



Aaron Robinson
Economics 272
Professor Tammy Feldman
June 1, 2005

Quick Facts

Northwest Airlines Corporation (NWAC) is the parent company of Northwest Airlines, Inc., the fourth-largest airline in the world.

Headquarters: Eagan, Minnesota

Hubs: Amsterdam, Detroit, Memphis, Minneapolis/St. Paul, and Tokyo

Ownership: 11% owned by original investors, 16% by employees, remainder publicly traded¹

President and CEO: Douglas M. Steenland

2004 Revenue: \$11.279 billion²

2004 Operating Profit: (\$505 million)³

Recent History

Northwest was purchased in a 1989 leveraged buyout led by Al Checchi, Gary Wilson (the Chairman since), and KLM Royal Dutch Airlines.⁴ An initial public offering was made on March 18, 1994.⁵ KLM's stake was gradually rebought through 1998, and together they created a highly profitable partnership that continues to serve as a model for the entire industry. The two airlines operate the only airline alliance with full U.S. antitrust immunity, allowing them to create an integrated product and supply network that benefits both airlines and their customers. Areas of integration include marketing, reservations, purchasing, ground handling, route networks, schedules, pricing, revenue sharing, frequent-flier programs, and an identical business class product. This, along with the formation of numerous other partnerships and Northwest's recent entry into the SkyTeam airline alliance, is the most significant change the company has undergone since first beginning transpacific service in 1947.

Market Structure

The airline industry is characterized by very high competition and thus low profits. This is especially true in the current climate with market overcapacity, runaway oil prices, and increased consumer demands for a cheaper product. What has not helped the cause of the "legacy" carriers – larger airlines that rely primarily on business travelers – is the decreased willingness to pay for

¹ Edmund S. Greenslet, "Major Airlines Profiles," *Aviation Week & Space Technology 2005 Aerospace Sourcebook* (17 January 2005), 358.

² Northwest Airlines Corporation, *2004 Annual Report* (Washington: Securities and Exchanges Commission, 7 March 2005), 23.

³ Ibid.

⁴ Thomas Petzinger, Jr., *Hard Landing* (New York: Three Rivers Press, 1995), 419.

⁵ Northwest Airlines, *Investor Relations – FAQ*, <http://ir.nwa.com/phoenix.zhtml?c=111021&p=irol-faq>.

premium travel and a shift in demand towards coach class travel, benefiting the low-cost carriers, such as Southwest, JetBlue, and AirTran. As a result, product differentiation between carriers has decreased to such a point that many customers now view airlines indifferently. Because of the growth of price-conscious passengers, fare wars have taken place, where one airline drops its fares in order to try to achieve a higher market share, forcing the others to match the price, thereby hurting everyone in the long run.

Among business and first class offerings, amenities are at similar levels for each airline: better seats and meals, powerports and now internet access, airport lounges, and higher reward rates in frequent-flyer programs. Frequent-flier programs were developed in order to maintain customer loyalty, but mile-earning and -redemption rules at travelers' employers and airlines have been tightened to a high degree. As a result, some analysts feel that both the differentiation between and value of mileage programs has declined to such a point that the concept will eventually be rendered obsolete.⁶ Air cargo, like transportation of passengers, is a fairly uniform business, with most competitors offering few advantages beyond network breadth.

Vertical integration among U.S. airlines is very much the same. The only components that stay within the company are reservations and aircraft operations, the latter of which can be broken down further. Flying, maintenance, and ground handling are done within Northwest, while catering and fueling are contracted out. Ground handling is usually done solely by Northwest, although there are exceptions (KLM handles all Northwest flights in Europe, for instance). When Northwest has a small presence in a city, it may opt to contract its handling out to other carriers, most often to its regional partners. Because most worker groups are unionized (pilots, flight attendants, ticket agents, and ramp personnel) and extensive training and retirement benefits are necessary, labor costs are higher than in other industries. U.S. airlines were once integrated with hotel chains (and occasionally rental car agencies), but this strategy was abandoned in the 1980s. Upstream integration is costly to pursue, and in some cases, forbidden by law (Boeing and United Airlines were once the same company).⁷ Although entry into the airline industry only requires one aircraft, the costs are high. Gate rights must be obtained from the appropriate airport authorities, and in three specific instances in the U.S., landing slots as well (New York's Kennedy and LaGuardia, Washington's Reagan). Entry by new carriers also requires certification by the FAA before revenue operations can even begin, a process that takes considerable time and expense.

Business Focuses

Northwest's previous name, Northwest Orient Airlines, gives the best clues as to its primary geographic market, but since deregulation, geographic airline names have become largely unrepresentative. Northwest's primary product is passenger traffic, with their strength being North America-Asia traffic, where they offer the most service of any carrier (see Appendix 1). Northwest is also strong in the Midwest (25%, the largest market share)⁸, where it maintains hubs in Detroit and Minneapolis/St. Paul and focus cities in Indianapolis in Milwaukee. The most valuable assets of Northwest are their "fifth-freedom" rights and landing slots in Japan, allowing them to act as a Japanese international carrier and maintain a transpacific hub at

⁶ James Ott and Raymond Neidl, *Airline Odyssey* (n.p.: Replica Books, 1998).

⁷ R.E.G. Davies, *Airlines of the United States since 1914*, (Washington: Smithsonian Institution Press, 1982), 79.

⁸ Bernie Han, "Northwest Airlines" (New York: Goldman Sachs Transportation Conference, 22 March 2005), 22.

Tokyo's Narita Airport. Narita is one of the most slot-constrained airports in the world, so these landing rights are a highly valuable asset. Northwest's strategy is also focused on its membership in the SkyTeam airline alliance, which includes their partnership with KLM. Northwest grew substantially in 1986 through the acquisition of Republic Airlines, combining a domestic system centered around Detroit, Memphis, and Minneapolis/St. Paul with an international system focused on Chicago, Detroit, Minneapolis/St. Paul, and Tokyo, a merger that carried several antitrust concerns with it (see Appendix 2). Northwest Orient was a minor player domestically until the Republic purchase, which was in response to United's purchase of Pan Am's Pacific network the previous year.⁹ This merger, combined with increased competition from both American Airlines and United Airlines in Chicago, led to Northwest's eventual abandonment of a Chicago hub and a gradual transition to the network today.

Following the merger, the airline was rebranded from the previous name of Northwest Orient Airlines in 1989. Another corporate makeover was undertaken in 2003 (as NWA Northwest Airlines), intended partly to properly direct customers to its website for booking, the somewhat unexpected nwa.com.

Northwest's internal branding is highly focused on the use of "World." Examples include:

- World Business Class: business class product in conjunction with KLM
- WorldCargo: cargo operations
- WorldClubs: elite access airport clubs
- WorldGateway: new terminal in Detroit
- WorldPerks: frequent-flier program
- WorldSpan: now spun-off reservations network
- WorldTraveler: in-flight magazine
- WorldVacations: vacation planning services

Northwest has ownership stakes and exclusive-service arrangements with Mesaba Airlines and Pinnacle Airlines, which act as Northwest AirlinK carriers and operate smaller aircraft to regional destinations to feed into the mainline network.

Among U.S. passenger airlines, Northwest offers the most cargo service, and is the only U.S. passenger airline to operate a dedicated freighter fleet, which flies between the U.S. and Asia.¹⁰ Due to the recent surge in demand for world cargo transportation, Northwest has utilized most of its recently awarded service rights to China and Japan for cargo purposes. Northwest also transports cargo and U.S. mail on its regular passenger flights.

Customers and Suppliers

As a differentiated service airline, Northwest offers both a Coach and First (World Business Class on intercontinental flights) product to its passengers. For elite-level customers, Northwest also offers membership in their WorldClubs, a network of private airport lounges throughout the world, with additional access to clubs of partner airlines around the world to expand their reach.

⁹ Petzinger, 410.

¹⁰ Northwest Airlines Corporation, 5.

Northwest sells tickets to passengers through several mediums. Telephone reservations centers are located in Baltimore, Chisholm (Minn.), Tampa, and Tokyo. Northwest also offers reservations through various online travel sites, which offer tickets by accessing the WorldSpan reservations system. Northwest closed all its city ticket offices by the end of 2004,¹¹ but has a fast-growing rate of internet sales (31% this year, 20% through nwa.com).¹²

Northwest's cargo division serves companies who purchase space on flights between Asia and the U.S. These can come in two forms: companies can either approach Northwest directly, but more often, they contract with a specialized cargo handler, which receives goods from many companies, and then bundles them and contracts with Northwest. For instance, in 2001, DHL entered a five-year contract with Northwest to supply a specified amount of cargo availability between DHL's Cincinnati hub and Asia; in response, Northwest began freighter service between Cincinnati and Tokyo with six weekly flights.¹³

Northwest's current fleet is from six manufacturers: Airbus, Boeing, British Aerospace, Canadair, McDonnell Douglas, and Saab. Current deliveries are only from Airbus, Boeing, and Canadair.¹⁴ Depending on the aircraft type, engines are supplied by CFM, General Electric, Lycoming, or Pratt & Whitney.¹⁵ Catering is most often provided by GateGourmet or LSG SkyChefs. Northwest purchases its fuel in advance by hedging on fuel purchases up to 18 months in advance, and carrying fuel onboard as necessary to try to maintain low fuel costs.¹⁶

Important Current and Future Dates¹⁷

April 2005 – Service to El Paso, Latrobe, Scranton begins

May 2005 – Service to Ithaca, Rockford begins

June 2005 – Service to Idaho Falls begins

June 2005 – Indianapolis and Milwaukee network expansion

July 2005 – Service to Charlottetown begins

October 2005 – Service to Bangalore begins

August 2008 – First 787-800 delivery

Competitors¹⁸

Because airlines compete on city-pairs (connections between cities rather than just nonstop flights), Northwest has a large number of competitors. The most important are listed here with their most important arenas, beginning with domestic passenger rivals, then international passenger competitors (KLM will not be listed as an international competitor because of the joint brand the two have created), and finally, cargo competitors:

- United Airlines: Northwest's primary competitor, both domestically and across the Pacific, Northwest offers slightly more destinations and service to Japan and Asia. A major difference between the two is Northwest's routing nearly all passengers through Tokyo, while United

¹¹ Ibid., 18.

¹² Han, 28.

¹³ Northwest Airlines Corporation, 6.

¹⁴ Ibid., 16.

¹⁵ SimAirline.net, <http://www.simairline.net>.

¹⁶ Northwest Airlines Corporation, 79.

¹⁷ Northwest Airlines, *Current News Releases*, <http://www.nwa.com/corpinfo/newsc/press.shtml>.

¹⁸ SimAirline.net.

routes passengers through Chicago, San Francisco, and Tokyo. The two also compete heavily in the U.S.-Hawaii market and in the Midwest.

- American Airlines: American, like United, maintains a major hub in Chicago, which like United, competes with Northwest's Midwest focus. American's main hub at Dallas/Ft. Worth also competes to some degree with Northwest's Memphis operations. American only flies to Nagoya and Tokyo in Asia.
- Continental Airlines: A partner of Northwest, the two airlines compete in some markets, as Continental maintains hubs near Northwest in Cleveland and Houston. Continental has been increasing service to Asia in recent years, with the biggest addition being service to Beijing later this year. The two also compete between Japan and both Guam and Saipan, and between the U.S. to Amsterdam.
- Delta Air Lines: Another Northwest partner, Delta has withdrawn heavily from the Asian market in recent years such that it only serves Tokyo today. The two compete domestically primarily between Delta's Cincinnati and Northwest's Detroit hubs, and somewhat internationally to Amsterdam and India.
- US Airways: Some competition in Eastern U.S. markets, but relatively little. US Airways has dropped service in recent years to several Northeast cities where they were often the sole carrier, and Northwest has added these destinations to its networks.
- Alaska Airlines: A Northwest partner, Alaska competes primarily with Northwest on service to Alaska and Seattle/Tacoma.
- Hawaiian Airlines: A Northwest partner, and as the name suggests, the two compete primarily on service between the U.S. West Coast and Hawaii.
- Midwest Airlines: Midwest, based in Milwaukee, has always maintained an uneasy truce with Northwest until Northwest's recent buildup in Milwaukee, which is making Midwest's future appear increasingly tenuous.
- Southwest Airlines: The largest low-fare carrier in the country, Northwest has been very effective at preventing Southwest from beginning extensive service from Northwest bases. Southwest has not been able to expand much in Detroit, and has declined to enter the Memphis, Milwaukee, and Minneapolis/St. Paul markets, albeit to some extent in Minneapolis/St. Paul through the acquisition of American Trans Air.
- AirTran Airways: Most competition between Northwest and AirTran is on Midwest-Florida routes. It's been suggested that Northwest's "Heartland" strategy of recent years is directed against AirTran at some cities, and a preemptive defense against AirTran and Southwest in other key Northwest markets.
- Frontier Airlines: Frontier began service to Minneapolis/St. Paul a decade ago, which has always been a strong performer for them on their routes to the Western U.S. Frontier began Los Angeles-Minneapolis/St. Paul service in recent years to try to break the Northwest monopoly, but Northwest retaliated by announcing Denver (Frontier's home base)-Los Angeles service and increasing frequencies between Minneapolis/St. Paul and Los Angeles. Both carriers eventually abandoned their additional routes.
- Japan Air Lines and All Nippon Airways: the two primary carriers of Japan, Northwest competes with both of these on their transpacific flights, all of which originate or terminate in Nagoya, Osaka, or Tokyo.
- Air China, Cathay Pacific Airways, China Airlines, China Eastern, China Southern, EVA Air, Korean Air, Philippine Airlines, Singapore Airlines, Thai Airways International: these carriers all compete with Northwest on routes to their various home countries in Asia.

- Air France, Alitalia, British Airways, Lufthansa German Airlines, Virgin Atlantic: All of these airlines compete with Northwest between the U.S. to Frankfurt, London, Paris, and Rome (Air France and Alitalia are now Northwest partners).
- Air Canada: Northwest is the most active U.S. carrier to Canada, while Air Canada offers by far the most transborder routes.
- Air India, Jet Airways: Northwest flies to Mumbai and soon Bangalore in India, and competes with both these carriers between India and the U.S. (Jet Airways begins service to the U.S. later this year, and is a Northwest partner within India, although international cooperation remains unclear.)
- FedEx, Korean Air Cargo, Nippon Cargo Airlines, Polar Air Cargo, Singapore Airlines Cargo, UPS: These all-cargo carriers compete with Northwest Cargo between the U.S. and Asia.

Market Analysis

The most pressing issues in the short-run for Northwest are the continual rising costs of fuel and increased competition from low-cost carriers (LCCs). Every one-cent increase in the cost of fuel per gallon adds \$19.2 million in costs for Northwest; mainline fuel costs increased 46.5% from 2003 to 2004.¹⁹ LCCs have been successful largely because of their lower labor costs, which have enabled them to target the high-end customers of “legacy” airlines. Increased competition from LCCs is a problem that every major U.S. airline is facing today, but LCCs have only entered two of Northwest’s three domestic hubs (Detroit and Minneapolis/St. Paul), and have not been strong competitors, finding it difficult to expand. Frontier and Independence’s recent attempts to enter traditional Northwest markets were rebuffed; America West, Southwest, and Spirit have largely avoided adding service at Detroit (despite Detroit being Spirit’s original home base, see Appendix 2); and America West, ATA, and Frontier have maintained only minor schedules at Minneapolis/St. Paul. There are two main reasons for this: first, the Midwest region is growing at a lesser rate than the rest of the country, so LCCs are less inclined to enter Northwest’s home domestic markets; second, Northwest’s two-pronged “Heartland” strategy has kept LCC infiltration to a minimum and increased market strength in two key Midwest markets, Indianapolis and Milwaukee.

Northwest, like all airlines, faces heavy tax burdens, especially after September 11, that have significantly hurt their earnings. Northwest notes in their Annual Report that “airlines are among the most heavily taxed of all U.S. companies....taxes and fees can add up to approximately 25% of what a passenger pays for an average roundtrip domestic airline ticket.”²⁰

Northwest expects to continue operating their DC-9s for extended periods of time “given the Company’s route network, maintenance programs and the lack of a commercially successful new 100-seat aircraft at this time....[Northwest] estimates that its [DC-9] aircraft on average could fly more than eight additional years beyond 2004.”²¹ While these are all true, the main reason for the DC-9’s success as the Midwest workhorse is that the aircraft have all long been paid for and are therefore not saddled by ownership payments. Numerous DC-9 flights have been gradually

¹⁹ Northwest Airlines Corporation, 26.

²⁰ Ibid., 27.

²¹ Ibid., 17.

replaced by the newer and smaller CRJs, which are both cheaper to operate and are often better suited to such markets.

Across the Atlantic, there are questions about the impact of KLM's recent merger with Air France, but it is expected that given the unparalleled success of the KLM-Northwest alliance, a means will be found to keep it in place, even should the KLM brand disappear. Northwest's position in SkyTeam is still evolving and being finalized, but several steps are being taken to enhance its position. Air France is beginning service to Detroit this summer, Northwest recently began service to Guangzhou (future member China Southern's main hub), and Northwest is considering launching a Minneapolis/St. Paul-Paris route in addition to restoring Detroit-Seoul service. Transborder service to Canada, where Northwest is the leader among U.S. airlines, is increasing; due to the outstanding economics of the new 757-300s, Northwest has been able to restore and add many new routes to Hawaii.

Northwest's strategy across the Pacific in recent years has been to concentrate all operations through Japan, with as many flights as possible through Tokyo Narita (currently 79% of passenger operations)²² to achieve the highest possible economies of scale and returns. This has included cutting several routes before and after September 2001, as well as rerouting all China flights through Tokyo. The future of this system is unclear as the Japanese economy continues to maintain minimal growth, especially when compared to China. Northwest is always seeking more rights to serve China and Japan, both passenger and cargo, but their recent order of 18 787s suggests a long-term strategy shift towards a network based more in the U.S. like arch-rival United.²³ Northwest has been able to successfully match capacity with demand thanks to its centralized Tokyo operations and fleet diversity. While United operates solely 747-400s and 777-200ERs to Asia, Northwest flies 747-400s, 747-200s, DC-10-30s, A330-200s, and 757-200s to match a wide range of desired capacities.²⁴

On May 19, 2005, US Airways and America West announced their intention to merge the two carriers, a move that is highly complementary to both carriers, but one that carries significant integration issues. While most airlines would be highly affected by the greater market power wielded by the combined company, Northwest should remain relatively unaffected because there would still be relatively few markets that the larger US Airways would compete in. Adding to Northwest's protection is that the new company would offer relatively little competition in Northwest's home Midwest markets.

²² SimAirline.net.

²³ Northwest Airlines, "Northwest Airlines Orders Boeing 787," *Associated Press*, 5 May 2005.

²⁴ SimAirline.net.

Appendix 1: Market Shares²⁵

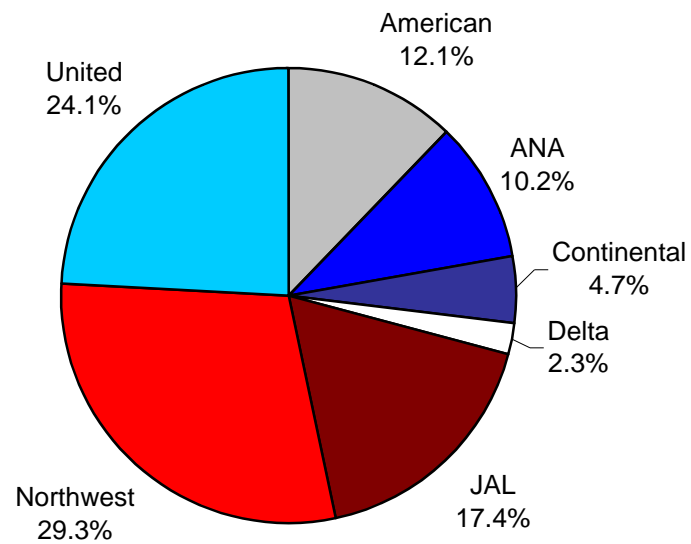


Figure 1. Weekly U.S.-Japan Seats

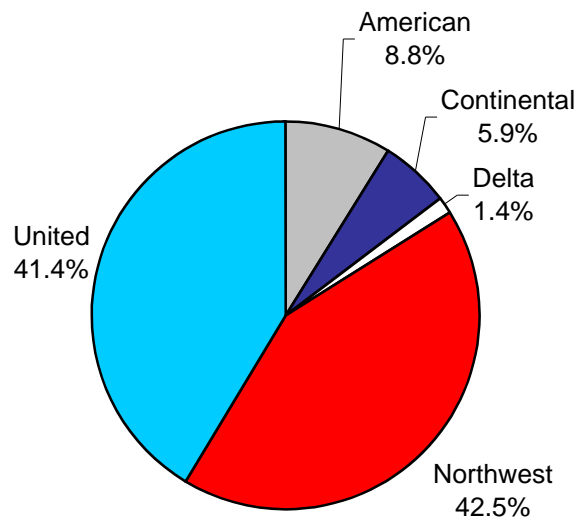


Figure 2. U.S. Airlines Weekly U.S.-Asia/Intra-Asia Seats

²⁵ Ibid.

Airline	Destinations
American	Nagoya, Shanghai, Tokyo
Continental	Beijing, Hong Kong, Nagoya, Tokyo
Delta	Tokyo
Northwest	Bangkok, Beijing, Busan, Guam, Guangzhou, Hong Kong, Manila, Nagoya, Osaka, Saipan, Seoul, Shanghai, Singapore, Taipei, Tokyo
United	Bangkok, Beijing, Guangzhou, Ho Chi Minh City, Hong Kong, Nagoya, Osaka, Seoul, Shanghai, Singapore, Taipei, Tokyo

Figure 3. Destinations in Asia

Notes:

- Numbers may not add up to 100% due to rounding
- U.S. mainland only, Hawaii excluded
- Does not include Continental's Micronesia operations
- Guam, Saipan included in Asia, not U.S.
- Non-Japan/U.S. carriers not included

Appendix 2: Recent Court Cases²⁶

Midwestern Machinery Co., Inc. v. Northwest Airlines, Inc. (U.S. D.C. District of Minnesota, Civ. Action No. 97-1438). In June 1997, Midwestern Machinery Co. and several individuals filed an antitrust class action against Northwest in the U.S. District Court for Minnesota. The complaint alleges that Northwest's acquisition of Republic Airlines in 1986 resulted in a substantial reduction in competition in violation of Section 7 of the Clayton Act...On December 20, 2004, the Eighth Circuit Court of Appeals affirmed the decision of the District Court and on January 14, 2005, denied the plaintiffs' petition for a rehearing or a rehearing *en banc*.

Spirit Airlines v. Northwest Airlines (U.S. D.C. Eastern District of Michigan, Civ. Action No. 00-71535). In March 2000, Spirit Airlines filed a Sherman Act monopolization complaint against Northwest in the U.S. District Court for the Eastern District of Michigan alleging that Northwest had monopolized, or attempted to monopolize, air transportation service between Detroit and Philadelphia and between Detroit and Boston in 1996 by engaging in predatory pricing and other actions to exclude Spirit from those markets...On March 31, 2003, the Court granted Northwest's motion for summary judgment. Spirit's appeal of the Court's Order granting summary judgment is pending.

²⁶ Northwest Airlines Corporation, 19-20.

Sources

R.E.G. Davies, *Airlines of the United States since 1914*, (Washington: Smithsonian Institution Press, 1982).

Edmund S. Greenslet, "Major Airlines Profiles," *Aviation Week & Space Technology 2005 Aerospace Sourcebook* (17 January 1985).

Bernie Han, "Northwest Airlines" (New York: Goldman Sachs Transportation Conference, 22 March 2005).

Steven A. Morrison and Clifford Winston, *The Evolution of the Airline Industry* (Washington: Brookings Institution Press, 1995).

Ramon De Murias, *The Economic Regulation of International Air Transport* (Jefferson, N.C.: McFarland & Co., 1989).

Northwest Airlines, *Current News Releases*, <http://www.nwa.com/corpinfo/newsc/press.shtml>.

Northwest Airlines, *Investor Relations – FAQ*,
<http://ir.nwa.com/phoenix.zhtml?c=111021&p=irol-faq>.

Northwest Airlines Corporation, *2004 Annual Report* (Washington: Securities and Exchanges Commission, 7 March 2005).

William E. O'Connor, *An Introduction to Airline Economics* (New York: Praeger, 1985).

James Ott and Raymond Neidl, *Airline Odyssey* (n.p.: Replica Books, 1998).

Thomas Petzinger, Jr., *Hard Landing* (New York: Three Rivers Press, 1995).

Barbara Sturken Peterson and James Glab, *Rapid Descent* (New York: Simon & Schuster, 1994).

Anthony Sampson, *Empires of the Sky* (New York: Random House, 1985).

SimAirline.net, <http://www.simairline.net>.