



# Mexico: Air Cargo Transportation

Silvia Cárdenas, Christopher Lewis  
November 08

## Summary

Mexican air cargo transport is growing at a rate of 8% per year (2007), which makes it the second most important Latin American market in terms of international air cargo traffic and first in terms of domestic air cargo traffic.<sup>i</sup> The Mexican air cargo industry has the potential to position itself as a logistic tool of international importance due to its geographical location of having a northern border with the U.S., a western coast that allows easy access to Asia, an eastern coast with access to Europe/Africa and a southern border with Central and South America.

The current global economic conditions represent a challenge for the aviation industry and for air cargo transportation as well. Some long-term growth forecasts have been revised and adjusted downward to reflex the potential for a global recession, which may lead to a temporary reduction of competitive airfares both for passenger and for cargo operations in Mexico and worldwide. Mexico has recently experienced new trends in the aviation industry, such as the presence of private airport groups and regional and low-cost airlines. However, passenger and business trips are not going to be the only ones affected by the increase in air transportation's operational costs. Air cargo transportation will have to resist increasing costs by developing new market strategies and innovations to overcome the months of difficulties in the near future and to retain the growth trends of the last few years.

## Market Demand

According to Jorge Cardena Amaya, General Director of the International Training Institute for Air Cargo (ICICA), only 0.4% of Mexico's total shipments are moved by air.<sup>ii</sup> This signals a tremendous opportunity for growth as previous bottle necks are eliminated, infrastructure improves and more competitive prices make air transportation a more attractive mode of transport. Currently land and maritime transport are the principal methods for international transportation including domestic cargo.

However, in 2006 the Mexican Association of Importers and Exporters (ANIERM)<sup>iii</sup> estimated a smaller percentage of cargo moved by air:

### ANIERM : Cargo in Mexico 2006

Roads	58%
Sea	32%
Railroads	10%
Air	0.1%

*Source: Vuela Magazine Issue 121,2008*

Air cargo transportation is comprised of local air transportation, as well as international cargo activities done by local carriers and international companies. Local air cargo has always competed with other forms of transportation: roads, railroads and ports. Over the last 15 years, some key efforts were deployed to try to connect

air cargo with logistic and intermodal transportation components. Air cargo implies having an integrated infrastructure platform and competitive costs that reflect clear advantages in terms of availability, safety, delivery and simplicity. President Calderon's initiative to invest in Mexico's infrastructure through the National Infrastructure Plan (NIP) indicates the importance placed on a more integrated and linked infrastructure system for the country's future and its development.

The Mexican Civil Aviation Authority, which is the regulatory agency for Mexican aviation, routinely publishes statistics on the industry's trends both for passengers and cargo operations. From 2001-2007 passengers and cargo have consistently increased<sup>iv</sup>, signaling that the market has sustained a permanent demand for air transportation services. During the same period of time, foreign companies have handled more than 58% and local companies have handled 41% of air cargo services.

Some of the foreign companies with significant volumes of operations are the following:

<b>Mexico: Cargo Volume by Foreign Companies*</b> (Thousand tons)					
	2007	2006	2005	2004	2003
Air France	37.8	36.7	32.6	26.7	21.9
Astar Air Cargo	16.0	15.0	14.9	15.9	NA
Cargolux Airlines					
Inter.	29.8	29.7	27.3	25.4	20.9
Federal Express	80.6	86.5	70.3	66.8	57.2
KLM	17.8	17.7	17.9	15.6	17.4
Martin Air Holland	17.5	17.5	17.6	18.0	19.5
UPS	36.0	31.9	26.9	29.3	26.6

*\*Include regular and charter services*

*Source: <http://www.sct.gob.mx>*

Cargo operations in Mexico represent an attractive business for foreign companies, especially considering the size, cost, scheduling and business alliances with other carriers. The development of the sector will be supported by the Mexican Government's priority to improve the airport system and to support cargo projects for some airports, including those at Ensenada, Queretaro, Puebla and Tizayuca, among others.

More than a decade ago, courier services realized that the Mexican Postal Services could not adequately meet market demand. After a boom in the US and other industrialized countries, courier services also began to be commonly used in Mexico. Fedex, DHL and UPS are the leaders in Mexico, but Estafeta as a Mexican courier has been able to offer a viable option for domestic services. Estafeta and DHL have selected the San Luis Potosi airport, in the central part of the country, as their Mexican 'hub'.

Business opportunities exist for new-to-market companies in international and domestic cargo operations, courier services, as well as in 'sensitive' shipments for the pharmaceutical, medical and electronic industries.

## Market Data

According to the DGAC, a total of 635,777 tons of air cargo were handed during 2007, 41% by Mexican carriers in regular and charter services. A total of 47 airlines provide cargo services in Mexico. The top six cargo providers are listed below in order of importance:

- |  |                      |
|--|----------------------|
| 1) Aerotransportes Mas de Carga (MasAir) | 84.5 (thousand tons) |
| 2) Aero Union                            | 52.6                 |
| 3) Aerovias de Mexico (Aeromexico)       | 43.1                 |
| 4) Mexicana de Aviacion (Mexicana)       | 30.5                 |
| 5) Estafeta Carga Aerea                  | 24.7                 |

The two largest air cargo transport companies in Mexico are FedEx and MasAir, which each carry almost double the volume of the third largest transport company, AeroUnion.

<b>Mexico: Main Air Cargo Transport Companies, 2007<sup>e</sup></b>	
Company	Annual Volume (Tons)
Federal Express (USA)	65,839
MasAir (Mexico)	61,302
AeroUnion (Mexico)	35,561
AeroMexico (Mexico)	31,725
Air France (France)	27,734
United Parcel Service	27,127
Mexicana de Aviacion (Mexico)	22,210
Cargolux (Luxemburg)	21,412
Estafeta Carga Aerea (Mexico)	16,685

*e: Estimated data*      *Source: Vuela Magazine, Issue 121, 2008, p. 53*

Within the Mexican air cargo industry, there remains a wide variance in the type of aircraft used to transport air cargo. Participating aircraft range from turboprop airplanes to Boeing 747-400s.<sup>vi</sup>

The National Association of Air Transport (CANAERO) believes that the diversity of aircraft has kept the industry from realizing its potential. Mr. Jorge Luis Moya, VP of CANAERO stated: "Those that have entered this business have done so with the wrong aircraft, some have brought planes that have been converted to cargo planes... but as far as the government's share of the blame there is not enough space in a few of the airports for cargo or for duty-free warehouses".<sup>vii</sup>

<b>A Sampling of Cargo Aircraft in Mexico</b>	
<i>Company</i>	<i>Cargo Aircraft Used</i>
Aerpostal	Douglas DC-8-63
AeroUnion	Airbuses A300s
AirFrance	Boeing 747-400F
Estafeta Mexicana	Boeing 737-200/300s
Jet Paqueteria	Rockwell CT-39A
KLM	Boeing 747-400M
MasAir	Boeing 737-300Fs

### **Business Models in the Mexican Air Cargo Industry**

<i>Description of Model</i>	<i>Examples of companies that use this model</i>
1. Airlines dedicated to air cargo transport solely	Fedex and AeroUnion
2. Cargo airlines operated as subsidiaries of regular airlines	MasAir, which is part of Grupo LAN
3. Totally transport planes operated by regular or charter airlines which also have passenger services	Air France
4. Airplanes that apart from transporting passengers also dedicate a good part of their capacity to cargo transport	KLM

*Source: Adapted from article "Carga Aerea en Mexico". Vuela Magazine. No. 121. 2008. page 54*

In addition to the above-mentioned business models, a new Mexican airline, Regional Cargo, is focused on providing cargo services for the domestic market. It is based out of the Queretaro International Airport and operates ATR-42-300s, the first of their kind in Mexico. Over the next three years the company hopes to invest 45 million dollars in order to expand their fleet by nine airplanes by adding four ATR-42-300s and five Boeing 737-200s. Regional Cargo appears to be positioning itself as a significant player in air cargo by signing alliances with passengers' airlines to provide logistic and air cargo transportation and by planning to increase efficiency using overnight/evening operations.<sup>viii</sup>

### Airport Infrastructure

While no airport is exclusively dedicated to cargo transport, Mexico's most relevant cargo airports are the Mexico City International Airport (AICM), Guadalajara, Monterrey, and more recently the Cancun airport, which have served the main regional routes over the last six years.<sup>ix</sup>

<b>Percentages of Annual Air Cargo Volumes (kg) by Airport</b>	
<b>Airport</b>	<b>Percentage</b>
Mexico City	75.3%
Guadalajara	19.1%
Toluca	5%
Monterrey	4.9%

*Source: Aeropuertos y Servicios Auxiliares (ASA)*

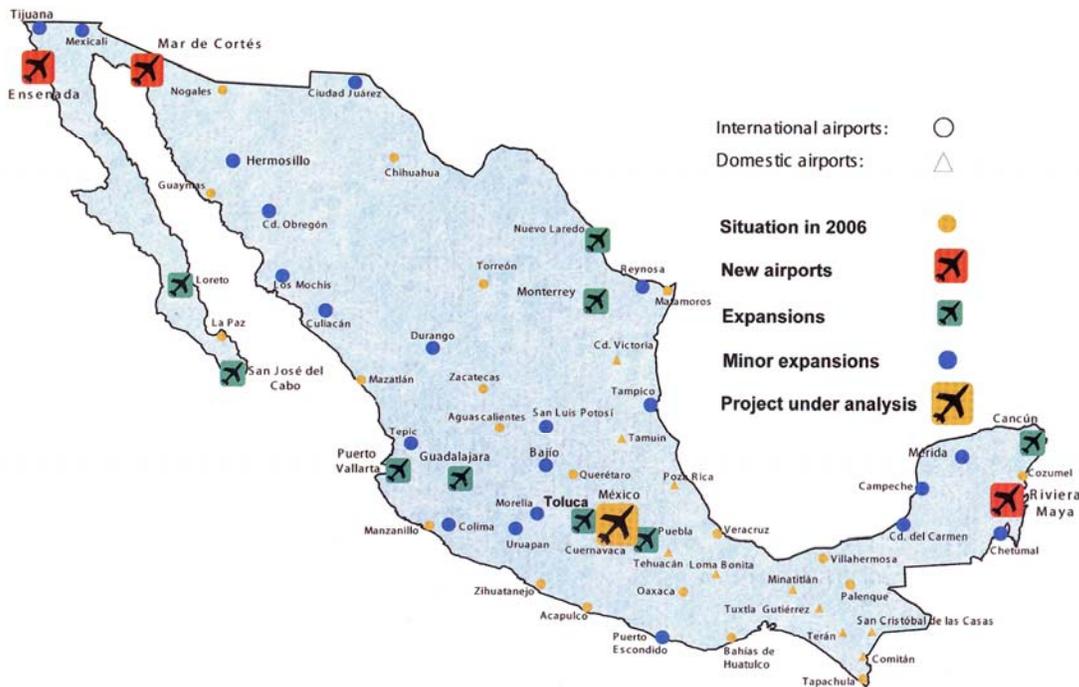
It is important to note that the metropolitan area of Mexico City, the State of Jalisco (capital Guadalajara) and the State of Nuevo Leon (capital Monterrey) represent 32% of the country's total population.<sup>x</sup>

It is estimated that 75% of the air cargo transportation is linked to foreign trade and only 25% is a result of local operations.<sup>xi</sup> Generally, air cargo is used when merchandise is of high value, fragile, perishable or in the event of an urgent need or when no other form of transport is available.

Mexican airports handled 635.7 tons of cargo in 2007, an average growth rate of 8%. Foreign carriers grew 6.9% and Mexican carriers grew 9%. Severe bottlenecks at airports due to unexpected air traffic growth have left little a no room for cargo traffic at certain airports. However, plans are now underway to fix such problems through the National Infrastructure Plan, which is a government initiative funded by public and private funds to improve infrastructure such as roads, ports, bridges and airports throughout Mexico.

The map below depicts Mexican Airport Infrastructure projects that will take place through 2012. As part of Mexico's National Infrastructure Plan (NIP), by 2012, at least three new airports will be built and thirty-three airports will be expanded using national and international private and public investment. However, not all airport expansion and development projects will affect the air cargo transport infrastructure. Improvements will be made to those airports that receive the heaviest air cargo traffic (Mexico City International Airport) and potentially Puebla, Toluca and Queretaro.

## Infrastructure in 2012



Source: National Infrastructure Program 2007-2012. <http://www.infraestructura.gob.mx>

## Regional Dispersal

According to Arturo Lan Arredondo, Coordinator of the ANIERM, there is “too much concentration in air cargo service”. According to ASA, over 90% of air cargo services were concentrated in only five airports nationwide. More geographically dispersed service may increase demand for air cargo transport.<sup>xii</sup>

There have been developments in the growth and dispersion of airports that are being utilized for cargo. The Queretaro airport aspires to handle 10-20% of the cargo transport market in the country within three or four years, according to Gilberto Lopez Meyer, the former Director General of the DGAC. The Queretaro airport has a large runway and the capacity to accept large cargo and jumbo jets.<sup>xiii</sup> Additional plans include other airports, such as Puebla and San Luis Potosi airports with the participation of the private sector.

Aeropuertos y Servicios Auxiliares (ASA)<sup>xiv</sup> has a project that will invest 80 million pesos in the construction of a cargo terminal at the Nuevo Laredo Airport in the State of Tamaulipas. This investment is expected to increase the airport’s cargo capacity to 50 tons of export and import merchandise. This investment will greatly benefit the in-bond (maquiladora) industry and the industrial regions located between Nuevo Laredo and Mexico City. This will shift some traffic away from the Laredo Texas International Airport which is being used by some Mexican companies. This new cargo terminal will allow for between four and six cargo operations daily, which will benefit 41% of the commercial transit between Mexico and the U.S., which transits through the state of Tamaulipas.<sup>xv</sup>

Estafeta, the leader of the domestic market, maintains a logistics center in the airport of San Luis Potosi, which currently handles 40% of domestic shipments. This has contributed to a reduction of air cargo in Mexico City by encouraging air traffic to go to the central part of Mexico.<sup>xvi</sup>

However, even after the National Infrastructure Plan is completed in 2012, there may still be a need for greater geographical disbursement of air cargo operations in order to make air cargo an essential component of an efficient multimodal system.

International firms such as DHL have an estimated 9% growth last year due to growth in exports and imports with Asia and North America by small and medium size Mexican companies. Specifically the countries that have strengthened their commercial flows with Mexico have been China, Japan, Singapore, Indonesia, the U.S.A. and Canada countries where Mexican companies have established some businesses.<sup>xvii</sup> Air traffic from Mexico headed to Asia and Australia has registered an annual 12% increase.<sup>xviii</sup>

## **Best Prospects**

As previously mentioned, it is estimated that only 0.4% of all Mexican cargo transport is done by air. To speed up growth in this method of transportation, niche areas such as agricultural goods (fruits, flowers and vegetables for example) should be used like other countries such as Costa Rica, Colombia and Ecuador have done. Alternatively, high value-added products such as aerospace or automotive parts, electronics or pharmaceutical products, could be another area of air cargo growth. According to Luis Sierra Arriola, General Director of MasAir, it is necessary to bring air cargo use to the light manufacturing industry, which should be developed during the next ten years.<sup>xix</sup>

In order to increase the percentage of air cargo transportation, advertising is needed focusing on the benefits of air cargo including offering delivery guarantees, security measures and demonstrating that air transport is becoming better and more feasible, continued Jorge Cardena Amaya, General Director of the International Training Institute for Air Cargo (ICICA).<sup>xx</sup> One such example of this could be to target companies that currently ship to Asia using ocean freight.<sup>xxi</sup>

Some airport expansion projects have helped create greater interest in cargo operations. It is anticipated that in the near and medium term there will be significant growth in demand of cargo equipment and system, as well as in the development of specialized air cargo facilities. Although many suppliers may be interested in these projects, those

with high quality and service (not just low cost) may have an edge with potential buyers, as such purchases should last several years.

## Key Suppliers

One can say that air cargo operations in Mexico used to be dominated by international carriers. For many years the market was divided into a proportion of 80/20, which represents a market share of 80% for foreign companies and 20% for domestic carriers. Nevertheless, in the last few years this market share ratio has changed to 60/40<sup>xxii</sup>. This shows that foreign firms used to have a much larger presence in Mexico in comparison to national carriers than they do now. Nevertheless, several Mexican companies have negotiated agreements, mainly with American firms, to serve shared destinations for passengers and cargo. This might explain this proportional change. The Mexican market has 24 exclusive cargo companies which use Mexico's network of 58 international airports. With a surface of almost two million square kilometers, the country has received services from an additional 22 cargo carriers regularly in the last four years, while 70 already existing air cargo companies handle 57.8% of all air cargo transported in Mexico.

The most important international air cargo companies per volume of operations in Mexico in 2007 are:

FEDEX [www.fedex.com](http://www.fedex.com)  
Air France: [www.airfrance.com](http://www.airfrance.com)  
UPS [www.ups.com](http://www.ups.com)  
Cargolux Airlines Inter. [www.cargolux.com](http://www.cargolux.com)  
KLM [www.klm.com](http://www.klm.com)  
Martinair Cargo Holland [www.martinaircargo.com](http://www.martinaircargo.com)  
Astar Air Cargo [www.astaraircargo.com](http://www.astaraircargo.com)

Mexican carriers are lead by :

Autotransportes Mas de Carga: [www.masair.com](http://www.masair.com)  
Aero Union: [www.aerounion.com](http://www.aerounion.com)  
Aerovias de Mexico (Aeromexico/Aeromexpress Cargo): [www.aeromexico.com](http://www.aeromexico.com)  
Mexicana de Aviacion (Mexicana): [www.mexican.com](http://www.mexican.com)  
Estafeta Carga Aerea: [www.estafeta.com](http://www.estafeta.com)  
Aviacsa: [www.avaicsa.com](http://www.avaicsa.com)

## Market Entry

There are no official barriers to entry for U.S. companies in the air cargo industry. However, succeeding in the market will require sustained effort, investment, time, a good marketing strategy (promotion) and in some market segments, a physical local presence.

In Mexico, business is done on the basis of personal relationships. U.S. exporters need to travel to Mexico frequently to develop and strengthen relationships in order to do business successfully in Mexico. Word-of-mouth referrals are very important and relationships inside main business groups are built over the long term.

Mexican companies tend to be extremely price conscious and appreciate outstanding service. Time is essential to cultivate trust to enhance a professional partnership. In the case of selling aircraft, key high-level contacts are extremely important, so personal attention must be given to important clients.

Several market entry strategies have proven to be effective in Mexico. In general, Mexicans appreciate close working relationships, so working with a locally-based agent, representative or distributor is usually successful.

However, market entry strategies can vary by sector and region in Mexico. U.S. Commercial Service staff is available to provide individualized counseling to determine the best market entry strategy for a given U.S. company/product.

## **Market Issues & Obstacles**

Without considering inventory, logistics costs are estimated to be 13% of sales, which is 25% more than the equivalent spent in the United States and 70% more than that spent in the U.K., according to Estafeta's estimate.<sup>xxiii</sup> There continues to be great opportunities for U.S. companies that are able to further develop this rapidly expanding industry in Mexico. Shipping is 90 USD cents per kilo which is cheaper than Centro American kilo rates, which can go up as light as 1.65 per kilo.

Currently there is growing competition between modes of transportation. According to Joel Hernandez, from Aerocharter Station, a Mexican cargo line "... the high operation costs of aircraft don't permit attractive rates when compared with land transport, even though I see this turning around the air transport industry will soon see the benefits of security and logistics improvements in the airports".<sup>xxiv</sup>

Principal international destinations for Mexican air cargo are Memphis, Tennessee (Fedex headquarters), and Louisville, Kentucky (UPS headquarters). The main air traffic towards Mexico comes from Miami, Los Angeles, Frankfurt, Paris and Sao Paulo. Cargo generally arrives in the cities of Mexico City, Toluca, Monterrey, Guadalajara, and to a lesser extent Merida-Cancun (basically the same locations that dominate air passenger traffic).

According to Eduardo Lopez Gonzalez, director of Planning and Finance for FedEx Latin America, Mexico could still improve export shipments by making a few regulatory changes which will lower the logistics transaction costs. There have been some efforts by the Mexican Chamber of Air Transportation (CANAERO) to negotiate with the Secretariat of Communication and Transportation, with the Mexicans Customs Officials and the Mexican Congress in order to adjust some regulations to better favor the industry.<sup>xxv</sup>

## Security

As of September 2007, the Bilateral Aviation Safety Agreement (BASA), an agreement between the United States and Mexico to enhance safety and efficiency in this industry, has come into effect. The deal in practice will remove barriers and make the outsourcing of production for U.S. companies easier to accomplish.

For example, BASA allows Mexican manufacturers to certify and ship components directly from Mexican factories, instead of returning them to the U.S. to be completed and checked for safety standards. In short, if looking to ultimately sell Mexican manufactured products in the United States, these products must meet the standards and rules as outlined by the Federal Aviation Administration (FAA). How will this affect the air cargo industry? This process first requires that products be certified through one of several methods. For more information on certification requirements and methods to comply with the BASA, please contact:

### **U.S. Department of Transportation**

Federal Aviation Administration  
800 Independence Avenue, SW  
Washington, DC 20591  
1-866-TELL-FAA (1-866-835-5322)

## Trade Events

- **Aero Expo 2009 (May 21-23, 2009), International Aviation Trade Show & Convention Mundo Imperial, Acapulco México**  
<http://www.aeroexpo.com.mx>

The US Commercial Service will host a U.S. Pavilion. Aero Expo is the most important industry event in Mexico. It is a biennial international exhibit and will have more than 250 exhibitors in a surface of 10,000 sq. meters. Other activities complement the trade show, such as a conferences program and a static display.

Please contact Silvia Cardenas ([silvia.cardenas@mail.doc.gov](mailto:silvia.cardenas@mail.doc.gov)) if interested in having a booth within the U.S. Pavilion.

Other trade shows that will take place in 2009 are the following:

- Expo Manejo de Materiales y Logistica 2009 (February 3-5, 2009) Monterrey, Nuevo León, México  
<http://www.expomanejodematerials.com>
- Expo Logistica 2009 (July 1-3, 2009) Mexico city  
<http://www.expologistica.com>
- Expo CIAM Cancun 2009 (November 30 – December 2, 2009)  
<http://www.expo-ciam.com>

## Resources & Contacts

### *Related Associations*

Asociación Latinoamericana de Aeronáutica (Latin American Aeronautical Association)  
<http://www.ala-internet.com>

Camara Nacional de Aerotransportes (CANAERO)  
<http://www.canaero.org.mx>

Instituto de Capacitacion Internacional en Carga Aerea, S.C.  
<http://www.icica.com.mx>

Instituto Mexicano del Transporte (SCT)  
<http://www.imt.mx>

### *Mexican Government Resources*

The National Infrastructure Plan  
<http://www.infraestructura.gob.mx>

Ministry of Communications and Transportation  
<http://www.sct.gob.mx>

Aeropuertos y Servicios Auxiliares (ASA)  
<http://www.asa.gob.mx>

Ministry of Economy  
<http://www.economia.gob.mx>

## For More Information

The U.S. Commercial Service in Mexico City, Mexico can be contacted via e-mail at: Silvia.Cardenas@mail.doc.gov; Phone: 52-55-5140-2670.; Fax: 52-55-5566-1111 or visit our website: <http://www.buyUSA.gov/mexico>

## The U.S. Commercial Service — Your Global Business Partner

With its network of offices across the United States and in more than 80 countries, the U.S. Commercial Service of the U.S. Department of Commerce utilizes its global presence and international marketing expertise to help U.S. companies sell their products and services worldwide. Locate the U.S. Commercial Service trade specialist in the U.S. nearest you by visiting <http://www.export.gov/eac>.

**Comments and Suggestions:** We welcome your comments and suggestions regarding this market research. You can e-mail us your comments/suggestions to: [Customer.Care@mail.doc.gov](mailto:Customer.Care@mail.doc.gov). Please include the name of the applicable market research in your e-mail. We greatly appreciate your feedback.

*Disclaimer: The information provided in this report is intended to be of assistance to U.S. exporters. While we make every effort to ensure its accuracy, neither the United States government nor any of its employees make any representation as to the accuracy or completeness of information in this or any other United States government document. Readers are advised to independently verify any information prior to reliance thereon. The information provided in this report does not constitute legal advice.*

*International copyright, U.S. Department of Commerce, 2007. All rights reserved outside of the United States.*

---

### Footnotes

<sup>i</sup> Antonio Jose, Juan. 2008 “Carga Aerea en Mexico” *Vuela Magazine. Issue 121, p. 54*

<sup>ii</sup> Torres Hernandez, Atzayaelh Francisco. December 2006. “Que necesita el transporte aereo?” *Sinergia Empresarial Year 6, Issue 37, p.14*

<sup>iii</sup> *Diario de Yucatan*, 2006 “El Transporte de Carga Subirá 5% annual”, October 1<sup>st</sup>.

<sup>iv</sup> Jose, Juan Antonio 2008. “Carga Aerea en Mexico” *Ibidem*

<sup>v</sup> 2006 “Por que no ha podido despegar la carga area en Mexico?” *Sinergia Empresarial*. December, Year 6, Number 37, p.18

<sup>vi</sup> Jose, Juan Antonio, 2008. “Carga Aerea en Mexico”. *Vuela Magazine, Issue 121, p. 54*

<sup>vii</sup> 2006 “Por que no ha podido despegar la carga area en Mexico?” *Ibidem: In reference to ‘almacenes fiscales’ in Spanish.*

<sup>viii</sup>, Jose, Juan Antonio 2008, “Carga Aerea en Mexico”. *Ibidem p. 48*

<sup>ix</sup> Instituto Mexican del Transporte, (IMT), SCT. 2002. “Diagnostico general sobre la plataforma logistica de transporte de carga en Mexico”

<sup>x</sup> <http://www.inegi.gob.mx>

<sup>xi</sup> *Op Cit. IMT, SCT, “ Diagnostico general sobre la plataforma...” p. 52*

<sup>xii</sup> 2007 “Sobre la industria industria aerea de carga”. *Sinergia Empresarial, Year 6 Number 42 Mayo p. 32*

<sup>xiii</sup>, Ruben Bustos ,Carlos.2007 “Hub estrategico en Queretaro”. *Sinergia Empresarial. Year 6, Number 39, February p. 26*

<sup>xiv</sup> An independent government entity in charge of 20 airports, including the Metropolitan Airports System (Puebla, Cuernavaca, Queretaro , Toluca and Mexico City). <http://www.asa.gob.mx>

<sup>xv</sup> 2007 “Impulso a la carga aerea” *.Sinergia Empresarial. Year 6, numero 44. p. 30*

<sup>xvi</sup> Hernandez Torres, Atzayaelh 2007 “Estafeta la esencia de la logistica”. *Sinergia Empresarial. Year 6,Number 44, Ju.y, p 8-9*

- 
- <sup>xvii</sup> Jimenez Hernandez, Enrique. 2007“Por el mercado de las PyMES”. *Sinergia Empresarial*. Year 6, Number 44, July. p.10-11
- <sup>xviii</sup> 2006 “Vuele hacia el mercado mas grande” *Sinergia Empresarial* Year 6, Number 37, December. p. 17
- <sup>xix</sup> Hernandez Torres, Atzayaelh Francisco.2006 “Retos de altura: MasAir quire latinoamerica”. *Idem* p. 12
- <sup>xx</sup> Hernandez Torres, Atzayaelh Francisco. 2006“Que necesita el transporte aereo?”*Idem*. p. 14
- <sup>xxi</sup> *Op Cit.* Jose, Juan Antonio. p. 58
- <sup>xxii</sup> *Op Cit.* IMT, SCT “Diagnostico general sobre la plataforma ....”
- <sup>xxiii</sup> 2007“Evolucionar o morir” *Sinergia Empresarial*. Year 6. Number 41. April . p. 7
- <sup>xxiv</sup> *Op Cit* 2006 “Por que no ha podido despegar la carga area en Mexico?”
- <sup>xxv</sup> Hernandez Torres, Atzayaelh Francisco.2006 “Donde esta la carga aerea?” *Sinergia Empresarial*. Year 6, Number 37, December p.8