Status of Accommodating the A380 – March 2006

John F. Kennedy Airport
Presentation Outline

• The Aircraft and Buyers
• Importance to JFK
• Our Plan for Accommodation
• Status of Approvals
• Airfield & Terminal Construction Progress
• Construction Costs
What Is The A380?

The “New Large Aircraft”
- Greater than 500 seats
- Two Full Decks
- For Trans-Atlantic, Trans-Pacific, Intra Pacific Markets

- Passenger Version Late 06, Freighter Version 08/09
- Designed to Replace 747-400
- Length 238’, Wingspan 262’, Tail 79’
- Range 8,000 nm
A380 First Flight

Toulouse, 27th April 2005, 10:29 a.m.

First Flight MSN1
A380: Flight Testing

Cold Weather Tests – Iqaluit, Canada
February 6-11, 2006

Blizzard conditions:
Air temperature: -22 °F
Wind chill: -58 °F
A380: Flight Testing

Airport Proven
29 October 2005: Tested at Frankfurt, Terminal 2, Gate E9
### Who Are The A380 Customers?

<table>
<thead>
<tr>
<th>Airline</th>
<th>Orders</th>
<th>Airline</th>
<th>Orders</th>
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<tbody>
<tr>
<td>Air France *</td>
<td>10</td>
<td>Lufthansa *</td>
<td>15</td>
</tr>
<tr>
<td>China Southern</td>
<td>5</td>
<td>Malaysia Airlines</td>
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<td>Emirates *</td>
<td>43</td>
<td>Qantas Airways</td>
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<tr>
<td>Etihad Airlines</td>
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<td>Qatar Airways</td>
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<td>Singapore Airlines *</td>
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<td>ILFC</td>
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<td>Thai Airways International</td>
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<td>Kingfisher Airlines</td>
<td>5</td>
<td>United Parcel Service</td>
<td>10</td>
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<tr>
<td>Korean Air Lines *</td>
<td>5</td>
<td>Virgin Atlantic Airways *</td>
<td>6</td>
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</tbody>
</table>

* Coming to JFK

Grand Total: 159
Importance To JFK

Operational Benefits

The A380 Will:

• Increase Seat Capacity Without Increasing Operations
• Replace Some B747 Operations
• Consolidate Flights in Markets with High Load Factors
• Encourage International Travel Through Lower Seat Mile Costs
## Importance To JFK

### Regional Economic Benefits

- **Visitor, On-Airport, Induced Impacts**

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2016</th>
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<tbody>
<tr>
<td>Output</td>
<td>$62.9 M</td>
<td>$167 M</td>
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<td>Payroll</td>
<td>$24.9 M</td>
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<tr>
<td>Employment</td>
<td>860 Jobs</td>
<td>2,300 Jobs</td>
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- **Construction Related**

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<tr>
<th></th>
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<tbody>
<tr>
<td>Output</td>
<td>$18.9</td>
</tr>
<tr>
<td>Payroll</td>
<td>$6.6</td>
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<tr>
<td>Employment</td>
<td>180</td>
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</table>
## Plan For Accommodation

### Airfield Separations

<table>
<thead>
<tr>
<th></th>
<th>Group V</th>
<th>Group VI</th>
<th>JFK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Runway Width</strong></td>
<td>150’</td>
<td>200’</td>
<td>3- 150’, 1-200’</td>
</tr>
<tr>
<td><strong>Taxiway Width</strong></td>
<td>75’</td>
<td>100’</td>
<td>75’</td>
</tr>
<tr>
<td><strong>Rwy/Txy</strong></td>
<td>400’</td>
<td>600’</td>
<td>400’</td>
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<tr>
<td><strong>Txy/Txy</strong></td>
<td>267’</td>
<td>324’</td>
<td>300’</td>
</tr>
<tr>
<td><strong>Txy/Fixed Object</strong></td>
<td>160’</td>
<td>193’</td>
<td>130’</td>
</tr>
</tbody>
</table>
Plan for Accommodation

Operating Plan

- A380 Restricted to Alpha
- 14’ RSR Height Limit
- Improve Delineator & Centerline Spacing
- Restrict Bridge Crossing
**Status of Approvals**

Five Modification of Airfield Standards Submitted 1/02
- Twy to Fixed Object
- Twy to Twy
- Twy Width
- Rwy to Twy
- "Interim" Rwy Width

"Conditional Approval" Received 9/04 for Four Modifications

Runway Width to Be Managed Through Aircraft Certification Process

FONSI Awarded 9/04

PFC Application Approved 2/06
Airfield Construction Plans

- Taxiway A Bridges: Completed 6/05, Twy B Bridges To Be Completed 6/06
- Taxiway A West Start: 7/06, Complete 7/07
- Taxiway A North/South: Start 10/05, to be Complete 3/07
- Taxiway A Start: 10/04, Complete 9/05
- Rehab & Widen Rwy 13L/31R 2008
Terminal Construction Plans

Terminal Four:

Emirates, Virgin, Singapore

• Designed for A380

• Few Changes Required
Terminal Construction Plans

Terminal Four:

• Exp With 500+ Pax Flights

• Most Gate Infrastructure in Place

• Gate Plans:
  • Start With One UD, One LD
Terminal Construction Plans

• T-4 Designed for A380
  • Open Hold Rooms
  • Ticket Counters
  • Baggage Facilities
Terminal Improvements

Terminal One:

Air France, Lufthansa, Korean

- Will Add Hold room Space
- Expand Ramp
- Pax Bridge Slope Issue for UD
Costs For Accommodating The A380

It Depends…

• Twy November Changes – A380 Only
• Twy Bridge Strengthening- A380 & A340-600
• Twy Alpha Move- Part of State of Good Repair Program
• Rwy 13R 150’ to 200’ Width- A380 & Snow Removal

To Be Funded Through Passenger Facility Charges
Conclusion

A380 – A Worthwhile Investment

• Fits Strategic Plan
• Airfield Improvements Benefit Other Aircraft
• Economic Benefits to The Regional Economy are Significant
• FAA Modification of Standards Process Provides Flexibility
• State of Good Repair Approach Helps Mitigate Costs
• A380 at JFK Summer 2007