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THE AIRLINE INDUSTRY: CHARTING A GLOBAL FLIGHT PLAN

by L. Milton Glisson North Carolina A&T State University

Introduction

There are those who believe that in this thirteenth year of airline deregulation that the era of consolidation/merger/acquisition is essentially over in the United States. They are probably right because of two reasons. One reason, very simply, is that the large number of consolidations, mergers, acquisitions and bankruptcies have left very few Major carriers on the competitive playing field. The second reason is that the Department of Transportation's (DOT) authority over mergers and agreements concerning domestic transportation was sunset on December 31, 1988. On the surface, this reduced number of domestic competitors and the additional freedom from regulation appears to hold nothing but benefits not only for the American airline industry but for its international competitors as well. This apparent "windfall" from deregulation will be examined in the following pages.

As a case in point, European air carriers see decontrol as probably their best weapon in the competitive battle. For example, the recently signed Luxembourg II Agreement opened up the so-called Fifth Freedom Right which will allow such carriers as Aer Lingus, British Airways, Air France, KLM and Lufthansa to fly between any two European cities, even if both cities are outside their home country.¹

The Airline Industy Before And After Deregulation

Since 1985, approximately twenty-five (25) mergers and acquisitions have occurred; twenty-three (23) were by major carriers.² There were four Major carriers acquired in 1986: Peoples Express, Eastern, Republic, and Western which left only nine (9) of the former thirteen (13) Major carriers which has been further reduced to eight Majors with the acquisition of Piedmont by USAir in 1989.³

If all of this has taken place in approximately two-to-three years, what has happened to the industry since deregulation began in 1978? In sheer numbers alone, thirty-six (36) carriers began nearly a decade of deregulation. If every air carrier that stated operation, since deregulation of the air passenger segment of the industry, were still in operation today, there would be a grand total of 234⁴ air carriers. However, bankruptcies, mergers, consolidations, and ceased operations have claimed a staggering 68.8%; including the consummation of the acquisition of Piedmont by USAir on August 4, 1989. Over seventyfour (74) carriers certificated as Section 401 scheduled airlines remained in January, 1987. EXHIBIT 1 and TABLE 1 tell the story pictorially and numerically.

Of the remaining seventy-four (74) Section 401 certificated air carriers in January, 1987, a net total of only twenty-five (25) compete for airline traffic within the continental (48 contiguous states) United States (see TABLE 2). Thirty-six operate outside the forty-eight states (in Alaska, Pacific, and the Caribbean) while thirteen (13) others provide feeder service to larger carriers. None of the original mid-sized Regional carriers certificated prior to 1978 exist today. Ozark, Frontier, North Central, Hughes Air West, Southern, and Texas International have all been acquired. Although Allegheny and Piedmont both acquired Major carrier status by the expansion of their route structures, they were both acquired by USAir.⁵

The scheduled airlines are divided into three classifications: Majors, Nationals, and Regionals. TABLE 3: U.S. SCHEDULED AIRLINES, PRE- AND POST-MERGER and EXHIBIT 2: CON-SOLIDATION OF NATIONALS BETWEEN 1986 AND 1991 identify the carriers in each classification. For the sake of brevity, MAJOR airline companies are those airlines, once referred to as trunk carriers, and who are now classified as MAJORS because they have annual gross revenues over one billion dollars. NATIONAL airline companies are those that generate annual gross revenues between \$75 million and \$1 billion. And while REGIONAL airline companies have a history of their own, they are classified as LARGE REGIONALS if their annual gross revenues fall between \$10 million and \$75 million and ME-DIUM REGIONALS if annual gross revenues are less than \$10 million. For 1989, it was estimated that the Majors generated 429 billion revenue passenger miles (RPMs).⁶

Sunset of DOT Merger Authority

The sunset of DOT's authority to review mergers under Section 408 of the Federal Aviation Act does not transfer authority to review mergers to the Department of Justice nor to any other agency. The bottom line is that airline mergers no longer require administrative approval. However, when the airline industry lost the necessity for administrative approval, it also lost the immunity that airline mergers approved by DOT had previously obtained under the antitrust laws. As a result, airline mergers that violate the Sherman Antitrust Act and the Clayton Act now can be challenged in the courts by the Antitrust Division of the Department of Justice or by private parties.⁷ In short, the airline companies are now fully subject to the same antitrust rules that govern other American industries except for some aspects of international aviation.

Exhibit 1

Consolidation of Pre-deregulation Trunk and Local Airlines into Seven Major Airlines

19 Trunks & Locals - 1978	7 Majors - 1991
AMERICAN	AMERICAN
BRANIFF ———— BANKRUPTCY ("NEW 1	" BRANIFF EMERGED AS National Carrier)
CONTINENTAL —— BANKRUPTCY — (PL TEXAS INTERNATIONAL — EASTERN ————— (BANKRUPTCY, 3/91) FRONTIER —— PURCHASED BY PEOPLE	IRCHASED BY TEXAS AIR CORP.)
DELTA	DELTA
NORTHWEST	
PAN AMERICANSOLD PACIFIC DIVISIO NATIONAL	N TO UNITED — BANKRUPTCY (12-91)
TRANS WORLD	TRANS WORLD
UNITED-BOUGHT PAN AM PA	CIFIC DIVISION — UNITED
ALLEGHENY ————————————————————————————————————	USAIR

SOURCE: ADAPTED FROM <u>AIRLINE CONSOLIDATION</u>, (WASH., D.C.: AIR-LINE ECO., INC. 1987) p. 20 AND <u>FAA AVIATION FORECASTS</u>, <u>FISCAL YEARS</u> <u>1990-2001</u>, U.S. D.O.T., FED. AVIATION ADMINISTRATION, pp. 121-223.

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Table 1

A Numerical History of U.S. Scheduled Airlines Operating Under Section 401 Certificates as of January, 1987

Certificated prior to 1978	36
Certificated 1978 - 1986	198
Total	234
Less: Merged, Liquidated, Decertificated or not operating under a Certificate Total Currently Operating	<u>161</u> 73

Source: Adapted from <u>Airline Consolidation</u>, (Washington, D.C: Airline Economics, Inc. 1987), p. 16. Updated to March, 1991.

Table 2

Total Number Of Carriers Operating In Continental United States Without Feeder Agreements With Larger Carrier(s)

Total carriers currently operating	73
Carriers operating totally outside Continental U.S. (Alaska, Pacific, and Caribbean	<36>
Carriers with feeder agreements	<13>
Total carriers operating in Continental U.S. without feeder Agreement with Larger Carriers	24
Source: Adapted from <u>Airline Consolidation</u> , (Washing line Economics, Inc. 1987), p. 16. Updated to March,	, ,

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Table 3

U.S. Scheduled Airlines Pre- and Post-Merger

Pre-Merger:	<u> Majors (12)</u>	<u>Nationals (15)</u>	<u>Regionals (4)</u>
	American Continental Delta Eastern Northwest Pan American Piedmont Republic Trans World United USAir Western	AirCal Alaska Aloha America West Braniff Frontier Hawaiian Midway New York Air Ozark Pacific S.W. People Express Southwest TranStar World	Air Midwest Air Wisconsin Atlantic S.E. Jet America
Post-Merger:	<u>Major (8)</u>	National (8)	<u>Regionals (2)</u>
	American Delta Northwest Pan American Texas Air Corp. Trans World United USAir Group	Air Wisconsin Alaska Air Group Aloha America West Braniíf Hawaiian Midway - (Bankru Southwest	

Source: Adapted from Dr. G. James. <u>State of The Airline Industry</u>. Airline Economices, Inc., Washington, D.C., January, 1990.

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Exhibit 2

Consolidation of Nationals Between 1986 and 1991

Start of 1986	Disposition	End of 1991

Aircal Merged into American
Air Wisconsin Air Wisconsin
Alaska Alaska
Aloha Aloha
America West America West
American Trans Air American Trans Air
Braniff Braniff
Frontier Merged into People Express
Hawaiian Hawiian
Midway Bankruptcy, 12-91 Midway
MCM Grand MGM Grand
New York Air Merged into Texas Air Corp.
Ozark Merged into TWA
Pacific Southwest Merged into USAir
People Express Merged into Texas Air Corp.
Southwest Southwest
Trans America Ceased Scheduled Passenger Operations
Transtar Merged into Southwest
World Ceased Scheduled Passenger Operations
Air Wisconsin Air Wisconsin
Jet America Bought by Alaska

21 Carriers

10 Carriers

Source: Adapted from <u>Airline Consolidation</u>, (Wash., D.C.: Airline Eco., Inc., 1987) p. 20, and <u>FAA Aviation Forecasts, Fiscal Years 1990-2001</u>, U.S. D.O.T., Fed. Aviation Administration, pp. 221-223.

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The fact is that, today, not only have the possible combinations among airlines been reduced significantly but if and when any mergers are attempted, they will be closely scrutinized by the Antitrust Division of the Department of Justice, In addition, there are relatively few airports that serve as hubs for more than one airline. Hubs are airports in major cities/metropolitan areas that serve as collection points for passengers and cargo. REGIONALS transport passengers and freight from outlying areas into a Hub location via spokes (routes). Major and/or National airlines complete the move by carrying the passengers and/or freight to their final destinations via other spokes (routes). As a result of the small number of hubs serving more than one airline company, the antitrust analysis will likely tend to focus on an assessment of an airline mergers' impact on national concentration levels. However, the more immediate guestion is "What strategies do airline companies develop for one, three, five, and ten years in the future that will avoid incurring the wrath of the Antitrust Division of DOI?"

Four alternatives provide a short but non-exclusion list to this strategic planning question. (1) One of which is to go "BACK TO THE FUTURE!" If we return to the year 1978 when deregulation (of the passenger segment of the airline industry air cargo having been deregulated in 1977) - was the WAVE OF THE FUTURE, we find that deregulation was to become the FUTURE of the airline industry. Although, it is not "JUST" the deregulation of the American domestic airline industry that is charting the flight plan of domestic and international airline operations of the future. It is DOMESTIC DEREGULATION, INTERNATIONAL DEREGULATION (e.g., Europe, 1992) and WORLD EVENTS (e.g., Iraqi invasion of Kuwait and subsequent United Nations sanctioned trade embargo) of the most recent months, weeks, and days. The other three alternatives to the strategic planning question include the options of (2) developing marketing alliances not only with foreign air carriers but with national/global hotel and restaurant chains as well; (3) ownership changes (discussed later), and even the different forms of (4) frequent flyer agreements.

Globalization

Globalization is a strategic alliance alternative for which the airline carriers do not have an option if they plan to remain competitive. That is, they must globalize their operations simply to be able to remain competitive not only with their domestic counterparts but with the foreign-based international carriers as well. It is a strategic change forced on the industry by domestic and international deregulation. Globalization of the U.S. Airline industry began in 1977 and 1978 with the deregulation of the cargo and passenger segments respectively. Eventually, Canada, the United Kingdom, Japan, Australia, and other countries experimented with deregulation, liberalization and even privatization of their airline industries. It should be remembered that deregulation of the airline industry, domestically and internationally, has erupted upon the scene as a result of forces outside of the control of the airline industry. Globalization is the airship flying toward tomorrow; (domestic and international) deregulation is the current state-of-the-art fuel being used to power the ship; North America and Europe probably were the first two passengers on that ship to buy - but not pay for - their tickets. Many other passengers (i.e., countries/airline companies) are scrambling for tickets by jockeying for a position in the line that is forming.

The European Common Market added fuel to the fire of regulatory liberalization with the Treaty of Rome test of airline competition and pricing in the 1986 Nouvelles Frontieres case which held that the rules of competition which exist under the Treaty of Rome do, indeed, apply to aviation. At that point, the FUTURE was developing around an attempt to foster overall economic airline integration in Europe which would set up a chain reaction around the world.⁸

As a result, North America and Europe, two of the three major developed regions of the world, are moving rapidly to structurally change air transportation into an arena of open competition by initiating strategic alternatives available to them in the deregulated world of the airline industry. Airline companies in the rest of the world, including the less developed regions, are searching for and signing up partners with whom to dance to the new tune the world is now playing. As a result of domestic and international deregulation, mergers, consolidations, and bankruptcies, these relationships between the airline companies are developing into important strategic alternatives identified earlier; (1) marketing alliances, (2) ownership changes, and the (3) frequent flyer agreements.

Analysis of Globalized Strategies

STRATEGIC ALLIANCES

Of the many types of alliances available to enterprising airline companies, the three most important are **Marketing**, **Equity** and **Frequent Flyer Programs**. The last few years has seen a dramatic increase in all three types. Out of one-hundred, seventy-two alliances identified by Mead Jennings in the August, 1990 issue of <u>AIRLINE BUSINESS</u>, eighty-two of the agreements (47.67%) involved equity investments. More specifically, fifty-six per cent of these 82 agreements were made in the last five years (see TABLE 6, APPENDIX). TABLE 4 is an abstract of the strategic alliances of the U.S. domestic air carriers with domestic and foreign-based air carriers. An example is the first truly "global" alliance between Delta, Singapore and Swissair which includes the coordination of international fares and flight schedules, the loaning of flight attendants and the possibility of joint buying opportunities.⁹

Marketing Alliances

In the category of Marketing Alliances, we find the British Airways and United agreement to coordinate schedules and to share codes of international flights: but no equity swaps. Carried to an extreme, one would find a route-specific agreement which refers to an agreement between two airlines regarding the contribution of each airline to a cooperative effort over a specific route (e.g. New York to London). The equity swap another name for alliance partners buying into each other - is a relatively new variation on the much older marketing alliance theme. It is interesting to note that American Airlines serves as a partner to seven other major airlines; Aer Lingus, Air New Zealand, Cathay Pacific, Finnair, Maley, Qantas, and Singapore Airlines, American has picked up an equity position (7.5%) in only one of these airlines: Air New Zealand, Conversely, these same seven airlines serve as partners for American with Air New Zealand holding a 7.5% equity position in American Airlines. Among these seven partners, American has only one wideranging marketing alliance with Qantas. The other six alliances are route-or market-specific agreements.

TABLE 4 provides some insight into the relationships that have been established among the airline companies of the world and U.S. airline companies. The last column indicates what kind of relationship exists between any two carriers;"M" means there is a wide-ranging marketing alliance agreement between the two carriers; "R" means the agreement covers only a specific route/market; "J" means there is a joint venture between the two firms; "C" means the agreement is for cargo only and "MAN" means there is a management contract in existence.¹⁰

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Table 4

Stategic Alliances of American Carriers in the Airline Industry

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	PACT
AER LINGUS	AMERICAN			R
AEROFLOT	PAN AM			M
AIR CANADA	TWA			M
AIR-INDIA	TWA			R
AIR MICRONESIA	ALOHA		10	K
AIR MICKOTIESIA	CONTINENTAL		30	
AIR NEW ZEALAND			7.5	
ALITALIA	USAIR		7.0	м
ALL NIPPON	TWA			R
ALOHA	AIR MICRONESI	A 10		
AMERICAN	AER LINGUS			R
	AIR NEW ZEALA	ND 7.5		
	CATHAY			R
	FINNAIR			R
	MALEV			R
	OANTAS			м
	SINGAPORE			R
AMERICA WEST	ANSETT		20	
ANSETT	AMERICA WEST	20		
AUSTRALIAN	UNITED			R
BRITISH AW	DELTA			R
	UNITED			М
CANADIAN AIR.	MIDWAY			R
CATHAY PACIFIC	AMERICAN			R
CONTINENTAL	AIR MICRONESI	۹ 30		
	SAS		9.9	М

KEY: *=PLANNED; **=SUBJECT TO REGULATORY APPROVAL; M=WIDE-RANGING MARKETING ALLIANCE; R=ROUTE OR MARKET SPECIFIC ALLI-ANCE; J=JOINT VENTURE; C=CARGO; MAN=MANAGEMENT CONTRACT

SOURCE: Jennings, Mead. "Strategic Illusions", <u>AIRLINE BUSINESS</u>, August, 1990, pages 27, 28 & 30.

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Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	PACT
DELTA	BRITISH AW			R
Deen	SINGAPORE	2.8		M
	SWISSAIR	5	4.6	M
FINNAIR	AMERICAN		****	R
GULF AIR	TWA			R
HAWAIIAN	IAPAN AL		25	
JAPAN AL	HAWAIIAN	25		
KLM	NORTHWEST	14.9		
MALEV	AMERICAN			R
	PAN AM			R
	TWA			R
MIDWAY	CANADIAN AL			R
NORTHWEST	KLM		14.9	
Pan am	AEROFLOT			М
PHILIPPINE AL	TWA			R
QANTAS	AMERICAN AL			М
SAS	CONTINENTAL	9.9		М
SINGAPORE AL	AMERICAN			R
	DELTA	5	2.8	
TRANS WORLD	USAIR			Μ
UNITED	ALITALIA			R
	AUSTRALIAN			R
	BRITISH AW			М
USAIR	ALITALIA			М
	TWA			Μ

Table 4 Continued

KEY: *=PLANNED; **=SUBJECT TO REGULATORY APPROVAL; M=WIDE-RANGING MARKETING ALLIANCE; R=ROUTE OR MARKET SPECIFIC ALLI-ANCE; J=JOINT VENTURE; C=CARGO; MAN=MANAGEMENT CONTRACT

SOURCE: Adpated from: Jennings, Mead. "Strategic Illusions", <u>AIRLINE BUSI-</u> <u>NESS</u>, August, 1990, pages 27, 28 & 30.

Equity Alliances

It is sometimes difficult to separate the new variation . . . equity partnerships . . . from the old marketing alliance theme. The practice of alliance partners buying into each other has quickly gained acceptance in the airline industry even though the strategy is expensive and time consuming. Delta holds a 5% equity in Swissair who holds a 4.6% equity in Delta. The reciprocal 7.5% equity holdings of American and Air New Zealand were mentioned earlier. The largest equity holdings are the reciprocal amounts of Air Micronesia and Continental Airlines at 30% each. Japan Air Lines and Hawaiian Airlines run a close second with 25% each. The smallest equity positions are those of Singapore and Delta Airline Companies at 2.8% each. These equity holdings are looked upon by some as a method of cementing the relationship between two airlines for the long run. Those who oppose equity swaps do not see the need for the investments. To the opponents, the investments are nothing more than wasted management time and an inappropriate use of investors' money. To many, equity alliances are becoming a symptom of airlines in distress. Others see them as defensive postures which Delta readily admits that the 5% stakes it sold to Singapore and Swissair helped to fend off take over attempts which were in the wings just before the alliance took place.

To understand more clearly why the industry feels there is a need for marketing and equity alliances, a look at the industry in terms of traffic and capacity should provide some clues.

Frequent Flyer Program/Alliances

How can an airline play the passenger number-game and win? However an airline wins new customers - merger, consolidation, buyout, takeover, route purchase, new authority, discount fares, or other promotional programs - it must retain them as customers. One of the current favorite methods is the frequent flyer program. This program allows a passenger to bank his/her flight miles for the purpose of qualifying for a free trip for the passenger, his/her spouse or children, free rental cars, hotel accommodations or some other discounted fare. For instance, Delta Air Lines' frequent flyer program is supported by a partnership agreement with Air Canada, Air New Zealand, Japan Airlines, Lufthansa, KLM Royal Dutch Airlines, Singapore Airlines and Swissair. These air carriers, except Japan Airlines, allow the passenger to earn 100% of their actual mileage in Economy Class; from 125% to 150% in Business Class and 150% to 200% in First Class.

Delta also has partnership agreements with Alamo, Avis and National car rental firms. For those needing to spend the night, the agreement extends to Hyatt Hotels, Marriott Hotels, Preferred Hotels, Trusthouse Forte or Hilton Hotels/Hilton International. Passengers are eligible to earn 1,000 miles bonus credit each from the car rental firm and/or hotel.

Delta also extends an invitation to join the Crown Room Club which offers an array of services, complimentary beverages, meeting areas for business associates and special travel services ranging from assistance with check-in, seat assignments and boarding passes to personal check cashing privileges. Single membership is available at \$150.00 per year; \$200 for a member with spouse or the deduction of 30,000 miles from the member's Frequent Flyer mileage for one year single membership or 40,000 miles deduction for member with spouse.

Continental Airlines' Frequent Flyer Program is called ONEPASS and includes the following partners: Continental Express, Aer Lingus, Air France, Alitalia, Iberia, KLM, Lufthansa, Sabena, SAS and The Trump Shuttle. Continental allows a passenger who doesn't have sufficient mileage for a specific reward to "lock in" the current mileage level required for qualification for a period of up to three years or until his account accrues the required mileage. A passenger who is short on mileage for a particular reward, may purchase up to 20% of the necessary mileage for \$20 per 1000 miles. Continental also has agreements with several car rental firms. These include National, Europcar, Tilden, General Hertz and Thrifty. Its hotel accommodations include Marriott, Camino Real, Westin, (Compri) Hotels by Doubletree, Consort, Doubletree Hotels, The Radisson Hotels, and Wyndham Hotels. These hotels offer 500 miles per stay at the published retail or corporate rate.

United Airlines has a large compliment of partner firms through which a passenger can earn Frequent Flyer mileage. Of the airlines, these include Air France, Alitalia, Aloha Airlines, Aloha Island Air, British Airways, Iberia Airlines of Spain, KLM Royal Dutch Airlines, Lufthansa German Airlines, SABENA World Airlines, SAS, and Swissair. A 25% mileage bonus is available for a paid Business Class reservation and 50% bonus for paid First Class travel on United.

If a passenger charges his flight ticket, he will receive one mile for every dollar charged to a Mileage Plus, First Card Visa, Mileage Plus First Card Gold, Master Card Gold, or United Airlines Travel Card.

Participating carriers with American Airlines include American Eagle, British Airways, Cathay Pacific Airways, Qantas Airways, and Singapore Airlines.

American's car rental agreements include Avis and Hertz. Hotels accommodations are available through Hilton Hotels and Resorts, Inter Continental Hotels, Forum Hotels, ITT Sheraton, Marriott Hotels and Resorts and Wyndham Hotels and Resorts. Frequent Flyer Passengers can earn 500 mileage credits per night and a complimentary split of champagne by providing his/her "AAdvantage" number upon check-in at any Inter Continental or Forum Hotel. These mileage credits can be earned for up to seven consecutive nights per property (hotel) per calendar month. USAir, in addition to its Frequent Flyer Program which seems to be a stand-alone program that is not associated with any other airline company, has segmented its total market into several sub-markets. Two of the more prominent segmented programs are Military Fares and Senior Savers. Military personnel on active duty and their dependents can get 50% discounts off regular coach fares to cities in the United States and Puerto Rico. Dependents are eligible for 50% discounts even if they are not traveling with their active duty family member. Substantial discounts of up to 75% of economy class fares are offered to and from European destinations.

For those 62 years of age or older, USAir offers two special ways to save on flights; 10% discounted Senior Saver Fare and Golden Opportunities Coupon Books which come in two packages of four one-way coupons for \$473 or eight one-way coupons for \$790. A number of restrictions apply which tend to reduce the overall benefits.

In addition to strategic alliances, there are many other methods available to carry out perceived future market opportunities. In addition, to those already mentioned - mergers and acquisitions; geographical (regional) alliances; marketing alliances, computer reservations system (CRS) consortia - must be added the formulation of trading blocs such as the "United States of Europe - the European Economic Community (EEC) of 1992" and the European Free Trade Area (EFTA) which is the EEC's largest trading partner with six countries (Austria, Finland, Iceland, Norway, Sweden & Switzerland).¹¹

In Europe, London's two main airports, Heathrow and Gatwick, lie at the heart of a global network of air services. They are the two busiest international airports in the world.¹² Britain also has more than 20 major regional airports - serving such cities as Belfast, Birmingham, Cardiff, Glasgow, Leeds, Manchester and Newcastle. Tying into an extensive domestic network, they also have direct international links.¹³

Together, Britain's airports handle over 7,000 international flights each week. They also service about 5,000 domestic flights per week, many of them "shuttles" - linking the United Kingdom's (UK) major commercial and industrial centers within one hour's flying time of each other.¹⁴

There are more than fifty (50) airlines operating in the United Kingdom, handling approximately 26 million passengers annually and, in 1988, the UK's airports shipped nearly 800 thousand tons of cargo.¹⁵

However, there are only three domestic carriers in the United States that are already putting the various alliances, mentioned above, together and who have the best chance of survival and profitability over the long term; i.e., American, Delta and United (assuming someone can clear up United's ownership confusion in the very near future). These three airlines have the greatest probability of survival and profitability because they have the CRSs, the large dispersed hubs, the equipment is either on hand or on order, and their international routes are growing ¹⁶

American has gradually become (along with Pan Am, until it ceased operations in December, 1991) the major U.S. Carrier in Miami, American Airlines has a 29-point Caribbean system that is the largest of any domestic airline and is closing ground on Eastern Airlines' old Latin network by receiving, on March 8, 1990, clearance from the Justice Department to purchase Eastern's Latin routes. The \$349 million sale must still be approved by the Department of Transportation and the federal bankruptcy court overseeing Eastern's re-organization. The new authority will give American Airlines control of a 20-city network in Central and South America.¹⁷

By comparison, British Airways and Air France have positioned themselves better than even American, Delta or United since they command over 95% of their home markets, compared to the 15% - 18% controlled by American or Delta.¹⁸ Other European carriers are following British Airways' and major U.S. air carriers' lead who are rushing to gain access to Western European gateways before 1992. For instance, KLM took a large stake in Northwest and a small share of Air UK. Swissair and SAS have agreed to take a 10% share of each other while Air France and Lufthansa have formed their own alliance.¹⁹

The smaller carriers must rely on international traffic to grow and are being very creative in reaching for ownership and alliances. For example, SAS is now allied with Continental in the U.S.; Lan-Chile in South America; Swissair in Europe to tap the Middle East and Africa; and Thai in Asia. Another strategy of SAS's Jan Carlzon is that he has adopted former United Chairman Dick Ferris's concept of building a door-to-door travel network with hotels, reservations systems and car rentals. All of this links together information distribution systems, ground transportation systems and airport ground services. Very simply, SAS's Chairman Carlzon intends to capture the passenger from the moment he leaves the home or office to the moment he returns.²⁰

Tactical Implementation of Strategies

North America and Europe are the two major powers in the move toward a globalized airline industry. Europeans are using the tactic of dividing U.S. air carriers to capture U.S. market share with various alliances. The tactic is working because it is often in the interest of individual U.S. carriers to build international ties with foreign operators even though such action will undermine their own U.S. competition. It is the highly competitive atmosphere that allows U.S. carriers to be segmented by foreign carriers and this segmentation process makes it easier to access U.S. markets through these ownership and marketing alliances.²¹

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For example, a foreign carrier looks for two U.S. domestic carriers which are competing for traffic originating within the United States but which has a foreign destination through an international departure point in the United States. The foreign carrier creates an alliance with the U.S. carrier which cannot fly out of that departure point to international destinations. As a result, the foreign carrier obtains (at least part of) the international traffic rather than the other U.S. carrier that did have international operating authority.

In this situation, European carriers hold a significant competitive advantage because domestic competition, while intense in the United States among air carriers, is virtually nonexistent among the major foreign carriers since there is essentially only one large carrier in each home market. Therefore, if a U.S. air carrier wants to create an alliance with a foreign carrier overseas and the foreign carrier says "NO", the U.S. carrier has no option and, very simply, has no access to that specific market.²²

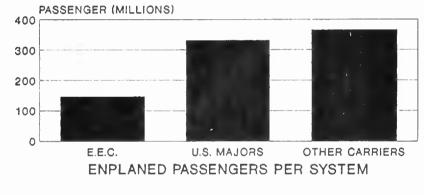
On the other hand, if one domestic carrier in a U.S. market (Hub) says "NO" to an alliance proposal of a foreign carrier, there are often as many as seven (7) or eight (8) other U.S. domestic carriers with whom the foreign carrier can create alliances or take an equity position. Financially more important, if the foreign carrier can develop an alliance, the market accessed by the foreign carrier can often rival the size of its home market. For example, British Airways (B.A.) Deputy Chairman Colin Marshall calls its agreement with United "the best relationship of any two airlines." (and) "We are very complementary and the combination of the two from a marketing standpoint makes all the sense it did originally." The reason that it does make good sense for the foreign carrier is because British Airway's agreement with United gives it access to 48% of the world's international scheduled passenger traffic when, otherwise, it would only have access to 17% of that market!23 Speaking of markets for air travel, just how does the United States compare with Europe?

United States versus Europe, et al

EXHIBIT 3 illustrates the point that U.S. Majors accounted for 330 million or 39.3% of the passengers enplaning world carrier systems in 1988. It also compares the United States (Major) carriers with two other categories; European Common Market (E.E.C.) - including the European Free Trade Association EFTA). The European Common Market, including the EFTA, enplaned only 145 million (out of 840 total enplaned passengers) customers for a 17.3% share of the market. All other world carriers enplaned a total of 365 passengers for a 43.4% share of this lucrative market which must be split among a number of smaller carriers. Carried one step further, EXHIBIT 4 illustrates the percentage of total traffic (Shown on the left-hand Y-axis) for six geographical areas - North America, Domestic [N.A.(D)]; Far East (F.East); Europe (Intercontinental); North America (International); Europe-Intra, and a miscellaneous category of Others. Exhibit 4 also estimates the growth experienced in 1989 and forecasts the expected growth for a six-year period (1990) - 1995) for these areas. It is interesting to note that the Far East had the greatest estimated percentage growth in 1989 and is expected also to again be the leader in growth during the sixyear period 1990 - 1995. Ignoring the category of "Others", Europe (intercontinental) is forecasted to be second in growth and North America (International) third behind the first two positions.

Yet the first five positions, in rank order, of net increase in international passenger enplanements are staffed with two foreign air carriers, British Airway and Lufthansa. EXHIBIT 5 shows that the second five positions have only two American air carriers, Continental and Pan Am. One might say that as far as enplanements are concerned American air carriers are only handling fifty percent while the other half is being shared by a number of different countries.

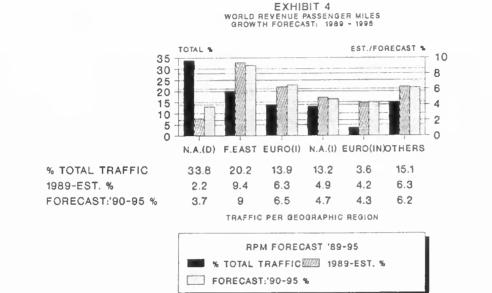
EXHIBIT 3: WORLD CARRIERS SYSTEM ENPLANED PASSENGERS



WORLD CARRIERS

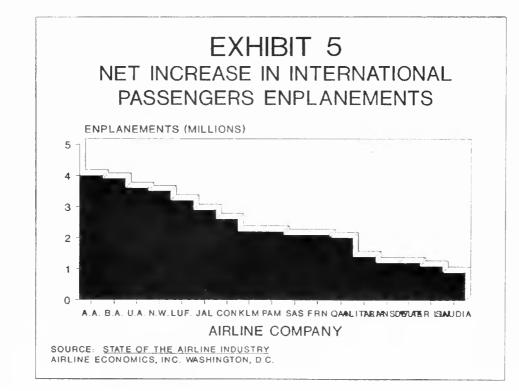
E.E.C.

SOURCE: STATE OF THE AIRLINE INDUSTRY, AIRLINE ECONOMICS, INC. WASHINGTON, DC JANUARY, 1990. Volume IV, Number I



ADAFTED FROM: Dr. George James, Stele of the Airline Industry, Airline Economics, Inc., Weshington D.C., Jenuery, 1990.

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American air carriers do not fare much better in a ranking of the top 50 airline companies by profits. Table 5 indicates that only two American airlines - United and American - were numbers one and two, respectively, out of the top five airlines; Alitalia, Cathay Pacific, and British Airways occupied third, fourth, and fifth places, respectively.

In the second group of five airline companies, the United States again had only two representatives - Delta and Trans World - who occupied the sixth and eight places, respectively. And once again, the other three positions were held by firms from foreign countries; Singapore (7), Iberia (9), and Air France (10). Therefore, only four American carriers are ranked in the ten most profitable air carriers in the world, The other six positions are held by air carriers from six different countries. Competition, based on profitability on a global basis, is currently alive and doing very well!

When ranked by passengers enplaned in 1988, the United States air carriers occupied three of the top five positions; United (1), American (3), and Delta (4). Trans World Airlines (6) and British Airways (7) were the only other air carriers that were ranked in the top ten most profitable carriers that were also ranked in the top ten carriers when ranked by enplaned passengers in 1988. In other words, five of the most profitable airline carriers were more economical in operating their companies than five other companies that carried more passengers but made less profit. For example, Texas Air was ranked 46th in profitability but 2nd in the number of passengers carried. Pan American ranked 43rd in profitability but 9th in passengers enplaned.

Table 5

The Top 50 Airline Companies Ranked by Profits and Passenger Miles

Company & Rank/Profit	Country	(Millions) '88 Profits	0	
1. United Air Lines	U.S.	\$1,124.3	69.1	(1)
2. American Air Lines	U.S.	476.8	64.8	(3)
3. Alitalia	Italy	368.6		
4. Cathay Pacific	Hong Kong	361.6		
5. British Airways	Britain	331.3	30.5	(7)
6. Delta	U.S.	306.8	49.1	(4)
7. Singapore	Singapore	299.0		
8. Trans World	U.S.	249.7	34.8	(6)
9. Iberia	Spain	208.2		
10. Air France	France	193.5		
12. USAir Group	U.S.		30.4	(8)
14. Japan Air Lines	Japan		28.3	(10)
17. Northwest Airlines	U.S.		40.1	(5)
43. Pan American	U.S.		29.0	(9)
46. Texas Air	U.S.		69.0	(2)

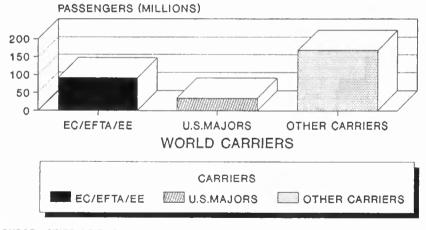
Source: Woods, Wilton. "Revolution in the Air", <u>Fortune</u>. January 1, 1990, pp. 58-59.

Specifically, in the international market, we find that U.S. Majors - as illustrated in EXHIBIT 6 - carried only 35 million of the total 294 million international passengers in 1988. This represented only 12% of the total while the European Economic Community (EEC), the Europe Free Trade Area (EFTA), and the Eastern Europe carrier system accounted for 91 million passengers or 31% of the total, Other carriers accounted for the balance of 168 million (57%).

EXHIBIT 7 shows the relative market position of the European Common Market air carriers in terms of enplaned passengers. British Airways (B.A.) leads the group with 23 million enplaned passengers in 1988 for a market share of 21% of the 107 million total passengers. Sabena Airlines had the smallest share of only 1.8% or 2 million enplaned passengers. Iberia, Air France, and Alitalia were all tied for third place with 14% representing 15 million enplaned passengers. Lufthansa was second with 16.8% (18 million passengers), a full 4.2% behind first place British Airways.

The European Free Trade Association (EFTA) did not have the volume of passengers but competition was thriving neverthe-less. Of the total 26.8 million passengers, SAS enjoyed a 49.6% (13.3 million passengers) share of the market. Swissair enplaned 7.1 million passengers for a 26.49% market share. A distant third place was held by Finnair (14.2% market share with 3.8 million passengers) which enplaned only 53.5% of the volume enjoyed by Swissair and less than a third (28.6%) of the volume of SAS Airlines. Fourth and fifth places were occupied by Austrian Airlines (1.8 passengers or 6.7%) and Icelandair (.8 passengers or 2.98%) respectively (see EXHIBIT 8).

EXHIBIT 6 WORLD CARRIERS INTERNATIONAL PASSENGERS



SOURCE: <u>STATE OF THE AIRLINE INDUSTRY</u> AIRLINE ECONOMICS, INC. WASHINGTON, D.C.

EXHIBIT 7 EUROPEAN COMMON MARKET CARRIERS SYSTEM ENPLANED PASSENGERS

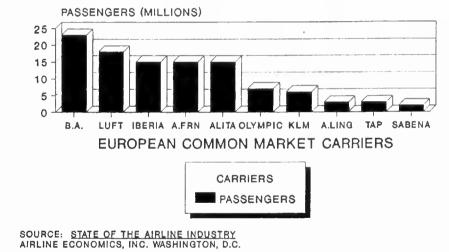
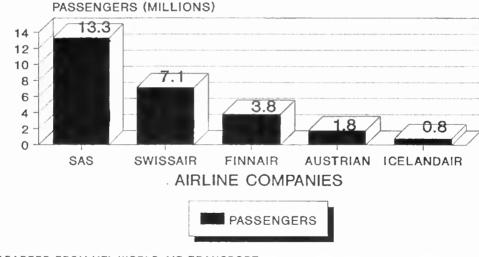


EXHIBIT 8 EUROPEAN FREE TRADE ASSOCIATION SYSTEM PASSENGERS



ADAPTED FROM IATA WORLD AIR TRANSPORT STATISTICS AND AIRLINE ECONOMICS, INC.

Impact of Domestic and Global Factors

The impact of all of these factors is that airline management must recognize that one of the areas of the FUTURE for the airline industry will be in *GLOBALIZATION* - WHICH IS BEING FOSTERED ON THE AIRLINE COMMUNITY BY DEREGULA-TION ON A DOMESTIC AND AN INTERNATIONAL LEVEL as witnessed by American's purchase of Eastern's Latin America routes; THE EQUITY POSITIONS BEING TAKEN BY NUMER-OUS AIRLINE COMPANIES IN OTHER MEMBERS OF THE AIRLINE COMMUNITY ON A WORLD-WIDE BASIS; the marketing alliances being developed between U.S. domestic airlines and foreign carriers; joint computer reservations systems, and the deregulation of the European Economic Community by 1992 are only a few examples of the move to globalization.

Management must not be mislead by the apparent increase in the intensity of competition among carriers. As time wears on, and it is found that more and more marketing alliances are developed by once competing carriers; AS MORE AIR CARRI-ERS BECOME OWNERS OF OTHER AIR CARRIERS, as a few forced mergers (because of economic circumstances - Pan Am has lost \$1.1 billion since 1984)²⁴ take place and as individual carriers stake out their respective niches, the industry will actually experience less competition. More specifically, the FUTURE of the airline industry is going to impact management by demanding more creative responses to such things as:

1. Fare increases that are probable not only over the next few months but over the next few years. This will be true especially in those markets in which carriers experience very little or no competition, However, management should be cautious in increasing its fares in markets where virtually no competition exists because of the possibility of pricing itself out of the market by driving the customers to other modes of transportation and/or attracting the attention of federal regulators who still harbor the notion that the airline industry should be re-regulated. 2. Even with increasing fares, service is likely to remain about the same - not withstanding USAir's President stating that "- (Service is) at the top of the heap right now."; in addition to the fact that USAir was **FIRST** in being **LAST** in **ON-TIME ARRIVALS AND DEPARTURES** until most recently when it moved from **LAST** to **FIRST**! Managerially, costs must be kept in line in relation to revenue. However, the reduction of passenger services will likely draw the ire of the flyer unless the fare is reduced appropriately and the passenger knows when he purchases his ticket that it is a "No-Frills" flight. If this is not the case, management must become adept at "Non-Price" competition and communicate to the potential passenger the values he/she will receive for the price paid for the ticket; e.g., a larger selection of flight schedules, fewer (or no) changes between origin and destination, wider seats, ground services, etc.

3. Ownership is going to be the key to the future development of worldwide airline services according to the recent trends in airline ownership through equity alliances. You can find the future survivors if you find the owners of other airlines, hubs, computer reservation systems (CRS's), and new equipment. Ownership provides greater control than marketing alliances. Major examples include: DELTA'S 5% equity swap with Swissair and Singapore; AMERICAN'S do-it-yourself philosophy (even though it owns a piece of Air New Zealand); KLM's partial ownership of NORTHWEST and 20% of SABENA and SAS which has a piece, it seems, of almost everybody - 9.9% of Texas Air; unspecified portions of Lan-Chile and Thai; 24% of Airlines of Britain which is currently seeking authority through British Midlands. A financial link of 5% - 10% has been proposed between SAS and Swissair, Both of these airlines are establishing links with Finnair in order to serve the Eastern European market. While the Austrian government has reduced its share of Austrian Airlines to 51%, Swissair is attempting to increase its share from the current 8% to 10%; All Nippon has 3.5% which it hopes to increase to 5%; Air France has 1.5% and Lufthansa has shown interest in taking a 10% share.25

Management should be aware that changes in the ownership of airline companies could mean significant changes in the labor market. One possibility is that fewer managerial jobs might be available in the domestic market while employment opportunities could well increase on the international level. This could demand increased mobility of airline employees not only within the continental United States but globally also. Management should prepare for the eventual negotiation of labor contracts that cross continental borders for all levels of employees.

4. Another important consideration for management as both marketing and equity alliances increase in popularity si control. Equity, as mentioned, allows for reciprocal marketing practices over which control can be exerted by the owning partner(s). That control can easily be extended to the marketing alliances and the marketing function of pricing. Management will have to be extremely careful to avoid even the appearance of collusion in pricing practices. Deregulation was implemented because their was a desire to increase competition. Deregulation removes external controls over many marketing practices which the industry and its individual members are now going to have to police.

5. The **FUTURE** for the airline industry? Probably five or six mega-worldwide carriers by the year 2000 with each having a subsidiary operation in North America, Europe and Asia. There will be niche airlines, largely state owned or under state controls, operating in the Middle East, Latin America and Africa. These niche airlines will, of course, avoid free market competition as much as possible. In order to avoid this free market competition as much as possible, management must develop its expertise in market segmentation through the practice of **Market Targeting** (identifying the specific market(s) to be served) and **Target Marketing** (developing a marketing mix product differentiation - that appears to satisfy the demands of each specific market).

6. Those air carriers surviving in the year 2000 will fall into one of three categories: (1) Proactive (Examples: American, British Airways, Delta, United, Air France), (2) Active: Waitand-See (Examples: Northwest, Continental, Iberia), and (3) Reactive (Examples: Niche carriers such as Singapore, Swissair and others from Africa, Latin America and the Middle East).²⁶ Management will decide into which of these three categories its airline company will participate by the goals, strategies, and action plans it develops. But the important point is that management must make a decision or, at least, recognize the decision that has been forced upon it by the strategies that have been developed. If management does not make a conscious decision, competition will force it into one of these categories by forcing the company to take specific managerial actions regarding such things as passengers fares, service, and flight schedules. It is always more convenient to decide a competitive issue than to have it decided by competitors.

Conclusion

Macro-industry analysis tells us that the major U.S. players in the game will be reduced in number. This reduction continues in the month of December, 1991 as two more carriers are lost to bankruptcy: Midway and Pan American. However, macro-analysis also tells us that the airline industry will become more globalized and that competition on this level will increase significantly. Deregulation was once the future of the airlines. But deregulation led to competition at home and abroad. It now appears that nearly the whole world wants a piece of the action. Out of the ten most profitable airline companies in the world, the United States claimed only four positions; the First, Second, Sixth, and Eighth. The other six slots represented six different countries - Italy, Hong Kong, Britain, Singapore, Spain, and France. When ranked by passenger miles, INSTEAD OF PROF-ITABILITY, one-half of the top-ten companies changed their positions. The U.S. maintained its four positions but was only able to place a firm in the First, Third, Fourth, and Sixth rankings.

Part of the answer to the question is that airline companies are going to have to BECOME INVOLVED IN STRATEGIC PLANNING IN ORDER TO DEVELOP STRATEGIES OF GLOBALIZATION FOR EACH OF ITS MARKETS AND FOR THE COMPANY AS A WHOLE - A MASTER STRATEGY, IF YOU WILL. With the United States accounting for 330 million or 39.3% of the passengers enplaning world carrier systems in 1988, the world is beating a path to the front door of America (i.e., "THEY", ... NOT "WE"... are developing marketing alliances with American airline companies). Those who can't get in the front door head for the back door (they buy a piece of an American airline firm); look for a window (share a computer reservations system - CRS) to squeeze through or simply buy out the entire company.

However, once the hype has diminished, the economic analyses have been completed, the mashing and gashing of teeth have subsided; the moaning and groaning have ceased; the knuckle cracking has been silenced, and finger pointing is a thing of the past, we will find that the air under the wings of the future of the airline industry will be provided by four elements: (1) Fares, (2) Service (MARKETING ALLIANCES), (3) Ownership (EQUITY ALLIANCES) and FREQUENT FLYER PROGRAM AL-LIANCES. Given these four elements; given the direction of the industry today and baring interference by governmental bodies (i.e., baring a return to re-regulation), we sill see that there will be true worldwide mega-carriers by the year 2000. Whether mega-carriers will provide additional services, conveniences, lower fares, a greater variety of destinations or whether they will be regional/hub monopolies with high fares, limited services and fewer destinations remains to be seen.

APPENDIX

TABLE 6

STRATEGIC ALLIANCES IN THE AIRLINE INDUSTRY

Carrier	Partner I	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
AER LINGUS	AMERICAN			R
	LUFTHANSA			RC
AEROFLOT	ANA/AUSTRIAN			R
	CANADIAN AL			М
	FINNAIR			М
	PAN AM			м
	TNT			JC
AEROLINEAS	QANTAS			R
AIR AFRIQUE	AIR MAURITANIE	20		
AIR BOTSWANA	NAMIN AIR			R
AIR CANADA	AIR NEW ZEALAN	D		R
	B MIDLAND			R
	CATHAY			R
	SINGAPORE AIRL	NES		R
	TWA			Μ
AIR EUROPE/ILG	AIR EUROPA	25		
	AE SPA	33		
	AE SCAND.	35		
	ALL NIPPON			м
	NFD	49		
AIR FRANCE	AIR INTER	37		М
	AIR MADAGASCA	R 3.48		
	AIR MAURITIUS	12.77		R
	AUSTRIAN	1.5		

KEY: *=PLANNED; **=SUBJECT TO REGULATORY APPROVAL; M=WIDE-RANGING MARKETING ALLIANCE; R=ROUTE OR MARKET SPECIFIC ALLI-ANCE; J=JOINT VENTURE; C=CARGO; MAN=MANAGEMENT CONTRACT

SOURCE: Jennings, Mead. "Strategic Illusions", <u>AIRLINE BUSINESS</u>, August, 1990, pages 27, 28 & 30.

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
	CANADIAN AL			R5
	EURO BERLIN		51	
	LUFTHANSA			COOP,J
	R AIR MAROC			М
	THAI INTL			RC
	UTA	54.8		
AIR-INDIA	AIR MAURITIUS	8.51		R
	TWA			R
AIR INTER	AIR FRANCE		37	M
	UTA		35.8	
AIR JAMAICA	AIR NEW ZEALA	ND		R
AIR LANKA	MALAYSIA AL			M
AIR LIBERTE	ALISARDA			M
AIRLINES OF				
BRITAIN	SAS		24.9	
AIR MADAGASCAR	AIR FRANCE		3.48	
	AIR MAURITIUS			R
AIR MAURITANIE	AIR FRANCE		12.77	R
	AIR MADAGASC	AR		R
	AIR-INDIA		8.51	R
	BRITISH AW	12.77		
	CATHAY			R
	LUFTHANSA			R
	MALAYSIA AL			R
	SINGAPORE AIR	LINES		R
AIR MICRONESIA	ALOHA		10	
	CONTINENTAL		30	
AIR NEW ZEALAND	AIR CANADA			R
	AMERICAN		7.5	
	BRITISH AW			R
	CATHAY			R
	JAPAN AL		7.5	
	QANTAS		19.9	R
	MALAYSIA AL			R
	SINGAPORE AIR	LINES		R
	R JORIANIAN			R
	AIR JAMAICA			R

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact	
	AIR ZIMBABWE			R	
	VARIG			R	
AIR NIUGINI	CATHAY			R	
	PAL			R	
	QANTAS			R	
	SINGAPORE AIRL	INES		R	
AIR PACIFIC	QANTAS		19.6	R	
AIR UK	KLM	14.9		М	
AIR VANUATU	ANSETT		40		
AIR ZIMBABWE	AIR NZ			R	
	QANTAS			R	
ALISARDA	AIR LIBERTE			R	
	MERIDIANA	25			
ALITALIA	ATI	100			
	CANADIAN AL			R	
	IBERIA			М	
	USAIR			Μ	
ALL NIPPON	AIR EUROPE			М	
	AEROFLOT/AUST	RIAN 9		R	
	NIPPON CARGO	11.43			
	SAS			М	
	TWA			R	
ALM	KLM			М	
ALOHA	AIR MICRONESI	A 10			
AMERICAN	AER LINGUS			R	
	AIR NEW ZEALAND 7.5				
	CATHAY			R	
	FINNAIR			R	
	MALEV			R	
	QANTAS			Μ	
	SINGAPORE AIR	LINES		R	
AMERICA WEST	ANSETT		20		
ANSETT	AIR VANUATU	40			
	AMERICA WEST	20			
	COOK IS INT			м	
	LADECO	25			

Carrier	Partner E	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
	POLYNESIAN			MAN
	INT		50	
ATI	ALITALIA		100	
AUSTRALIAN	UNITED			R
AUSTRIAN AL	AIR FRANCE		1.5	
	ANA/AEROFLOT		9	R
	SWISSAIR		10	
AVIACO	IBERIA		67	
BALAIR	SWISSAIR		48.9	
BRITISH AW	AIR MAURITIUS	12.77		
	AIR NEW ZEALAN	ID		R
	CALEDONIAN	100		
	CANADIAN AL			R*
	DELTA			R
	GB AIRWAYS	49		
	MAERSK			J
	SWA	20**		
	UNITED			м
BRITISH MIDLAND	AIR CANADA			R
CALEDONIAN AW	BRITISH AW			100
CANADIAN				
AIRLINES	AEROFLOT			М
	AIR FRANCE			R
	ALITALIA			R
	BRITISH AW			R*
	JAPAN AL			R
	LUFTHANSA			R
	MIDWAY			R
	SAS			R
CARGOLUX	LUFTHANSA		24.5	
	LUXAIR		24.9	
CATHAY PACIFIC	AIR CANADA			R
	AIR MAURITIUS			R
	AIR NEW ZEALAN	1D		R
	AIR NIUGINI			R
	AMERICAN			R
	DRAGONAIR	35		

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
	JAPAN AL			R
	LUFTHANSA			RC
	MALAYSIA AL			R
CANDOR	LUFTHANSA		100	
CONTINENTAL	AIR MICRONE	SIA 30		
	SAS		9.9	М
COOK ISL. INTL	ANSETT			м
CRUZEIRO	VARIG		100	
CTA	SWISSAIR		38.2	
DELTA	BRITISH AW			R
	SINGAPORE A	IRLINES 2.8	5	м
	SWISSAIR	5	4.6	м
DHL INTL	JAPAN AL		5(20*)	
	LUFTHANSA		5(20*)	
DRAGONAIR	CATHAY		35	MAN
EAST-WEST	TNT		60	
EURO BERLIN	AIR FRANCE		51	
FRANCE	LUFTHANSA		49	
FINNAIR	AEROFLOT			М
	AMERICAN			R
	JAS			R
	SAS	< 10*	< 10	М
	SWISSAIR			М
GARUDA	JAPAN AL			R
	KLM			R
	KOREAN			R
	LUFTHANSA			R
	MALAYSIA			R
	SINGAPORE A	IRLINES		R
	THAI			R
	UTA			R
GB AIRWAYS	BRITISH AW		49	
GERMAN CAR. SER	LUFTHANSA		100	
GULF AIR	TWA			R
HAPAG LLOYD	LUFTHANSA		10	
HAWAIIAN	JAPAN AL		25	
IBERIA	ALITALIA			М
	AVIACO	67		

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
	JAPAN AL			R
	R AIR MAROC			М
	VIVA	100		
INTERFLUG	LUFTHANSA		26	M,}
JAPAN AIR LINES	AIR NZ	7.5		
	CANADIAN AL			R
	CATHAY			R
	DHL INTL	5(20*)		
	GARUDA			R
	HAWAIIAN	25		
	IBERIA			R
	JAPAN AS	9		
	JAPAN ASIA	100		
	QANTAS			R
	SOUTHWEST	51		
	SWISSAIR			R
	THALINTL			R
	UTA			R
JAPAN AIR SYSTEM	FINNAIR			R
JAPAN ASIA	JAPAN AL	100		
KLM	AIR UK	14.9		М
	ALM			М
	GARUDA			R
	MARTINAIR	29.8		
	NIPPON CARGO			RC
	NLM	100		M
	NORTHWEST	14.9		RC
	SWA	20**		D.C
	SINGAPORE AIF			RC
	TRANSAVIA	40		
	VIASA			R
KOREAN AIR	GARUDA		25	R
LADECO	ANSETT		25	
LAN-CHILE	SAS		30	
LINJEFLYG	SAS	25	100	
LTU	LTE	25		C
LUFTHANSA	AER LINGUS			C C,J
	AIR FRANCE			C,)

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
	AIR MAURITIUS			R
	CANADIAN AL			R
	CARGOLUX	24.5		
	CATHAY			RC
	CONDOR	100		
	DHL INTL	5(20*)		
	EURO BERLIN	49		
	GARUDA			R
	GERMAN CARGO	D 100		
LUFTHANSA	HAPAG LLOYD	10		
	INTGERFLUG	26		M,J
	THALINTE			R,RC
LUXAIR	CARGOLUX	24.9		
MAERSK	BRITISH AW			J
MALAYSIA AL	AIRLANKA			M
	AIR MAURITIUS			R
	AIR NEW ZEALA	ND		R
	CATHAY			R
	GARUDA			R
	R JORIANIAN			M
	SINGAPORE AIR	LINES		R
	THAI INTL			R
MALEV	AMERICAN			R
	PAN AM			R
	INT			R
	TWA			R
MARTINAIR	KLM		29.8	
MERIDIANA	ALISARDA		25	
MIDWAY	CANADIAN AL			R
NAMIB AIR	AIR BOTSWANA			R
NFD	A OF EUROPE		49	
NIPPON CARGO AL	ALL NIPPON		11.43	
NLM/NETHERLINES			100	м
NORTHWEST	KLM		14.9	
PAN AM	AEROFLOT			м
	MALEV			R
PHILIPPINE AL	AIR NIUGINI			R

Carrier	Partner E	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
	TWA			R
POLSNESIAN AL	ANSETT			MAN
QANTAS	AEROLINEAS			R
	AIR NEW ZEALAN	D 19.9		
	AIR NIUGINI			R
	AIR PACIFIC	19.6		
	AIR ZIMBABWE			R
	AMERICAN AL			M
	JAPAN AL			R
ROYAL AIR MAROC	AIR FRANCE			Μ
	IBERIA			Μ
ROYAL JORDANIAN	MALAYSIA AL			Μ
SABENA WORLD AL	BRITISH AW		20**	
	KLM		20**	
	SOBELAIR	100		
SAS	a of Britain	24.9		
	ALL NIPPON			М
	CANADIAN AL			R
	CONTINENTAL	9.9		М
	FINNAIR	<10*	< 10*	М
	LAN-CHILE	30		
	LINJEFLYG	100		
	Scanair	100		
	SPANAIR	49		
	SWISSAIR	7.5*	7.5*	M
	THALINTL			М
	VARIA			R
SCANAIR	SAS		100	
SINGAPORE AL	AIR CANADA			R
	AIR MAURITIUS	-		R
	AIR NEW ZEALAN	ID		R
	AIR NIUGINI			R
	AMERICAN			R
	DELTA	5	2.8	
	GARUDA			R
	KLM			RC
	MALAYSIA AL	-	-	R
	SWISSAIR	5	5	

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
	TRADEWINDS	100		
SOBELAIR	SABENA		100	
SOUTHWEST AL (JAPAN)	JAPAN AL		9	
Spanair	SAS		49	
SWISSAIR	AUSTRIAN	10		
	BALAIR	48.9		
	CTA	38.2		
	DELTA	4.6		
	FINNAIR			М
	JAPAN AL			R
	SAS	7.5*	7.5*	М
	SINGAPORE AIR	. 5	5	
THAI INTERNAT'L	AIR FRANCE			RC
	GARUDA			R
	JAPAN AL			R
	LUFTHANSA			R,RC
	MALAYSIA AL			R
	SAS			М
INT	AEROFLOT			JC
	ANSETT	50		
	EAST-WEST	50		10
	MALEV			JC
FRADEWINDS PTE	SINGAPORE AIR	•	100	
	KLM	2	40	
IRANS EUROPEAN	TEA BASEL	?		
	TEA FRANCE	2		
	TEA UK	?		
TRANS WORLD	AIR CANADA			M
	AIR-INDIA			R
	ALL NIPPON			R
	GULF AIR			R R
	MALEV PAL			к R
	PAL USAIR			к М
UNITED	ALITALIA			R
UNITED	AUSTRALIAN			R
	BRITISH AW			M

Carrier	Partner	Carrier's Equity In Partner(%)	Partner's Equity In Carrier(%)	Pact
USAIR	ALITALIA			м
	TWA			M
UTA	AIR FRANCE		54.8	
	AIR INTER	35.8		
	AIR MAURITANI	E 20		
	GARUDA			R
	JAPAN AL			R
VARIG	AIR NEW ZEALA	ND		R
	CRUZEIRO	100		
	SAS			R
VIASA	KLM			R
VIVA	IBERIA		100	

KEY: *=PLANNED; **=SUBJECT TO REGULATORY APPROVAL; M=WIDE-RANGING MARKETING ALLIANCE; R=ROUTE OR MARKET SPECIFIC ALLI-ANCE; J=JOINT VENTURE; C=CARGO; MAN=MANAGEMENT CONTRACT

SOURCE: Jennings, Mead. "Strategic Illusions", <u>AIRLINE BUSINESS</u>, August, 1990, pages 27, 28 & 30.

Endnotes

¹Marcia MacLeod, "European Air Carriers See Decontrol as Weapon in Competitive Battle," <u>Traffic World</u>, Aug. 6, 1990. pp. 44-45.

²C.F. Rule, "Antitrust and Airline Mergers: A New Era," <u>Transportation Practitioners Journal</u>, Vol. 57, No. 1, Fall 1989, p. 62.

³George W. James, "How Will the Future Airline Globe Be Divided," <u>Fifteenth Annual FAA Aviation Forecast Conference</u>, Mayflower Hotel--Washington, D.C., March 2, 1990, p, 1.

4"EC/EFTA Trade Relations," <u>Europe 1992, The Facts</u>, Department of Trade and Industry and the Central Office of Information, United Kingdom, September, 1989, p. 12.

⁵Ibid,, p. 62.

٥lbid.

⁷Ibid.

⁸lbid.

⁹Jennings, Mead, "Strategic Illusions" <u>Airline Business</u>, Quadrant House, The Quadrant, Sutton, Surrey, United Kingdom, August, 1990, pp. 24-30.

¹⁰Jennings, Mead, Op. Cit., p. 27.

¹¹George W. James, Op. Cit., p. 2.

¹²Ibid.

¹³Mark B. Solomon, "American's Latin Empire Nearly Set as Justice Clears Eastern Route Sale," <u>Traffic World</u>, 3-19-90, pp. 17-18.

¹⁴George W. James, Op. Cit., p, 2,

¹⁵Ibid., p. 3.

¹⁶lbid.

¹⁷Ibid., p. 3.

¹⁸Ibid., p. 4.

¹⁹Kenneth Labich, "How Airlines Will Look In The 1990s," FORTUNE, January 1, 1990, p. 55.

²⁰George W. James, Op. Cit., p. 9.

²¹George W. James, Op. Cit., p. 10.

²²George W. James, Op. Cit,, p. 2.

²³George W. James, Op. Cit., p. 4.

²⁴Kenneth Labich, Op. Cit., p. 55.

²⁵George W. James, Op. Cit. p. 9.

²⁶George W. James, Op, Cit,, p. 10.