



Airline Schedules

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Lecture Overview

- What is a Flight Schedule?
- Airline Schedules: 3 Perspectives
- Frequency Planning
- Timings

What is Flight Scheduling?

- Timetable of what cities are flown to and at what times
- It includes other aspects (aircraft assignment etc) as well
- Timetable usually updated twice a year (for most network carriers)
 - Often March – October and October – March

What is Flight Scheduling?

- Frequency
- Timings
- Fleet
- Rotation
- Crew

Airline Schedules

- Operational aspects
 - “Putting the schedule together”
 - Optimisation of flying programme
 - Maintenance
 - Crewing
 - Constraints (curfews, slots)
 - Turnaround times

Airline Schedules

- Economic aspects
 - “Do we make money?”
 - Revenues vs costs
 - Resource planning

Airline Schedules

- Marketing aspects
 - Developing a schedule that is attractive to customers and makes money
 - Enabling connections
 - Competitors
 - Seasonal Adjustments
 - Aircraft
 - Frequency
 - Timings
 - Cancellation/Introduction

Frequency Planning

- Higher frequency improves attractiveness for passengers
 - Reduces schedule delay (time between preferred departure and actual scheduled departure)
 - Can be a competitive advantage
- Particularly important
 - on short-haul routes
 - at peak times (morning/late afternoon)
 - for business travellers (higher value of time)
- Dependent on demand forecasting
- Trade-off: higher frequency & smaller aircraft (higher unit costs) vs lower frequency & larger aircraft (lower unit costs)

Timings

- Short-haul
 - High demand for peak time departures (morning/late afternoon)
 - To enable business passengers day return flights
 - But Aircraft/crew availability?
 - But Aircraft utilisation vs load factor:
 - should the aircraft wait until peak time or return immediately
most airlines opt for aircraft utilisation, particularly LCCs
 - Less important in leisure markets

Timings

British Airways

Departing from LON London on Tuesday 19 April 2016													
Flights													
Flight number	From	To	Depart	Arrive	Op by	Stops	Sat 16	Sun 17	Mon 18	Tue 19	Wed 20	Thu 21	Fri 22
BA0902	<u>LHR</u>	<u>FRA</u>	07:05	09:40	BA	0	✕	✕	✕	✕	✕	✕	✕
BA8732	<u>LCY</u>	<u>FRA</u>	08:05	10:35	CJ	0			✕	✕	✕	✕	✕
BA0906	<u>LHR</u>	<u>FRA</u>	08:15	11:00	BA	0			✕	✕	✕	✕	✕
BA0904	<u>LHR</u>	<u>FRA</u>	10:50	13:30	BA	0		✕					
BA0904	<u>LHR</u>	<u>FRA</u>	11:00	13:40	BA	0	✕		✕	✕	✕	✕	✕
BA0908	<u>LHR</u>	<u>FRA</u>	13:45	16:30	BA	0			✕	✕	✕	✕	✕
BA8734	<u>LCY</u>	<u>FRA</u>	14:45	17:15	CJ	0		✕	✕	✕	✕	✕	✕
BA0910	<u>LHR</u>	<u>FRA</u>	15:10	17:55	BA	0	✕	✕	✕	✕	✕	✕	✕
BA0912	<u>LHR</u>	<u>FRA</u>	16:10	18:55	BA	0	✕	✕	✕	✕	✕	✕	✕
BA8738	<u>LCY</u>	<u>FRA</u>	16:55	19:30	CJ	0			✕	✕	✕	✕	✕
BA0914	<u>LHR</u>	<u>FRA</u>	17:10	19:55	BA	0						✕	
BA8736	<u>LCY</u>	<u>FRA</u>	19:10	21:40	CJ	0		✕	✕	✕	✕	✕	✕
BA0916	<u>LHR</u>	<u>FRA</u>	19:40	22:15	BA	0		✕	✕	✕	✕	✕	✕

Departing from LON London on Wednesday 22 June 2016																
Flights																
Flight number	From	To	Depart	Arrive	Op by	Stops	Sun 19	Mon 20	Tue 21	Wed 22	Thu 23	Fri 24	Sat 25			
BA2556	<u>LGW</u>	<u>RHO</u>	13:10	19:10	BA	0				✕						
BA2556	<u>LGW</u>	<u>RHO</u>	15:25	21:25	BA	0							✕			

Departing from RHO Rhodes on Wednesday 29 June 2016													
Flights													
Flight number	From	To	Depart	Arrive	Op by	Stops	Sun 26	Mon 27	Tue 28	Wed 29	Thu 30	Fri 1	Sat 2
BA2557	<u>RHO</u>	<u>LGW</u>	20:00	22:05	BA	0				✕			
BA2557	<u>RHO</u>	<u>LGW</u>	22:15	00:25*	BA	0							✕

Timings

- Long-haul
 - Time zones critical issue to generate convenient and possible arrival/departure time
 - See BA schedule LHR – HKG – LHR
 - Aircraft utilisation vs load factor
 - On long-haul routes aircraft will often be parked until demand is higher
 - See BA and TK schedule LHR – JNB – LHR

Timings

British Airways

Departing from LON London on Tuesday 19 April 2016													
Flights													
Flight number	From	To	Depart	Arrive	Op by	Stops	Sat 16	Sun 17	Mon 18	Tue 19	Wed 20	Thu 21	Fri 22
BA0031	<u>LHR</u>	<u>HKG</u>	18:40	13:35*	BA	0	✈	✈	✈	✈	✈	✈	✈
BA0027	<u>LHR</u>	<u>HKG</u>	21:55	16:40*	BA	0	✈	✈	✈	✈	✈	✈	✈

Departing from HKG Hong Kong on Tuesday 26 April 2016													
Flights													
Flight number	From	To	Depart	Arrive	Op by	Stops	Sat 23	Sun 24	Mon 25	Tue 26	Wed 27	Thu 28	Fri 29
BA0032	<u>HKG</u>	<u>LHR</u>	23:05	04:50*	BA	0	✈	✈	✈	✈	✈	✈	✈
BA0028	<u>HKG</u>	<u>LHR</u>	23:45	05:35*	BA	0	✈	✈	✈	✈	✈	✈	✈

Timings

British Airways

Departing from LON London on Tuesday 19 April 2016

Flights

Flight number	From	To	Depart	Arrive	Op by	Stops	Sat 16	Sun 17	Mon 18	Tue 19	Wed 20	Thu 21	Fri 22
BA0055	<u>LHR</u>	<u>JNB</u>	19:05	07:05*	BA	0	✕	✕	✕	✕	✕	✕	✕
BA0057	<u>LHR</u>	<u>JNB</u>	21:20	09:05*	BA	0	✕	✕	✕	✕	✕	✕	✕

Departing from JNB Johannesburg on Tuesday 26 April 2016

Flights

Flight number	From	To	Depart	Arrive	Op by	Stops	Sat 23	Sun 24	Mon 25	Tue 26	Wed 27	Thu 28	Fri 29
BA0056	<u>JNB</u>	<u>LHR</u>	19:20	05:30*	BA	0	✕	✕	✕	✕	✕	✕	✕
BA0054	<u>JNB</u>	<u>LHR</u>	20:45	06:55*	BA	0						✕	
BA0054	<u>JNB</u>	<u>LHR</u>	21:10	07:20*	BA	0	✕	✕	✕	✕	✕		✕

Turkish Airlines

Outbound: Istanbul - Johannesburg

Previous Day

Tuesday 19 April 2016

Next Day

Departure	Arrival	Flight	Duration
01:30 Istanbul (IST)	10:20 Johannesburg (JNB)	TK40	9h50

Inbound: Johannesburg - Istanbul

Previous Day

Tuesday 26 April 2016

Next Day

Departure	Arrival	Flight	Duration
18:45 Johannesburg (JNB)	05:15 Istanbul (IST) WED 27 APR	TK41	9h30

Timings

- Consistency of timings
 - Departure timings same everyday for a certain destination
 - Particularly an issue with business travellers who become familiar with timetables
- Weekend schedules often different to weekday schedules
- Appearance in GDS
 - Block time and frequency
 - Important to be on the first page for a booking enquiry

Conclusions

- Airline scheduling is critical in airline marketing
 - Schedules need to be appealing to customers
 - Airlines can achieve higher yields with a more convenient schedule
- Airline scheduling affects other areas within the airline
 - Operations
 - Aircraft utilisation (ownership costs)