The Aerospace Sector

In Mexico

Mexico has consolidated its aerospace sector as a global leader. It has recorded 17.2% annual growth in the last ten years. Currently, there are 302 companies and support entities in the country, most of which are NADCAP and AS9100 certified. They are located mainly in five states and employ more than 45,000 high-level professionals.

International Trade

By 2014, exports from the Mexican aerospace industry reached a value of 6.366 billion dollars. According to estimates from the "Strategic Program of the Aerospace Industry 2010-2020," coordinated by the Ministry of Economy (SE), the industry is expected to export 12.26 billion dollars in 2020, with a 14% average annual growth rate.

National Strategy

The national strategy maintains its focus on turning Mexico into a destination that serves the complete cycle of an aircraft: from design and engineering; to part manufacturing and assembly; aircraft maintenance; and recycling and/or refurbishment of aircraft that have completed their lifecycle.

Regional Strategies

For the next development stage of the aerospace and defence (A+D) industry in Mexico, it was agreed to define strategies to identify and develop the production vocations of the country’s aerospace clusters. To do so, the capabilities, specificity, existing industrial niches and prospective analysis of the various competitiveness poles in Mexico must be considered.

Chihuahua

Chihuahua’s strategy is based on the maturity of the aerospace industry, which has enabled the state to attract strategic projects from the leading companies in high-technology dual and restricted use goods (particularly with its clear vocation for precision-machined products). The state’s three main strategic milestones for the aerospace sector are:

- **2016**: To become Latin America’s leading competitiveness pole in high technologies and dual-use goods.
- **2016**: To export 1.3 billion dollars, with a 30% surplus, that is, 20% annual growth and a 100% surplus increase.
- **2021**: To reduce its dependency on mold, tool and specialized services by 50% on current figures.

Baja California

Baja California’s strategy focuses on knowledge process outsourcing services (KPO) for the A+D industry. In addition, the state has the potential to develop fuselage systems and power plants, which will make it an important manufacturing supplier with integrated value chains.

- **2015**: It is an internationally competitive pole due to a high value productive ecosystem. VCO = export volume, export sophistication level, foreign direct investment (FDI) import substitution and local suppliers.
- **2020**: It is the main KPO export hub for the A+D industry in Mexico.
- **2025**: It triggers and coordinates actions to make Mexico the leader in Latin America in fuselage systems and high power by potency systems.
Sonora
The state’s strategy is based on the development of the supply chain, with a focus on innovation, mainly in turbine manufacturing, and the generation of specialized talent aimed on the industry’s needs.⁴

The state plans to follow medium- and long-term strategies in order to become a global leader in turbine manufacturing. To achieve this goal, it plans actions that include competitive costs throughout the production chain, as well as talent and local manager development.

Querétaro
Querétaro has the potential to specialize in turbine design, manufacturing, assembly and Maintenance, Repair and Overhaul (MRO) of complex fuselage parts, turbines and landing gears.

As an important coordination mechanism between the industry and higher education and research institutes, the Aerospace Research and Innovation Network of Querétaro (RIIAQ) helps develop and strengthen research, technological development and innovation capabilities.

To exemplify the capabilities of other aerospace-driven regions (Nuevo León, Tamaulipas, Jalisco, Coahuila and San Luis Potosí), the following supply coordination scheme is presented.

Nuevo León.
Nuevo León’s strategy is based on leveraging its capacities in advanced manufacturing, engineering, design and research and development to apply them to the development of the region’s aerospace sector.

The strategic milestones defined by the triple helix are for Nuevo León to:
2020: Be the most important hub in Latin America for civil aviation MRO.
2020: Be the top R&D center in the country for advanced manufacturing and aerospace design.
2020: Have developed and skilled supply chain integrated into the aerospace value chain.
2025: Be the biggest generator of human capital for the aerospace sector in Mexico, specializing in high-precision manufacturing, materials, mechanical design, and maintenance for aviation.

Competitiveness
Mexico has forged its vocation as a centre for high strategic value manufacturing, engineering and development, due to the degree of technological sophistication of its exports, its engineering talent (with the highest number of graduates in the Americas), the quality and competitiveness of its workforce and, particularly, its respect for industrial property.

According to KPMG’s Competitive Alternatives 2014, Mexico is one of the most competitive countries globally and the most competitive in North America in terms of aerospace manufacturing costs, with costs that are approximately 13.3% lower than in the United States, 14.2% lower than in Germany, 13.8% lower than in Australia and 12.8% lower than in Japan.⁵

Successful Business Stories

Bombardier
In October 2011, Bombardier announced a new investment of 50 million dollars for a new building where the aft fuselage of the whole family of Global aircraft will be manufactured, including the recently announced Global 7000 jet (entry-into-service scheduled for 2016) and Global 8000 jet (entry-into-service scheduled for 2017).

Since Bombardier established in Mexico in 2006, the company has invested a total of 500 million dollars in its manufacturing plant in Querétaro. This was the first time in Bombardier’s history that a supplier of aeronautical products to the US.

Eurocopter
In 2011, this company announced an important investment of 75 million dollars in Querétaro, which is leading to the creation of 80 highly-technical jobs for the manufacture of helicopter parts and aircraft parts for Airbus. The company seeks to meet several market conditions in order to develop its business plans in Mexico.

Safran Group
Safran is a leading high-technology group, operating worldwide, with three core businesses: Aerospace (propulsion and equipment), Defence and Security. The Safran Group comprises a number of companies with prestigious brand names, and holds, on its own or in partnership, global or European leadership positions in all of its markets.

In Mexico, Safran group owns Labinal, Messier Services Americas, Messier-Dowty, Sneca, Sneca America Engine Services (SAMES), Morpho Identification, Morpho Cards, Turbomeca and Globe Motors. Safran employs over 4,000 workers in Mexico—twice as many as its closest competitor—which makes it the number one employer in Mexico’s aerospace sector. Safran has been implementing its business plan in Mexico for almost 30 years.

Safran is also the top French investor in the country in the past few years. Since 2007, the Group has made eight openings of new manufacturing facilities or extensions. In March 2012, Safran opened a new Snecma’s workshop for F35 engines in Queretaro. It is the most advanced of its category, using state-of-the-art technologies.

Over the past two years, sales of products manufactured by Safran in Mexico—most of which are mostly exported to the US—have grown at an average annual rate of 25%. As for new jobs, the company experienced a similar growth rate and is forecast to keep up the pace throughout the year.

³The sector comprises companies that focus on manufacturing, maintenance, repair, fitting, engineering, design and auxiliary services to commercial and military aircraft.
⁵Ibid.
⁶Sonora’s Aerospace Industry Road Map, 2012.
⁷Competitive Alternatives 2014, KPMG.
⁹Aviation Week, 2013.
¹⁰Ministry of Economy (SE), 2011.
¹¹Statistical Yearbook 2011-2012, AMJUX, Mexico.