Doing Business in Mexico’s Aerospace Sector Webinar

Zoë Munro
August 8, 2018
Great Lakes St. Lawrence Governors & Premiers

• Formed in 2015, building on 30 years of collaboration through the Council of Great Lakes Governors

• Chief executives of:
  - Illinois
  - Indiana
  - Michigan
  - Minnesota
  - New York
  - Ohio
  - Ontario
  - Pennsylvania
  - Québec
  - Wisconsin

• Growing the region’s $6 trillion economy and protecting the world’s greatest freshwater system

• Chair: Michigan Governor Rick Snyder

• Vice-Chair: Wisconsin Governor Scott Walker
Great Lakes St. Lawrence Governors & Premiers
Award-Winning Project Portfolio

Economy

- Promoting SME Exports
- Growing Strong Clusters
  - Maritime Transportation
  - Tourism
- Attracting Foreign Investment

Environment

- Managing Sustainable Water Use
- Restoring and Protecting the Great Lakes St. Lawrence
GSGP Trade Missions have assisted over 450+ Great Lakes companies to export their products and services to 25 international markets.

450+

Great Lakes Companies Assisted

Abu Dhabi, Argentina, Australia, Brazil, Chile, Czech Republic, Colombia, Dubai, Germany, India, Indonesia, Mexico, New Zealand, Peru, Poland, Romania, South Africa, Qatar, Québec, Tanzania, Thailand, Turkey, Vietnam, UAE and the United Kingdom.
GSGP Mexico Office

- Michigan, New York & Wisconsin
- Pennsylvania Authorized Trade Representative
- Offices in Mexico City, Querétaro and Guadalajara
- Assisted over 3000 companies in wide range of industry sectors

Efren Flores, Director
xefren@gbpmexico.com

Silvia Alonso, Project Manager
xsalonso@gbpmexico.com
Business Opportunities for Industrial Suppliers with Aerospace Industry in Mexico
About the Mexican Federation of Aerospace Industry

- Mexican Association of Aerospace Companies
- Private, non-profit organization
- Established in 2007
- 100+ member companies
- Member presence in 13 states of Mexico
- Capital origin: Approx. 35% from Mexico, 65% Foreign
- FEMIA is the Private counterpart of the Mexican Federal Government

International Collaboration
New Industry in Mexico with an outstanding growth 2004 – 2017 (+14% avg annual)

| 312 Industrial Facilities | • 80% MFG  
|                         | • 11% MRO  
|                         | • 9% D&E  |

Jobs: +50,000 in 19 of the 32 states in Mexico


• Moved from 10th to 6th place as exporting country to the USA Aerospace Industry in less than 10 years.

Expectation for 2018:

• Close to 60,000 jobs  
• 340+ industrial facilities  
• Exports around to 8,300 million USD  
• 20% superavit in trade balance

Competitive manufacturing platform in less than 10 years

• Mexico’s global ranking in the Industry is 12th
Major companies in Mexico

- Aernnova (Spain)
- Airbus Group (Europe)
- Bombardier Aerospace (Canada)
- Daher Aerospace (France)
- Eaton Aerospace (UK)
- Fokker (Holland)
- General Electric (USA)
- GKN (UK)
- Gulfstream Aerospace (USA)
- Groupe Latecoere (France)
- Honeywell Aerospace (USA)
- ITP Group (Spain)
- MD Helicopters (USA)
- Meggitt (UK)
- Safran Group (France)
- Sargent Aerospace (USA)
- Textron – Cessna, Bell Helicopter, Beechcraft (USA)
- UTC Aerospace Systems (USA)
- Zodiac Aerospace (France)
Products & Services in Mexico

• Propulsion system components
• Aerostructures & sheet metal
• Landing system components
• Braking systems
• Precision machined parts
• Plastic injection molding parts
• Heat & surface treatment
• Electrical & electronics
• Composite material parts
• Design & engineering services
• MRO services
• Aircraft interiors
Mexico’s Exports Destinations

% of Mexico’s Exports

- USA 80.7%
- Canada 4.7%
- France 3.5%
- Germany 3.2%
- Others 7.9%

Source: Mexico’s Secretariat of Economy
Mexico’s Imports Origin

% Imports to Mexico

- USA: 73.6%
- Others: 12.0%
- France: 8.7%
- Canada: 3.0%
- United Kingdom: 2.7%

Source: Mexico’s Secretariat of Economy
Mexico’s Aerospace Trade Balance
(Millions of USD)

Average Annual Exports Growth: 14.6%

Fuente: Secretaría de Economía – México Gobierno Federal
Challenges for Buyer companies
World Fleet Forecast to 2036

This is the forecast of Commercial Aviation, where Boeing and Airbus lead around 90% of the demand of single aisle aircraft (B737 Max & A320)

Source: OEMs forecasts 2017
DEMAND
“I'll ask someone else. Didn't realize you were still dealing with that backlog.”
Looking for a great supplier

In Mexico
What if?
Supply Chain Development Program

FEMIA, in coordination with the National Productivity Council from the Federal Government, is directing the National Program for Supply Chain Development with the objective of integrating more competitive value chains in terms of productivity, quality, costs and lead-times in the aerospace industry in Mexico.
### Aerospace Value Chains Integration Process

**Progress**

<table>
<thead>
<tr>
<th>Buyers</th>
<th>Purchasing Pools</th>
<th>Suppliers</th>
<th>7 Supplier Days</th>
<th>$10 MUSD Awards / 9 Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>210 / 70 / 42</td>
<td>$609 MUSD / yr</td>
<td>+360 / +160 Visits</td>
<td>/ 32 SD Plans</td>
<td>$10 MUSD Awards / 9 Suppliers</td>
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**Detected Demand of +$609 MUSD / yr**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Demand</th>
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<tbody>
<tr>
<td>Castings $280 MUSD (aluminum and magnesium)</td>
<td>✓</td>
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<tr>
<td>Machining $62+ MUSD</td>
<td>✓</td>
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<tr>
<td>Sheet metal $38 MUSD</td>
<td>✓</td>
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<tr>
<td>Forgings $23 MUSD (titanium and nickel)</td>
<td>✓</td>
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<tr>
<td>Special Processes $20 MUSD</td>
<td>✓</td>
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<tr>
<td>Soft Goods &amp; Thermoforming $20 MUSD</td>
<td>✓</td>
</tr>
<tr>
<td>Coatings $16 MUSD</td>
<td>✓</td>
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<tr>
<td>Assemblies $13 MUSD</td>
<td>✓</td>
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<tr>
<td>Carbo-nitriding $10 MUSD</td>
<td>✓</td>
</tr>
<tr>
<td>Composites $2 MUSD</td>
<td>✓</td>
</tr>
<tr>
<td>Plastic injection molding $14 MUSD</td>
<td>✓</td>
</tr>
<tr>
<td>Raw material $5 MUSD</td>
<td>✓</td>
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* Interiors suppliers TBD

**Success Story:**

Plastic injection molding supplier location for UK buyer:

- 320 suppliers in Government database
- 20 suppliers recommended by FEMIA
- 5 Suppliers visited in 4 cities
- 3 suppliers qualified to get contracts of $14 MUSD in less than 6 months

$10 MUSD signed Contracts

9 suppliers
Supplier Companies Index + B2B Connections

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<tr>
<th>Empresa</th>
<th>Estado</th>
<th>Ciudad</th>
<th>Tier</th>
<th>I&amp;D</th>
<th>Giro</th>
<th>AS9100</th>
<th>NADCAP</th>
<th>Visita</th>
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B2B Connections in progress

Demand to be allocated with new (domestic or foreign suppliers) through our 3PQTS Pre-Audit
Competitiveness: Internal Areas to improve (suppliers)

- Raw materials
- Manufacturing Processes
- Engineering & design
- Open book quotation
- Fast quotation process
Competitiveness: External Areas to improve (suppliers)

- No feedback from buyers
- Lack of complementary capabilities integration (total acquisition cost perspective)
- Access to government incentives
Threats:

✓ NAFTA renegotiation (perception)
✓ Competitiveness: Asia, Africa & East Europe
✓ Aerospace demand + Local Content
✓ Regional teamwork in other regions
✓ Government incentives
Match Making Process

*** The Buyer leads the match & pairing, pricing & contractual negotiation.
Assessment 3PQTS

Factors to Evaluate

**People**
- Career Plan and Specialization, Training Plan, Technical Profile, Hard & Soft Skills, Engagement & Turnover back-up strategy.

**Technology**
- Detailed capabilities

**Pricing**
- Pricing, RFQ open book, Quotation Process, Cost Reduction Model, Market Portfolio, Payment Terms, Cycle Time Target, Quotation Maturity

**Quality**
- Certifications, NCR, 5’s, Documentation controls, Six Sigma or Lean, Nadcap, ITAR, Statistic Process Control, KPI, FAI compliance, OEM Qualifications, Customer Performance

**Supply Chain**
- KPI, Delivery Performance, Pull IN/OUT Performance, Forecast Model, Inventory Control, PO Management, Efficiency & improvement, EDI and ERP, Kit & shipset model, Ramp-up model, Local and external suppliers, Value Chain, Logistics, Sourcing, Customer Service

**Profile**
- Company Profile, Financial Health, Decision-making, Communication, Country stability, Distance to Delivery and Communications, Intellectual property Assurance, 5 year Strategy
3 Reasons why Buyers DON´T Work with new Suppliers

1. **Buyer Companies DON´T KNOW** about the existence of **aerospace capabilities from suppliers in the region** (installed, certified, available and competitive)

2. **Suppliers** are **NOT QUALIFIED** because of **hard and soft skills gaps** (raw materials, cycle times, manufacturing processes, engineering & design, follow up culture for NDAs, RFIs, RFQs, RFPs, open book quotation, foreign trade policies and permits, credit lines, etc).

3. **Suppliers DO NOT have an integrated supply chain** (raw materials, special processes, customs & logistics, etc).
Supply Chain Development Roadmap

Getting Prepared for future projects

3 Action Lines to Develop and Integrate Suppliers with Aerospace Buyers

1. Aerospace Capabilities & Competitiveness Inventory
2. Competitiveness Acceleration Workshops
3. Multi-Supplier Teams Integration
Action line 1:  
Aerospace Capabilities & Competitiveness Inventory

The Inventory has 2 main objectives:

✓ To document the aerospace maturity level of suppliers, including their company profile, technological capabilities, quality system (6 factors with 30 KPIs considered by buyer companies).

✓ The Technological capabilities inventory will be promoted to more than 200 aerospace buyer companies, as a strategy to bring more work packages to Mexico.

Note: FEMIA will collaborate with TechBA (FUMEC) to integrate more than 300 suppliers into this technological capabilities inventory during 2018, followed by competitiveness acceleration recommendations.

Buyers from Aerospace OEMs, Tiers 1 & 2 will have access to this technological capabilities inventory.
Action line 2: Competitiveness Acceleration Workshops

FEMIA will coordinate Supplier Development Workshops in 2 different areas:

✓ **Hard Skills:** training to reduce operating costs, tooling, engineering and design, etc.

✓ **Soft Skills:** management programs, best practices on how to quote and integrate quotations and proposals, including leadership, attitude and follow up skills with potential clients.

Note: these workshops will be integrated according to the gaps found in the capabilities and competitiveness inventory stage.
Action Line 3: Multi-Supplier Teams Integration

In order to integrate more cost-competitive supply chains, we will integrate teams including key players.

Regional Team Players

✓ Complementary capabilities: raw material, machining, metal stamping, heat treatment, special processes
✓ Focus on quoting for systems, instead of isolated components
✓ Single Quotation System for buyer companies, including all suppliers in the team

Cost composition*

- Raw Material: 21%
- Manufacturing: 45%
- Special Process: 34%

International Team Players

✓ If there is a key supplier (capability) missing in regional supply chains, FEMIA will work to find them in other countries.
✓ FEMIA will offer the integrated purchasing pools to justify business cases for foreign companies, including direct and indirect support that might be required (soft landing and government incentives packages tailored for foreign suppliers that require getting established in Mexico)
Next Steps

1. Send a Company Presentation:
   - ✓ Profile
   - ✓ Technological capabilities (manufacturing process, vertical integration, products, raw materials, size constraint and applications)
   - ✓ Quality Certifications & KPIs
   - ✓ Human capital profile
   - ✓ Supply Chain Integration
   - ✓ Commercial basic terms

2. FEMIA will send presentations to potential buyers

3. Supplier signs Non-Disclosure Agreement with FEMIA and/or Buyer

4. Based on Buyer’s requirements and supplier’s capabilities potential match, under buyer’s indications, FEMIA will introduce buyers and suppliers (via email and then through a B2B meeting at an event, commercial mission or at a tailored location and time).

5. FEMIA will follow up with Buyers and Suppliers to review next steps.
Mexico Aerospace Trade Mission 2018

November 11-16, 2018

- Aerospace sector trade mission to Querétaro and Chihuahua, Mexico
- Customized one-on-one business appointments with interested buyers and other prospective business partners set up by the GSGP Mexico Office & FEMIA

Mission registration deadline: September 17, 2018

- Mission Participation Fee US $1,500 per person (each additional participant $500)

- Customized B2B Meeting Schedule
  - US $2,775 USD* ($0 in MI, NY & PA)

- Grant funding is available in many States to offset travel costs and mission fees.
Mission Itinerary

DAY 1 - Sunday, November 11

• Depart from US for Querétaro, Mexico

DAY 2 - Monday, November 12

• AM: Briefing with State Government of Querétaro and FEMIA
• Company Business Meetings in Querétaro

DAY 3 - Tuesday, November 13

• Company Business Meetings in Querétaro

DAY 4 - Wednesday, November 14

• Networking breakfast with Aerospace University and member of the Aerospace Cluster of Querétaro
• Travel to Chihuahua

DAY 5 - Thursday, November 15

• Briefing with the State Government of Chihuahua and the Aerospace Cluster of Chihuahua
• Company Business Meetings in Chihuahua

DAY 6 - Friday, November 16

• AM Travel to U.S.
Mexico Aerospace Trade Mission 2018

• In-country market business briefings and networking events

• In-country staff support of GSGP

• Group assistance with logistics
Trade Mission Website

South America Trade Mission

March 24-29, 2019

- Multi-sector trade mission
- Brazil and Colombia
- Grant funding available in many States
- Registration deadline January 22, 2019
