Mexico’s Aerospace Industry Conference

Las Vegas Nevada
May 23-24, 2013
THE AEROSPACE INDUSTRY IN MEXICO

"Mexico's Aerospace Conference”
on May 22-23 2013 in Las Vegas NV at the Bellagio Hotel
The Mexican Federation of the Aerospace Industry (FEMIA®)

The Aerospace Industry in Mexico at the glance

Opportunities in the Aerospace Industry in Mexico

Challenges in the Aerospace Industry in Mexico

Stages of the Aerospace Industry in Mexico
The Mexican Federation of the Aerospace Industry (FEMIA®)

- A Non-for-profit Association organized in November 2007

- 68+ Members exporting over to 5.100 Billion USCy in 2012, almost 24% growth in relation to 2011.

- 20% yearly growth rate since 2002 (decreased in 09 due to global crisis)

- Growth in 12 was 24% including services.

- Expecting at least a 13% growth in 2013

- Strategic industry in the country (high potential of “clusterization”)

- Public policies directed to incorporate more local supply and to enhance competitiveness of OEMs and Tiers
The Mexican Federation of the Aerospace Industry (FEMIA®)

Our Structure

- Represented by Board of Directors chaired by President
- Chair supported by 3 Regional Vice Presidents and a General Director
- The Operation of FEMIA founded in 9 Commissions
  - Internal Governance
  - Training
  - Taxes, Customs and International Trade
  - Incentives and Technological Development
  - Competitiveness
  - National Strategic Plan
  - National Security
  - Development Centers
  - Small and Medium Size Corporations
The Mexican Federation of the Aerospace Industry (FEMIA®)

Mexico: 114.9 M inhabitants
$710 BUS Foreign Trade
GDP >$1,087. BUSCy

Source: FEMIA® April 2013

Northwest Region:
VP Eva Valdez

Northeast Region:
VP Benito Gritzewsky

Central Region:
VP Stephane Lauret

65+ MEMBERS
BC 8
SON 4
CHIH 8
COAH 2
NL 9
SLP 3
QRO 19
GTO 1
JAL 4
EM 6
DF 10
PUE 1
HGO 1

MANUFACTURING  54
MRO  12
DESIGN & ENGINEERING  23
The Aerospace Industry in Mexico

Location and Geographical Distribution

267 Corporations
18 States
34,000 +

- Baja California (59)
- Sonora (45)
- Chihuahua (32)
- Coahuila (7)
- Nuevo León (32)
- Tamaulipas (11)
- San Luis Potosí (5)
- Querétaro (33)
- Yucatán (3)
- Puebla (2)
- Hidalgo (2)
- Jalisco (11)
- Durango (1)
- Zacatecas (1)
- Aguascalientes (2)
- Guanajuato (3)
- EDOMEX (9)
- Mexico City (12)

Fuente: Dirección General de Industrias Pesadas y de Alta Tecnología, (SE) ProMéxico y FEMIA
The Aerospace Industry in Mexico at the glance

- A new industry with remarkable growth since 2002 (20%+ per annum)

- Over 267 companies: 79% MNF, 11% MRO & 10% D&E.

- Employment: Over 34,000+ in 18 States

- Exports: 3.4 BUSD (2010) and >4.5 BUSD (2011), with a 25%+ growth in relation to 2010

- The growth in 2013 was 24% including services and expecting a growth of 13% in 2013.

- In 2015, expect to have 37,000 employees, with 350+ companies and generate 7.5 billion USD., with 30% more of national supply.

- With a new competitive industrial platform less than 10 years
The Aerospace Industry in Mexico at the glance

- FDI and NDI is $13.5B (estimated)

- Estimated FDI and NDI $4.7 Billion USD from 2008 to 2011

- In 11 and 12, eighteen known new projects have been announced.

- Estimated FDI close to 4,200 millones USD en (08, 09, 10 y 11). Estimated amount of 1,300 million USD en 2012. and expecting a similar amount in 2013.

- The largest recipient of FDI in the sector worldwide in last three years

- 10th largest supplier to the US market, but numbers are improving

- A new program to promote FDI & NDI in the sector
The Aerospace Industry in Mexico at the glance

Source: DGIPAT with data from DGCE, Figures in millions USD.
* Includes estimated services rendered
The Aerospace Industry in Mexico at the glance

Structure by number of Employees

<table>
<thead>
<tr>
<th>Size</th>
<th>No. de Employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>1 - 10</td>
</tr>
<tr>
<td>Small</td>
<td>11 - 50</td>
</tr>
<tr>
<td>Medium</td>
<td>51 - 250</td>
</tr>
<tr>
<td>Large</td>
<td>More than 251</td>
</tr>
</tbody>
</table>

15 corporations with over 500 employees, 8 in Baja California, 2 in Chihuahua, 3 in Querétaro and 1 in Coahuila and Tamaulipas.
The Aerospace Industry in Mexico at the glance

Suppliers of OEMs by aircraft model in Mexico

<table>
<thead>
<tr>
<th>Corporation</th>
<th>Model</th>
<th># of suppliers</th>
<th># of suppliers in Mexico*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airbus</td>
<td>330-300</td>
<td>355</td>
<td>16</td>
<td>4.5</td>
</tr>
<tr>
<td>Airbus</td>
<td>A380</td>
<td>399</td>
<td>20</td>
<td>5.0</td>
</tr>
<tr>
<td>Boeing</td>
<td>787</td>
<td>299</td>
<td>14</td>
<td>4.7</td>
</tr>
<tr>
<td>Boeing</td>
<td>747-400</td>
<td>354</td>
<td>12</td>
<td>3.4</td>
</tr>
<tr>
<td>Bombardier</td>
<td>CRJ200</td>
<td>299</td>
<td>13</td>
<td>4.3</td>
</tr>
<tr>
<td>Embraer</td>
<td>ERJ 135</td>
<td>279</td>
<td>17</td>
<td>6.1</td>
</tr>
</tbody>
</table>

* Identified suppliers not necessarily supply parts for the mentioned models
Source: S.E.and AROSPACE DATABASE, PROGRAM TRACKER
Opportunities in the Aerospace Industry in Mexico

- Industry up cycle: Large OEMs driving market standards (BOEING and AIRBUS)
  - Incremental trend for back log order in Q3 (2012) 7,123* versus an avg output capacity of 1,800 aircraft per year!
  - Back log orders close to 7 years.

- Medium OEMs (BOMBARDIER(CAN.), EMBRAER(BRA.), MITSUBISHI(JAP.), SUKHOI AND IRKUT(RUS), COMAC AND AVIC(CHINA), have a 5 year backlog orders

- Private planes and helicopters(CESSNA, HACKER BEECHCRAFT, DASSAULT, GULFSTREAM, GRUMMAN, BELL, SICORSKY, AUGUSTA, EUROCOPTER) have a 3 year backlog orders.

- World´s current commercial fleet 18+ years old and over 20,000 aircraft must be replaced within 8 years!

- The defense market is over 4-5 times the commercial aerospace market, which is aprox 550-600 billion USD.

*Aerospace Market News
Opportunities in the Aerospace Industry in Mexico

Government agencies and FEMIA working together,

- Identifying business opportunities in specific regions (from Industrial Parks Facilities to Cluster-ization)
- “Walking the Talk” in International events together
- Developing a National Aerospace Strategic Program to optimize business opportunities
- Reviewing competitive environment to jointly develop attraction for NDI & FDI
Challenges in the Aerospace Industry in Mexico

- Increasing local capacity for certification to attract local companies to the sector
- Continuous supply of human talent to meet industry needs
- Rationalization of government incentives in E&D and R&D
- Optimize regional comparative and competitive advantages
  - Geographical positioning
  - Infrastructure connectivity
  - Free Trade Agreements networking
  - Same time zone working
  - High capacity to react to new product requirements
- Avoid waste of limited resources
The National Strategic Program of the Aerospace Industry

FEMIA with the support of the Mexican government, has created the “Pro-Aereo”
This program is based on key strategies, milestones and goals through 2020 as outlined below:

KEY STRATEGIES:

1. - Promotion and development of internal and external markets, defining our niches and creating the instruments to support our continuous growth.

2. - Strengthen and develop our aerospace industry capabilities with a linked Supply Chain. Develop local suppliers and encourage cluster development throughout Mexico.

3. - The development of the necessary human assets of the industry, with well defined technical and training programs and education-industry links.

4. - Development of the necessary technology including specialized clusters, new areas of technology, R&D labs and development of new materials.

5. - Development of the public-private programs required to assist the growth of the industry, with an institutional frame, Governmental leadership, incentives and financing, international covenants and including infrastructure, certifications required by the industry, logistics and technical centers.
The National Strategic Program of the Aerospace Industry

Milestones to be reached:

- The establishment of a formal coordination and administrative-management mechanism between industry and government.
- Active manufacturing participation in international programs to access new technologies and markets.
- To enact the establishment of a formal “buy-local” strategic program.
- The establishment and implementation of “Offsets” compensation systems to benefit corporations established in the country.
- To create specific support and incentive programs for the aerospace sector.
- An access to a specific financial line for the aerospace industry.
- The Opening of a Proof Testing Aerospace Lab to service the industry.
- To design, to develop, to manufacture and to assemble an engine module.
- To support the assembly of the first series airplane with 50% local content.
- To place our country as the first aerospace service HUB in Latin-America.
The National Strategic Program of the Aerospace Industry

Goals through 2020:

➢ To be within the 10 largest suppliers of the aerospace industry in the world in exports.

➢ To reach over $12 billion USD in exports a year.

➢ To have over 110,000 workers in the aerospace business

➢ To reach 50% of local content in our raw materials and products in the aerospace industry
The National Strategic Program of the Aerospace Industry

Number of aerospace companies in Mexico

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2011</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>65</td>
<td>238</td>
<td>350</td>
<td>450</td>
</tr>
</tbody>
</table>

Employment

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2011</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>10500</td>
<td>31000</td>
<td>38000</td>
<td>110000</td>
</tr>
</tbody>
</table>

Foreign Direct Investment per Year (FDI)

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2011</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>470</td>
<td>1300</td>
<td>3200</td>
<td>4600</td>
</tr>
</tbody>
</table>

Accumulated FDI

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2011</th>
<th>2015*</th>
<th>2020*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>4300</td>
<td>19300</td>
<td>27500</td>
<td>48000</td>
</tr>
</tbody>
</table>
The National Strategic Program of the Aerospace Industry

Trade in the Aerospace Industry

PERCENTAGES OF THE COMMERCIAL AEROSPACE INDUSTRY OF THE WORLD

usa 48
france 7.3
uk 7.3
germany 2.1
canada 2.1
japan 2.1
china 2.1
russia 2.1
italy 2.1
brazil 2.1
spain 2.1
singapore 2.1
india 2.1
holland 2.1
mexico 2.1
others 2.1

FEMIA
Final Remarks

Mexico a place to do Aerospace Business

- Mexico: Cross road of the World
- Mexico: Young and energetic labor force
- Mexico: Good Infrastructure
- Mexico: Partnering government
- 24% + growth in International Trade in 2012

- Mexico: Regulatory environment in the making
- Mexico: Increasing its industrial footprint
- Mexico: Working in Rule of Law
- Mexico: Facing opportunities and challenges
- Mexico: A growing industry environment with the chance to influence the future
MUCHAS GRACIAS

www.femia.com.mx
www.femia.org.mx
FEMIA’s Platform
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@femia_news
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