



Point-to-Point

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Burgeoning Freighter Demand Creates Aircraft Investment Opportunities

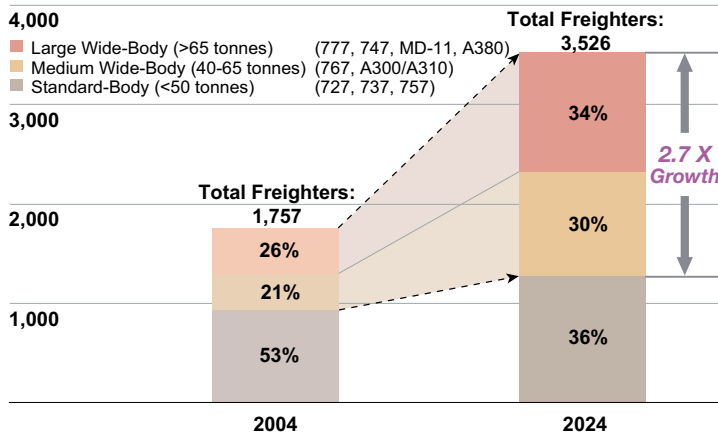
A healthy world economy is driving demand for cargo transport by air. Nearly 2,900 freighter aircraft will be added to the world fleet to meet that demand.

Economic projections indicate that the global economy, as measured by gross domestic product (GDP), will grow at an average 2.9% per year during the next 20 years. Demand for air cargo transport, measured in revenue tonne-kilometers (RTK), is strongly linked to GDP.

Based on three decades of Boeing economic analysis and modeling experience, the industry reference Boeing World Air Cargo Forecast projects that rising world GDP will drive an average 6.2% annual growth in demand for air cargo transport. At this average growth rate, air cargo transport demand will triple in 20 years.

While demand for air cargo transport will triple, the number of freighters in the world fleet will only double. Air cargo demand and the freighter fleet grow at different rates because some demand may be met by using larger freighters, rather than by increasing the number of airplanes. Some demand will also be absorbed by the passenger airplane fleet, whose revenue cargo capacity will also grow during the forecast period.

Widebody Freighters Lead the Future Fleet



All factors considered, the world freighter fleet will take delivery of nearly 2,900 freighter aircraft. About 1,100 of these will replace freighters that will be retired during the forecast period, leaving a net fleet growth of 1,800 new and converted freighters.

Wide-Body Freighters Are the Market Growth Segment

Fleet growth segments are affected by several independent factors, including business strategies, aircraft retirement rates, and the varying rates of market growth in major trade regions. For example, U.S.-based air express carriers will emphasize growth in the medium and large wide-body fleet segments. Asia-Pacific and European airlines will move toward large long-haul freighters, especially new and converted 747s.

The number of wide-body freighters will grow by a factor of 2.7 during the forecast period. At the same time, growth of the standard-body fleet will slow. Consequently, wide-body freighters, which currently make up 47% of the world fleet, will gain the majority share with 64% of the fleet. A relatively small number of very large freighters which will enter the fleet during the next 20 years will contribute little to the rise in average freighter size. The increased share of wide-body freighters of all sizes--new and converted--will drive average freighter size to increase 25% by 2024.

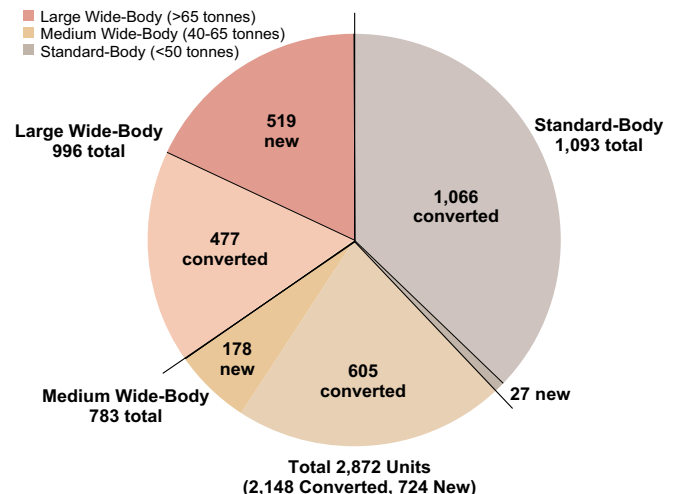
Global Network Carriers Will Favor New Freighters

About 75% of the freighters joining the world fleet will be converted freighters. However, the percentage of new and converted freighters varies widely by freighter size category.

For example, of the 1,093 standard-body freighters to be delivered, only about 27 will be new-production freighters. In contrast, of the 996 large freighters to be delivered, 519 will be new. The 724 new production freighters to be delivered in all categories represent a total value of \$155 billion in current U.S. dollars.

Converted freighters are a good investment value because carriers use the relatively low-cost aircraft in a large number of air cargo op-

Of 724 Production Freighter Deliveries, About 519 Will Be Large Wide-Bodies



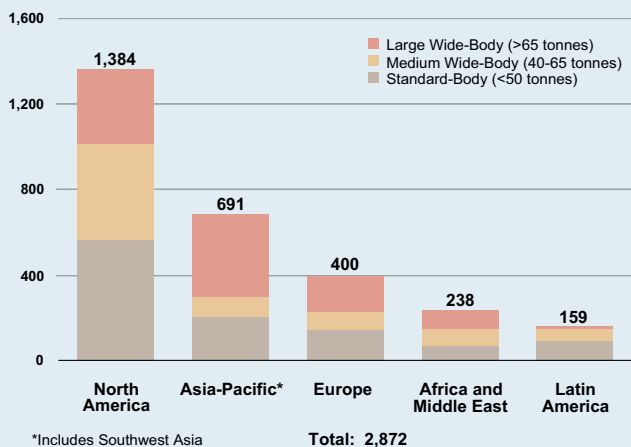
erations where the additional time required for maintenance of older aircraft is not an issue.

The Boeing Converted Freighter program addresses the growing requirement for wide-body conversions, modifying 767-300 and 747-400 passenger airplanes to 767-300BCF and 747-400BCF freighters. Boeing Converted Freighters enjoy the benefits of original Boeing engineering, parts, documentation, and post-delivery support, greatly increasing their residual value and marketability.

Many operators, particularly global network carriers, find that new freighters provide crucial advantages, including greater payload or range capability, higher reliability, and greater fuel efficiency. Where yields are tight, the efficiency of wide-body freighters, such as the 777 Freighter and 747-8 Freighter can spell the difference between marginal and profitable operations. ■

For a detailed discussion of these topics, visit the Boeing World Air Cargo Forecast website:
www.boeing.com/commercial/cargo/WACF_2004-2005.pdf

North America Will Account for Nearly Half of 2005-2024 Freighter Deliveries



While the Chinese and intra-Asian air cargo markets will lead world traffic growth at 10.6% and 8.5%, respectively, North American carriers will receive more than half of the freighter deliveries over the next 20 years. Many of these North American-domiciled freighters will serve the vibrant Asian markets.

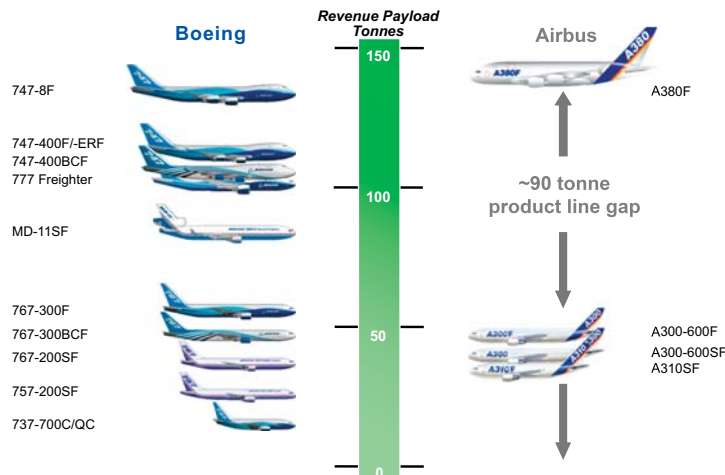
747-8 Freighter Builds on Success Meets Real-World Operational Requirements

The role of the 747 freighter series is no less vital today than before the advent of the A380-800F. The new 747-8 Freighter, with superior efficiency and economics, is the ideal choice to carry on the indispensable responsibilities of 747 freighter series.

Profits in the highly competitive air cargo market often hinge on matching airplane size, performance, and operating costs to specific market requirements. For most cargo operators, no single model of airplane can meet the full spectrum of requirements.

With a selection of 10 models of production and converted freighters, Boeing offers the industry's most complete line of cargo aircraft. Boeing freighters provide more than 90% of global air cargo capacity.

Only Boeing Offers a Full Line of New and Converted Freighters



Over 90% of All Freighter Cargo Flies on Boeing Aircraft

In fact, more than half of the world's air cargo capacity is supplied by the various models of new and converted 747 freighters alone.

The 747-8 Freighter Needs No Introduction

747 freighters are recognized at airports along every major cargo route, trusted by cargo shippers, familiar to maintenance providers, and well-known by freighter pilots. Moreover, the world's current air cargo network is built around the 747, giving the new 747-8 Freighter a commanding head start over any competition. The 747-8 Freighter is excellently positioned to turn profits and earn return on investment in all the world's most lucrative cargo markets, immediately upon entry into service.

Demonstrating their confidence in the 747's operational and revenue advantages, the world's cargo carriers have ordered 92 Boeing 747-400F, -400ERF, and -8 Freighters since the A380 was launched. This compares to only 27 orders for the A380-800Fs as of January 2006. That is nearly a three-and-a-half to one vote of confidence for the 747!

The 747-8 Freighter will be able to use existing airport infrastructure and 90% of existing ground support equipment, including cargo loaders, at more than 200 airports where the 747-400 is already welcome. This alone is a resource that will take billions of dollars of investment and possibly decades for the A380-800F to rival.

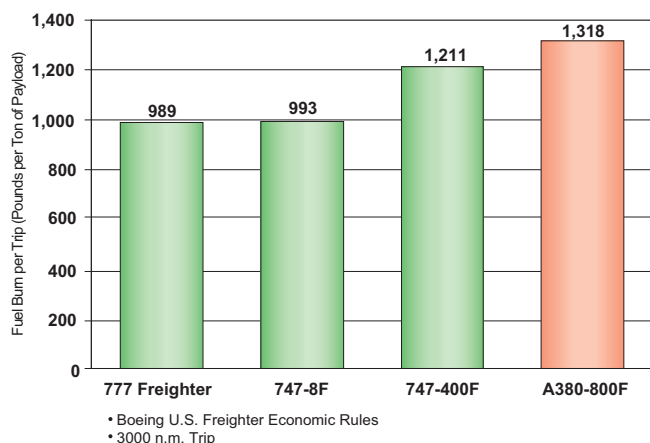
The 747-8 Freighter shares 73% common parts and the same pilot type rating with the 747-400 freighters serving 20 operators on 6 continents. All told, the 747-8 Freighter's advantages increase revenue potential for operators, while reducing economic risk for operators and investors alike.

Airplane Size and Economics Are Right for the Market

The overwhelming majority of new cargo aircraft deliveries over the next 20 years will be in the large (over 65-tonne) freighter category. The immensely successful 747 freighter series dominates that category today. As the latest and most advanced member of the 747 freighter series, 747-8 Freighter enjoys a long list of advantages over competing cargo aircraft.

Longer than the 747-400F by 18.3 feet (5.6 meters), the 747-8 Freighter offers 16% greater revenue cargo volume. Though not as large as the A380-800F, the 747-8 Freighter uses its volume much

Production Freighters Fuel Burn Comparison



more efficiently and is much more economical to operate than the triple decker A380-800F.

To gain a slim 7 tonnes more cargo capacity than the 747-8 Freighter, the A380-800F must lug 85 tonnes more operating empty weight into the air, every time it leaves the ground. This is a very poor trade! The A380-800F's extra weight consumes 32% more fuel on every trip—that's 26% more fuel per tonne of revenue cargo—compared to the 747-8 Freighter.

Design Accommodates Easy Loading, High-Yield Shipments

The 747-8 Freighter is the only new freighter that can be loaded "straight in" through its unique nose cargo door. Straight-in loading can reduce loading and unloading times significantly. The nose door also enables loading of long and awkwardly shaped cargo, which can be an important source of premium revenue.

The 747-8 Freighter can also load industry-standard 10-foot-high (3m) pallets through its side doors. This simplifies pallet assembly as well as airplane loading.

The A380-800F, on the other hand, requires three different pallet heights on its three decks. This complicates pallet assembly and airplane load and balance issues.

The 747-8 is designed to accommodate a maximum cargo density of 10-lb/ft³ (160-kg/m³). This easily meets today's typical market density of about 9.5 lb/ft³ (152-kg/m³).

The A380-800F is designed for a maximum cargo density of only 8.2 lb/ft³ (131-kg/m³). Operators of the A380 will be forced to fill the airplane with below-market-density loads in order to use the full volume of the aircraft. To fly typical market-density loads, operators will be forced to leave revenue cargo volume empty.

The 747-8 Freighter's unique capabilities and operational advantages make it a valuable asset for operators in high-capacity and long-distance air cargo markets. The 747-8 Freighter's ability to use existing airports and ground support equipment helps ensure easy placement and resale, sustaining high residual value. ■



An Industry First — Post-Delivery Support for Freighter Conversions

As prime contractor, the Boeing Converted Freighter (BCF) Program ensures original airplane equipment manufacturer parts and engineering, complete documentation, and contractual price and schedule performance. In addition, Boeing Converted Freighters offer the same level of post-delivery support as Boeing offers for new airplanes—an industry first.

Boeing initiated the conversion program to help owners of 767-300 and 747-400 passenger airplanes realize the maximum value inherent in their Boeing jetliners. The program grew out of Boeing's successful experience converting MD-11 passenger airplanes to freighters. Acting as prime contractor, Boeing manages the entire passenger-to-freighter conversion process—from contract signing to redelivery of the converted freighter—ensuring that the Boeing Converted Freighter is certified and ready to enter service on schedule and on budget.

The first 747-400BCF entered service in December 2005, two days after the airplane's ceremonial redelivery to launch customer Cathay Pacific, in precise accord with the original contract. The 767-300BCF was launched with three firm and four option conversions from Japan's All Nippon Airlines. The first 767-300BCF will enter service in the fourth quarter of 2007. Nearly 600 Boeing 767-300s are currently in passenger service around the world. About 250 of these will have been in service for 15 years or longer in 2007, making them excellent candidates for redelivery as converted freighters beginning in 2008. Over the next 20 years, 767-300s reaching the 15-year service mark will be an ample source of candidates to fill the project-



747-400BCF and 767-300BCF

ed requirement for 605 medium wide-body freighter conversions.

The Boeing Converted Freighter designator assures owners and investors that the same engineering, workmanship, and attention to detail goes into the 767-300BCF and 747-400BCF as goes into all Boeing airplanes. Boeing standards for quality and consistency ensure that Boeing Converted Freighters will integrate smoothly into existing Boeing fleets.

A Boeing Converted freighter is supported like a new Boeing airplane. No other conversion program can offer Boeing customer support, including access to the MyBoeingFleet web portal for maintenance information, up-to-date technical manuals, and support from Boeing field service representatives and service engineers.

As the original aircraft manufacturer, Boeing applies unique understanding of aircraft structures and systems to deliver a converted freighter that is economical to maintain and operate—and that will command the highest value in the freighter market. ■

The 777 Freighter Brings Twinjet Economy to High-Demand Market

By Lars Q. Andersen

Vice President - Program Manager, 777 Program,
Boeing Commercial Airplanes



We're very excited to introduce the new Boeing 777 Freighter. Every way you look at it, the 777 Freighter is a natural fit for the air cargo market. It's the world's largest and most capable twin-engine freighter. It has greater capacity than any other twin-engine cargo airplane. It has lower trip costs and consumes less fuel than any large freighter. And, it flies farther than any

other freighter.

With revenue payload capability of 229,000 lbs (104 tonnes), the 777 Freighter is the perfect choice to replace older three- and four-engine cargo aircraft that can't come close to the 777 Freighter's fuel economy. More importantly, the combination of economical operation and range will enable cargo carriers to open new direct and nonstop services between cities that have never before enjoyed premium services, such as overnight and express deliveries.

The ability to fly nonstop between widely separated city pairs helps carriers keep profit margins healthy by avoiding the substantial costs of refueling stops, cargo handling at transfer depots, and landing and navigation fees at intermediate airports.

The 777 Freighter fits right into the worldwide air cargo network that grew up around the phenomenally successful 747 freighter family. The 777 Freighter can accommodate 10-foot-high pallets through its main cargo door, making it easy to transfer cargo shipments to or from a 747 freighter. And, like the 747 freighters, the 777 Freighter can carry market-standard load densities of 10 lb/ft³ (160 kg/m³).

These capabilities and advantages make the 777 Freighter a high-value asset in any cargo fleet. Access to today's markets and the ability to create new markets makes the 777 Freighter a solid investment opportunity. ■

Noteworthy Developments

The Cape Town Treaty Takes Effect on March 1, 2006.

- The Treaty establishes a new web-based international registry to track the priority of lender claims and interests. Users will be able to file and protect their interests from anywhere in the world on a 24/7 basis.
- Financiers should register at: <https://www.internationalregistry.aero>

Boeing Program Update:

737:

- Making history with the 5,000th 737 delivery; the total number of orders for the 737 now exceeds 6,100 airplanes.
- 737-900ER design completion.
- ANA becomes a launch customer for the 737-700ER.

777-200LR:

- 777-200LR receives FAA certification to enter commercial service.
- First airplane delivers to Pakistan International Airways on February 25, 2006.

Commercial Aviation Services:

- Aeromexico purchases Boeing's Electronic Flight Bag for their 777s.
- Singapore Airlines purchases Boeing Electronic Flight Bag Installation Kits for its entire fleet of new and existing 777s.
- Boeing opens Operations Center for improved response to urgent airline support issues. Located in Seattle, the center provides comprehensive airplane support services for urgent airline structures, systems, materials and maintenance issues.



Customer Support Operations Center

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