

- Improved information flow impacts decision making and reduces:
 - Irregular Operations
 -
- Some ground rules:
 -
 -
 -
- Improved information flow and decision making reduces the number and impact of disruptions, and in even a small fleet can reduce costs by \$1,000,000 annually, while improving a positive Brand image

Note: Figures shown are for demonstration purposes only. Each airline's actual numbers will vary, based on their type of operation, as well as type and size of fleet

Calculations

Improved operations management

- Better operations coordination & management results in:
 - Reduced aircraft time out of service
 -
- Some ground rules:
 -
 -
 -
- Improved operations coordination & management can save over \$1,000,000 annually and helps reinforce a positive Brand image

Note: Figures shown are for demonstration purposes only. Each airline's actual numbers will vary, based on their type of operation, as well as type and size of fleet

Bringing it all Together

| | |
|--------------------|--|
| \$30,000 | Reduction in fuel carried |
| \$200,000 | Increase in payload |
| \$40,000 | Reduced cost of planning |
| \$1,000,000 | Improved information flow and decision making reduces Disruptions |
| \$1,000,000 | Better operations management improves schedule performance and enables added flights and revenue |
| \$2,270,000 | Estimated value |

Note: Figures shown are for demonstration purposes only. Each airline's actual numbers will vary, based on their type of operation, as well as type and size of fleet

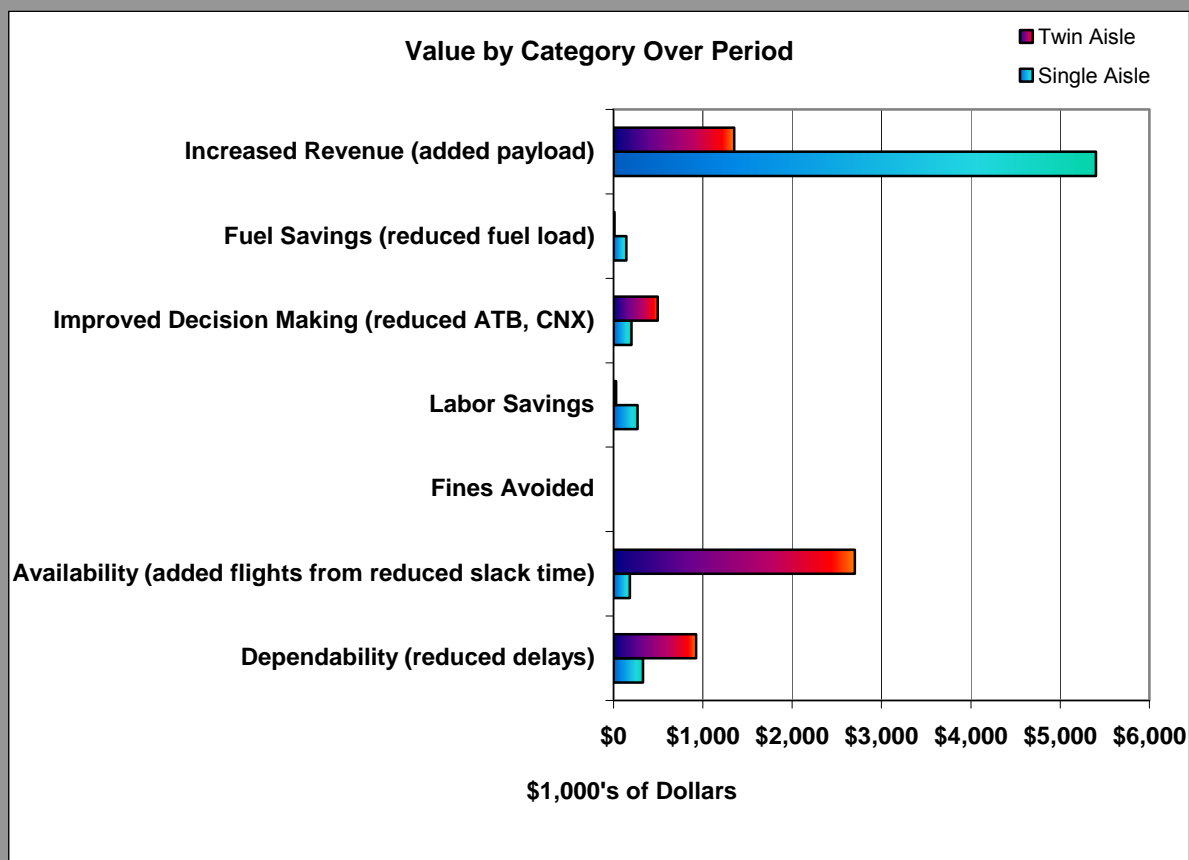
Value Ground Rules

| Ground Rules | | |
|---|--------------|------------|
| Flt Crew Labor Rate (loaded, per person) | \$75 | |
| Dispatch Labor Rate (loaded, per person) | \$35 | |
| Fuel Price (\$ per Gallon) | \$2.20 | |
| Flight Days per Year | 360 | |
| Discount Rate | 10% | |
| | | |
| | Single Aisle | Twin Aisle |
| Fleet Size | 25 | 5 |
| Average Fuel Load Reduction (Lbs) | 1000 | 2000 |
| % of Fuel Burn Saved with Fuel Reduction | 3.10% | 2.00% |
| % of Flights with Fuel Savings | 25.00% | 25% |
| Average Stage Length (Hrs) | 1.5 | 6 |
| Avg Flight Segments per Day per A/P | 6 | 1.5 |
| Avg Additional Revenue per Flight | \$100 | \$500 |
| | | |
| Planning and Control Labor per Flight Segment (Hrs) | 0.25 | 0.5 |
| Percent of P&C Time for Planning | 50% | 50% |
| Fines per Year | \$10,000 | \$5,000 |
| Percent of Fines Avoided per Year | 50% | 50% |
| | | |
| Avg Number of ATB/Diversions As-Is (Annual per A/P) | 10 | 5 |
| Avg Number of ATB/Diversions What-If (Annual per A/P) | 6 | 3 |
| Avg Cost per ATB/Diversion | \$18,500 | \$74,000 |
| | | |
| Avg Number of CNX As-Is (Annual per A/P) | 20 | 10 |
| Avg Number of CNX What-If (Annual per A/P) | 15 | 7 |
| Avg Cost per CNX | \$25,000 | \$116,000 |
| | | |
| On-Time Reliability Rate As-Is | 98.5% | 99.0% |
| On-Time Reliability Rate What-If | 98.7% | 99.2% |
| Consequential Delays (Ripple Effect) | 25% | 15% |
| Delay Shift | 5% | 5% |
| Average Delay Cost per Hour | \$6,100 | \$16,300 |
| | | |
| Slack Time per Flight As-Is (Minutes) | 10 | 30 |
| Slack Time per Flight What-If (Minutes) | 5 | 20 |
| Slack Time Used | 10% | 10% |
| Average Seats per Airplane | 146 | 250 |
| Average Profit (RASM-CASM) | \$0.01 | \$0.02 |
| Average Pax Load Factor | 70% | 75% |
| Added flights | 1 | 1 |
| Miles per Added flight | 500 | 2000 |

Valuation Results

| <i>Annual Value by Category</i> | Single Aisle | Twin Aisle |
|--|--------------------|--------------------|
| Dependability (reduced delays) | \$330,613 | \$925,712 |
| Availability (added flights from reduced slack time) | \$183,960 | \$2,700,000 |
| Fines Avoided | \$5,000 | \$2,500 |
| Labor Savings | \$270,000 | \$27,000 |
| Improved Decision Making (reduced ATB, CNX) | \$199,000 | \$496,000 |
| Fuel Savings (reduced fuel load) | \$141,646 | \$9,138 |
| Increased Revenue (added payload) | \$5,400,000 | \$1,350,000 |
| Total Annual Value | \$6,530,220 | \$5,510,350 |

- Evaluate areas of greatest value for business case focus



Valuation Results – Making the Business Case

| Annual Value by Category | Single Aisle | Twin Aisle |
|--|---------------------|--------------------|
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| Fines Avoided | \$5,000 | \$2,500 |
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| Total Annual Value | \$6,530,220 | \$5,510,350 |

| Annual Business Case | Single Aisle | Twin Aisle |
|---|---------------------|---------------------|
| Flights per Day | 150 | 7.5 |
| Flights per Shift | 75 | 3.75 |
| Flights per FTE per Shift | 30 | 3.75 |
| Staffing Shifts per day | 2 | 2 |
| Required FTE per Day | 5 | 2.0 |
| Operational Days per Week | 7 | 7 |
| Shifts per FTE per Week | 5 | 5 |
| Training, Sick Leave and Vacation Coverage (as a % of FTEs) | 25% | 25% |
| Required Staffing | 8.8 | 3.5 |
| Current Support Staff Annual Pay | \$36,400 | \$36,400 |
| Direct Dispatcher Annual Pay | \$72,800 | \$72,800 |
| General Admin Overhead Costs (as a % of Annual Pay) | 100% | 100% |
| Total Current Annual Labor Cost | \$ 637,000 | \$ 254,800 |
| Total Dispatcher Annual Labor Cost | \$ 1,274,000 | \$ 509,600 |
| Net Savings with Value of Licensed Operations Staffing | 5,893,219.57 | 5,255,550.28 |

- Value from previous page

- Cost of support

- Net benefit of Professional Ops Control

What are the Specific Areas of Value to Your Airline?

- Reduction in fuel carried
- Increase in payload
- Reduced cost of planning
- Improved information flow and decision making reduces the impact of disruptions
- Better operations management yields additional revenue
- *Others?*



Questions?

Thank you!