



Airbus vs. Boeing

Dr David Rees



Brief History

- Founded in Seattle, 1916
- Production scaled up during WW2



- US' first commercial jet airliner, 1958

- Active participation in Apollo program,
- Hydrofoil, submarine hunter



- Competition begins with Airbus, 1980s



- Space research

Clients-Airlines

- Air Europe
- Air Pacific
- American Airlines
- Asiana Airlines
- Hawaiian Airlines
- Gulf Air
- PrivatAir
- Southwest Airlines



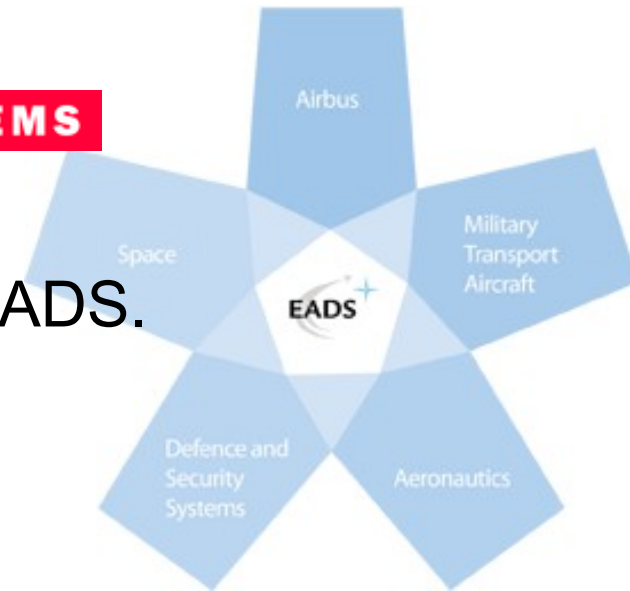
Asiana Airlines



Brief History

- Airbus began in the aircraft industry in 1970, as a European consortium of French, German, and later, Spanish and U.K. companies.
- Owned in 2001 by
 - **E**uropean **A**eronautic **D**efence and **S**pace **C**ompany (80%)
 - BAE Systems (20%).
- In 2006 BAE sold its shareholding to EADS.
- Based in Toulouse, France.

BAE SYSTEMS



Brief History

- **1999**

The anti-noise "Stage 3" increased orders

- **2000**

Airbus officially launches the A380

- **2001**

Downtrend in the market caused by the terrorist attacks.

- **2003- 2004**

Reached 52% of the total order book worldwide (1,454 planes).

- **2006-2007**

-Airbus builds in China its first assembly plant outside Europe.

-Changes in corporate governance.

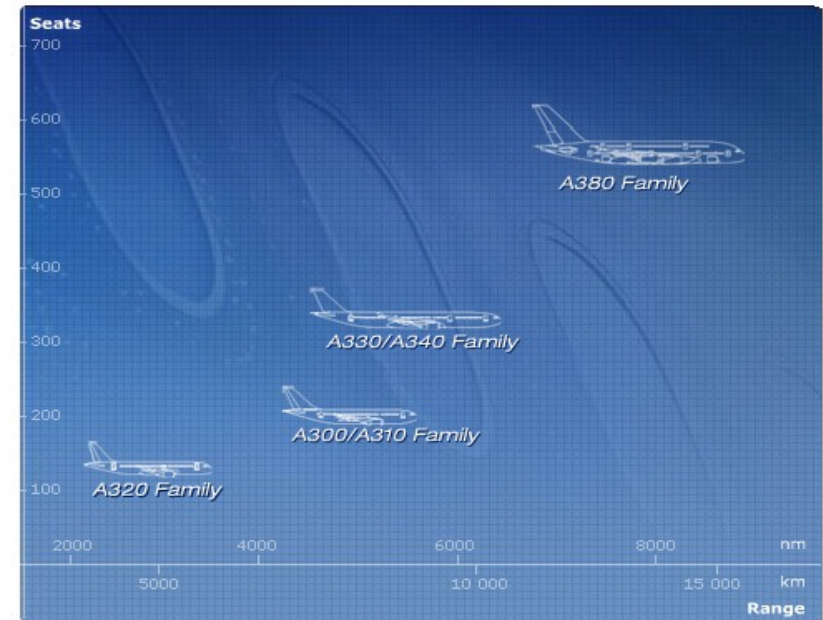
- Louis Gallois



Products

- Small aircraft
 - Less than 100 passengers
- Medium size aircraft
 - 100 -350 passengers
- Big aircraft
 - More than 500 passengers
- Aircraft freight transport
 - Federal Express, UPS and Cathay Pacific
- Luxury
 - VIP Corporate Jetliner
- Airbus military

Efficiency and comfort, from 100 to 525 seats





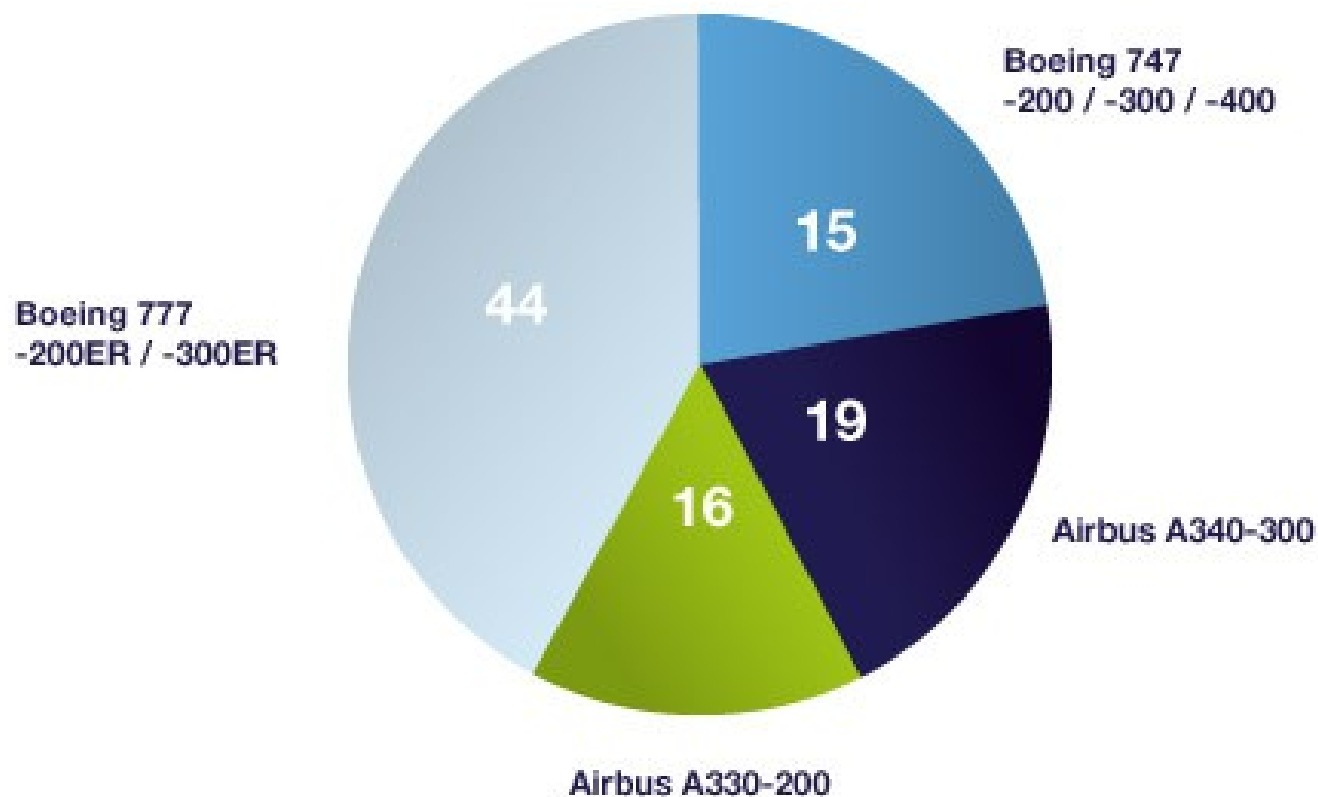
Clients-Airlines



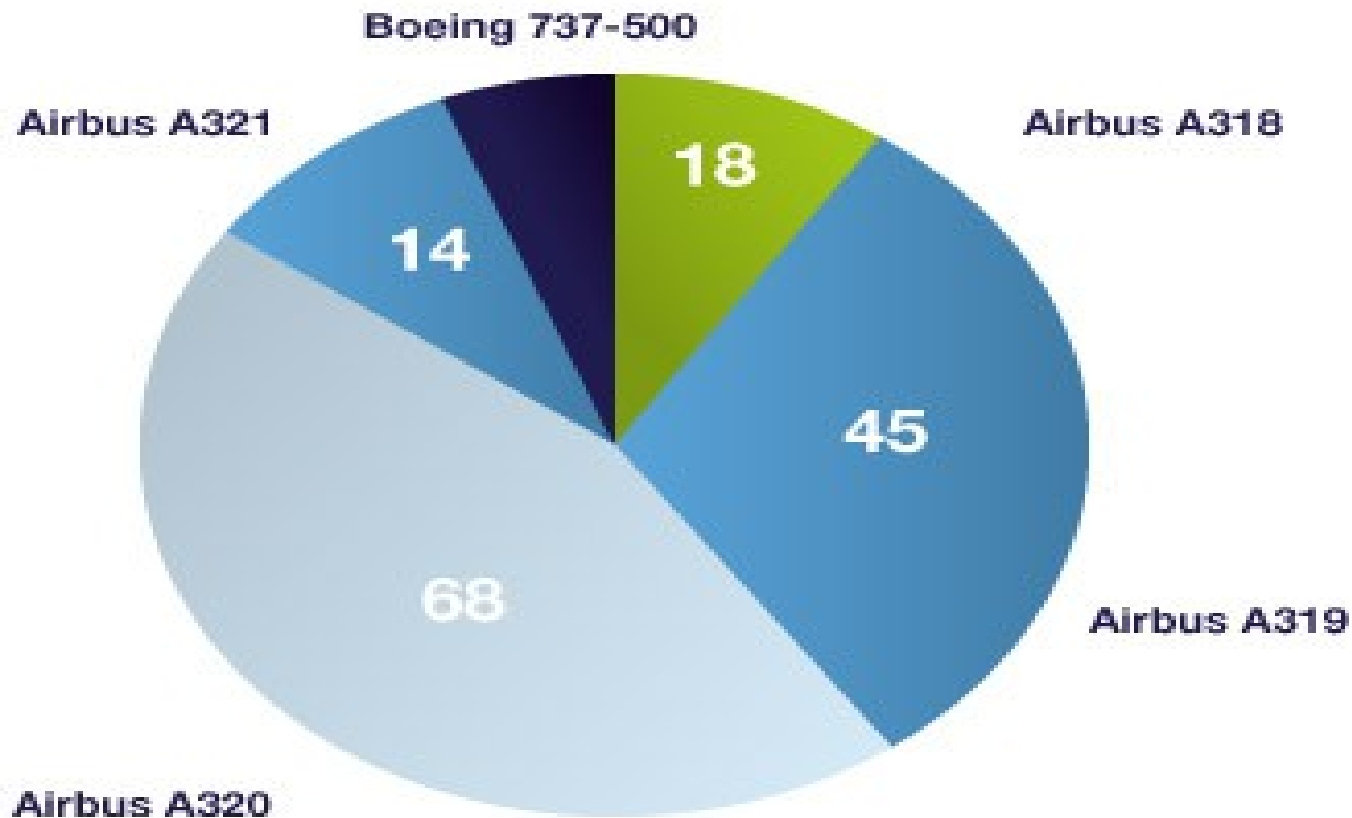
- Jet Blue
- Emirates
- Qatar Airways
- CASC
- Frontier
- China Airlines
- Lufthansa
- Federal Express
- Malaysia Airlines
- Korean Air

	AIRBUS	BOEING
Headquarters	15 aprox. many languages.	Chicago
Number of employees-needed	57,000 (aprox)	166,000 (aprox) One of the largest employee-owned funds in the world.
Number of aircraft currently in circulation	more than 3,000	more than 14,000
Other units	Military aircrafts	The second-largest aerospace and defense contractor in the world.
Anual revenue 2007	US\$ 157.1 (51% market)	US\$ 61.5 billion
Actual orders	1341	1413
Actual deliveries	453	441
Extra information	-Environmental issues.	-Future environmental issues.

AIR FRANCE LONG-HAUL FLEET



AIR FRANCE MEDIUM-HAUL FLEET



PLANE vs. PLANE

Boeing B777 Airbus A340



PLANE vs PLANE



Boeing 767



Airbus A330

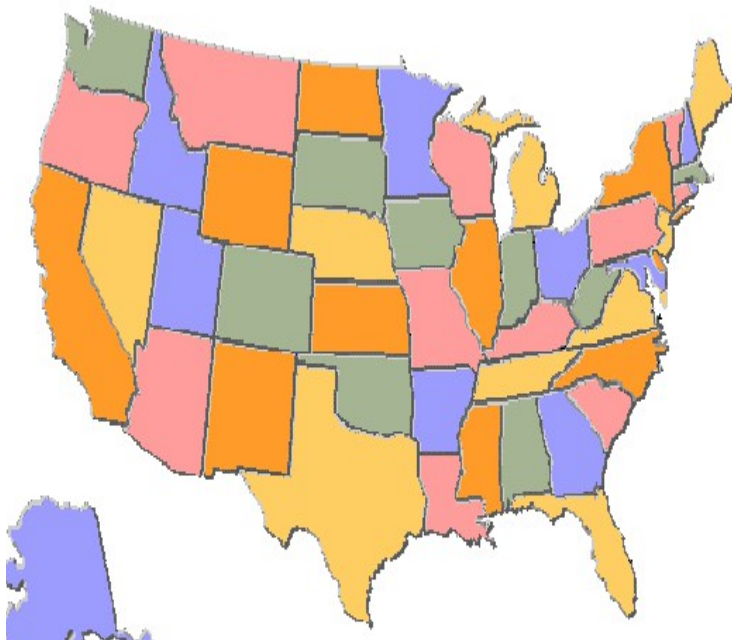


Plane vs plane

•Boeing 747-400	AIRBUS A380
467 passangers	555 passengers
The most recent version of 747 family.	Use alternative fuel GTL
The world's fastest commercial jetliner and best freighter.	Most modern aircraft flying today (more spacious and more profitable).
The most popular widebody airplane of history.	The first airliner with two floors
	

An ugly, protracted war
ensues...

The Dispute in Brief



VS



- May be the largest transatlantic war
- Issue: Government subsidies
- US asked WTO to step in to establish dispute settlement panel

Boeing complains first...



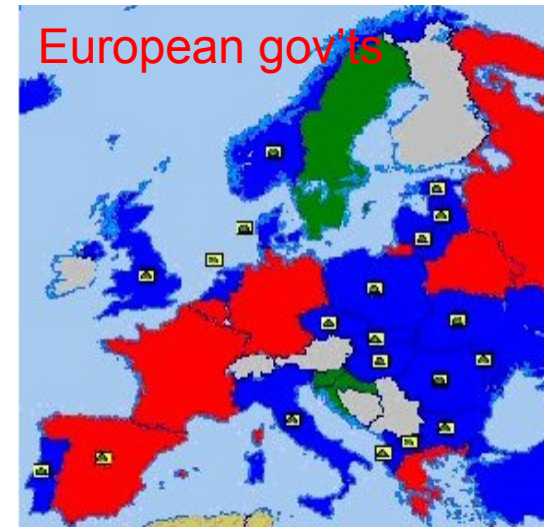
"Launch Aid"



AIRBUS
AN EADS JOINT COMPANY WITH BAE SYSTEMS

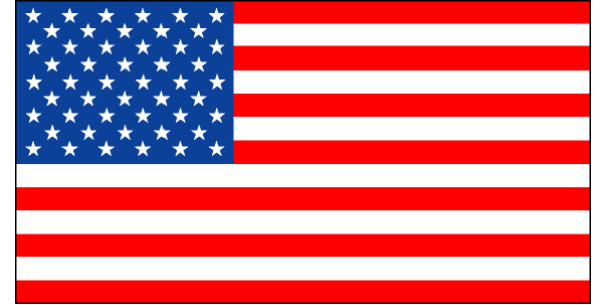


EU Commission



European gov'ts

Airbus retaliates...



BOEING®



War Milestones

- 1978-79: OECD consensus & GATT
- 1992: EC-US Agreement on Trade in

Large Civil Aircraft

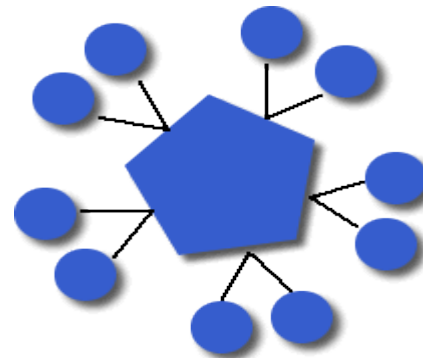
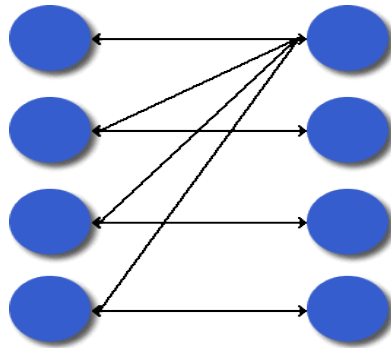
- 2005: WTO gets involved after a year of negotiations fail
- 2007-2008: Awaiting WTO decision

While the two giants fight,
the world around them
changes...

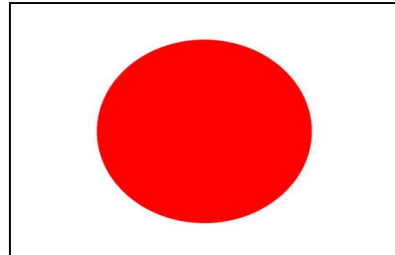
The shifting marketplace

- A changing business model for air travel

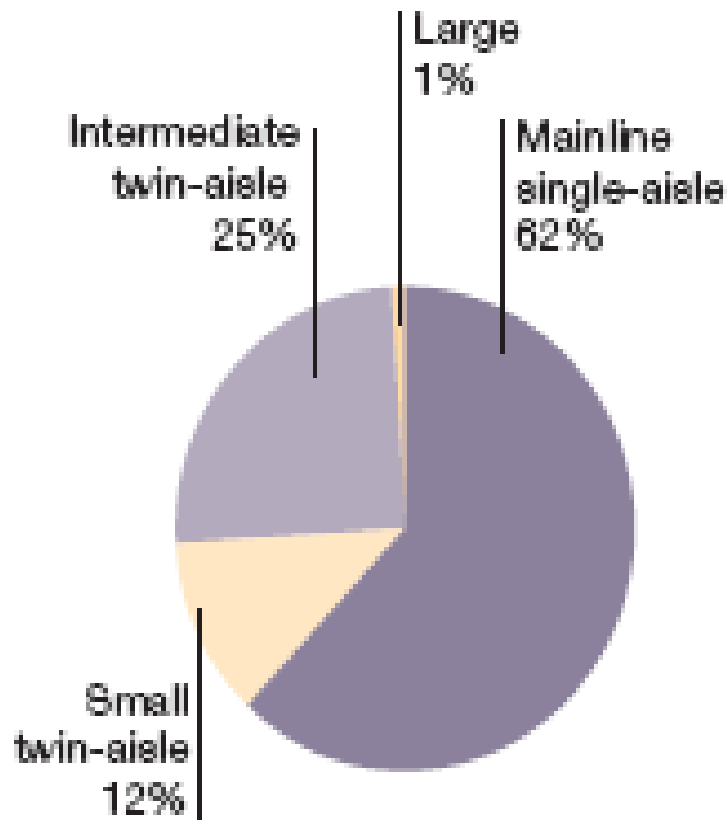
Point-to-Point vs. Hub-and-Spoke



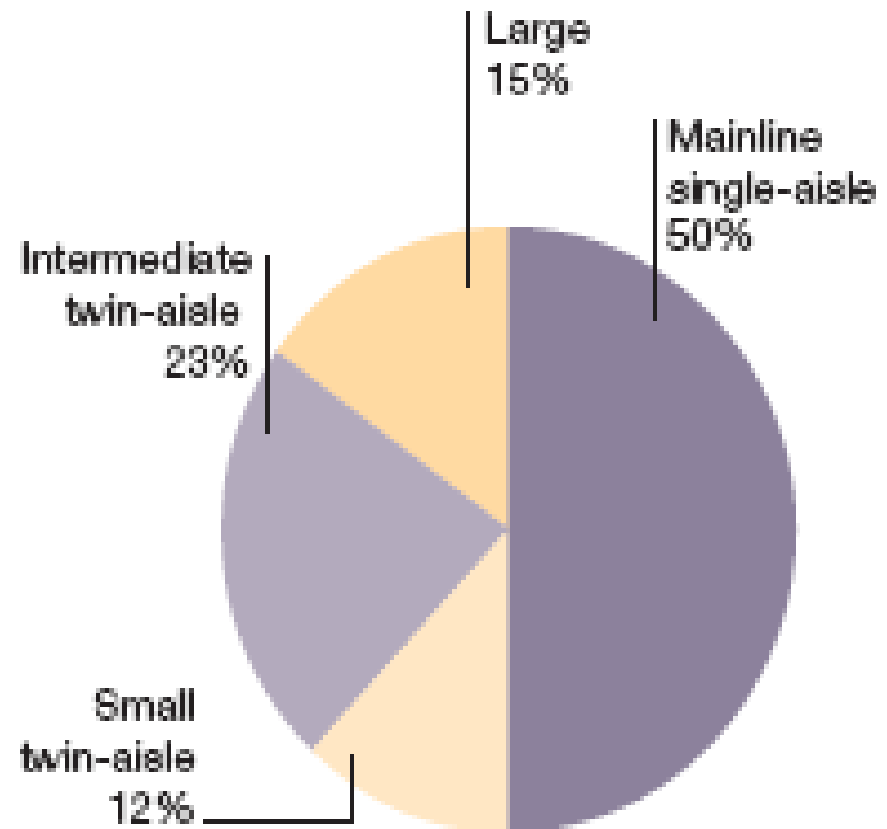
- New threats emerge



Market Trends



World total
at end 2003
1.96 million seats

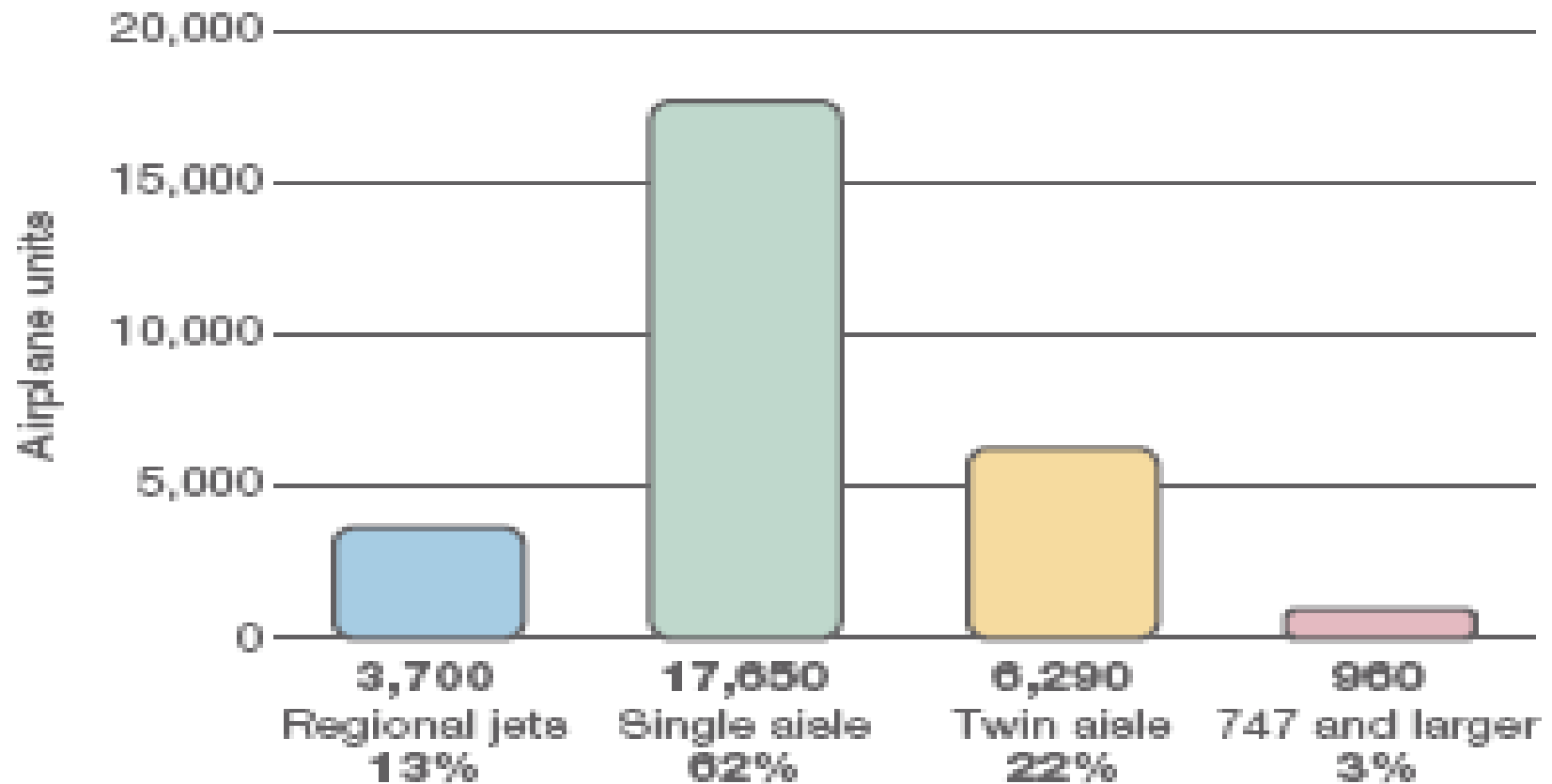


World total
at end 2023
4.69 million seats

Market Trends

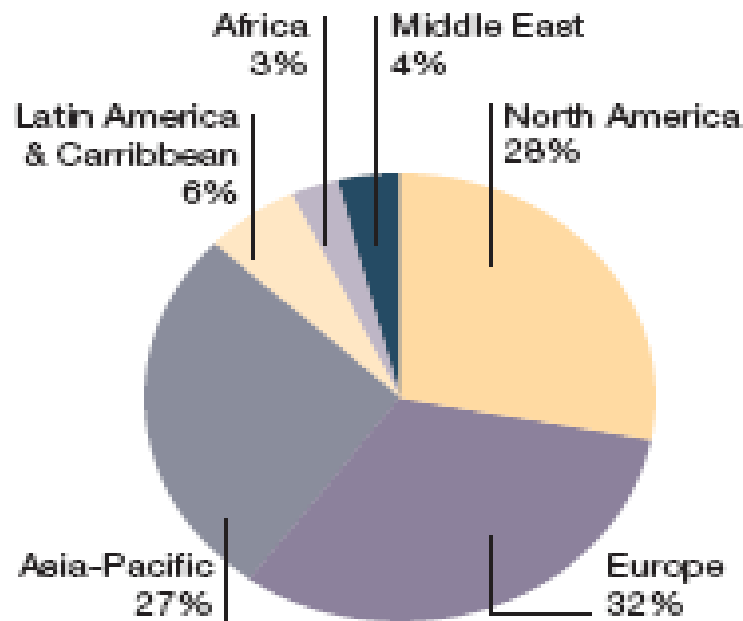
28,600 New Airplane Deliveries

2007 to 2026

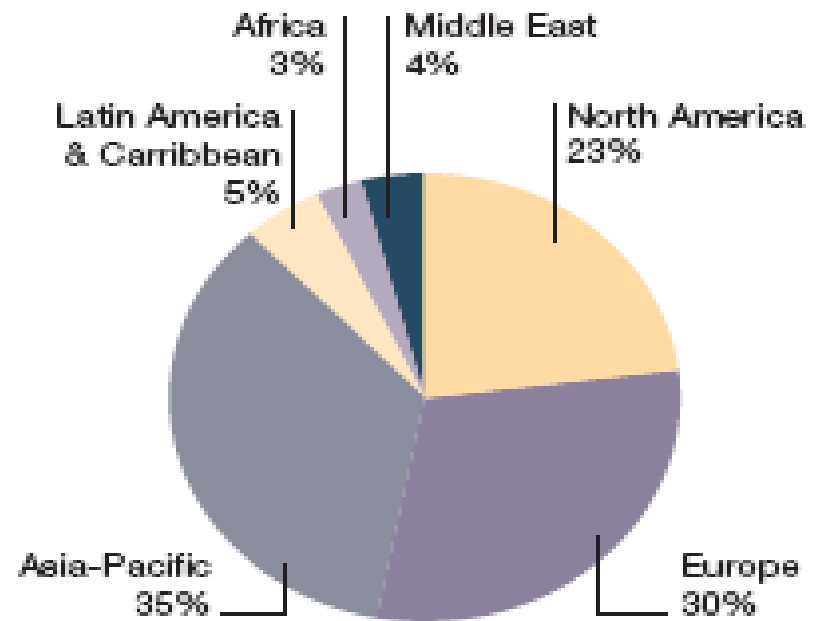


Market Trends

Most deliveries to Europe, most seats to Asia-Pacific



**16,601 new passenger
aircraft deliveries
2004-2023**



**3.8 million new seats
delivered
2004-2023**

Strategies: Boeing

- Focus on Point-to-Point system (Dreamliner 787)
- Garner third-party financing markets
- Acquisition of McDonnell-Douglas in 1997 to increase market share



Strategies: Airbus

- Focus on Hub-and-Spoke system (A 380)
- Fuel efficiency and flight tests using alternative fuels
- Commonality amongst models and the fly-by-wire technology





The Role of China

- Boeing and China:
 - Long standing relationship with China since 1972
 - Parts and assemblies: tail section, vertical fin, horizontal stabilizers, doors, wing panels or 1/8 of the whole structure!
 - Engine manufacturers such as GE, Rolls Royce, and Pratt & Whitney are also being subcontracted in China

The Role of China



- Airbus and China
 - Relationship established in 1990
 - 50% of the Airbus fleet in service has parts produced in China
 - Established training and customer support centres

Benefits and Risks

- Benefits: high productivity, lower costs, quality, lax government control
: springboard to capture Chinese market amounting to \$280 billion and catering to 100 million tourists
- Risks: decrease control, costly training, and transfer of technology to possible competitor



The Chinese Threat

- The AVIC I (China Aviation Industry Corporation I):
 - Biggest aviation manufacturer in China that is state-owned
 - Extensive network of development, production and related business operations:
 - ✓ 111 enterprises
 - ✓ 36 research institutes
 - ✓ 6 universities and colleges
 - ✓ Total staff of 560,000
 - Plans to focus more on developing civilian airplanes to catch Chinese domestic market

"AVIC I is the biggest aviation manufacturer in China. Our goal is to reach the level of big international aviation companies in the next 20 to 30 years."

--Tang Xiaoping,
assistant president AVIC I

1. Cooperation among countries brings a lot of benefits.

“Airbus demonstrates we can achieve more together in Europe than we ever can alone. Working together in Europe means we can compete with anybody in the world.”

~ Former British PM Tony Blair ~

During Jan 2005 unveiling of Airbus 380

Questions

- How do you think the WTO should rule to settle this dispute?
- What steps can Boeing and Airbus take to create a sustainable resolution?
- What will be the future of other producers in the market?