Hong Kong International Airport

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Introduction

- Project Overview
- Project use & benefits
- Technical Issues
- Innovations
- Social problems and policy issues
Construction

- Began in 1993
  - Land reclamation
  - Transportation systems
- Southern Runway commissioned in July 1998
- Northern Runway opened in 1999
- HK $155.5 billion (US $20 billion)
## Site Details

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total airport site area</td>
<td>1,255 hectares (4.85 sq. miles)</td>
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<tr>
<td>Terminal floor areas</td>
<td>710,000 m² (3.5 Ala Moana Shopping Centers)</td>
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<tr>
<td>South and North Runway length</td>
<td>3,800 meters</td>
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<tr>
<td>Airport workforce</td>
<td>About 60,000</td>
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</tbody>
</table>
Usage Statistics

<table>
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<tr>
<th>Connectivity</th>
<th>85 airlines, 154 destinations worldwide</th>
</tr>
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<tr>
<td>Flight handling capacity</td>
<td>56 flights per hour at peak hours</td>
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</tbody>
</table>

![Graph showing passenger growth from 1998 to 2008](image-url)
Airfreight Movements

![Graph showing cargo movements over years with data points and trend line.](image-url)
Project Use & Benefits

- Project Use:
  - To safely transport & accommodate people all over the world.
Social Benefits

- Easier access to the airport
- Reduced noise pollution
Economic Benefits

- Improved traffic
- Attract tourism
- Better environment for residents near Kai Tak airport
- Increased growth opportunities
Technical Issues

- Suffered various severe organizational, mechanical, and technical problems that almost crippled the airport (first 3-5 months).
- Main problem was with computer glitches
- Expensive for future expansion
- Temporary pavement heaving
The airport also features the HKIA Automated People Mover, a driverless people mover system consisting of 3 stations to provide fast transportation from the check-in area to the gates (and vice versa).
• Intermodal transportation hub combining air, sea and land:
  • Develop networking
  • New Airport-Mainland Coach Station
  • Bus services between HKIA and major cities in the Mainland
  • Ferry services between the *Hong Kong International Airport* and *Pearl River Delt*
Environmental Innovations

- Of the roughly 100 tonnes of waste produced daily, some 12 tonnes is recovered for re-use or recycling.
- Mechanized food waste composters which reduce waste volume by up to 90%.
- Promotion of organic farming projects.
- Roof greening competition for primary and secondary schools.
Environmental Innovations

- "Green Airport" meetings with the Air Service Providers Association
  - > 95% of airport staff travel to the airport by bus or rail
  - > 60% of passengers
  - < 2 % of staff drive to work
- Use of recycled water
  - Seawater is used for flushing toilets in all large buildings as well as in cooling systems
- Bird repellent grass near runways and taxiways
Social Problems & policy challenges

• Airspace restriction from Chinese military: China requires that aircraft flying the single air route between Hong Kong and the mainland must be at an altitude of least 15,000 feet

• Only one airway between Hong Kong and mainland China

• Maintaining the some of the Airport Authority Ordinances

• Down turn of the Asian economy

• Increased competition among the Neighboring Airport
THE END

THANK YOU!