

# US Airline Fleet Renewal Strategies

## Implications for MRO Planning in North America

7<sup>th</sup> Annual Aircraft Maintenance Outsourcing  
Conference for the Americas

October 24<sup>th</sup>, 2007

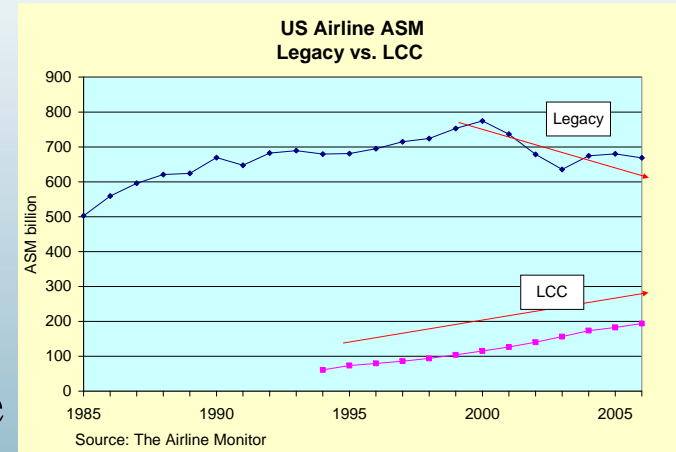


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**The  
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# A Tale of Two Industries

- Legacy Carriers - An industry in decline
  - Inadequate profits
  - Minimal investments
  - Limited time left in the recovery side of this cycle



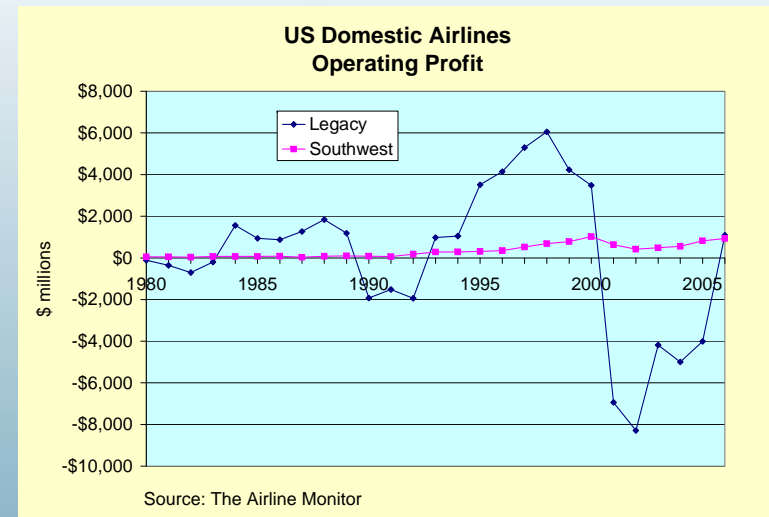
- Low Cost Carriers - An ascendant industry
  - Reaching maturity
  - Modest Profits
  - High but slowing investment



# The Challenge

## US Domestic Situation ....

- Businesses must make money in their home markets
- 1Q 2007 provides some hope..
- Southwest proxy for LCC
- If this earnings cycle mirrors the last, only 2 years until earnings peak

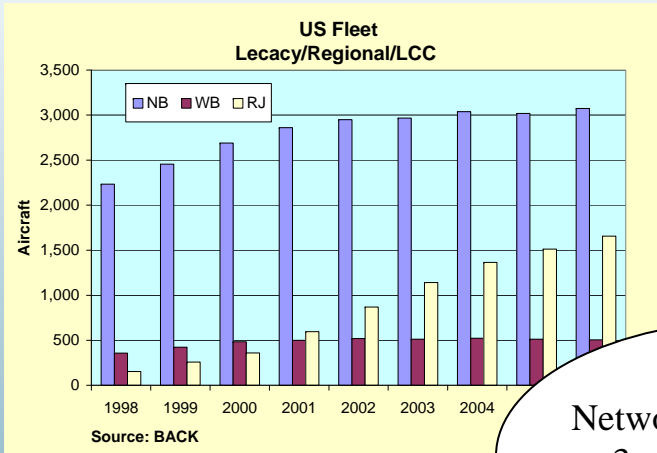


## Fleet Renewal Drivers

- LCC's define domestic competitive environment
- Legacies retreating to international markets
- Fleet renewal strategies reflect perceived strengths

# Fleet Trends

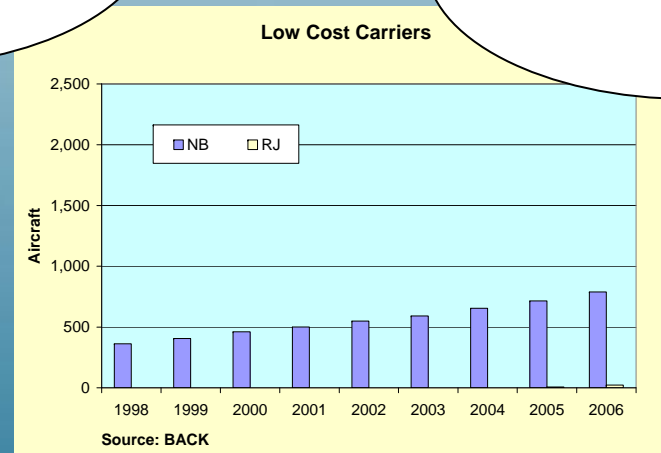
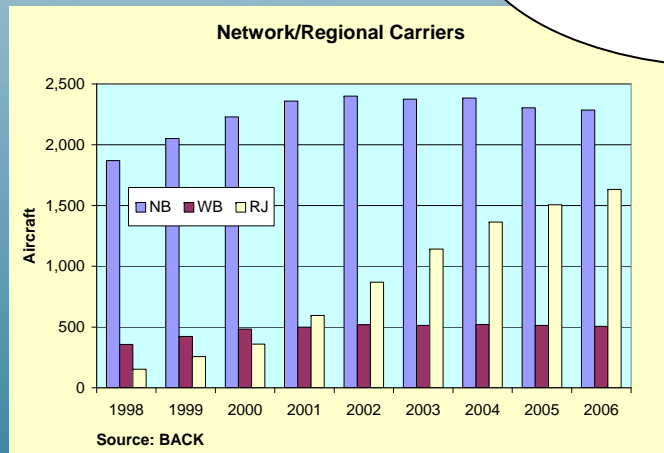
- At end 2006, > 5,200 commercial jets in US fleet
- Post 1998, fleet doubles while RPMs grow < 20%
- RJs source of growth
- Narrow bodies, 60% of fleet, stagnant since 2001



Network NB fleet

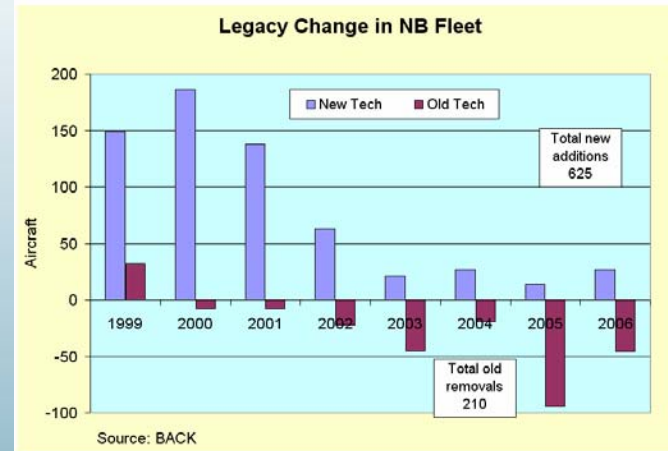
- 3x larger than LCC
- 4x larger than WB

LCC NBs doubled since 1998

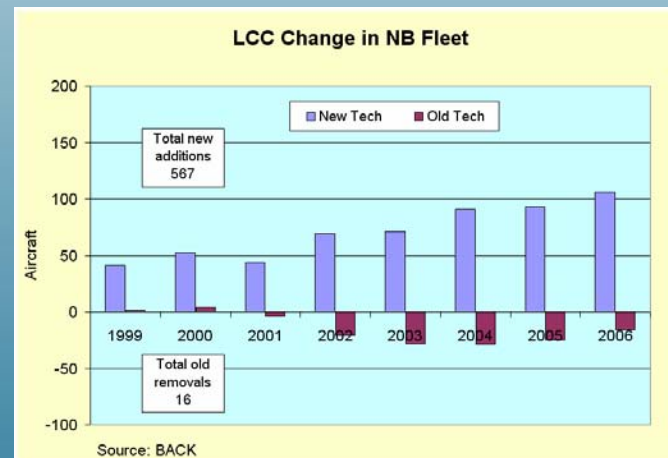


# Narrow Body Fleet Changes

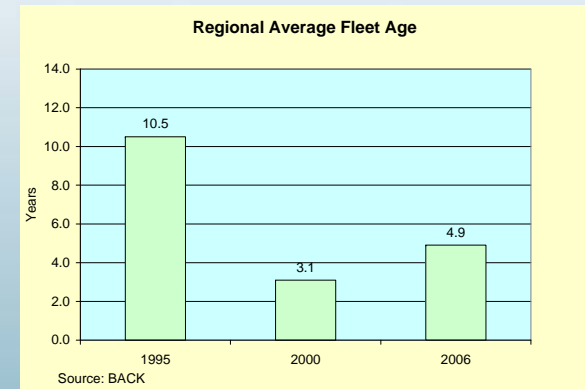
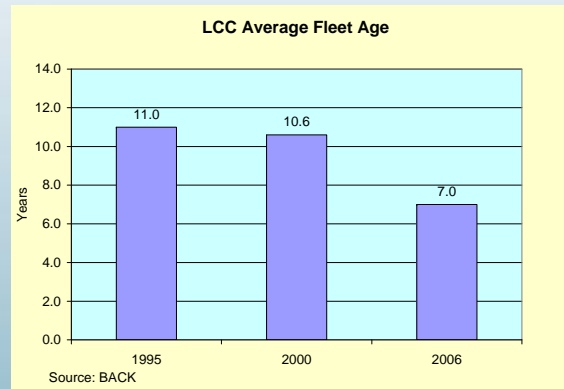
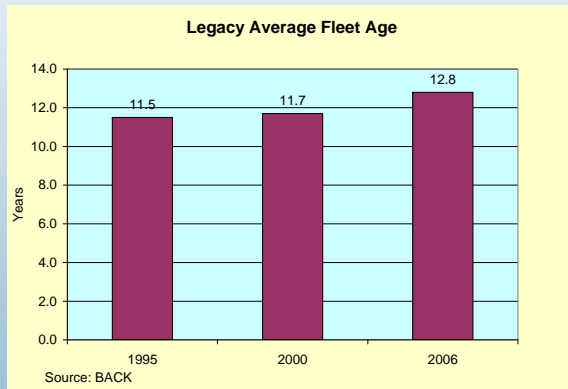
- Legacy NB fleet reflect their changing fortunes in domestic market



- LCC fleets reflect ascendancy of business model



# Fleet Age Trends



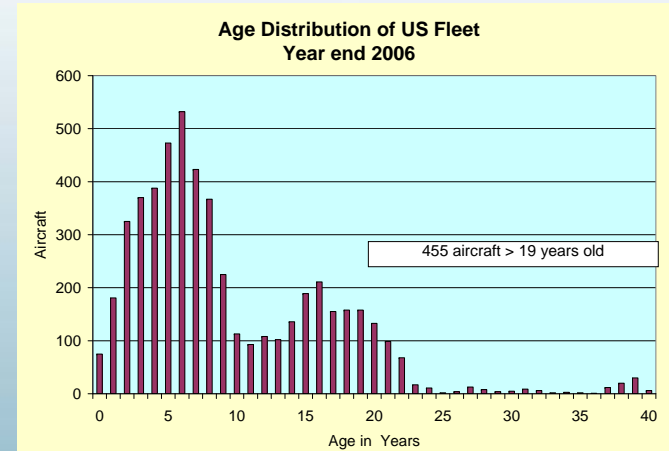
- Northwest still using DC9s - almost 40 years old
- Southwest's oldest 737 > 22 years
- Comair's CRJs now 14 years

Oldest In Service Aircraft			
	1995	2000	2006
Legacy	30.0	35.0	39.9
LCC	28.3	33.3	22.4
Regional	25.9	15.8	13.9

# US Aircraft Fleet Requirements/Orders

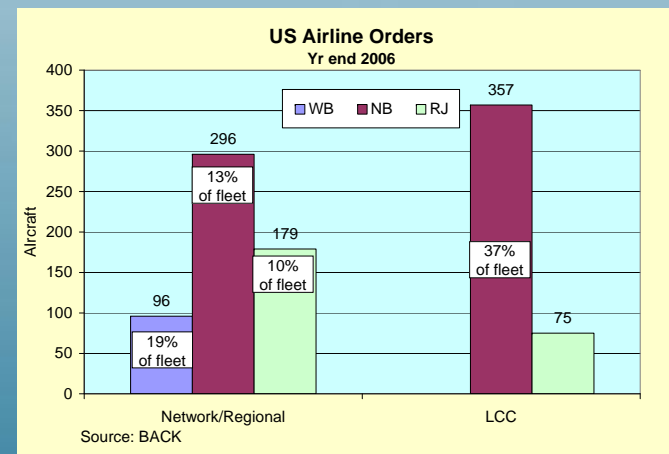
US Fleet at end 2006:

- More than 450 aircraft were 20+ years old
- 1,326 aircraft > 15 years old



End 2006, US airlines held orders for > 1,000 aircraft

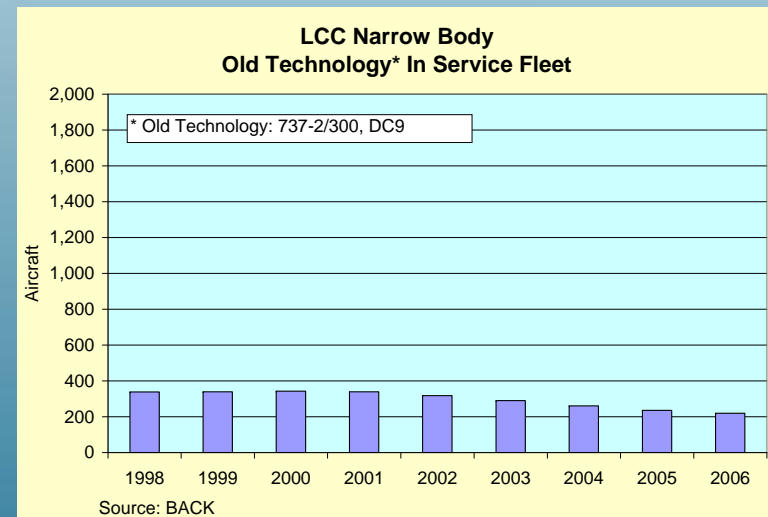
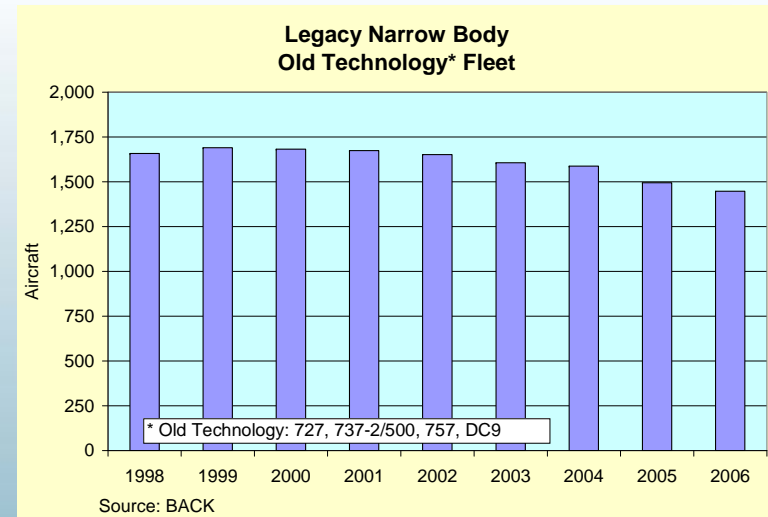
- Legacy – 390 orders - replacement
- Regional – 180 orders
- LCC – 430 orders - continued growth



# Old Tech Narrow Body Fleets

## At end 2006:

- 63% of Legacy NB aircraft were old tech; 38% of LCC
- This is the source of maintenance company profits today
- Operating ~ 1,700 older aircraft when oil is \$ (Insert today's value) a barrel
- Replacement cost ~ \$70 billion – implies maintenance job security



# Fleet Renewal Strategies

## Legacy Carriers

- Defer today what can be put off until tomorrow



## Low Cost Carriers

- Reduce growth in recognition of minimal profits



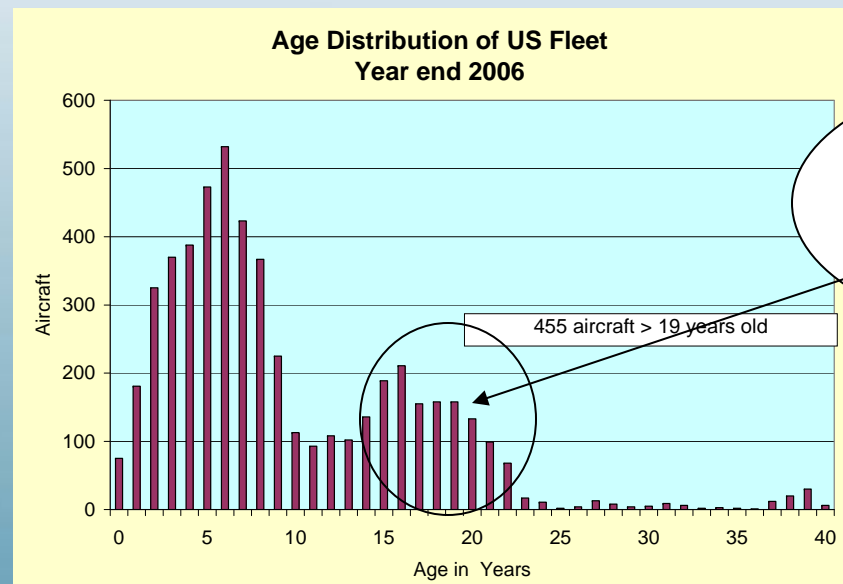
# The Wild Cards

??

- U S domestic market
- US recession in 2008
- Will LCCs challenge Legacies in international markets?
- Fuel prices
- Timing of NB replacement
- Concerns about global warming



**Thesis:** MRO Golden Years – 2007 to 2015??



How can we avoid this increasingly old fleet?

**Risks to thesis:**

- Global recession
- Fuel prices hitting \$???
- Excess of new maintenance capacity

## Key Issues for MROs

- Reduce life cycle maintenance costs
- Adapt to fx volatility
- Plan for risk of next downturn
- Build in flexibility to handle “wild cards”



# Thank You



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