

Understanding Air Freight



Advantages of Air Freight

Speed

*Customer Service
Increased Production*

Accuracy

*Easy Track and Trace
Loss Prevention*

Reliability

*Security Against Theft
Less Damage*

Control

*Reduce Storage Costs
Manage Perishability*

Scheduling

*Direct Shipping
Indirect Shipping*



Air Cargo Security

TSA – Transportation Security Administration

The TSA protects the Nation's transportation systems to ensure freedom of movement for people and commerce. The TSA will continuously set the standard for excellence in transportation security through its people, processes and technology.

The TSA is responsible for –

- Law Enforcement Programs
- Detection Teams
- Crew Member Self-Defense
- Federal Air Marshals
- Air Cargo Security Programs



TSA Compliance

TSA's security regime for air cargo is divided into two distinctive divisions

- The Transportation Sector Network Management (TSNM) Air Cargo Division
In charge of the strategic development of TSA programs
- Office of Security Operations (OSO) Air Cargo Division
In charge of program compliance

These Air Cargo Division are responsible for working across TSA, Department of Homeland Security, and other Governmental Agencies (Domestic and International) to develop air cargo regulations, technological solutions, and policies that continuously enhance the security of the air cargo supply chain.

To handle Air Freight in the United States, you must be TSA Certified





International Air Transport Association

IATA provides a wide range of services and programs to the aviation community. IATA sets standards in many areas of the business making it possible for cargo to travel from one place to another seamlessly using two or more airlines. It also leads a number of industry initiatives involving safety, security, environment and the quality of air travel.

IATA has a network of over 230 member airlines serving over 130 countries around the world. IATA carriers account for 93% of all international air traffic.



Known Shipper Program

In response to the September 11th attacks on the United States, the Department of Homeland Security implemented new rules to ensure the safety of domestic and international air travel in the United States.

Shippers must be properly vetted by a TSA Air Carrier or Freight Forwarder

Known shippers can tender their freight on both passenger and cargo aircraft, with some restrictions.

Indirect Air Carrier (IAC)

IAC, also known as a freight forwarder, is a person or entity within the United States not in possession of an Federal Aviation Administration air carrier operating certificate that undertakes to engage indirectly in air transportation of property and uses for all or any part of such transportation the services of a passenger air carrier.

Each IAC must adopt and carry out a security program that meets TSA requirements.

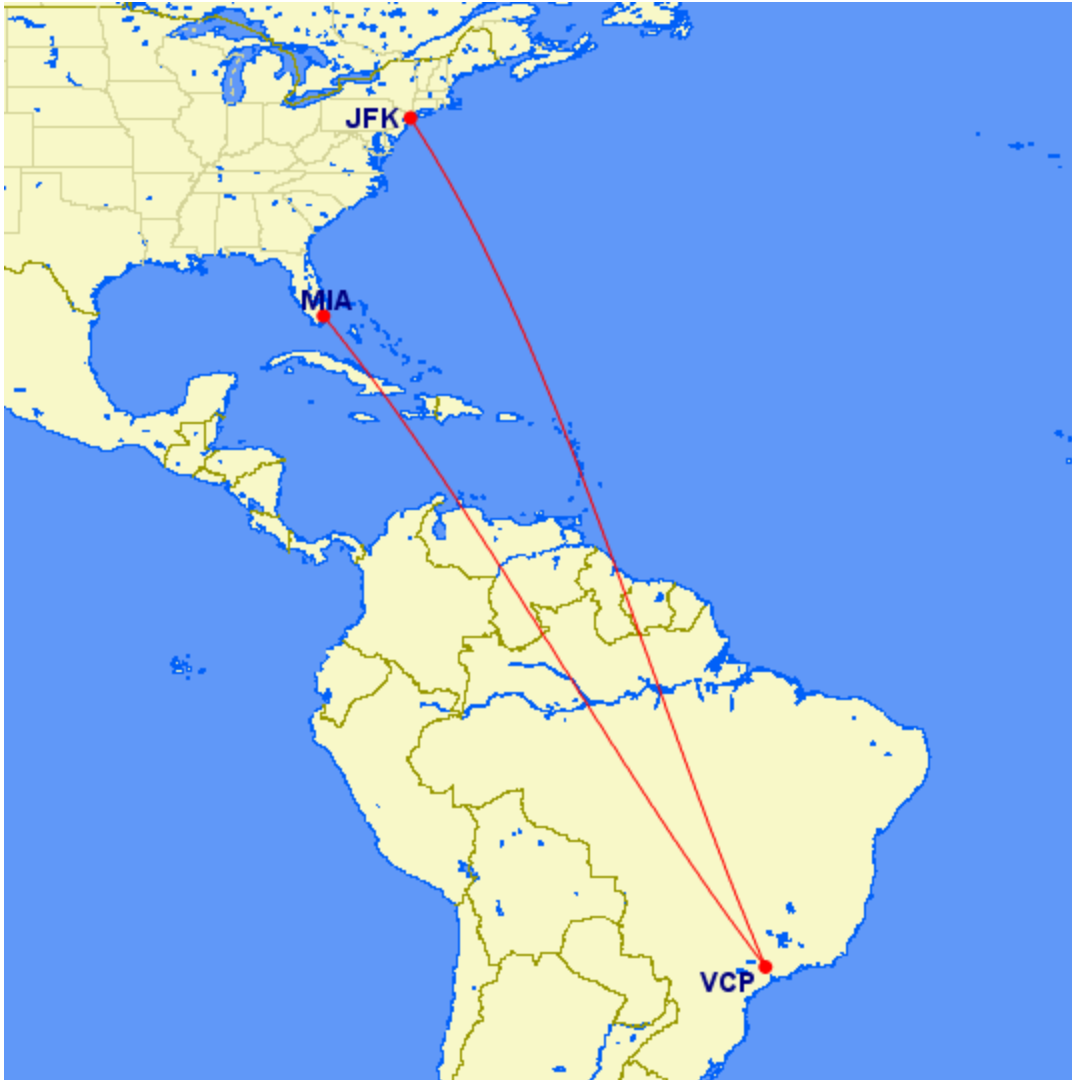




Air Traffic Control

- Direct Routing
- Indirect Routing
- Airport Terminals
- Freighter Service
- Passenger Service
- Specialized Service

Direct Routing



- *Fastest Mode of Transit*
- *Terminal to Terminal*
- *Major HUB to Major HUB*
- *More Frequent Routing*
- *Consistent Scheduling*

Direct routing gives the shipper more supply chain flexibility. The additional speed to market can benefit both production and distribution.

For specialized commodities, temperature controlled items and cargo with a short shelf life, direct shipping is often the best option.



Indirect Routing

Indirect routing is the most cost effective method of air freight and in many cases, it is the only method. Indirect routing combines IATA carriers at their strengths. This allows customers to send freight to some of the most remote areas of the world.

- *Major HUB to Intermediate HUB*
 - *Less Frequent Routing*
 - *Inconsistent Scheduling*





Airport Terminals

Airport Terminals are used for storing, trans-loading and cross-docking air freight. These bonded facilities will store freight during indirect shipping and will warehouse the cargo until customs are cleared.

Facility Information Resource Management System (FIRMS) is a program for U.S. Customs & Border Protection to manage customs bonded facilities. A specific code is assigned to each bonded facility and it is called the FIRMS code.

Airport Code – A three-letter code designating the specific terminal



Airway Bills

An Airway Bill (AWB) is the document that covers all transport by air. It is issued by the carrier as a non-negotiable document serving as a receipt to the consignee for the goods. The AWB contains all the conditions of transport.

House Airway Bill (HAWB)

HAWB issued by a TSA freight handler who is acting as a carrier.

Master Airway Bill (MAWB)

MAWB is issued on airline's stationery to the TSA freight handler for all of the goods covered by one or more House AWBs.

Direct Airway Bill (DAWB)

A DAWB is a service where freight is transported on the airline DAWB without a HAWB. Direct shipments are generally used when freight and service needs are immediate. Freight is not consolidated with other cargo.





ORIGINAL 1
(FOR CARRIER)





Consolidation

Air Freight consolidation is combining multiple shipments into one. This can be an efficient and cost effective way to move your shipments. During consolidation, multiple shipments are moving under one AWB.

Advantages of Consolidation

Freight consolidation service is an extremely efficient logistics strategy

- More Cost Effective
- Reduces Delivery Costs
- Improved Inventory Control
 - Less Transit Time
 - Less Handling
- Lower Chance of Damage
- Increases Shipping Options

Many businesses, large and small, depend on freight consolidation services to streamline their logistics, maximize efficiency and minimize transport times.





Carrier Selection

Freight Aircraft

Freighter – Air Lifter – Cargo Jet

*Designed exclusively for cargo with
no passenger amenities*

- *Wide Body*
- *Cargo Doors*
- *High Wings*
- *High Tails*

Passenger Aircraft

Airliner – Airbus

*Designed to transport both cargo and
passengers*

- *Wide Body and Narrow Body
(Distance)*
- *Limited Commodities*
- *Less Cargo Space*
Create Additional Options

Specialized Aircraft

Charter Aircraft

Military Aircraft

Small Package - Courier

Expedite (Over-Night/2-Day/Express/Standard)



Unit Load Device (ULD)



A Unit Load Device (ULD) is a pallet or container used to load luggage, freight, and mail on both wide-body and narrow-body aircrafts. ULD's allow a large quantity of cargo to be bundled into a single unit.

A specialized ULD can also be used for temperature controlled cargo. These ULD's will protect cargo from the elements and will also allow different temperature settings within the aircraft.



Airfreight Packaging

Cargo is typically containerized for flights. Cargo will be tendered to the carrier either loose or containerized. Once the loose freight is checked in, it is loaded into a ULD.

There are approximately 20 different types of ULD's

The type of ULD or pallet used will depend upon the cargo configuration of the aircraft and whether or not the ULD is designed for use on the main or lower deck of the aircraft.

Main Deck ULD's

Carried in the cabin section of a cargo aircraft, or on the passenger level of passenger aircraft

Lower Deck ULD's

Designed to be carried below the main deck



Chargeable Weight

The Chargeable Weight of an Air Shipment is the Actual Gross Weight or the Volumetric Weight of the shipment – whichever is the greater. Chargeable Weight is used when determining air freight charges.

The Importance of Chargeable Weight

Dave ships marshmallows. The weight of the marshmallows is probably very low but the packaging could occupy a good amount of space on the aircraft. In this case, if Dave is charged strictly on weight, he would pay a very nominal amount compared to a shipper who exports a more dense commodity.

Chargeable Weight considers the actual volume of the cargo and how that cargo will occupy space on the aircraft.



Pricing

The categories for pricing air freight are

*ULD Pricing
Tariff Pricing
Contract Pricing
Spot Bid Pricing*

Air freight pricing is very fluid and is quickly affected by capacity and market conditions.

ULD pricing is based on the type of ULD. Each device will have a flat rate for use and a pivot rate for weight.

- *The tare weight is the weight of the ULD when it is empty.*
- *The pivot weight is weight over the allowable weight for the ULD.*

Each specific ULD will have their set allowable weights



Carrier specific tariff rates apply for:

*Dangerous Goods
Oversize Cargo
Perishable Goods
Valuable Goods
Live Animals*

Tariff rates may vary by carrier. No carrier is permitted to charge more than the rates stipulated by IATA. Rates regulated by IATA are called Tact Rates.

Contract Rates are provided by carriers for specific flights or commodities. As the weight increases, the rates decrease.

*Minimum \$50.00
-45 kgs = \$2.00 kg
+45 kgs = \$1.75 kg
+100 kgs = \$1.50 kg
+150 kgs = \$1.25 kg*

Spot rates are daily rates made available by the carrier. These rates are offered for a discount because an airline might not be filled to capacity. Another type of spot bid is “promotional rates” offered by the carrier to build up specific traffic on certain routes.



