Nippon Cargo Airlines

Medium-to Long-Term Business Plan FY2006-2015 (NCA Phoenix Project 2.0) (16 April 2007)

- **Prospect for FY2006 : Comparison with the Original Plan**

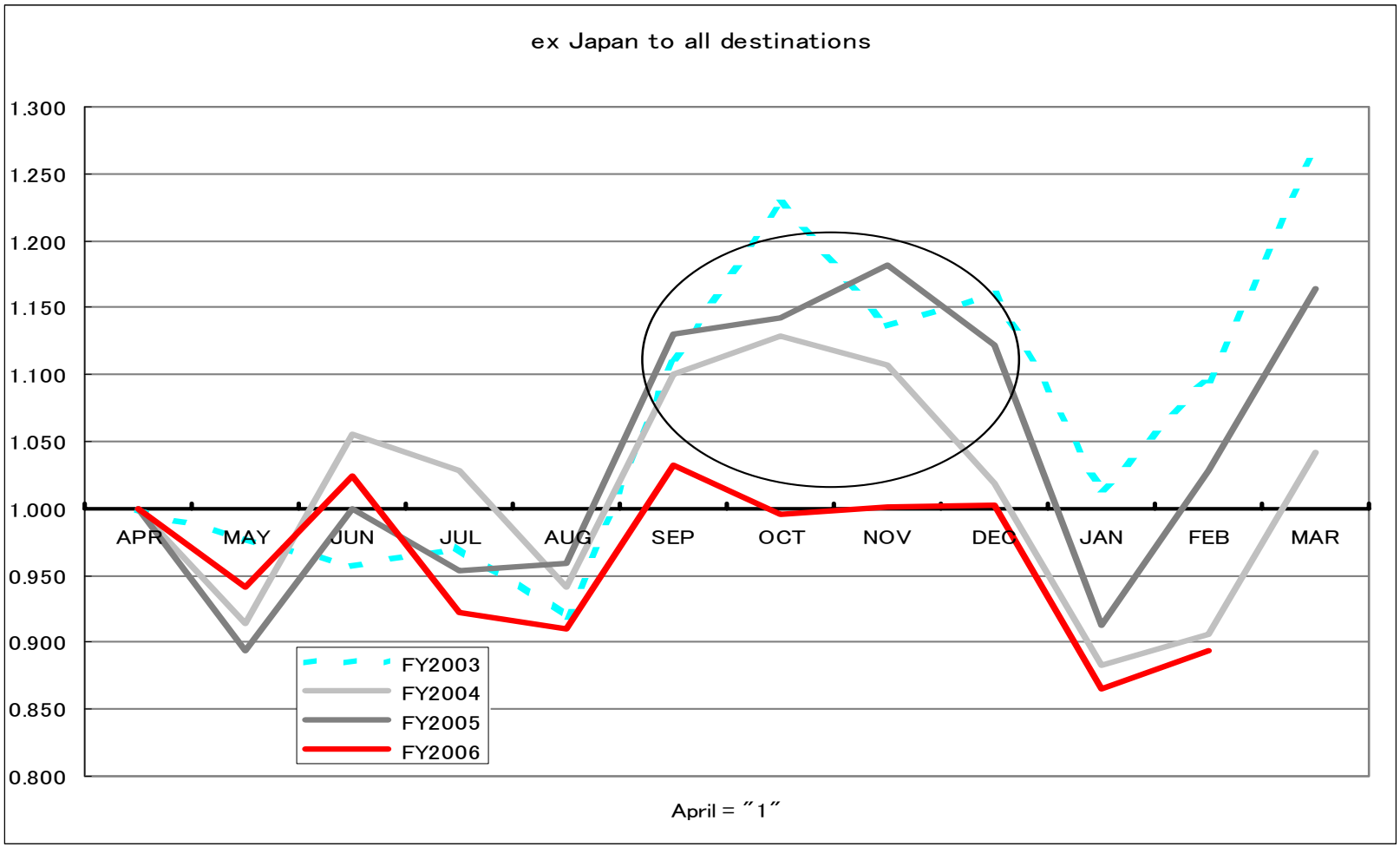
(Consolidated Accounts with the NYK Group)

(Unit : JPY100 mill)	FY05 Result	FY06 Initial Plan	FY06 Mid-Term Review	FY06 Latest Outlook
Revenues	1,036	1,100	1,026	970
Recurring Profits	▲ 104	2	▲ 108	▲ 181

		(a)	(b)	(b)-(a)
Difference from FY05		106	▲ 77	▲ 183
Breakdown)	Scale+L/F	72	0	▲ 72
	Market Condition	0	▲ 42	▲ 42
	Replace to 400F・Direct FLT to EUR	23	23	0
	Rise in Fuel Costs	▲ 23	▲ 38	▲ 15
	Maintenance Costs for 200F	0	▲ 25	▲ 25
	Costs for Independence	0	▲ 35	▲ 35
	Sales of Aircrafts	34	40	6

- FY2006 Result : Overview
  - Market
    - Generally Weaker Cargo Movements
    - Oversupply between China and Japan
    - Delay in Developing Cargo Business of Intra-Asia
  - Fleet
    - Malfunctions in Aged Aircrafts ⇒ Declining Operating Utilization and Increased Maintenance Costs
  - Fuel costs
    - High Fuel Prices ⇒ Increase in Fuel Costs
  - Independence
    - Steady Progress ⇒ Further Acceleration in Independence
    - Progress Exceeding Expectations ＝ Temporary Increase in Double Costs due to Accelerating of the Entire Process

Market Condition in FY2006 ＝ Weaker Cargo Movements



• Phoenix Project 2.0： Outline

Phase-1 Period to Accomplish Independent Operations (FY2006－2008)

- Swift Accomplishment of Independent Maintenance, Flight Operations, Freight Services and IT
- Upgrading of Fleet from B747-200F to B747-400F
- Costs Reduction through The Road to GEC[3] (GEC = Global and Efficient Common Cargo Carrier)
- Development of the Basis for Global Business ⇒ Laying a Solid Groundwork of Profitable Business

Phase-2 Period to Take Off (FY2009－2012)

- Extension of Runway B at Narita Airport (in the Spring of 2010) and Re-internationalization of Haneda Airport (in the Autumn of 2010)
- Introduction of B747-8F
- Strengthening of Network ⇒ Elimination of Accumulated Losses

Phase-3 Period to Further Growth (FY2013－2015)

- Strengthening of B747-8F Fleet
- Developing NCA Network and Improving Cooperation with Strategic Partners
- Global Business Development ⇒ Accomplishment of the Fifth Position in IATA

• Phoenix Project 2.0: Financial Plan

【Consolidated Accounts with the NYK Group】

(Unit: JPY100 mil)		FY05	Phase-1 Independent FY06	FY07	FY08	Phase-2 Take off FY09	FY10	FY11	FY12	Phase-3 Further Growth FY15
Revenues		1,036	970	1,032	1,127	1,300	1,650	2,000	2,350	3,000
Recurring Profits		▲104	▲ 181	▲ 157	▲ 63	10	100	190	260	350
Operation Cost per ATK (FY05=100)		100	113	108	92	85	80	76	75	72
Fleet	B747-200F	10	5	3						
	B747-400F	2	4	6	9	10	10	10	10	10
	B747-8F					2	5	8	11	14
	Additional Capacities	(0)	(2)	(2.5)	(3)	(3)	(3)	(0)	(0)	(0)
	Total as of end of FY	12	9+(2)	9+(2.5)	9+(3)	12+(3)	15+(3)	18	21	24
NCA Fleet	Average age	16.1	11.4	7.8	1.9	2.4	2.8	3.3	3.7	6.2
	Average Utilization/day	12.2	11.1	11.4	12.6	12.0	12.8	13.2	13.2	13.2

• Phoenix Project 2.0 : Tradewise L/F・Yield Trend

				Phase-1			Phase-2
				FY07/3	FY08/3	FY09/3	FY10/3
L/F (%)	NCA	Asia/US	EB	97%	98%	97%	
			WB	74%	79%	78%	
		Asia/Europe	WB	99%	100%	100%	
			EB	90%	95%	93%	
		Intra-Asia	NB	82%	79%	82%	
			SB	59%	71%	63%	
				79%	**83%**	**81%**	**79%**

Yield (%)	NCA	Asia/US	EB	100%	98%	99%	
			WB	100%	92%	92%	
		Asia/Europe	WB	100%	94%	95%	
			EB	100%	94%	94%	
		Intra-Asia	NB	100%	91%	91%	
			SB	100%	96%	96%	
				100%	**92%**	**93%**	**94%**

• Phoenix Project 2.0： Business Envelopment (1)

① **Growing Market:** Business Activities are Becoming Globalized and Borderless (Ref. P15,16)
Growth of Asia-Europe/U.S. , Intra-Asia Trade, Mainly China, ASEAN and India (Ref. P17)
Japan Trade Remains Relatively Moderate (Ref.P18)

② **Aviation Policies:** Expansion of Airports in Asia ⇒ Increasing Flights
Improving Utilization
Aviation Policies in Various Countries are on a Liberalization Trend.

③ **Fleet:** A Generation Shift in Freighter Aircraft: Retirement of Aged Aircraft (Ref. P19 &20)
Asia-Europe/U.S. Trade: Transportation by Large Freighter is Indispensable.
⇒ Demand-Supply Requirements for Large Freighter Aircraft are Tighter (Ref. P21)
Intra-Asia Trade: Increasing Capacity in the Belly of Passenger Aircrafts,
Particularly Aboard Daytime Flights. (Ref. P22).
Upgrading of Logistics Requirements.
⇒ High-Demand for Nighttime Cargo Services.

• Phoenix Project 2.0: Business Envelopment (2)

④ **Freight:** A Shift to a Freight Charge System Directly Reflecting the Space Demand and Supply Situation.

⇒ Basically, a Rise in Yield of the Base Freight Can Not be Expected.

⑤ **Cost:** Fuel Price Remains at High Level.

Globalization of Airline Safety Standards, such as IATA Operational Safety Audit (IOSA)

⇒ Foundation to Make Competitive International Procurement Bids

⑥ **Safety:** Stepped-up Measures to Combat International Terrorism Aiming at Aircrafts

⇒ Airline Security is being Strengthened around the World.

⇒ Cargoes for Passenger Aircraft are Strictly Controlled.

- **Phoenix Project 2.0: NCA's Action**

⇒ ・Reduction of Costs ・Expansion of Network ・Development of Global Business

① Swiftly Establish Self-Sustaining Maintenance and Flight Operations

・Overcoming the Double Cost Structure in Efforts to Support the Accomplishment of Independent Operations.
・Reduction of Operating Costs (Maintenance, Flight Operations, Freight Services, Fuel and G&A Costs.) (Ref. P23,24,25,26)
・Strengthening of Network. (Ref. P27)

② Replace and Enhance Fleet (Ref. P19)

・A Drastic Reduction in Costs for Flight Operations, Maintenance and Fuel.
・Increasing Capacity and Improvement in Services by Using a Highly Competed and Advanced Fleet.

③ Narita Airport Runway-B and Re-internationalized Haneda Airport

・Make the Most of 24-Hour Airport Operations in the Tokyo Metropolitan Area.
・Increase of Slots, Midnight Freighter Services to Asia and Aircraft Utilization Improvement.

④ Global Business Development

Strengthen Network and Global Procurement
⇒ Stepping up Ties with Jett8, ABC and Cargolux, and Developing NLV through 4RHQ + GHQ

Medium-to Long-Term Business Plan FY2006-2015 (NCA Phoenix Project 2.0) (16 April 2007)

- **Phase-1 (FY2006～08) : Period to Accomplish Independent Operations (Consolidated Accounts with the NYK Group)**

(Unit : JPY 100 mi)		FY06	FY07	FY08	FY09
Revenues		970	1,032	1,127	1,300
Recurring Profits		▲ 181	▲ 157	▲ 63	10
Fleet	200F	5	3	0	0
	400F	4	6	9	10
	8F				2
Average age		11.4	7.8	1.9	2.4

●**Enhanced Marketing:** Scale Expansion and Improving L/F on the Asia, Europe and U.S. Sectors through Deals with Forwarders

●**Fleet Replacement:** Improve Profitability by Introducing 400F/8F After Retirement of 200F
(Drastic Decrease in Operating Costs Including Fuel and Maintenance Costs).
*Retired 6 x 200Fs by the End of FY06 ⇒ Will Retire 2 in FY07 and the Remaining 3 within the First Half of FY08)

●**Independent Operations:** To Make Maintenance, Flight Operations, IT, etc. Independent, or Switch to More Competitive Contracts through Global Procurement.
(Recruiting) Securing Crew and Maintenance Staff Members are Making Progress
(Maintenance) Independent Maintenance for 400F in Jul. 2007 and Full Independence will be in Summer 2008.
(Flight Operations) Independent Flight Operations in Apr. 2008 and Full Independence by the End of 2009.

●**FY2008: Financial Accounts will be Balanced in the 2nd Half of FY08**

Medium-to Long-Term Business Plan FY2006-2015 (NCA Phoenix Project 2.0) (16 April 2007)

- **Phase-2 (FY2009～12) : Period to Take Off:**

Enhanced Global Business Development with 8Fs by Making the Most of the "Big Bang" in the Japanese Aviation Industry (Expansion of Narita and Haneda Airports)

Consolidated Accounts with the NYK Group

(Unit : JPY 100 mill)		FY09	FY10	FY11	FY12
Revenues		1,300	1,650	2,000	2,350
Recurring Profits		10	100	190	260
Utilization	(hrs/day)	12.00	12.80	13.20	13.20
Fleet	200F	0	0	0	0
	400F	10	10	10	10
	8F	2	5	8	11
		12	15	18	21
Average age		2.4	2.8	3.3	3.7

Elimination of Accumulated Losses

●Increased Utilization: Rise in Fleet Utilization by a New and Unified Fleet.

Expansion of Narita and Haneda Airports in 2010 → Environmentally Efficient 8Fs, Making the Most of 24-hours Airport Operations and Increasing Operating hour/day to More Than 13 hours/day

●Fleet Scale: Introduction of Two 8Fs in FY09 and Three Each Year between FY10 and FY12

- **Phase-3 (FY2013～2015) : Period to Further Growth**

(Consolidated Accounts with the NYK Group)

(Unit : JPY100 mill)	FY15
Revenues	3,000
Recurring Profits	350

Fleet		
NCA Fleet	400F	10
	8F	14
		24

●Enhance Global Network based on the Strengthened B747-8F Fleet
●Enforce Cooperation with Strategic Partners

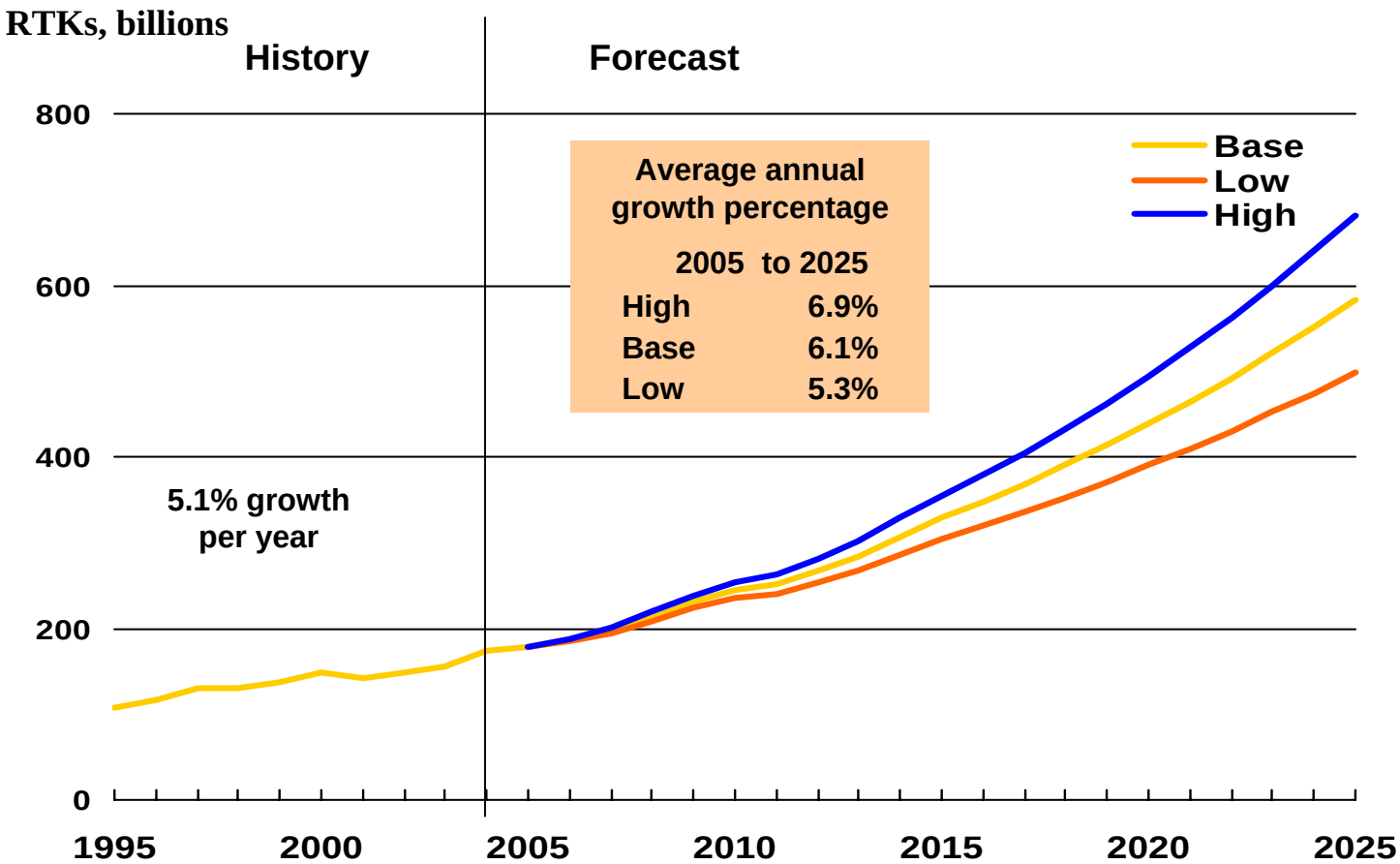
End

Data

Growth of Int'l Air Cargo Market

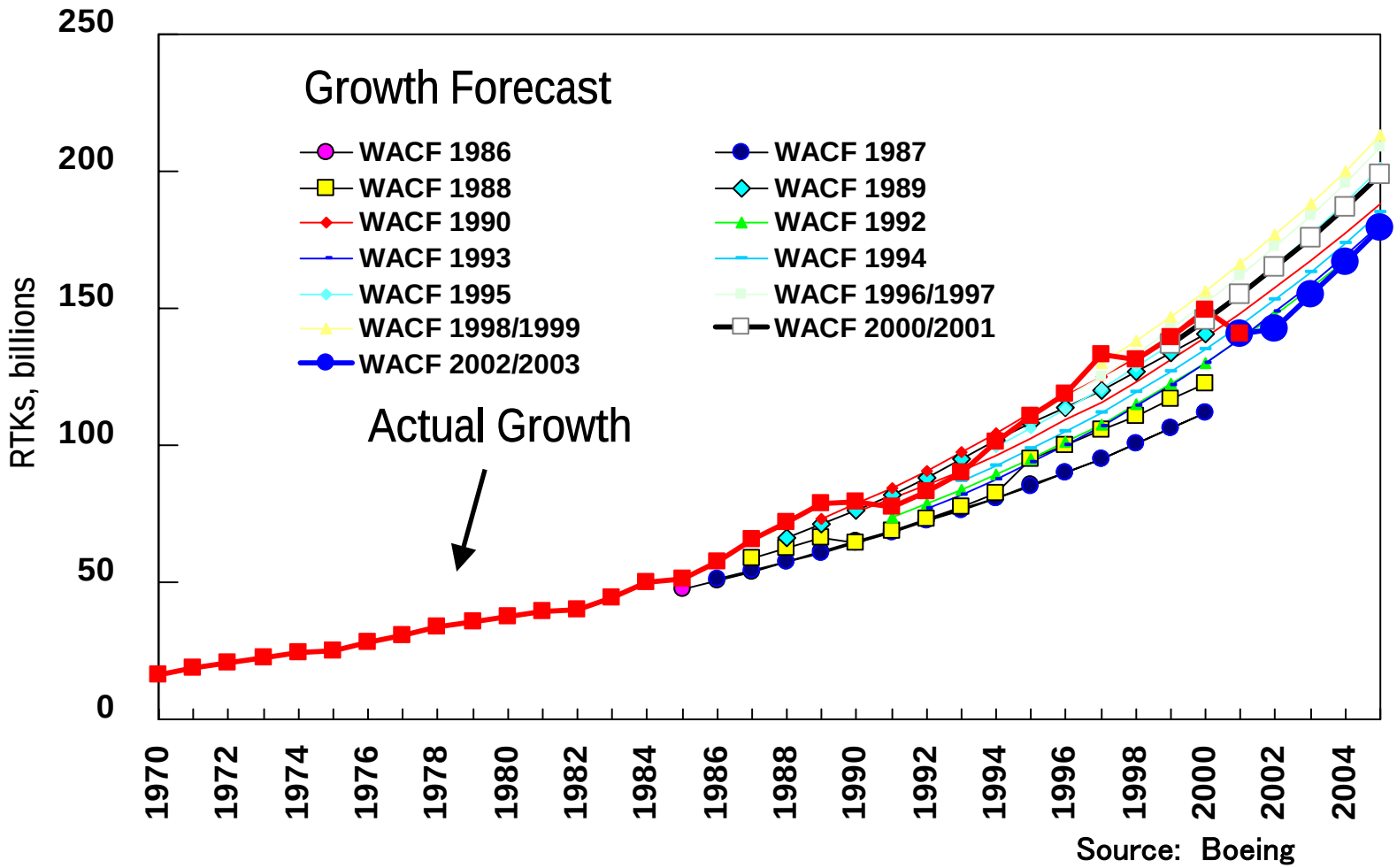
Results 1995－2005

Projection 2005－2025

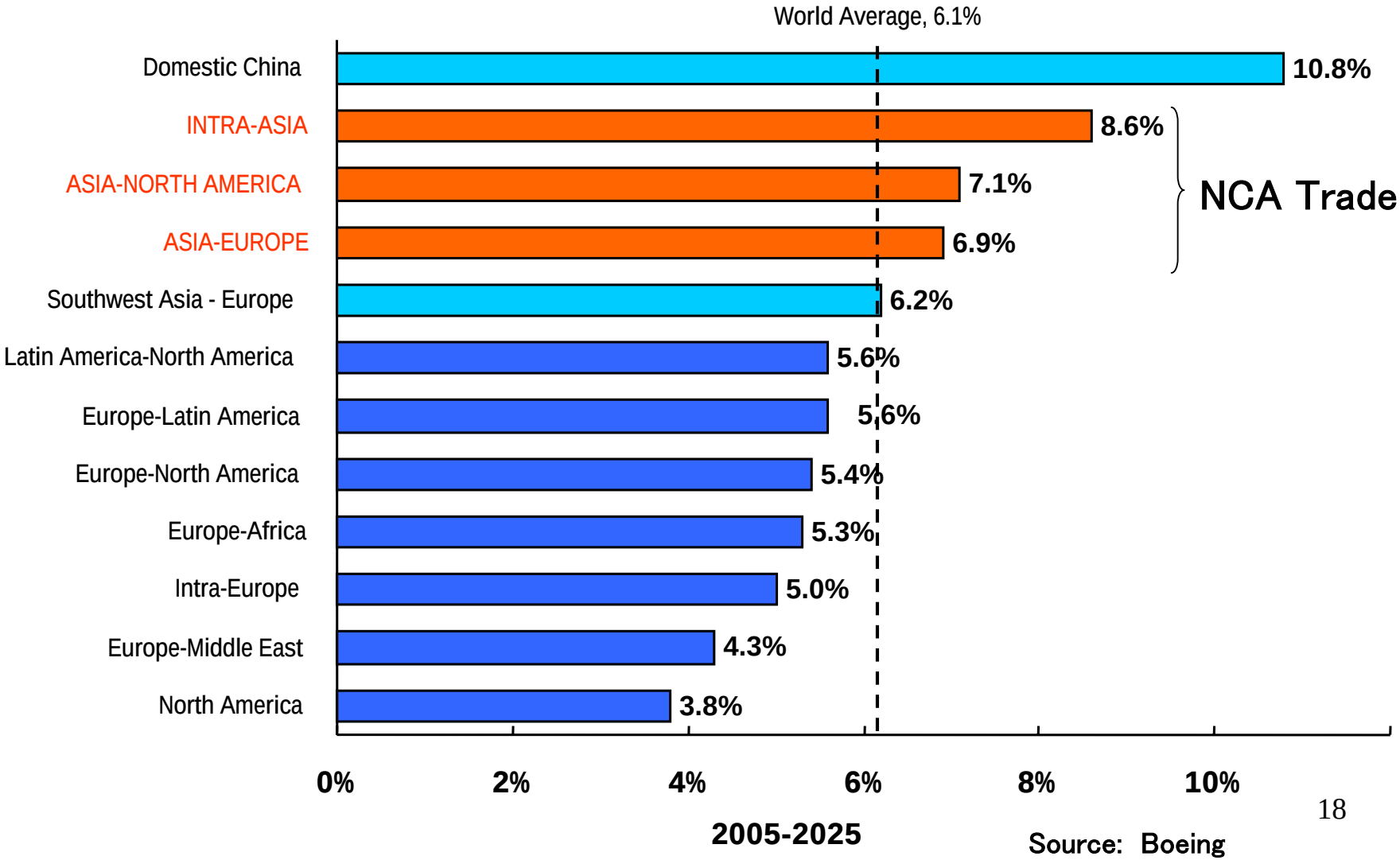


Source: Boeing

Comparison of Boeing's World Air Cargo Forecasts & Actual Growth

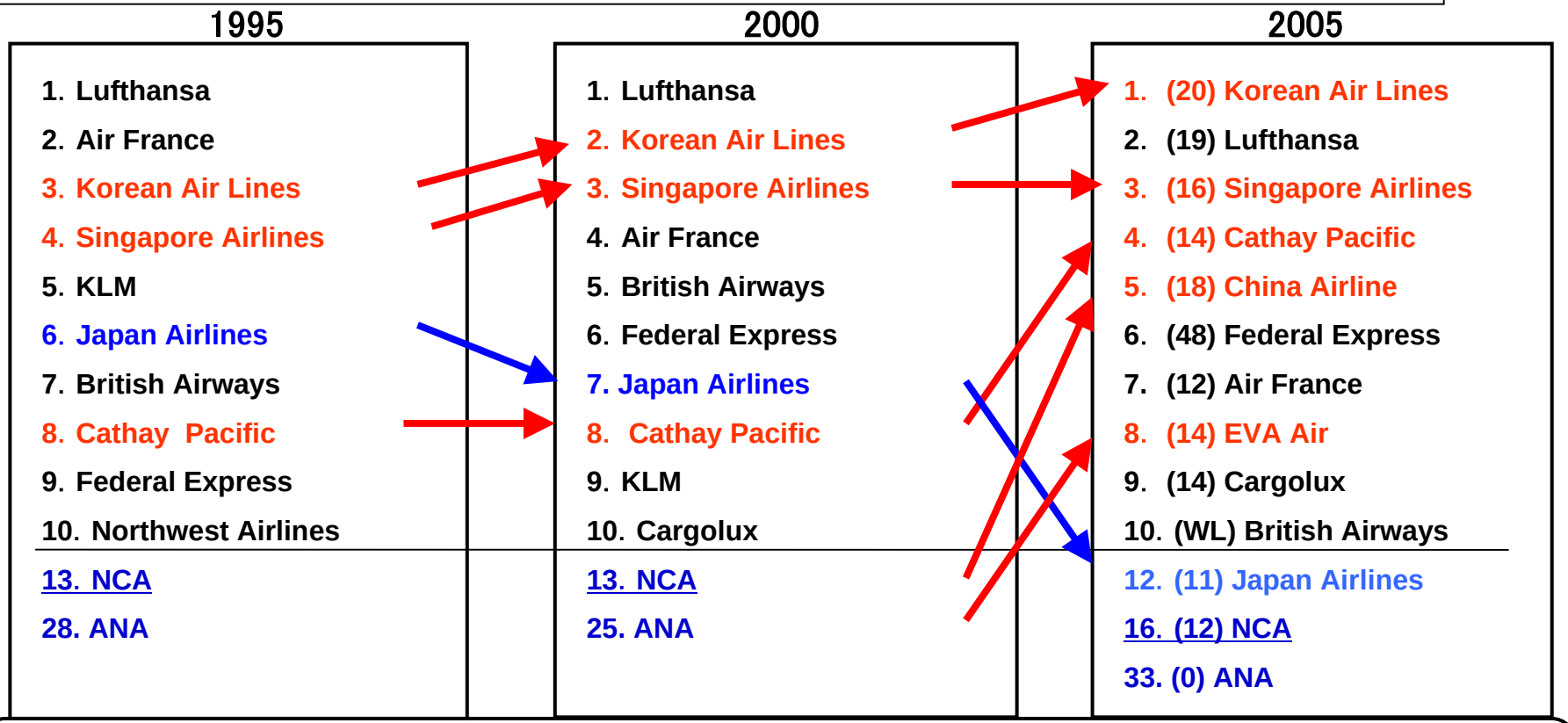


Asia is the Growth Engine



Medium-to Long-Term Business Plan FY2006-2015 (NCA Phoenix Project 2.0) (16 April 2007)

Growing Asian Airlines & Struggling Japanese Airlines



	1995	2000	2005
Share: Japanese companies	8.2 %	7.7 %	6.5 %
(Top 50) Asia, excluding Japan	21.0 %	23.0 %	39.7 %
Total Asia	29.1 %	30.7 %	46.2 %

Source : IATA WATS, International Freight Tonne-Kilometers Carried,
( ) = Number of B4, MD11 Freighters

Generation Shift in Freighters

Points: ・Cost (Fuel, Maintenance, Crew + Commonalities)

・Transportation Ability (Payload, Utilization, Range, Take-Off Capability)

・Environmental Capability (Night Flight, Airports)

	B747-200F	B747-400F	B747-8F
Service Entry	1973	1993	2009(Forecast)
Number of Crews	CAP1, CO1, FE 1 Total 3	CAP1, CO1 Total 2	CAP1, CO1 Total 2
Range (Max Load)	6,200km	7,850km	7,906km
Structual Payload	105.9t	112.6t	133.9t
Configiration	Main:29, Lower:9, LD3:2	Main:30, Lower:9, LD3:4	Main:34, Lower:11, LD3:4
Noise Level at Take Off	QC8	QC4	QC2
Fuel Efficiancy (Basing 200F as 100)	100	82	64
No of NCA Fleet (Order)	5	4 (10 as of 2009)	(14)

Cf. 11 2005

Generation Shift in Freighters

B747-8F : Low Noise Aircraft with Reduced CO_2, NO_x Emissions

Demand & Supply Forecasts for Large Freighter Aircraft (until 2015)

OUT Aged Large Freighter Aircrafts	No. of Aircrafts
B747-100/200/300F	110
DC10F/MD11F	228
Total	338

IN Future Supply Forecast	No. of Aircrafts
B747-400F	24
B747-400Conversion	app. 140－α
B747-8F	app. 85
B777F	app. 90
A380F	0
Total	app. 340－α

＊Market Growth

＊Retirement of Aged Aircraft

＊Limited Supply

↓

B747-8F High Performance Large Aircrafts are the Key to being Competitive

NCA 14, Cargolux 13, ABC 5, Atlas 12, Emirates 10, Korean 5, others

Medium-to Long-Term Business Plan FY2006-2015 (NCA Phoenix Project 2.0) (16 April 2007)

Passenger Aircraft "Belly"

- High Frequency (Northeast Asia)
- Downsizing & Fleet Renewal

B747-400 152m³	→	B777-200 151m³	B777-300 202m³
B767-300 108m³	→	B787-3/8 125m³	B787-9 154m³
B767-300 108m³	→	B737-NG 27m³	

- Daytime・Standby・Limitation
  ⇒ Price War
- Freighters Pursue Uniqueness
  ⇒ ・Nighttime
  ・Acceptance Guarantee
  ・Large Sized Cargo

Medium-Sized Freighters

- B767F・A300F/A330F
- Limited of Payload and Range
  ⇒ Focused on Express Business
  ⇒ General Cargo: Limited to Japan, Korea and Turkey
- Focused on Asia Routes
  ⇒ Daytime: Competition with Passenger Aircraft "Belly"
  Nighttime: Generally Subordinate to B747-8F in Main Trade For Niche Routes

Maintenance

① Tasks Faced by NCA: Preparations to Accomplish Independent Engineering and Maintenance Operations for 400Fs (by July 2007) based on the Premise of Safe Operations.

Completed Tasks

Employment of 61 Engineers	1st Class Engineers for 747-400F: 25 Staffs (April 2007)→ 30 Staffs (Jul 2007)
Stations in Japan and Oversea	Establish Independent Operations, both in Japan and Overseas (Jul 2007)
Heavy Maintenance on Fuselage	Contranct for C-checks with KLM
Engine Maintenance	Contract with GE on "Power by the Hour"
Rotable Parts	Contract with Lufthansa Technik
Consumable Parts	Contract with Boeing to supply parts

Jul 2007 Approval of Repair Station by the JCAB and Achievement of Independent Maintenance of 400Fs

② Independent Operation

Sep 2008	Retirement of B747-200F ⇒ Full Independence Achieved
Autumn 2008	Introduction of Maintenance Simulator
Autumn 2009	Maintenance Hangar at Narita Airport (for B747-8Fs)

③ IOSA Examination : Autumn 2007, Approval within 2008

④ Preparations to Introduce 8Fs: WTT (Working Together Team) Participation and Obtaining "Same Type Rating" Verification

Flight Operations

① Efforts are being Undertaken to Accomplish Independent Operation by Functions with Precise Attention Paid to Safety

Feb 2007	Order Full Flight Simulator with CAE in Canada
Oct 2007	Move to NCA's Office Space in Terminal 2, Narita Airport
Oct 2007	Accomplish Independence in Flight Operation Planning
Jan 2008	Accomplish Independence in Crew Service and Scheduling and Flight Operations Engineering
Apr 2008	Accomplish Briefing, Flight Dispatch and Flight Oepration System (Sabre)
Jun 2008	Complete the Crew Training Center and Introduction of Full Flight Simulator
End of 2009	Complete Independence on Crew Dispatch and Training

② Employment and Training (Crew, Flight Operation Managers, Flight Operation Engineers etc.)

③ IOSA Examination in Oct 2007 , Approval within 2008

④ Preparations to Introduce 8Fs: WTT Participation ,
Obtain "Same Type Rating" Approval

Medium-to Long-Term Business Plan FY2006-2015 (NCA Phoenix Project 2.0) (16 April 2007)

IT

① NCA's Computer Center "@Tokyo" Opened in March 2007

② Selection and Introduction of Three Major Independent Systems

(Reducing Costs by ¥2.7 Billion over the Next 10 Years)

System	Cargo Infomation i-Cargo	Maintenance i-Macs	Flight Operations
Supplier	ibs(India)	Trax(USA)	Sabre(USA)
Scheduled to start operating	Jan 2008	Jul 2007	Apr 2008

③ Establishing and Implementing a Medium-term Information System (a Structured, Competitive System)

Freight Service

① Bidding for and Accomplishing Independent
Transport Operations at Airports both in Japan and Overseas
: Narita, Kansai, Chubu and Hong Kong Airports
(Resulting in ¥500 Million Cost Reduction a Year)

② Project to Improve Sheds in North America

③ Project to Deal with Expansion of Haneda Airport

Medium-to Long-Term Business Plan FY2006-2015 (NCA Phoenix Project 2.0) (16 April 2007)

NCA Network in 2007