

Aerospace Resource Guide

A Reference for U.S. Exporters

2013 Edition



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Stan Deal,
Vice President & General Manager
Supply Chain Management & Operations
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AEROSPACE
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MARCH 11-13, 2014 > SEATTLE, USA

A&DSS Seattle 2012 figures

800

COMPANIES

10,000

PRE-ARRANGED
MEETINGS

30

REPRESENTED
COUNTRIES (40% US)



Did you meet with the right contacts?



How would you rate the quality of the attendees? Did you meet companies that you selected?



What did you think of the quality of attending companies that you selected?



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Introduction

What Can the U.S. Commercial Service Do for You?

The U.S. Commercial Service (CS) is the export promotion arm of the U.S. Department of Commerce's International Trade Administration. Our global network of more than 1400 trade professionals is located throughout the United States and in U.S. Embassies and Consulates in more than 70 countries. Whether you are looking to make your first international sale or expand to additional markets, we offer the expertise you need to connect with lucrative opportunities to increase your bottom line.

Our Services

The CS Aerospace Team works directly with the industry to provide you with the information you need to grow your business and ensure that the aerospace industry remains a cornerstone of the U.S. economy. We have created this Aerospace Resource Guide to provide valuable market intelligence relevant to your company and its export goals. To learn more about how we can help you, visit [export.gov/industry/aerospace](https://www.export.gov/industry/aerospace).

For more information on how CS can help your business increase its international sales, please contact your local CS office. A list of offices appears at the back of this guide and at [export.gov/usoffices](https://www.export.gov/usoffices).

Melissa Grosso

Global Aerospace and Defense Team Leader
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Market Intelligence

- Analyze market potential and foreign competitors
- Obtain useful information on best prospects, financing, laws, and cultural issues
- Conduct background checks on potential buyers and distributors

Business Matchmaking

- Connect with pre-screened potential partners
- Promote your product or service to prospective buyers at trade events worldwide
- Meet with international industry and government decision makers in your target market(s)

Trade Counseling

- Develop effective market entry and sales strategies
- Understand export documentation requirements and import regulations of foreign markets
- Navigate U.S. government export controls, compliance, and trade financing options

Commercial Diplomacy

- Overcome trade obstacles to successfully enter international markets
- Benefit from coordinated U.S. government engagement with foreign governments to protect U.S. business interests
- Access U.S. government trade advocacy for your foreign government procurement bids

Australia

Summary

Australia has a well-developed aerospace industry infrastructure. Demand for its resources and increased wealth has boosted commercial and general aviation passenger traffic, and stimulated an increase in corporate aircraft fleet. Australia is a key market in the Asia Pacific region and is a net importer for aviation and aerospace products. Australia is the 13th largest export market for U.S. aircraft and parts (HS 88). In 2012, U.S. exports of aircraft and parts (HS 88) to Australia totaled USD 2.1 billion.

Market Entry

Successful market entry strategies for Australia have three common elements: understanding the market, selecting the optimal partner, and providing ongoing support to that partner. It is important to gain an understanding of the Australian context for a product or service, its competitors, standards, regulations, sales channels, and applications. Success in the market will require appointing an Australian distributor or establishing a local subsidiary, and setting up a local sales presence. Typically, distributors for aerospace products will cover the entire country. Given the size of the Australian continent, same size as continental U.S., and the distance from other countries, local support and service is important. Most of the criteria American firms use to select distributors are applicable to Australia, with expectations adjusted to the scale of the market given the population of 22.9 million. Performing due diligence on potential local partners is just as important as in the United States.

Current Market Trends

The industry is a mix of subsidiaries of a few major global aerospace companies, and several hundred small to medium local enterprises. There are over 14,000 registered aircraft in the Civil Aviation Safety Authority's Civil Aircraft Register. Sixty-two percent are over fifteen years old, pointing to a large and increasing

Statistics

Capital: Canberra
Population: 22.9 million
GDP: USD 1.59 trillion
Currency: Australian Dollar (AUD)
Language: English

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need for spare parts for a fleet of ageing aircraft. There are approximately 12,200 power-driven airplanes and 1,800 rotorcraft registered. Over 9,100 registered aircraft were manufactured in the United States, representing approximately 65 percent of aircraft registered.

Current Demand

Although there is little aircraft manufacturing, Australian demand for aircraft components and spares is strong. Australia's servicing infrastructure is skilled in aircraft modification, repair and maintenance, system design and development, and aviation training. Owing to the prominence of U.S.-manufactured aircraft, there is a strong aftermarket for U.S.-produced equipment in all areas of aviation and aerospace in Australia. U.S. suppliers have an unmatched reputation for quality and service across the many agent/distributor-manufacturer relationships that characterize market supply in Australia. Commercial aviation is dominated by Qantas/Jetstar and Virgin Australia and accounts for approximately 50 percent of demand. General aviation activities include charter, training, aerial work (search and rescue, fire fighting, police, and medical operations), private, business, and aerial agriculture.

The Australian Defense Force (ADF) consists of the Royal Australian Navy (RAN), Australian Army, the Royal Australian Air Force (RAAF) and a number of 'tri-service' units. Located under a single headquarters, the ADF has approximately 81,000 full-time personnel and active reservists, and is supported by the Department of Defence and several other civilian agencies. The ADF is technologically sophisticated but relatively small compared to neighboring Asian militaries. The ADF is supported by a significant budget by worldwide standards and is able to deploy forces in multiple locations outside Australia. The U.S. DoD is a major supplier to the Australian military through the Foreign Military Sales (FMS) program. Most of the major U.S. defense aerospace companies have subsidiary offices in Australia.

Competitors

Australia imports all but a few aircraft, and imports spares and equipment to maintain and modify the fleet. The Australian Department of Foreign Affairs and Trade (DFAT) reports that in 2011, Australian imports of aircraft and parts totalled USD 4.9 billion. Australia imported USD 2.1 billion from France and USD 1.7 billion from the United States.

Trade Events

Avalon 2015, Australian Int'l Air Show & Aerospace & Defense Exposition

Avalon, Geelong, Victoria • airshow.com.au

Held every two years, the Avalon Airshow is Australia's largest and most comprehensive aviation, aerospace, and defense exposition. It encompasses the full range of military and civil aviation, aerospace, as well as air and land defense.

Austria

Summary

The Austrian market for civil aviation aircraft amounted to USD 876.2 million in 2011 and is expected to grow by 5% in 2012. Austrian aircraft and parts imports in 2011 amounted to USD 947.7 million. With domestic-based manufacturing limited to one company, Diamond Airborne Sensing GmbH, the vast majority of the market is served by imports.

The major aircraft suppliers to Austria in 2011 were the United States with 29.1%, Germany with 27.0%, Canada with 10.6%, Brazil with 6.2%, and France with 1.2%.

The Austrian general aviation market is characterized by imports. Diamond Airborne Sensing GmbH is the sole Austrian manufacturer, and it produces only small craft. The Federal Statistical Office gives only import/export figures for civil aircraft and related parts and equipment. No official aircraft production figures are available. The Austrian market for civil aviation aircraft amounted to USD 876.2 million in 2011 and is expected to grow. Market demand estimates are based on sales figures obtained from the Civil Aviation Office and Diamond Airborne Sensing.

Diamond Airborne Sensing in Wiener Neustadt, produced 101 single-engine and twin-engine two-seater and four-seater propeller-driven avgas aircraft in 2011. Approximately 95% of Diamond's production is exported worldwide. Diamond uses diesel engines from the Austrian firms Austro Engines and Rotax. Suppliers for avionics are the U.S. firms Bendix King and Garmin.

We project an average annual growth rate of 5% for the Austrian civil aircraft market. It should be noted that the accuracy of estimated growth rates are problematic because of the possibility of large one-time orders that greatly skew the statistics.

Statistics

Capital: Vienna
Population: 8.4 million
GDP: USD 418 billion (2011)
Currency: Euro (€)
Language: German

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Aircraft leasing companies have become major factors in the industry as aircraft development and production costs escalate. For the airlines, leased aircraft offer the advantages of low capital investment and greater flexibility in adjusting to changing market conditions.

The Austrian Airlines Group (AAG) has a fleet of 7 Airbus 319, 14 Airbus 320, 3 Airbus 320-111, 3 Airbus 321-211, 2 Boeing 737-800, 6 Boeing 767-300 ER, 4 Boeing 777-200, 14 Bombardier Q 400, 15 Fokker 100 and 9 Fokker 70. AAG is a 100% subsidiary of Deutsche Lufthansa AG.

NIKI Luftfahrt GmbH (NIKI) has a fleet of 4 Embraer E190, 12 Airbus 320, 3 Airbus 319 and 4 Airbus 321. NIKI is a 100% subsidiary of Air Berlin Group.

Austria imported 8 twin-engine aircraft over 5.7 tons and 18 twin-engine aircraft over 20 tons in 2012.

The principal end-users of civil aviation aircraft, parts and equipment are in the Austrian Airlines Group, as well as other charter airlines. Emergency medical services and the police use civilian helicopters. The market for corporate fleets and business charter operators appears saturated because of the low prices for flights available commercially. However, industry experts forecast a growth for this sector in 2013.

In the very important category of single aircraft up to 2 tons, U.S. aircraft are dominant. The largest share of this market is held by Piper, Cessna and Beech Aircraft. A strong competitor is Diamond. In 2012, 706 light aircraft (up to 2 tons), 102 aircraft up to 5.7 tons, 331 twin-engine aircraft over 5.7 tons, 207 twin-engine aircraft over 20 tons, 146 helicopters were registered in Austria. The segment over 20 tons had the highest import increase. Private Austrian pilots register their aircraft for business use to gain tax advantages. Other end-users are air taxi and charter services.

Market Entry

Austrians are generally well disposed toward Americans. Following a few general rules of Austrian etiquette will help maintain this positive feeling. Appointments should be made either by telephone or in writing well in advance, and prospective buyers or distributors should be given the option of determining the date and place of the meeting. Prompt response to letters and emails is very important. Some local firms have reported negative experiences in trying to contact U.S. firms, having to go through too many organizational layers and sometimes never getting a response at all. The exporter who can communicate in German will be much rewarded, even though most Austrians speak English. Austrians tend to place more emphasis on quality than price, especially for larger purchases. The quality of a product should therefore be its main selling point. Austrians are generally looking for long-term business relationships rather than immediate sales and profit. Hard selling is generally counterproductive.

Current Market Trends

There is a trend to invest in smaller, more fuel efficient jet aircraft like the Embraer, Falcon, Cessna Citation and the Gulfstream to achieve operational efficiency and to meet market demand.

Current Demand

Demand for additional new passenger aircraft is slightly declining due to the economic downturn, with the exception of replacements. Both the Austrian Airlines Group and the general aviation operators will be replacing some aircraft in the next few years. While the occupancy rate is still high, the yield is bad due to high fuel costs and landing fees. However, demand for CARGO aircraft is increasing. There is also a high demand for aircraft parts, avionics and engine parts.

Barriers

There are no barriers in this market, with the exception of high fees charged by Austro Control.

Trade Associations

- Austro Control: austrocontrol.at
- Federal Economic Chamber—Aviation Department
- Civil Aviation Authority—Federal Ministry of Transportation, Innovation and Technology: www.bmvit.gv.at/en

Belgium

Summary

Belgium's Aerospace Market is a blend of civil and military. The Belgian defence, now some distance from the great recession, is preparing to purchase additional equipment. Its F-16s are soon to be replaced with a new, next generation aircraft. Belgium's vibrant aerospace industry, serving both the military and civilian markets, is looking for new technologies, such as composites and manufacturing technologies, that will help it maintain their edge.

The Belgian defense industry is fully privatized and centered on the manufacturing of components, subassemblies and small arms rather than full weapon systems and platforms. As a small nation, Belgium cannot maintain a large defense industry based on internal requirements. Instead, the Belgian defense industry relies on the export of components and subcontractor work on major defense programs. Procurement methods and procedures for the Belgian Ministry of Defense (MOD) are similar to those used the U.S. Department of Defense. There is a central procurement office for high value items. Belgium is also the site for NATO headquarters and the Supreme Headquarters Allied Powers Europe (SHAPE), both of which offer significant procurement opportunities for large and small U.S. companies.

Market Entry

When selling to Belgium, many U.S. SMEs opt to work with a defense consultant. There are a handful of Belgian defense consultants that have segmented the market vertically. These consultants seem to have a gentleman's agreement whereby they respect each other's market segment. The in-country Commercial Section maintains good contacts with these Belgian defense consultants.

Most of the consultants are retired military. They maintain good contacts within the Belgian defense and will often work with the relevant officer drawing up the procurement specifications. When the RFP is released, the consultant will cut all

Statistics

Capital: Brussels
Population: 11 million
GDP: USD 413.281 billion
Currency: Euro (€)
Language: French, Dutch, German

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formal and informal ties with the Belgian defense and advise the company they represent on how to enter a successful and competitive bid. This is a common practice in Belgium.

Belgian defense consultants are typically compensated by a commission the percentage varying depending on the size of the contract. However, for larger contracts that take several years to see through, a retainer may be negotiated. Larger companies should also consider setting up an EMEA office in Belgium. Many large U.S. defense companies have elected to do so due to Belgium hosting several EU and NATO institutions and the EDA (European Defense Association). Locating in Belgium gives better access to these institutions.

U.S. companies seeking to sell military equipment to Belgium are advised to start with the Office of Defense Cooperation (O.D.C.) and the U.S. Commercial Service. Together, these offices are well versed in the Belgian military environment and procurement procedures.

Current Market Trends

Belgium's defense, as elsewhere around Europe, is aging, with the average soldier being 43 years old. Furthermore, due to the recession, Belgium's defense has been shrinking down to 32,000 people from 40,000 five years ago. This has limited the deployability of Belgium's defense. Currently Belgium has less than 500 people deployed in Afghanistan and Lebanon.

Belgium, streamlining its forces, no longer has a separate army, navy and air force but rather has a unified defense with a land, sea and air component served by a joint medical component. Belgium is specialized in demining and continues to cooperate on various levels with the Dutch defense, particularly with regards to naval power.

Belgium is also developing a "BEST" soldier or future soldier program integrating the latest technologies for the deployed. This includes improved and smart textiles; enhanced, integrated and scalable communication; personal optics and global positioning. For more information on Belgium's BEST soldier, please visit www.mil.be.

Current Demand

In addition to FN Herstal, the well-known Belgian small arms manufacturer, Belgium has a vibrant aerospace and defense industry, with many SMEs producing components for various aircraft and offering various MRO services. The companies are highly competitive and, in view of the current high energy and labor costs, are often looking for new cutting-edge technologies to maintain their competitive edge. They focus on advanced, small-batch production capabilities in both metallurgy and composite materials.

The MOD has set aside 300 million dollars for procurement. However, due to the recession and like elsewhere in Europe, the Belgian ministry of defense has tightened its defense spending and has over the past years limited its procurement to essential maintenance repair and overhaul in addition to ammunition resupply. Accordingly, in 2011–12 a similar amount was

set aside but not spent. We expect as purchases in 2013 anti-tank missiles, hand weapons, NH-90 hardware, AIV ammunition, satellite terminals and observation baskets for F-16s.

Competitors

A listing of all the major competitors is available on the Flemish and Walloon Aerospace and Defense Associations website.

The following are notable companies: BARCO, ASCO, SABCA, SABENA Technics, UTC, Sonaca, and FN Herstal. Many of the above companies produce Aerospace components, assemblies, sub-assemblies and provide MRO services. Historically the technology transfer related to Belgium's F16 purchase has bolstered this segment of the industry.

Barriers

For a briefing on defense related business in Belgium and current political issues, we urge all U.S. suppliers of defense equipment and services to contact the U.S. Embassy in Belgium, in particular the ODC and U.S. Commercial Service offices, prior to contacting any Belgian government agency.

While Belgian industry remains relatively free of government control, there is influence exerted by both the Belgian parliament and the regional governments of Flanders and Wallonia.

Suppliers of defense related products, equipment and services should remain well aware of Belgian procurement plans well before the publication of the actual RFQ's: changes in technical requirements or any alteration of the RFQ becomes impossible once the RFQ is published. Non-compliance can lead to administrative elimination from competition. Therefore, the importance of local representation cannot be understated.

Recent EU legislation indirectly forbids offsets. However, it is clear that restriction has simply caused them to be relabeled as "industrial sharing," though the term "offset" is still openly used. The prohibition has made the aerospace and defense business in Belgium much more opaque. In the past, the ministry of economic affairs, once the gatekeeper to the Belgian market, required 100% offset explicitly engineered into all relevant bids. Currently it appears that Belgium still expects industrial sharing (offsets) however, how this is to be conveyed or negotiated and to what percentage remains unclear.

Trade Events

NATO Information Assurance Symposium (NIAS)

September 17–19, 2013 • Mons, Belgium • nias2013.com

This year the NATO Information Assurance Symposium will focus on the threats and security issues that NATO will face in the era of cloud computing.

Trade Associations

Flemish Aerospace Group (FLAG)

flag.be

An association of aerospace companies located in Flanders/Belgium. Approximately 70 members who are active in most aeronautical sectors. Capabilities range from concept, design, and certification to manufacturing and customer support, as well as training and exploitation.

Skywin Walonia

www.skywin.be/?q=en

A group of companies, training centers, and research units engaged in public and private partnership around common and innovative projects. Skywin's objective is the creation of jobs in Walloon Aerospace companies. Skywin Wallonia represents approximately 6,400 jobs and €1 billion in revenue, and exports 90% of its products.

Brazil

Summary

The Aerospace Industry is one of the most important industries in Brazil and many companies are world class players due to its high technology capability and the quality of its products.

The industry is led by Embraer, the world's third largest aircraft manufacturer. In 2012, Embraer delivered 205 aircraft and closed the year with firm orders of 185 aircraft valued at USD 12.5 billion. The company produces commercial, military and executive aircraft. In January 2013, Embraer signed a memorandum of understanding with Agusta Wetland, the Italian helicopter manufacturer, to establish a joint venture partnership to produce helicopters for the military and civilian markets. On February 27th, 2013, the U.S. Air Force announced the selection of A-29 Super Tucano manufactured by Embraer for its Light Air Support (LAS) Program.

The other key player in the industry is Helibras, Eurocopter's subsidiary in Brazil since 1992, which has been manufacturing helicopters in Itajuba, State of Minas Gerais, since 1978 and delivered more than 500 helicopters to the Brazilian civilian, military, and law enforcement markets. Eurocopter has recently won a €1.9 billion bid to supply 50 helicopters to the Brazilian Armed Forces, with the commitment to develop part of the aircraft in Brazil.

Despite the presence of two strong local aircraft manufacturers, Brazil offers excellent opportunities for the general aircraft suppliers. According to the Brazilian Association of General Aviation (ABAG), Brazil has the second largest fleet of executive aircraft, and the third largest helicopter fleet. Aircraft imports in 2012 totaled USD 4.7 billion, an increase of 21% compared to 2011.

Statistics

Capital: Brasília
Population: 190 million
GDP: USD 2.47 trillion
Currency: Real
Language: Portuguese (Brazil)

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Market Entry

Companies interested in supplying OEMs must undergo a strict qualification process of their company, product, and technology, but they will find excellent opportunities once they have done so. Embraer imports annually over USD 2 billion of aircraft components to support its Brazilian operations, and is always open to develop new suppliers with recognized technology and qualification in the aeronautic industry. Having a local agent familiar with the way OEMs operate, and who are available for periodic site visits, will facilitate access to the right people within those companies. Reaching out directly Tier 1 and Tier 2 suppliers is the right approach to be successful in Brazil.

Suppliers of parts and products for aircraft maintenance and repair will be more successful having a well-informed local agent, or a stocking distributor. However, when signing an agent or distribution contract with a Brazilian firm, it is important to use the services of local law firms that are familiar with Brazilian legislation. Commercial distribution contracts are regulated by general Brazilian commercial laws and not by specific legislation; however, there is a specific legislation that regulates the relationship between a foreign company and Brazilian agents or sales representatives. Based on this legislation, when a representation contract is broken, the monetary compensation owed by the U.S. party usually favors the local agent.

Current Market Trends

The worldwide trend of airlines replacing some larger equipment with smaller jets that fly more efficiently should keep Embraer as the leader in this market segment, continuing to offer good opportunities to U.S. aircraft component manufacturers.

Current Demand

Azul Trip Airlines has recently announced the purchase of 12 Embraer aircraft, and Latam Airlines has plans to double its fleet in the next ten years with additional 100 aircraft. Latam's current fleet is composed of Boeing and Airbus aircraft.

Brazil's designation to host the 2014 FIFA World Cup and the 2016 Olympic Games should increase the demand for executive aircraft and helicopters. The offshore oil segment where the Brazilian Government is making enormous investments in the pre-salt oil-fields also presents significant business opportunities for helicopter manufacturers.

Aeronautical maintenance and repair is another sector that should not be overlooked. This sector, currently estimated at USD 600 million, has been enjoying an annual expansion of 5–6% over the last few years.

Barriers

Aeronautical products must be certified by the Brazilian Civil Aviation Agency (ANAC.)

There are not serious barriers for the importation of aeronautical products. Embraer imports a large percentage of their aircraft components from the U.S. Qualification processes are typically driven by the OEM.

Trade Events

Latin America Aviation Supply & Services (LAASS)

April 23–25, 2013 • São Paulo, Brazil • laass.com.br/en

LAASS will be held for the first time in 2013, with the objective to bring together all the companies and professionals who are part of commercial, general, and military aviation.

AIRPORT INFRA EXPO

May 22–24, 2013 • São Paulo, Brazil • airportinfraexpo.com.br/eng

Annual show for suppliers of products and services for airports, information technology, operations, passenger handling, and supply chain of commercial aviation.

EXPO AERO BRASIL

July 11–14, 2013 • São José dos Campos, Brazil • expoaerobrasil.com.br

Showcase for products and services ranging from the production of civil and military aircraft to embedded software for space systems.

LABACE Business Aviation Conference and Expo

August 14–16, 2013 • São Paulo, Brazil • abag.org.br/labace2013

The largest business aviation event held in the Southern Hemisphere.

Trade Associations

- Brazilian Association of Aerospace Industries (AIAB): aiab.org.br/english
- Brazilian Association of General Aviation (ABAG): agab.org.br



Canada

Summary

Canada has the world's fifth largest aerospace industry, with Montreal being one of the world's largest aerospace hubs. The industry generates over USD 22 billion a year, of which 80% of output is sold internationally, largely to the U.S and Europe. A key characteristic of this market is that, unlike the United States, it is predominantly focused on civil aircraft manufacturing, which accounts for approximately 77% of total production. Canada's aerospace sector was not as hard hit by the downward cycle in aerospace and the world's economic slowdown as many other aerospace hubs. In fact, its output was largely the same over the last three years; while some Canadian companies experienced a decline, numerous others posted record growth/profits, thereby offsetting the losses.

Canada has had a growing aerospace industry since the first flight over 100 years ago. Today the industry is very mature and diverse, with production in almost every single aerospace sub-sector. Canada is a world leader in market segments such as regional aircraft, flight simulators, small gas engines, robotics and satellite technologies, aircraft maintenance, repair and overhaul, and landing gear systems. In 2011, the breakdown of Canada's aerospace sub-sectors was as follows: 42% of production was allotted to aircraft and aircraft components; 31% to maintenance, repair and overhaul (MRO); 11% to engines and engine parts; 7% to avionics and electrical systems; 4% to simulation and training; 4% to other categories. As a whole, the Canadian aerospace industry invests USD 1.5 billion into R&D every year, the highest investment levels of any Canadian industry.

The Canadian aerospace industry is also dominated by a few very large players; the top 19 companies generate 87% of sales. The current top companies by revenues include Bombardier (aircraft), Pratt & Whitney Canada (engines), CAE (flight simulation), Magellan (aerostructures), Vector Aerospace (MRO), Héroux-Devtek (landing gears), Bell Helicopter Textron (helicopters), Northstar (components), Avcorp Industries (aircraft design & fabrication).

Statistics

Capital: Ottawa
Population: 34 million
GDP: USD 1.74 trillion
Currency: Canadian Dollar
Language: English, French

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Moreover, the aerospace industry is concentrated in the provinces of Quebec (68%) and Ontario (29%). The aerospace sector in Quebec is dominated by OEMs and Tier 3 and Tier 4 companies, with a small presence of Tier 1 / System Integrators. In contrast, the Ontario aerospace sector is comprised of a few OEMs, but possesses a great number of System Integrators, Tier 1 and Tier 2 companies.

Market Entry

Canada and the United States have a unique set of agreements which have rendered this aerospace market to be one of the easiest export markets for U.S. aerospace products in the world. These agreements include: the North American Free Trade Agreement (NAFTA), the North American Defense Production Sharing Agreement, Canada's ITAR Exemption (Section 126), and a U.S.-Canada Bilateral Aviation Safety Agreement to streamline regulatory requirements such as Canadian airworthiness approval for U.S. aircraft parts. Moreover, geographic proximity, similar language (except Quebec) and business culture have also played a large role in the ease U.S. aerospace companies experience in doing business in Canada. As a signatory to the WTO Agreement on Trade in Civil Aircraft, Canada is committed to free trade principles for civil aircraft and aircraft parts.

Current Market Trends

Continued Supply Chain Integration

To reduce the risk and cost of managing large supply bases, OEMs are moving away from manufacturing to focus on aircraft design, final assembly and after market customer service. As such, they are partnering with system integrators who can take on the risks associated with manufacturing, including managing complex supply chains. Consequently, the global aerospace supply chain is being consolidated as OEMs further reduce the number of suppliers they buy from directly. In markets where a large military aircraft production existed, this consolidation is only taking place now in part due to the fact that OEM can no longer offset slowdowns in civil aviation with surges in military spending. Due to Canada's aerospace market being predominantly civil aircraft manufacturing, Canadian aerospace companies have been ahead of the curve in implementing lean manufacturing and supply chain principles to offset cyclical uncertainties in the civil aviation market. Today, this trend continues as Canadian OEMs work with increasingly fewer suppliers. U.S. firms need to be mindful of this reality in Canada and seek opportunities at various levels of the supply chain.

Green Aviation

With increased pressures worldwide for lighter, quieter and more fuel efficient planes, Canada has been at the forefront of some of the world's cutting edge green technologies. The Canadian Government and Canadian aerospace companies' support for research and development in developing new technologies is very strong. Some areas focused on include: new materials such as composites, de-icing technologies, engine capabilities in extreme weather, fuel

efficiencies and noise reduction. U.S. companies with technologies lending themselves to greener aircraft, including greener manufacturing processes such as additive manufacturing, should do well in Canada's market.

Growing Need & Demand for Unmanned Aerial Vehicles

Another trend is Canada's increased demand for unmanned aerial vehicles (UAVs) and satellites to survey its large territory with difficult to reach northern regions. Many studies have shown the global demand for UAVs is rising exponentially, with civil applications to overtake military ones rapidly. Canada will be a hot market for these technologies, and many Canadian companies are actively engaged in creating and testing these cutting edge technologies and products.

Current Demand

As a whole, Canada's aerospace sector is a very good market for U.S. aerospace exports. In general, most Canadian companies purchase over half of their supplies from American companies, and a vast majority of Canadian aerospace companies count the United States as their number one partner and customer. Canada's aerospace supply chain is highly integrated with that of the United States, with an aircraft part crossing the border approximately seven times before it reaches final assembly. Therefore, U.S. aerospace companies are welcome in Canada, and American technology is highly sought after.

According to Boeing's Market Forecast (bit.ly/ZE3t3j), the world's increased demand for travel over the next 20 years will create a need for 34,000 more planes worth over USD 4.5 trillion. They also estimate that 23,240 of the 34,000 planes needed (68 percent) will be single-aisle aircraft, precisely the same category of planes Canada currently holds a considerable global market share in. Bombardier, the world's third largest civil aircraft manufacturer, is headquartered in Montreal, Canada. In 2008, Bombardier launched its line of C-Series jets, a medium range aircraft ideal for smaller, regional travel. They are hoping that this new plane will be able to meet the growing demand for regional travel. Should the Boeing analysis prove to be accurate, U.S. aerospace suppliers integrated in the C-Series supply chain and other Bombardier products should do very well.

Competitors

U.S. companies entering this market will face competition from local Canadian companies, other U.S. companies, as well as European companies. While there are a number of other countries seeking to capture business opportunities such as Mexico and China, and their exports to Canada are growing rapidly, the U.S.' share of total foreign exports to this market place dwarfs all others by a substantial margin (over 40%). Nonetheless, U.S. companies need to demonstrate financial soundness, ability and willingness to take on risk, continuous improvement and innovation, persistence, competitive pricing and willingness to create and commit to long term partnerships with Canadian customers to do well.

Barriers

The Canadian aerospace supply chain is highly globalized; manufacturers are constantly shopping the world for innovative and competitive systems and components, but they are also reducing the number of suppliers with which they are prepared to take on, and require these suppliers to invest in the research and design of systems that meet their performance specifications. To be considered as a partner, one must be included in design conversations and sales consideration from the outset and demonstrate the ability to offer excellent products at a competitive price.

Trade Events

Aeromart 2013

April 23–25, 2013 • Montreal, QC • bciaerospace.com/montreal

Canadian Aviation Expo

June 1–2, 2013 • Breslow, ON • canadianaviationexpo.com

Canadian Business Aviation Convention

June 25–27, 2013 • Toronto, ON • cbaa-acc.ca/convention

Air Transport Association of Canada Convention & Trade Show

November 17–19, 2013 • Montreal, QC
atac.ca/web/en/events/agm-and-tradeshow.html

Aerospace Innovation Forum

December 2–4, 2013 • Montreal, QC • aeromontreal.ca/2013forum

Trade Associations

- Aerospace Industries Association of Canada: aiac.ca
- AéroMontréal: aeromontreal.ca/homepage
- Ontario Aerospace Council: ontaero.org
- Canadian Business Aviation Association: cbaa-acc.ca

Available Market Research

- U.S. Companies Capture Large Share of Canada's Aerospace Market: bit.ly/Y2Wphr
- Canada: Aerospace Market: bit.ly/11xE14y
- Beyond the Horizon: Canada's Interests and Future in Aerospace: bit.ly/10F2nFy
- Reaching Higher: Canada's Interests and Future in Space bit.ly/YAF4ju

China

Summary

Aircraft, Spacecraft, and Related Parts (USD millions)			
	2010	2011	2012
Total Imports	12,399.43	13,793.53	17,726.84
Imports from the U.S.	5,898.85	5,492.55	7,590.07
USA shares 100%	47.57	39.82	42.82

Data Sources: Global Trade Atlas

China is one of the world's fastest growing civil aviation markets. The industry has grown at double-digit rates for several years. Industry forecasts expect growth to remain strong over the medium term, averaging 7% over the next 20 years. In order to keep pace with demand, China is forecast to require 5,260 new aircraft valued at USD 670 billion over the next 20 years. Most of these will be single-aisle aircraft designed for short-haul domestic travel. Commercial opportunities in the civil aviation market include final assembly and tier-one suppliers, small niche parts manufacturers, airport design and construction companies, and general aviation among others.

Statistics

Capital: Beijing
Population: 1.33 billion
GDP: USD 8,223 trillion
Currency: Yuan (¥)
Language: Mandarin Chinese

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Market Entry

U.S. firms without an existing China presence may want to consider hiring a local distributor or representative. This partner generally helps establish access to decision makers and gain timely commercial information about the market. They also traditionally leverage personal connections to promote the U.S. product, and develop sales leads. While this is a common global practice, successful exporters comment on the need to invest significant time and attention to maintaining and managing relationships with Chinese partners. Some U.S. firms decide to enter into a Joint Venture (JV) relationship with Chinese partners, exchanging technological know-how for market access. This should only be done after significant due-diligence and cost/benefit analysis.

US firms often use training programs to establish productive partnerships with Chinese clients. Industry associations such as the US-China Aviation Cooperation Program (ACP) can serve as valuable vehicles for smaller firms to leverage similar opportunities.

Current Market Trends

Aircraft Parts: Manufacture and Repair

Aircraft Parts (USD millions)			
	2010	2011	2012
Total Imports	1,446.46	1,785.19	1,736.67
Imports from the U.S.	545.08	625.27	589.71
USA shares 100%	37.68	35.03	33.96

Data Sources: Global Trade Atlas

China's import market for aircraft parts and components exceeded USD 1.7 billion in 2011 and 2012, an increase of over 21% compared with year 2010. China's demand for aircraft parts can be attributed to a number of factors including an increasing capacity utilization rate, the age and expansion of China's aircraft fleet, and the domestic production and assembly of aircraft.

There are 1,745 registered commercial transport aircraft in China with an average age of five years, and as the fleet continues to age, it will require parts and equipment for routine maintenance and repair. Though there are a number of major domestic aircraft and parts manufacturers scattered throughout China, the sector is still underdeveloped, creating a strong demand for reliable imported products and technologies to ensure quality standards.

China's domestic aircraft part and assembly manufacturing sector is also growing. In addition to approximately 200 small aircraft parts manufacturers, there are also a number of regionally-based major manufacturers concentrated in Shanghai, Chengdu, Xi'an, Jiangxi and Shenyang. China's domestic manufacturing base is developing, as reflected by the commitments of

large aircraft and engine manufactures to expand procurement in China over the long term. However, most highly technical and sophisticated parts and assemblies will continue to be imported until production quality meets international standards. At the present time, domestic manufacturers do not have the ability to produce all of the qualified materials and parts.

Airports

China currently has 178 civil aviation airports, including the world's second busiest in Beijing, with plans to expand aggressively to 244 by 2020. The government announced plans to invest USD 64 billion to build and improve 97 airports by 2021, including 78 green field projects and a new USD 15 billion international airport in Beijing. The expansion will place 80% of China's population and 96% of its GDP within 100 kilometers (roughly 60 miles) of the nearest airport, greatly enhancing the potential for aviation growth.

The airport system at present is highly concentrated, with top airports suffering from major congestion. The top three airports, Beijing, Shanghai and Guangzhou, account for 1/3 of all traffic, while the top 14 airports handle 2/3 of total traffic nationwide. Local industry estimates indicate that 40 of China's airports are already at or near capacity, with another 29 expected to reach this limit within the next two years. To relieve congestion, China opened 19 new airports over two years from 2009–2011.

International companies will have opportunities to participate in both the airport design and in the infrastructure construction. Qualified companies can bid for design, consultation, surveillance, management, and construction of designated civil airport projects. However, the chances for international leading design and construction companies to win the bid are limited, unless partnering with qualified Chinese domestic design and construction companies. So far, the Beijing Capital Airport, Shanghai Pudong Airport, Shanghai Hongqiao Airport, Shenzhen Huangtian Airport, and Guangzhou's new Baiyun Airport are all designed by international companies with local Chinese partners.

Ground service is another area in which foreign companies can actively participate. Beijing Capital Airport, Guangzhou Baiyun Airport, and Chengdu Shuangliu Airport have all established joint ventures with foreign partners (Singapore, Indonesia and UK) in ground services. Shanghai Airport Ground cooperated with Cargo Warehouse and Lufthansa set up a joint venture. China Air Oil Supply Corporation (CAOSC) has established many joint ventures with foreign companies to provide air oil supply services.

General Aviation (GA)

In China, the airspace is tightly controlled by the Chinese military and the airspace class system does not segment out its GA air activities. Strict military control over roughly 70% of all Chinese airspace is the largest single factor limiting growth of this industry. GA is still underdeveloped in China regarding GA aircraft numbers, GA professionals and GA facilities.

However, a welcome change came in November 2010 when civilian and military authorities issued a joint reform document calling for liberalization of low altitude airspace under 4,000 meters (13,000 feet). Implementation of the reform will roll out in three stages, starting with an Experimental Phase in Guangzhou and Shenyang. The policy outlines a national rollout by 2015, and a final deepening and consolidation by 2020. Since then, GA develops with fast speed with new players coming to this market and the more involvement of local governments. GA has big potential market driven by the state and local economy development plan, the public demand for business jet, and the need for public services and individual recreations.

China currently has 123 operators registered with the Civil Aviation Administration of China (CAAC), the main stakeholder formulating policies and regulations concerning the safety and economics of GA in China. However, about 80% Chinese operators have only 2 or 3 aircraft thus struggle to achieve operating scale and profitability. In addition, GA aircraft is very costly to use in China due to airspace access, flight approval procedures, and operation charges such as airport charges, plus maintenance services. All of these factors contribute to low profitability for Chinese operators.

GA deregulation will accelerate in the following 3-5 years. China is gradually opening its low altitude airspace, which will trigger the booming of this industry. According to CAAC's official source, the GA aircraft' operation hours will increase to 300,000 hours in 2015 from the current 140,000 hours, with an annual growth rate of 16%. The GA fleet size will reach over 2,000 GA aircraft in 2015 from the current 1010 GA aircraft.

Competitors

The size and growth of China's market has attracted nearly all major international manufacturers and service companies. Traditionally, domestic Chinese firms cannot match foreign technology and compete only on price and network (access to decision makers). Joint venture programs and aggressive R&D investment is narrowing this gap in certain product categories. Still, China's share of the world export market for commercial aviation products was only slightly more than 1% in 2011.

Barriers

The Chinese face three key challenges that threaten to limit the industry's growth: inadequate infrastructure, overly restrictive airspace, and limited skilled human resources. In response to over-congestion at its largest airports, China announced plans to invest USD 64 billion for construction of 97 new airports by 2021. Then in November 2010, Chinese military and civilian authorities issued a joint statement outlining liberalization of airspace under 4000 meters (13,000 feet) by 2020. Personnel training and capacity building are a priority for regulators, airlines, airport operators and manufacturers.

In addition, U.S. firms without a significant on-the ground presence often face additional challenges building relationships, obtaining timely market information, and gaining access to decision makers.

Trade Events

China Commercial Aircraft Summit 2013

April 24–25, 2013 • Shanghai, China • opplandcorp.com/aero

Fifth year, gathers 200+ Chinese and international aerospace companies for pre-scheduled B2B meetings.

China Civil Aviation Development Forum

May 16–17, 2013 • Beijing, China • ccadf.cn/forum.php

The only aviation event organized by the CAAC, China's largest business & policy event focused exclusively on commercial aviation.

AvioniChina (China International Conference & Exhibition on Avionics & Testing Equipment)

September 17–19, 2013 • Xi'an, China • avionichina.com

Avionics products, system and test equipment technology and infrastructure.

MRO Expo China 2013

October 16–18, 2013 • Xiamen, China • [websites they gave don't work](#)

Aims to strengthen international communication and cooperation and serves as a high-level platform for businesses and clients to share their achievements in aviation maintenance.

Singapore Air show

February 11–16, 2014 • Singapore • singaporeairshow.com.sg

Asia's Largest Aerospace & Defense Event seeks to create opportunities for aerospace industry representatives to do business, explore the latest innovations and exchange ideas

Air Show China 2014

November 11–16, 2014 • Mons, Belgium • www.airshow.com.cn/en

China International Aviation & Aerospace Exhibition (Airshow China or Zhuhai Airshow) is the only international aerospace trade show in China endorsed by the Chinese central government. It features the display of real-size products, trade talks, technological exchange and flying display.

Trade Associations

Government Authorities

- Civil Aviation Administration of China (CAAC): www.caac.gov.cn

- Air Traffic Management Bureau: atmb.net.cn
- Center of Aviation Safety Technology: castc.org.cn

Airlines

- Air China: www.airchina.com.cn/en
- China Eastern Airlines: en.ceair.com
- China Southern Airlines: csair.com/en
- Spring Airlines

Aircraft Manufacturers

- Aviation Industry Corporation of China (AVIC): www.avic.com.cn
- Commercial Aircraft Corporation of China (COMAC): www.comac.cc
- AVIC Commercial Aircraft Co.

MRO Facilities

- Aircraft Maintenance and Engineering Corporation (AMECO): www.ameco.com.cn
- Shanghai Technologies Aerospace Co. (STARCO), staero.aero/starco.html
- Guangzhou Aircraft Maintenance Engineering Co. (GAMECO): gameco.com.cn
- Taikoo Aircraft Engineering Company Limited (TAECO): www.taeco.com
- MTU Maintenance (Zhuhai): mtuzhuhai.com/en
- GE Engine Services (Xiamen)
- Sichuan Snecma Aero Engine Maintenance Company Ltd. (SSAMC): snecma.com/?lang=en

Aircraft Trading Companies

- China Aviation Supplies Corporation (CASC): www.casc.com.cn/eng

Other

- CAAC news: caacnews.com.cn
- Civil aviation industry analysis report: bit.ly/10kub4X
- China Civil Aviation Report: uniworldusa.com

Colombia

Summary

The aerospace industry has had significant growth in Colombia in the last decade for two main reasons. The government invested heavily in military equipment which proved to be effective during the recent internal conflict. Also, as a result of political stability, significant economic development has begun in the civil aviation industry. The Colombian government has increased investment in aeronautical infrastructure due to the increasing demand on airport traffic from passengers and cargo both domestically and internationally. This is a market with very good prospects for US companies, with projected growth over the next five years.

Market Entry

Distribution

A reliable distributor or representative is crucial to entering the Colombian market. Colombian law does not require foreign firms to secure local representation for private sector sales. However, Colombians prefer to deal with companies that have a local representative to ensure access to after-sales services. The one exception to this law is for sales to the government, which does require foreign bidders to have legal representation in Colombia.

Regulation

Colombia's Civil Aviation Agency (AEROCIVIL) is the government entity responsible for the regulation and control of the aeronautic and airport infrastructure.

Given the tremendous opportunities for U.S. exporters in Colombia, it is appropriate that on October 21, 2011, President Obama signed the United States-Colombia bilateral trade agreement (U.S.-CTPA) following its approval by the U.S. Congress. On May 15, 2012 the FTA agreement entered into effect finishing the implementation phase.

Statistics

Capital: Bogotá
Population: 46 million
GDP: 380.5 billion
Currency: Peso
Language: Spanish

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Current Market Trends

The aviation industry in Colombia is growing at a rate greater than 10% per year and it is expected to continue as such in the future. This high growth trend is introducing a new dynamic to sub sectors such as aircraft parts, MRO services, avionics, aeronautical infrastructure equipment and others. The Colombian government (GoC) is updating its airport infrastructure with concessions. GoC is also working to update the current airport infrastructure by passing a Public Private Partnership (PPP) law that allows international companies to invest through build-operate-transfer concessions that will expand infrastructure investment to levels not seen in Colombia since the 1950's. Bogotá is expecting to build a new airport for general aviation and is remodeling its current one. Medium size cities such Medellín, Cali Cartagena and Barranquilla are expected to continue updating its current airports.

Current Demand

The aviation industry in Colombia is growing at a rate greater than 10% per year. In 2009 the country was handling 15.6 million passengers, while in 2012 it reached 23 million. The projections are that Colombia will grow to around 35 million passengers by 2016. Seventy per cent of cargo and passenger operations occur at El Dorado Airport in Bogotá, which is becoming the second busiest airport in South America overall and the busiest airport for cargo shipments. El Dorado airport is growing rapidly, moving 1 million tons per year. In 2012, the airport reached close to 700,000 tons in cargo.

Competitors

All major aviation industry companies have their products in Colombia. Competition is tough and demand is continuing to grow. Companies that belong to subsectors such aircraft parts, MRO services, avionic parts and services, and military equipment are competing for a market share in Colombia. Price and quality of service play a major role in the market.

Colombia signed an open skies agreement with the United States that entered into effect on January 2013 which will increase the competition for the market. Markets still waiting to be developed are private helicopter and small general aviation.

Barriers

The Colombian government continues to struggle in its management of concessions. This poses a real risk to the subcontractors in terms of delays and predictability. For years, the government exclusively managed Colombia's airports. The government built and developed infrastructure for the needs of a closed economy. In the mid-1990s, Colombia began a slow process of opening its economy to the rest of the world, causing greater demand on the obsolete airport infrastructure. The Colombian economy is expected to continue growing the coming years, creating more demand on airport infrastructure as a result of an increase in passenger and cargo traffic. One challenge will be aeronautical infrastructure, managed

by AEROCIVIL, matching the same level of technological sophistication as the investments made in the physical infrastructure of the airports. AEROCIVIL is planning to upgrade the current navigation system to the new CNS/ATM which stands for Communications, Navigation and Surveillance Systems for Air Traffic Management. The system uses digital technologies, including satellite systems, and varying levels of automation to achieve a seamless global Air Traffic Management system. This is an ambitious program with the latest Airport technology that will ensure safer aircraft traffic control.

Trade Events

Feria Aeronáutica Internacional

Medellin (Rionegro) • f-aircolombia.com/en

The most important Air Show in Colombia. Organized by the Colombian Air Force. Includes military and civil aircraft.

Czech Republic

Summary

Transatlantic relations are considered very important to the Czech aerospace sector. As examples, the major Czech aerospace manufacturer, Aero Vodochody, cooperates with Boeing, Sikorsky, and BAE, and in 2008 GE Aviation acquired Walter, a Czech manufacturer of small turboprop engines, combining the firms' engineering and design strengths.

Two domestic air carriers operate in the country: state-owned Czech Airlines (CSA) and the private charter company Travel Service. CSA operates Airbuses and ATR propeller aircraft; Travel Service has a fleet of eleven Boeing B737s, and the company signed contracts for two more Boeing planes, including the country's first Dreamliner. In late 2012, the Czech government approved privatizing up to 95.69% of CSA to a strategic partner. By late spring 2013, the Czech government is seeking to select a strong, preferably non-European, investor who would help CSA to further develop and expand its overseas flights. The government had previously attempted, unsuccessfully, to privatize the airline in 2009.

Vaclav Havel Airport in Prague is the largest airport in the Czech Republic and the second biggest in Central Europe. Fifty airlines and eight low-cost carriers utilize the airport, connecting Prague with 105 destinations worldwide. In 2012, the airport cleared 10.8 million passengers, less than the projected 12 million, as the situation in international air transport has continued to deteriorate due to the global financial crisis. Other Czech airports with international status are located in Ostrava, Brno, Pardubice, and Karlovy Vary. The total number of travelers served by these airports does not exceed one million people.

In 2011, the Czech government established Cesky Aeroholding, a holding company composed of Vaclav Havel Airport Prague, Czech Airlines, Czech Airlines Technics (service, repair and maintenance of aircraft), Czech Airlines Handling, and Czech Airlines Services. Cesky Aeroholding oversees the loss-making airline, as a key facet of the state's plan to turn around Czech Airlines' fortunes.

Statistics

Capital: Prague
Population: 10.5 million
GDP: USD 190 billion
Currency: Czech Crown
Language: Czech

Contact

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Market Entry

The Czech Republic is committed to a free market and maintains a generally open economy, with few barriers to trade and investment. Membership in the European Union means that tariffs and standards, as well as most procedures, must conform to EU norms. The importer usually handles customs formalities.

Tariff rates on U.S.-origin goods are contained in the EU's Common External Tariff schedule. Details are available through the EU or through the Czech Directorate of Customs/Ministry of Finance (mfcr.cz). The value-added tax (VAT) and excise taxes are payable by the recipient of goods on the basis of Czech regulations. VAT applies to all goods, both domestic and foreign, sold within the Czech Republic. The VAT rate is generally 21%, although a lower VAT of 15% is charged for selected goods, such as food and services. VAT on imports is calculated on the declared customs value plus applicable duty and excise tax.

Current Market Trends

As commercial jet check-in procedures become ever more complicated, private business jet travel is grabbing a larger share of the market. To meet the demand, some Czech-based operators are adding aircraft to their fleets and U.S. companies should keep an eye on this promising market. Four private operators dominate the growing market of business jets. A fleet of biz-jets such as Bombardier Learjet, Embraer Legacy, Gulfstream and Cessna Citation has recently been added by US Nextant 400XT. Bell helicopters dominate the market for emergency medical services and the police.

Current Demand

Aircraft spare parts, avionics, and safety and security equipment.

Competitors

Major competitors include but are not limited to: Airbus, Embraer, Bombardier, and Smiths-Heiman.

Barriers

There are no trade barriers in this market. Many distributors are thinly capitalized or staffed, yet represent a wide variety of foreign companies. They often focus efforts on the hottest selling product of the moment, at the neglect of others.

Trade Associations

- Association of Aircraft Producers: alv-cr.cz/?l=en
- Confederation of the Czech Aviation Industry: www.sclp.cz/?lang=en

Denmark

Summary

In Denmark there are 10 major publicly available airports. Copenhagen Airport is the airport with the largest number of passengers, while Billund is the largest provincial airport. Air traffic management in Danish airspace is carried out by Naviair which has functioned as an independent state-owned company since October 2010.

Besides the Scandinavian flag carrier for Denmark, Sweden and Norway—the SAS Group—the Danish Civil Aerospace industry is quite fragmented, with a number of smaller companies depending on a few large contracts. They each cater to the dependencies of major individual companies in relation to transportation of personnel and freight, for instance in relation to the offshore oil industry.

In 2012 the Danish civil aerospace industry employed more than 45,000 people and it is estimated that the Danish supplier-market for the airports and airlines creates value for close to USD 975 million. This includes areas such as ground handling, catering, fuel, etc.

Market Entry

The import climate of Denmark is open to U.S. products and governed by fair business conduct. In order to save costs, the major buyers in the Danish civil aviation market usually prefer to deal directly with the aircraft and aircraft parts and equipment manufacturers. Since it is important to know when a major purchase may take place, a local network of business contacts is often necessary. This may be achieved by using local consultants or setting up a sales office. During the sales process it can advantageous for the exporter to assist in dealing with certification procedures and prepare the appropriate documentation including manuals and pilot instructions.

Statistics

Capital: Copenhagen
Population: 5.5 million
GDP: USD 208.5 billion
Currency: Danish Kroner
Language: Danish

Contact

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Current Market Trends

The role of the largest Danish airport—Copenhagen Airport—is changing in the European airport hierarchy. From a position as the 10th largest European airport in 1998, Copenhagen Airport has dropped to number 14 in 2011, even though passenger numbers have grown steadily to more than 20 million per year. An annual average growth of 1.8% has not been enough to cement its position in Europe and its status as the Northern European hub, with many intercontinental flights, has gradually weakened. In 2011 Copenhagen Airport reported a passenger volume of 22.7 million people.

The total number of passengers utilizing major Danish airports has however been increasing in recent years (except 2008), from just under 24 million passengers in 2005, to just over 28 million passengers in 2011. The total volume of cargo transported by plane to Copenhagen and Billund Airports (the main cargo airports), in the same period varied, but amounted to 396,000 tons in 2011.

Low cost airlines are at the same time putting pressure on the SAS group. Approximately 60-70 % of the SAS route earnings come from routes where SAS is in direct competition with low cost airlines. This has forced SAS to go through several optimization exercises over the previous years.

Current Demand

In Denmark, there is a close link between the market demand for aircraft and aircraft parts and the amount of airline passenger traffic. The main airline in the Nordic region is SAS. They constitute the largest single buyer of U.S. aircraft and parts. In addition to SAS, there is Thomas Cook Airlines Scandinavia A/S. The airline focuses on charter flights. SAS is currently in the middle of renewing their air fleet, introducing 37 new airplanes over the coming six years, while Thomas Cook Airlines Scandinavia A/S is having 12 new airplanes delivered up until 2014.

Competitors

In relation to airlines, the largest competitor within the Danish Civil Aerospace industry is the Scandinavian flag carrier for Denmark, Sweden and Norway—the SAS group.

Barriers

In Denmark, there are no major trade barriers to be found. EU directives dictate the regulative framework the market participants have to follow and often supersedes national legislature. This ensures common standards in relation to areas such as market entry, passenger rights and safety procedures. Like most countries the civil aviation industry in Denmark is subject to very fierce price competition, which drives margins down.

Trade Events

There are no major local shows in Denmark. However, Danish industry specialists are frequent visitors at the large European international airshows, including the Paris Air Show in France and the Farnborough Air Show in the U.K.

The International Paris Air Show 2013

June 17–23 • Paris, France • paris-air-show.com

The world's premier and largest event dedicated to the aviation and space industries. A globally-renowned showcase of aerospace equipment and technology.

Trade Associations

- The Danish Trade Association for Civil Aerospace: dansk-luftfart.dk

Available Market Research

- Statement from the committee on Danish Civil Aerospace (March 2012)
- Civil Aerospace Industry—A prerequisite for growth and prosperity (May 2012)

France

Summary

Reported non-consolidated revenue for the French civil aerospace industry in 2011 grew to €27.7 billion (GIFAS), out of total non-consolidated aerospace and defense aerospace revenues of €38.5 billion.

Orders in 2011 in the civil sector rose by a spectacular 36.4%, reaching €44.2 billion, notably thanks to new programs such as the A320 Neo and the Leap engine. Unfortunately, the business jet order books did not fare so well, with Dassault Falcon delivering 33.7% fewer jets, but registering 9 more orders than in 2010, for a total of 36.

Helicopter orders slightly dropped in 2011, totaling 503 machines, but orders rose to 457.

The space sector, which in France is dominated by non-military contracts, remained stable with a turnover of €3.6 billion for the commercial sector.

Market Entry

Six aircraft manufacturers account for the majority of the French market: Airbus (large commercial aircraft), Eurocopter (light-to-heavy helicopters), Dassault Falcon Jet (high-end business jets), ATR (passenger and cargo turboprop aircraft for regional transport), Daher Socata (light aircraft and business turboprops), and GECI Aviation (light aircraft, formerly Reims Aviation). With the exception of GECI and Daher, these manufacturers are owned in part or entirely by the same parent company, EADS (European Aerospace Defense & Space). Created in 2000, this consortium dominates the civil aviation market.

Selling to these aircraft manufacturers entails undergoing a vendor/product qualification and assessment process. The Safran and Zodiac Groups are among France's major equipment suppliers; working through one of their many North American entities is one way of making the process easier.

Statistics

Capital: Paris
Population: 65 million
GDP: USD 2.53 billion
Currency: Euro (€)
Language: French

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AS9100 and NADCAP would be considered minimum requirements for doing business in the aerospace supply chain in France.

Because of the breadth and depth of the aerospace industry in France, many U.S. manufacturers opt to use the services of a distributor or agent to reach out to the many potential customers doing business here. It is generally considered difficult to break into the business (there are exceptions based on product type) without local representation that can interface with the various layers of engineers, purchasers and supply chain quality managers.

Current Market Trends

France's aerospace industry manufacturers derive about 75 percent of their revenues from civilian sector programs, the majority of which are destined for export. This large export market is due to the sustained interest in Dassault Falcon Jet, Eurocopter and Airbus aircraft, all of which have products that now successfully have captured global market share. However, Airbus continues to decrease its number of suppliers overall, preferring to work directly with a handful of major tier 1 partners and referring all other potential suppliers to its supply chain at the appropriate level.

Sourcing in the U.S. Dollar zone and low cost countries continues to be a strong tendency, driving demand for American components. The US Commercial Service in Paris can help American manufacturers identify the appropriate client for their products.

Current Demand

There are strong ongoing opportunities for US suppliers of parts, components and assemblies of civil aircraft. Airbus spends over 10 billion USD per year in the US on its supply base.

The best prospects for American firms in this market continues to be those associated with the manufacturing of new aircraft or engine models, or in very technical products such as composites. LEAP (which will be replacing the CFM56 program / LEAP-1A to power the Airbus A320neo, LEAP-1B to power the re-engined Boeing 737MAX, LEAP-1C for the COMAC C919) and the LEAP engine nacelle (for which Aircelle/Safran has been selected) are currently at the engineering and design stage. ATR, Eurocopter and Dassault are all launching new aircraft models. It is important to keep in mind that beyond French-made aircraft, French equipment suppliers are also working globally, on projects for Bombardier, Embraer, Sukhoi, Avic, Augusta Bell among others.

Competitors

Because of the proximity of Airbus, Dassault, Eurocopter and other aircraft manufacturers, France has a long-established and sophisticated aircraft supplier network. The French government encourages prime contractors to support local SMEs to maintain jobs and technical know-how in France. However, aerospace is a truly globalized industry and while

major assembly lines are maintained in France, parts and components come from around the world and these companies operate sourcing offices internationally.

Barriers

French aerospace manufacturers are seeking to subcontract in order to manage costs. With new projects in various stages of development and the value of the Euro vis-à-vis the U.S. dollar, the French market provides opportunity to the most competitive U.S. aerospace firms. However, entering the French market requires patience, investment, innovative products and competitive pricing.

Trade Events

The International Paris Air Show 2013

June 17–23 • Paris, France • paris-air-show.com

The world's premier and largest event dedicated to the aviation and space industries. A globally-renowned showcase of aerospace equipment and technology.

Aeromart Toulouse 2014

December 2–4 • Toulouse, France • bciaerospace.com/toulouse

Aeromart, run with the support of Airbus and its supply chain, is the leading global aerospace venue for pre-planned face to face meetings. Aeromart offers outstanding networking opportunities to manufacturers, tier 1 suppliers, subcontractors, service providers and clusters from around the globe.

Trade Associations

- GIFAS (French Aerospace Industry Manufacturers' Association): www.gifas.asso.fr/en/

Germany

Summary

In 2011, the German aerospace industry reported revenues of EUR 25.7 billion. Since 2008, it has seen solid growth rates between 4.1% (2011 over 2010), 4.7% (2010 over 2009) and 12% (2008 over 2007). Due to its technological know-how and its strong innovative capacity, it also has a significant effect on the growth of other industrial sectors. The number of direct employees in the German aerospace industry grew by 2.1% to 97,400 from 95,400 in the previous year. The share of university graduates is 50%. Another 850,000 jobs are supported throughout the supply chain of the aerospace industry. Some 250,000 people are working in the air transport sector. Research spending is significantly higher than in any other industry, averaging at 17% of the overall revenues (EUR 4.4 billion in 2011).

Market Entry

Market entry in the aerospace industry can be achieved through getting access to the suppliers to the major aircraft programs of the EADS/Airbus group and Boeing. On an OEM-level, the EADS/Airbus group has the target to source 40% outside of Western Europe by 2020. Global sourcing is one of the group's leading long-term objectives as part of its Vision 2020. An integrated EADS Airbus Global Sourcing Network (GSN) has been created to foster the globalization of its sourcing footprint. The GSN central team is based in Toulouse and Ottobrunn and operates Country Sourcing Offices in three strategic countries (China, India, USA). Country Focal Points are Brazil, Japan, Korea, Malaysia, and Mexico. For U.S. aerospace manufacturers, the first point of contact is the joint U.S. Sourcing Office that was set up by EADS North America and Airbus Americas in November 2010 to enhance the group's procurement in the United States. The German Tier 1 suppliers, such as Diehl Aerosystems, Liebherr-Aerospace Lindenberg, MTU Aero Engines and Premium AEROTEC, as well as some of the foreign Tier 1 suppliers with locations in Germany, can be approached directly. Which strategy is preferable in each case depends on the overall situation and the product a company has to offer.

Statistics

Capital: Berlin
Population: 81.7 million
GDP: USD 3.601 billion
Currency: Euro (€)
Language: German

Contact

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Current Market Trends

The latest available market data published by the German Aerospace Industries Association (BDLI) are for 2011. The 2012 figures will be announced on April 15, 2013. The 2011 revenues of EUR 25.7 billion generated by the German aerospace firms break down as follows: 59% or EUR 15.2 billion aerospace and space systems; 14% or EUR 3.6 billion propulsion systems; 24% or EUR 6.2 billion equipment; 3% or EUR 0.8 billion material technologies and components. The exports reported by the 150+ BDLI member companies amounted to 63.5% or EUR 16.3 billion of the overall revenues, a slight decrease from 2010. Imports from the United States to Germany were 6% or EUR 1.6 billion, based on the EU Market Access Database (MADB) trade values for aircraft, spacecraft and parts thereof (HS product code 8801-8804). Total extra-EU27 imports to Germany were 12% or EUR 3 billion. Based on these values and with the structure of the European aerospace industry in mind, it's realistic to assume that Intra-EU27 imports to Germany were more than two times higher than Extra EU27 imports and averaged at 30% of the local production. We are thus assuming an accumulated import share of 50% or EUR 12.9 billion for 2011. It is noteworthy that the 2011 export values reported by the German Federal Statistical Office (DESTATIS) divert from the BDLI values by almost 65%, the import values by 40%, resulting in exports worth EUR 26.9 billion and imports worth EUR 18.3 billion respectively.

The difference between the MADB and DESTATIS figures may be due to intra-company trade between the French and the German production sites of the EADS/Airbus group. However, the difference between exports and imports reported by BDLI remained at EUR 3.4 billion, the same as in 2010, which translates into a market size of EUR 22.2 billion (total production plus total imports less total exports). If this model is applied to the DESTATIS figures, it would result in a much smaller market size. Since the DESTATIS exports are higher than the total production of EUR 25.7 billion, we assume that the BDLI figure does not cover the entire revenues in the HS product categories 8801–8804.

Current Demand

The current demand for aerospace technology in Germany is largely dictated by the order intake from EADS but also from Boeing. This trickles down to the German Tier 1 suppliers, such as Diehl Aerosystems, Liebherr-Aerospace Lindenberg, MTU Aero Engines and Premium AEROTEC, depending on their work shares in the respective aircraft programs. The resulting demand for aerospace technology from Tier 2 and Tier 3 suppliers is hard to measure but the above revenue figures may provide a clue.

Competitors

European Aeronautic, Defence and Space Company (EADS)

Ottobrunn (Munich), Germany • eads.com

On the OEM level, EADS is the main competitor as the largest aerospace company in Europe and the second largest worldwide. Legally headquartered in Leiden, the Netherlands, the company develops and markets civil and military aircraft, as well as communications systems, space technology and defense-related systems. The 4 EADS divisions Airbus (commercial aircraft), Eurocopter (helicopters), Astrium (satellites), Cassidian (defense & security), all have sites in Germany (29 in total). In 2012, EADS generated revenues of EUR 56.5 billion compared to 49.1 billion in 2011, representing an increase of 15%. The order intake decreased by 21.8% from EUR 131 billion in 2011 to EUR 102.5 billion in 2012. The order backlog grew from EUR 541 billion (December 2011) to EUR 566.5 billion (December 2012). As of December 31, 2012, EADS employed a workforce of 140,405 people worldwide compared to 133,115 in the previous year. In 2012, EADS consolidated its headquarters in Toulouse, France. Through abandoning the previous structure with Munich and Paris as dual centers of power, further weight was shifted to the French side. What long-term effect this will have on the German production sites remains to be seen.

Diehl Aerosystems

Überlingen, Germany • diehl.com/en

One of five corporate divisions of the Nuremberg-based Diehl Group, a family-run enterprise with 14,000 employees. Diehl's aviation activities are consolidated in four business units: Diehl Aerospace, Diehl Aircabin, Diehl Comfort Modules, and Diehl Service Modules. In 2011, the division had 3,200 employees and generated a turnover of EUR 706 million. The annual report for 2012 will be published in July 2013.

Liebherr-Aerospace Lindenberg

Lindenberg, Germany • liebherr.com/ae/en-gb

A division of the family-run Liebherr Group, which generated revenues worth EUR 8.3 billion with 35,333 employees in 2011, up from EUR 7.6 billion with 33,000 employees in 2010. The division develops, manufactures and maintains aircraft air management systems, flight control and actuation systems as well as hydraulic and landing gear systems. Besides the division headquarters in Lindenberg, they also have a site in Toulouse, France. Liebherr-Aerospace achieved revenues of EUR 913.4 billion up from EUR 819.3 billion in 2010, together with Liebherr's Transportation Systems division.

MTU Aero Engines

Munich, Germany • mtu.de/en

Germany's leading engine manufacturer and the largest independent provider of commercial engine maintenance services worldwide. Revenues posted in 2012 were EUR 3.4 billion, up from 2.9 billion in 2011. The current workforce is estimated to be at 8,500 people. On the civil

aircraft engines side, MTU is mainly a partner or risk-revenue sharing collaborator to Pratt & Whitney (PW1000G 15%, PW2000 21.2%, PW4000G 12.5%, etc.), but also to Engine Alliance (GP7000), General Electric (GEnx), and to International Aero Engines (V2500).

Premium AEROTEC (PAG)

Augsburg, Germany • premium-aerotec.com/en

A leading aerostructures supplier and a fully owned subsidiary of EADS with sites in Augsburg, Nordenham, Varel (Germany) and Brasov (Romania). The company manufactures fuselage components for the following civil aircraft programs: Airbus A320 family (super shell, fuselage sections 15/17/19); Airbus A330/A340 (fuselage sections, floor beams, titanium components); Airbus A380 (fuselage shells, floor structure, wing components); Airbus A350 XWB (fuselage sections 13/14/16/18, pressure bulkhead, floor structure, wing components); and Boeing 787 (aft pressure bulkhead). In 2012, PAG reached an important milestone when it delivered the 100th inner wing leading edge for the A380 to Airbus. The company has more than 7,000 employees and generated revenues of EUR 1.3 billion in 2011.

Barriers

From the Country Commercial Guide 2012: Germany's regulations and bureaucratic procedures can be a difficult hurdle for companies wishing to enter the market and require close attention by U.S. exporters. Complex safety standards, not normally discriminatory but sometimes zealously applied, complicate access to the market for many U.S. products. U.S. suppliers are well advised to make sure they know precisely which standards apply to their product and that they obtain timely testing and certification. For information on existing trade barriers, please see the National Trade Estimate Report on Foreign Trade Barriers, published by the Office of the U.S. Trade Representative: go.usa.gov/TqCQ.

Trade Events

Aircraft Interiors Expo 2013

April 9–11 • Hamburg, Germany • aircraftinteriorsexpo.com

World's largest exhibition for airline interior design and airline cabin systems engineering. Launch pad for a wide range of product types from cabin management systems, fasteners, finishing, flooring, galleys, in-flight entertainment, interior paints, lighting, seating, repairs, safety, wiring, and more. Attracted some 500 exhibitors from 30 countries and 8,000 trade visitors from 90 countries in 2012. Approximately 20% of the exhibitors were from the U.S. The 2014 edition of the show takes place April 8-10 in Hamburg.

AERO 2013

April 24–27 • Friedrichshafen, Germany • aero-expo.com

International trade fair for general aviation and ideal stepping stone to enter the European market. The range of exhibits comprises business jets, single and twin-engine aircraft, light

aircraft (UL, VLA, LSA), motor gliders, kit planes, helicopters, propulsion systems, components, avionics, and more. Attracted 550 exhibitors from 28 countries and 30.800 visitors from 39 countries in 2012. Approximately 51 of the exhibitors were from the United States. The 2014 edition of the show takes place April 9-12 in Friedrichshafen.

inter airport Europe 2013

October 8–11 • Munich, Germany • interairport.com/europe/english

World's leading exhibition for the airport industry with a comprehensive range of equipment, technology and services for ground handling, terminal operations, airport IT and airport design, the exhibition. Held every two years in Munich, Germany. Caters to a global audience of industry professionals from airports, airlines, air cargo carriers and aviation-support. Attracted 607 exhibitors from 34 countries and more than 12,600 visitors from all over the world in 2011. Approximately 45 of the exhibitors were from the United States.

Aircraft Interiors Expo 2014

April 8–10 • Hamburg, Germany • aircraftinteriorsexpo.com

ILA 2014

May 20–25 • Berlin, Germany • ila-berlin.de

One of the most important aerospace, defense and space industry trade shows in Europe. Held every two years at Berlin ExpoCenter Airport. The segments are Commercial Air Transport, Space, Defense and Security, International Suppliers Center (ISC), HeliCenter, Unmanned Aircraft Systems, CareerCenter, Conferences. Attracted 1,243 exhibitors from 46 countries and some 125,000 trade visitors from close to 100 countries in 2012. Approximately 50 exhibitors were from the United States.

Trade Associations

- German Aerospace Industries Association (BDI): bdli.de
- German Airport Technology & Equipment: gate-alliance.de
- HANSE AEROSPACE e.V.: hanse-aerospace.net
- ALROUND (Association of Aerospace-oriented SMEs in Germany): alround.de

Available Market Research

- Germany: Aerospace Industry Update 2014 (published May 2014)

Greece

Summary

The civil aviation sector in Greece is one of its most vital industries, as tourism is the number one income generator for the country.

Airport development and upgrading are vital and to that end, the GOG plans include the upgrade and expansion of airports, air passenger and cargo infrastructure development, the development of Kastelli International Airport on the island of Crete, the privatization of 37 of the 39 regional airports, the upgrading and modernization of Chania airport in Crete as well as the upgrading and modernization of the Kalamata and Tripolis airports in Peloponnese.

The continuous increase of air traffic above Greek airports, the threat of terrorism to the world system of transports, and the mandatory EU Regulation for airport security, in effect since January 2003, have set standards for aviation security at all EU airports and created a demand for increased airport security measures.

Market Entry

39 of the 83 commercial airports in Greece are under the jurisdiction of the Hellenic Civil Aviation Authority (HCAA) and accept regular or charter flights. Fifteen are international, twenty five are national and four are municipal. 12 have parallel military use and are simultaneously checked by the Military Aviation Service. Moreover, six private airports are used for general aviation flights. In addition, there are nine heliports and seven landing facilities under development for hydroplane routes in Greece.

According to the Hellenic Civil Aviation Authority, the number of flights in 2011 around Greece was 410,226; a decline of 4.3 percent compared to 2010 (428,863). According to the same source, the total airport passenger traffic in the same year was 38,831,322; an increase of 1.4 percent compared to 2010 total air traffic

Statistics

Capital: Athens
Population: 11 million (est. 2010)
GDP: USD 3.013 trillion (2010)
Currency: Euro
Language: Greek

Contact

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(38,303,573), out of which 14,325,511 passed through the Athens International Airport “Eleftherios Venizelos,” the country’s biggest airport.

The major local air carriers in Greece are Aegean Airlines, with the most flights through Athens International Airport in 2009, and Olympic Air (ranked second), which operates both domestic and international flights. Olympic Air is the former state-owned Olympic Airlines, which was privatized in 2009, and now is controlled and managed by the Marfin Investment Group (MIG). Olympic Air started operation on October 1, 2009 under the new owner/management with 14 fewer international destinations than its predecessor, Olympic Airlines. On February 22, 2010, Aegean Airlines and Olympic Air announced that they had agreed to a merger. On July 30, 2010, the proceedings for the merger were initiated. The European Commission, however, rejected this merger, as they were concerned that it would create a monopoly.

Other airlines licensed by HCAA include:

- Astra, offering domestic and charter flights
- Sky Express, a regional airline based in Heraklion, Crete, that offers both scheduled and chartered flights in Greece and the Greek Islands
- Skywings, offering charter flights mainly to Ukraine
- Hellenic Imperial Airways, which has operated charter and scheduled flights since 2006
- Minoan Airlines, founded in September 2011 in Heraklion, Crete, has recently expanded its operations to the UK, with Oxford as a hub.

The major local air carriers in Greece possess a variety of aircraft:

- Aegean Airlines: Airbus A321 (4), Airbus A320 (22), and Airbus A319 (3)
- Olympic Air: Airbus A320 (2), Airbus A319 (2), Bombardier Q400 (10), and Bombardier Dash-100 (4)
- Astra Air: Airbus A320 (1) and BAE-146-300 (2)
- Sky Express: Jet Stream 41
- Sky Wings: McDonnell Douglas MD-83 (1), Boeing N757 (1), and Avro RJ100s (1)
- Hellenic Imperial Airway: Boeing 747-200 (4)
- Minoan Airlines: Fokker 50 (4)

Current Market Trends

Several upcoming airport projects present opportunities for U.S. companies involved in airport projects:

- The Ministry of Infrastructure, Communications and Networks announced in March 2013 an invitation for the expression of interest for the development, expansion, maintenance and exploitation of 37 regional airports in Greece, including the rights of administration, management and exploitation of the movable and fixed assets that are relevant to the operation of the airports, as well as of the land for commercial or other uses that lie within the boundaries of or close to the airports. The airports on offer will be split into two main groups, while steps will be taken to ensure that both the “high interest” airports and the rest continue to run smoothly.
- The Ministry of Development & Infrastructure, Transport & Networks plans to announce again an international tender for the development, under the BOOT (build, own, operate, transfer) method of a new international airport at Kastelli (35 klms. from the existing Heraklion airport) on the island of Crete.
- Among the Ministry of Development’s plans are the upgrading and modernization of Kalamata (Peloponnese) airport to an international and competitive airport, a move that will help the local economy of Messinia. The airport is scheduled to have direct connections to major foreign airports and attract the services of several low cost airlines.
- The Ministry of Development is also planning to announce an international tender for the extension of the Chania airport in Crete, one of the largest airports in Greece. Works will include the extension of the terminal building, a new control tower, as well as the remaining auxiliary installations, in order to meet today’s passenger needs.
- There are plans for the transformation of the military airport of Tripolis in Peloponnese into a mixed use airport with commercial traffic.

Current Demand

U.S. firms will find excellent sales opportunities for:

- Aviation Consulting Services
- Emergency Planning
- Perimeter Intrusion Detection
- Passenger, Cabin, and Hold Baggage Screening equipment
- Air Cargo Security
- X-Ray Imagery
- Radars, CCTV, Video, and Surveillance Systems
- Emergency Equipment and Fire Protection
- Trace Sensing
- Biometric Identification
- Aircraft Guarding and Patrolling
- Aircraft Spare parts

Competitors

U.S. airport equipment, as well as service firms, primarily compete with companies from Germany, France, the U.K., Italy, Japan, Israel, and Denmark. Due to the competitive nature of the market and the high cost of capital in Greece, firms providing the most attractive financing arrangements will generally be the most competitive. U.S. firms enjoy an excellent reputation for high quality equipment, advanced technology, superior technical proficiency, and expertise in the design and execution of large-scale airport projects. Given the fact that most of Greece's formal bidding procedures are related to tenders, we particularly urge U.S. suppliers to contact us early to find out about timing, strategy, and the level of assistance that we can offer.

Barriers

There are no restrictions on the importation of U.S. airport and port equipment and systems, or any non-tariff barriers affecting their entry into the Greek market. As a full member of the EU, Greece applies the common EU external tariff schedule to products imported from non-EU countries. Import duties for non-EU products are 3.5 percent.

All products, regardless of origin, (foreign and domestic), are subject to the Value Added Tax (VAT), which following the austerity measures applied by the GOG, increased from 19 percent to 23 percent. The VAT on non-EU products is applied to the total CIF value plus the import duty. All imported airport and port equipment, accessories, and parts must conform to EU specifications and meet EU environmental and safety requirements, i.e., ICAO and EU standards. This means that the equipment being shipped into Greece must have a CE mark certificate and conform to EU Regulations. UCL and TUV certificates are essential.

Trade Associations

- Ministry of Development & Infrastructure, Transport, and Networks: www.yme.gr
- Hellenic Civil Aviation Authority (HCAA): www.hcaa.gr



Hong Kong Special Administrative Region

Summary

Hong Kong's market for aircraft and aircraft parts has shown significant growth in the past few years due to an increase in aircraft movement, passenger numbers and cargo volume. In 2012, Hong Kong International Airport (HKIA) handled 56.5 million passengers, 4.03 million tons of cargo and 352,000 flight movements. Hong Kong is indeed an international hub with over 100 airlines operating extensive flight connections to 180 destinations worldwide, including 45 mainland China cities. As a result, the Airport Authority Hong Kong (AA) is proposing to build a third runway to cope with the expansion of air traffic in Hong Kong.

Market Entry

There are no aircraft, engine, equipment or component manufacturers in Hong Kong; all of these items are imported. The Airport Authority Hong Kong and government departments (e.g. Government Flying Service, Civil Aviation Department) make purchases through tender selection. For high-value purchases, the Central Government Tender Board does the selection.

Most of the end-users in Hong Kong purchase mainly from original equipment manufacturers (OEMs), distributors, stockists, or the service market. Many distributors in Hong Kong also sell to other markets in Asia, especially mainland China. Since these distributors have to keep stock, and also face staunch competition when selling to either Maintenance Repair Overhaul (MRO) operators or airline clients. U.S. manufacturers should be very careful when selecting distributors, retaining one or two only.

Current Market Trends

With global economic uncertainty and rising operational costs, many airlines, including low-cost carriers, are doing more outsourcing, therefore, Maintenance Repair Overhaul (MRO) operators have become major buyers of aircraft parts.

Statistics

Population: 7.11 million
GDP: USD 255 billion (2011)
Currency: Hong Kong Dollar
Language: English, Cantonese

Contact

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The Hong Kong business aviation market continued to show strength, fueled by an increasing number of high net-worth individuals and business tycoons in Hong Kong and China. A healthy growth is expected to continue as more passengers appreciate the comforts and convenience of travelling on private jets.

Current Demand

Best prospects for U.S. companies include: air traffic control equipment (i.e. flight data processing systems), business jets and related services, consumable and expendable aircraft parts and components, devices to improve operational efficiency, training for air traffic controllers and maintenance personnel. In addition, consumer awareness and a growing concern for aircraft safety management will create new business opportunities for U.S. firms.

Barriers

There are no barriers to market entry for most products, except defense items. Also, there are no tariffs on aviation products. Purchase decisions are usually based on quality, price and delivery schedule. However, FAA certificate or the equivalent must be provided for all items.

Trade Events

Asian Business Aviation Conference & Exhibition

April 16–18, 2013 • Shanghai, China • abace.aero/2013

China Aerospace & Aviation Technology Show

November 4–8, 2013 • Shanghai, China • www.for-expo.com/en

Resources

- Airport Authority Hong Kong: hongkongairport.com
- Civil Aviation Department (CAD): cad.gov.hk
- Association of Asia Pacific Airlines: aapairlines.org

India

Summary

The Ministry of Civil Aviation (MoCA) is responsible for formulation of national policies and programs for the development and regulation of the Civil Aviation sector in India. MoCA exercises administrative control over various autonomous organizations:

Directorate General of Civil Aviation (DGCA)

Manages registration of aircraft, establishes standards for airworthiness, licensing of pilots, aircraft maintenance engineers and air traffic controllers, certification of aerodromes and CNS (Communication, Navigation & Surveillance)/ATM (Air Traffic Management) facilities, granting of Air Operator's Certificates to airline operators, implementation of Safety Aviation Management programs, Supervision of the institutes/clubs/schools engaged in flying training and Promoting indigenous design and manufacture of aircraft and aircraft components. A recent proposal is to convert the Directorate General of Civil Aviation (DGCA) into an autonomous regulatory body with more financial and administrative powers to be called the 'Civil Aviation Authority of India' (CAA), which would be set up in line with autonomous or semi-autonomous bodies like the US federal aviation authority.

Bureau of Civil Aviation Security (BoCAS)

Establishing and monitoring Aviation Security Standards for airport operators, airlines operators, and their security agencies, training for implementing security controls and planning and coordination of aviation security matters.

Indira Gandhi Rashtriya Udan Academy (IGRUA)

Provides training in all aspects related to commercial pilot licensing.

National Aviation Company of India Limited (NACIL)

Formed by the government of India to oversee the merger of Air India and Indian Airlines. Air India is India's national flag carrier.

Statistics

Capital: New Delhi
Population: 1.2 billion
GDP: USD 1.779 trillion
Currency: Indian Rupee (INR)
Language: Hindi, English, others

Contact—New Delhi

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Pawan Hans Helicopters Limited

The national helicopter company of India, incorporated in 1985 to provide services to the oil sector for its off-shore exploration operations and charter services for promotion of tourism. Presently the shareholding of the Government of India is 51% and Oil and Natural Gas Corporation is 49%.

Airports Authority of India (AAI)

The primary body responsible for airport infrastructure maintenance and improvement of 125 airports, which include 11 international airports, 8 customs airports, 81 domestic airports and 25 civil enclaves at defense airfields. AAI also provides air traffic management services (ATMS) over entire Indian Air Space and adjoining oceanic areas with ground installations at all airports and 25 other locations to ensure safety of aircraft operations.

AAI projects additional investment of USD 30 billion for airport development in its next five-year plan (2012–2017). AAI also projects an investment of approximately USD 80 billion in new aircraft, including the delivery of 110 Boeing aircraft over the next five years. Airports Authority of India will spend INR 76 billion by 2014–15 to upgrade its airports. Since AAI's internal resources will not be sufficient to meet its planned capital expenditure of INR 76 billion over 2010–11 to 2014–15, it will fund its expansion through a mix of debt and equity. AAI manages all the airports except Delhi, Mumbai, Hyderabad, Cochin and Nagpur, which are managed under a public private partnership (PPP) framework.

Current Market Trends

The Indian Civil Aviation is currently the ninth biggest aviation market in the world and is expected to become the third largest civil aviation market in the world by 2020, as predicted by CAPA (Centre for Aviation). In terms of domestic traffic, India is the fourth largest in the world behind U.S., China and Japan. Despite these numbers, India is one of the least penetrated air markets in the world (even lower than Sri Lanka, Pakistan and Nigeria) with 0.02 trips per capita as compared to 0.2 of China and 2.2 in the U.S. This reflects significant potential for future growth.

Over the recent years, the passenger handling capacity in India has grown three-fold, from 72 million annually to nearly 233 million passengers per year and is projected to cross the 450 million mark of domestic passengers by 2020. Cargo handling capacity has risen from half a million tons to 3.3 million tons annually. Domestic airline fleet size has increased from 250 to over 430.

(estimated, millions USD)	2011	2012	2013	2014
Total Market Size	440	540	640	840
Total Local Production	285	328	378	435

(estimated, millions USD)	2011	2012	2013	2014
Total Exports	175	225	350	450
Total Imports	200	370	450	500
Imports from the U.S.	770	750	800	850

The present market size for airport and ground support equipment is estimated to be USD 540 million. Successful privatization of airport maintenance and ground support services will lead to another USD 100 million in market growth over the next three years. However, the Ground Handling Policy, which was proposed in 2007, now aims at limiting the number of current ground handlers by forming subsidiaries or joint venture companies to cater to the six major airports in the country—Delhi, Mumbai, Kolkata, Chennai, Bangalore and Hyderabad. Currently, all airline operators have their own staff for ground handling at these airports.

The general aviation market is also experiencing growth despite the challenges. India's general aviation fleet size is currently at 690 and is expected to reach 2000 by 2020 at an estimated 13% compound annual growth rate (CAGR). The 2012 Civil Aviation Sector Working Group report from the National Transport Development Policy Committee of India released in June, notes a projected growth in revenues in the general aviation sector of 15% annually through 2017. It describes the drivers of growth in general aviation passenger traffic as an increase in the number of millionaire households (also growing at a 15% annual rate). So, despite the fact that the study recognized the potential growth areas in the helicopter industry such as emergency medical services, relief and rescue operations, agricultural activities and commercial services within and between cities, it still seems that general aviation is viewed by the Government of India as a segment for the wealthy. As the Indian economy grows, more private companies and individuals have started to purchase airplanes. With Foreign Direct Investment (FDI) up to 49 percent, there is scope for growth in the Indian aircraft operation and sales.

Maintenance, Repair and Overhaul (MRO) opportunities exist for servicing 1,000 commercial aircraft and 500 GA aircraft. MRO facilities are also expected to need additional ground support equipment. Both Boeing and Airbus have decided to invest in an MRO facility. Industry sources estimate that establishing a world class MRO will require an investment of over USD 250 million. MRO business is estimated to grow at 10% annually and reach USD 1.2 billion by 2013 and USD 2.4 billion by 2020. Airlines in India currently outsource major checks and aircraft servicing to MRO hubs like Singapore, Malaysia and Dubai. Worldwide trends exhibit the gradual move towards third party MROs. Both government and private players have evidenced keen interest in this area with the intention of providing reliable and cost-effective maintenance services to all Indian carriers.

As per the Economic Survey 2012–13, the Twelfth Five Year Plan (2012–17) envisages an investment of INR 650 billion for Indian airports. The private sector is expected to contribute about INR 500 billion. Airports Authority of India has taken up the development of 35 selected non-metro airports identified on the basis of regional connectivity, development of regional hubs, places of major tourist attraction, and potential for development as business hubs. Work at 28 of these airports has been completed.

The Union Budget 2013–14 has allocated Rs 88.65 billion for the Ministry of Civil Aviation (MoCA) in the next fiscal under the Central Plan outlay, a 21.55 per cent increase over the Rs 72.93 allocated for 2012–13.

Current Demand

The aerospace manufacturing sector in India is in the early stages of development and most of the domestic demand is being met through imports. Opportunities for U.S. companies are abundant and can include:

- As an Engineering, Procurement and Construction (EPC) company.
- As an MRO (Maintenance Repair and Overhaul) operator.
- As a Training Institute/University to train personnel in ground handling, inflight crew, engineering services etc.
- As a lessor for aircraft in the following categories:
 - Large body aircraft for passenger & cargo operation
 - Business Jets & Turbo Props (Corporate Market)
 - Twin Piston Engines (Corporate Market & Flight Training Market)
 - Single Piston Engine Aircraft (Pilot Training Market)
- As an airport operator (enter into a Joint Venture with private firms (GVK, GMS, Reliance etc.), AAI & state government to operate, maintain and develop the airport)
- As a city-side developer for non-aeronautical facilities, such as airport related commercial real-estate ventures including hotels, conference centers, restaurants, and parking facilities.
- As a general aviation operator to provide connectivity within Tier 2-3 cities for passenger movement and also to address medical emergencies and promote tourism etc.
- As a supplier of construction and installations tools, passenger and cargo handling, rescue and emergency systems, airfield equipment and services, disaster management and system integration.

Barriers

- Lack of transparency and large time frame for various clearance processes for land acquisition, environmental clearances.
- Lack of Infrastructure and shortage of trained employees.
- Lack of regional connectivity.
- Lack of MRO (Maintenance Repair and Overhaul) facilities.
- High import duty on import of business aircraft/s for general aviation.

Trade Events

Indian Business Aviation Expo 2013

November 5–6, 2013 • New Delhi, India • miuevents.com/ibae2013

MRO India 2013

November 7–9, 2013 • Mumbai, India • mroindia.com

India Aviation 2014

March 12–16, 2014 • Hyderabad, India • india-aviation.in

Resources

- Director General of Civil Aviation: dgca.nic.in
- Aviation Cooperation Program (ACP): acp-india.com
- Association of Private Airport Operators (APAO): apaointia.com
- Business Aircraft Operators Association: baoa.in

Indonesia

Summary

Because Indonesia's aircraft fleet and defense equipment consists largely of U.S. products, the Indonesian aerospace industry offers excellent prospects for U.S. companies. Most desired are leasing services, aircraft spare parts (commercial and military), and maintenance services.

The total aircraft and parts market was estimated at USD 2.2 billion in 2012, with U.S. products accounting for 90% of the total market. End-users (primarily the 18 scheduled airlines, approximately 31 non-scheduled airlines, the police, and the military) prefer to purchase directly from original equipment manufacturers; however, U.S. suppliers are advised to partner with Indonesian companies. Indonesia will increase the number of aircraft in the next five years, including additional aircraft orders from Lion Air, Garuda Indonesia, and Sriwijaya Air, as well as various helicopters from the Indonesian military. The total market for aircraft and parts is predicted to increase by 20%, and the share of U.S. products is expected to grow by 15% per year.

Market Entry

Small and medium sized U.S. firms entering the Indonesian market would be well advised to use an agent or distributor. U.S. companies need to visit the Indonesian market in order to properly choose an appropriate agent or distributor. Appointment of a representative requires care, since it is difficult to get out of a bad relationship. Qualified representative will not take U.S. principals seriously unless they make a commitment to visiting the market on a regular basis. Patience and presence are key success factors.

The Presidential Decree No. 70/2012 regulates the procurement process for government agencies, including the state-owned companies, the Indonesian military and the Indonesian Police. Although it may be possible in some cases to sell directly to the Government, there is good reason to use the services of an

Statistics

Capital: Jakarta
Population: 248 million
GDP: USD 1.12 trillion
Currency: Indonesian Rupiah (IDR)
Language: Bahasa Indonesia
English, others

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agent or distributor for the early stages of project development, delivery, installation and service needs.

Key factors in purchasing decisions in Indonesia are pricing, financing, technical skills, and after-sales service. Firms should be prepared to invest capital and manpower into making their local representative a first-class service provider.

Current Market Trends

With a population of more than 248 million and as one of the fastest growing domestic air traffic markets in the world, Indonesia is an enormous aviation opportunity. The number of domestic passengers reached almost 52 million in 2010, 66 million in 2011, and over 72 million in 2012. In 2013, the Directorate General of Civil Aviation, Ministry of Transportation predicts that the industry will grow by 15% to over 83 million passengers.

On January 12, 2009, the GOI enacted the new Aviation Law No. 1, 2009 that restricts licenses to airline companies operating at least 10 aircraft, and also adopts the ICAO safety standards requirements. The government will impose sanctions upon airlines and their personnel if safety requirements are not met. The new law implements the provisions of the Cape Town Convention on International interests in mobile aircraft equipment, which assures lenders protection of their interests. In response to the improved financial securities, lenders such as Ex-Im Bank and others are vigorously engaged in financing aircraft to sell and lease to Indonesian companies.

Required under the new law, a new government agency has been set up for managing the air traffic control and navigation systems (AirNav Indonesia) and was inaugurated in January 2013. The new law also allows private companies to manage airports and compete with the current operators, PT Angkasa Pura I and II.

Current Demand

Indonesia's major airports are already operating beyond capacity. For example, Soekarno-Hatta International Airport currently ranks 16th in the world in passenger traffic, with 41 million passengers, compared with its ideal capacity of 22 million passengers per year. PT Angkasa Pura II plans to increase the airport capacity to 62 million passengers by expanding terminal 3 and 1, with a total investment of IDR 11.7 billion. In addition, the Indonesian government is already in the early stages of planning a new second airport for Jakarta.

In 2013, the GOI will focus on developing 24 new airports; developing the New Jakarta Automated Air Traffic Systems; extending, widening, and overlaying runways (88 airports), aprons (31 airports), and taxiway (21 airports); terminal expansion and rehabilitation (40 airports); and power and lightning procurement (82 airports). In addition, under the Public-Private Partnership Program, there are 5 new airport developments, one airport relocation, and two airport expansion projects that will be offered to private companies. There will also

be a need for air traffic control systems, airport ground support equipment, safety and security equipment, IT infrastructure and services, and other airport related equipment and services.

There are promising business opportunities in aircraft maintenance services in Indonesia. Currently, around 70% of the total aircraft operating in Indonesia are sent overseas for maintenance service. According to the Indonesian Association of Aircraft Maintenance Companies, the potential market for Maintenance, Repair and Overhaul (MRO) is predicted to reach USD 65.3 million in 2020. Currently, there are 74 Approved Maintenance Organizations, including Garuda Maintenance Facility Aeroasia, Nusantara Turbine Propulsion, Merpati Maintenance Facility, Indopelita Aircraft Services, Aero Nusantara Indonesia, Lion Technic and Kalimasada. The GOI is offering foreign investors the opportunity to join with Indonesian companies to establish aircraft maintenance facilities, aircraft leasing, and training companies. By having those businesses in Indonesia, the GOI believes there will be a reduced need to send aircraft for maintenance or to send crews for training to other countries.

Competitors

PT Indonesian Aerospace, previously named PT IPTN, is the only aircraft design and manufacturer in Indonesia. The company manufactures the CN-235, CASA 212 (under license CASA Spain), NBO 105 (product under license MBB Germany), Bell 412 (under license Bell Textron), AS 330&332 SP (product under license Aerospatial France), N250 (prototype), and N219 (under development). With Airbus Military, PT DI has expanded their cooperation for manufacturing CN295 in Bandung.

U.S. exporters hold 90% of the aircraft and parts market in Indonesia. Imports from U.S. suppliers are particularly strong in the following areas: airplanes and other aircraft, parts, aircraft launch gear and parts, engines, engines parts, instruments and appliances for aeronautical use, and aircraft electrical wiring sets.

Other major suppliers of aircraft and parts are Singapore, Russia, France, Brazil, Germany, United Kingdom, South Korea and Spain. Many Indonesian companies import U.S. products through Singapore intermediaries. Among the reasons mentioned are delivery time, price and cost for delivery since most of the Singapore companies are stockists.

Barriers

There are no non-tariff barriers inhibiting the importation of aircraft and parts. Import duties have been progressively reduced over the years in a number of deregulation measures by the government. The import tariffs on aircraft and parts are 0–10 percent. In addition, a Value Added Tax (VAT) of 10 percent is imposed on all imported products. The Directorate General of Civil Aviation, Ministry of Communications controls the registration of aircraft operating in Indonesia and safety regulations.

Trade Events

INDODFENCE 2014, INDOAEROSPACE 2014

November 5–8, 2014 • Jakarta, Indonesia • indodefence.com

Ireland

Summary

The aerospace industry in Ireland has over 160 companies with around 5,500 employees. Maintenance, Repair and Overhaul (MRO) with 4,000 employees is the largest sub-sector, while 900 work in manufacturing, 500 in services and 100 in space activities. National aviation policy is set by the Department of Transport, Tourism and Sport (DTTAS) and the state aviation agencies that fall under its aegis including the Irish Aviation Authority (IAA), Dublin Airport Authority (DAA), Shannon Airport Authority (SAA), and the Commission for Aviation Regulation (CAR). The Irish air travel market is dominated by Aer Lingus and Ryanair. Ireland has three state-owned airports (Dublin, Cork and Shannon) and five regional airports (Donegal, Kerry, Sligo, Waterford and West Ireland Knock) providing scheduled air services. The state-owned airports account for 96 percent of passenger traffic with Dublin being the nation's primary airport.

Market Entry

Partnering is a key factor for success across sectors of Irish industry. Irish end-users prefer international suppliers to have Irish-based representatives/partners to guarantee fast after-sales service and support allied to local market knowledge. Most suppliers to the Irish aerospace sector have a local agent/representative.

Current Market Trends

The Irish aerospace industry is largely MRO-based with the largest center being around Shannon airport. Current MRO activity encompasses airframe maintenance, specialist restorations of critical parts of aircraft engines and components, manufacturing and services ranging from seat fabrics and mobile access towers (ref: Aircraft and MRO firms operating in Ireland). Ireland is also home to a number of international firms in aircraft and aircraft engine financing.

Statistics

Capital: Dublin
Population: 4.6 million
GDP: USD 204.7 billion
Currency: Euro
Language: English, Irish (Gaelic)

Contact

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The Irish Aviation Authority (IAA) is the commercial semi-state company responsible for air traffic management & related services in Irish-controlled airspace and safety regulation of the civil aviation industry in Ireland. The IAA operates one of the most advanced air traffic management systems in Europe. In May 2011, the IAA successfully implemented its new COOPANS system which equips air traffic controllers with improved functionalities while maintaining maximum levels of safety and increasing capacity to improve customers' demands. The IAA also maintains the civil aircraft register for Ireland.

Aer Lingus operates long (North America) and short-haul services to/from Ireland while Ryanair operates an extensive short-haul network from 53 bases in 28 countries throughout Europe. The Air France/KLM-owned airline CityJet operates short-haul services from Dublin to London City Airport and Paris-CDG. Since March 2012, the Aer Lingus Regional Service to the UK and France is operated on a franchise basis by Aer Arann.

Ireland is a leading center for aircraft leasing. Nine of the top 10 global leasing companies currently operate in Ireland, with operations spanning the industry value chain, from sales to asset management and technical services. Activities undertaken include sales, remarketing and lease placement, financing operations, acquisition and management, transaction negotiation, execution and deal structuring and technical services including Irish aircraft registration. Irish-based companies own or manage 19 percent of the 18,000+ commercial craft flying worldwide.

In December 2012, the Irish government announced a new ownership and operating structure for Shannon Airport. As widely anticipated this new ownership structure for Shannon will endeavor to create a commercially focused airport that can grow passenger, business jet, cargo and aircraft maintenance business. In conjunction with this announcement, the government also launched a consultation on Ireland's national aviation policy with the intention of publishing a new policy in 2014.

Current Demand

Sluggish passenger growth caused by the poor economic climate across Europe and Ryanair's attempted acquisition of Aer Lingus since 2007 caused the deferral of fleet expansion procurements by Aer Lingus and Ryanair. Following rejection of its latest acquisition proposal by EU competition authorities in February 2013, Ryanair quickly moved to confirm a USD 15.6 billion order with Boeing for delivery of one hundred and seventy five (175) 737-800s through 2018. In addition, Ryanair is reportedly evaluating Boeing's Next Generation 737-Max aircraft for a further 125-plane order. Aer Lingus fleet upgrade is more medium-term with the planned procurement of nine Airbus A350 aircraft in 2014 being deferred until 2016.

The DAA will be undertaking refurbishment work at Dublin Airport's Terminal 1 facility in 2013/14. In addition, the planned development of an international aviation services center at Shannon Airport should offer opportunities in that region.

All government organizations namely DTTAS, DAA, SAA, IAA and CAR must comply with European Union and Irish government public procurement regulations. Consequently, all relevant procurements falling within these guidelines are listed in the Irish Government's eTenders public procurement portal. The notice search facility on this portal offers excellent insights on the procurement practices of these aviation agencies as interested U.S. suppliers can research details of previous, current, and most importantly, future procurements.

Competitors

The Aer Lingus fleet consists solely of Airbus aircraft while Ryanair's fleet is all Boeing. Aer Lingus has a short-haul fleet comprised of A319, A320 and A321 planes while its long-haul fleet is exclusively A330 aircraft. Ryanair's fleet consists solely of 275 Boeing 737-800s as a result of a contract agreed in 2001.

The Air France/KLM-owned airline CityJet operates two aircraft types across its European network—the Avro RJ85 and the Fokker 50. Aer Arann's 15-plane fleet comprises four ATR 42, nine ATR 72 and two Dornier 328 turboprop aircraft. The List of commercial operator aircraft in Ireland contains more detailed information on Irish commercial aircraft.

The IAA's CAIRDE 2000 Air Traffic Management (ATM) system is based on the Thales Eurocat 2000 ATM system. U.S. suppliers should note that Bombardier Aerospace is located in Belfast, Northern Ireland and initial queries related to that company should be directed to U.S. Commercial Service London.

Barriers

There are no barriers to importing aerospace equipment into Ireland, but exporters selling aerospace-related products and equipment in the EU must conform, where applicable, to the WEEE and RoHS directives. An aircraft operator involved in commercial air transport must be the holder of a valid Air Operator Certificate (AOC) issued by the Irish Aviation Authority and a valid Air Carrier Operating Licence (ACOL) issued by the Commission for Aviation Regulation.

Trade Events/Associations

There are no significant Irish aerospace trade events. DAA and IAA executives attend international aviation conferences such as ATC Global and Passenger Terminal Expo to learn of the latest developments. Irish agents and distributors would also visit international exhibitions to identify and source the latest innovative products. CS Dublin promotes U.S. exhibitors at European aviation shows to the Irish aerospace community and offers a customized contact service whereby Irish company interest is relayed direct to relevant U.S. firms. The Federation of Aerospace Enterprises in Ireland is the local trade association.



Italy

Summary

With a turnover of 10.48 billion USD and a workforce of 39,000, the Italian aerospace industry ranks seventh in the world and fourth in Europe and represents the largest manufacturing sector in Italy in the field of high-tech integrated systems. The Italian aeronautical industry is a strategic area supported by national and regional programs and characterized by international collaboration. The key players are Finmeccanica, its subsidiaries, a wide network of SMEs, research centers and universities. Italy is well integrated in international projects and has primarily fostered relationships with non-European partners.

The Finmeccanica Group (60 percent owned by the government) has a leading role in the aerospace, defense and security sectors. The Group holds a 50 percent share in Agusta Westland, the world's second biggest producer of civil helicopters, and owns Alenia Aermacchi and the Avio Group. Alenia Aermacchi manufactures products for military and commercial aircraft, turboprops, aero structures, advanced mission systems, unmanned aerial systems (UAS), parts, subassemblies and is a provider of aircraft maintenance services. It is the world leader in the production of training aircraft. Avio—founded by Fiat and now owned by Finmeccanica and the British private equity firm Cinven—is one of the oldest companies operating in the aerospace industry worldwide and a leading manufacturer of aircraft and naval engines and a leader in space propulsion. Another important player is Piaggio Aero Industries that designs, develops, constructs and maintains aircraft, engines and aircraft structural components. Mubadala Development Company and the Tata Group are stakeholders in the company.

The main civil industrial programs and partnerships in which the Italian industry participates include:

Statistics

Capital: Rome
Population: 61 million
GDP: USD 1.7 trillion
Currency: Euro
Language: Italian

Contact

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- Boeing 787 Dreamliner: Alenia North America and the Boeing Company set up the joint venture “Global Aeronautica” to produce the 787 Dreamliner, a mid-sized, wide-body, twin-engine jet airliner. Alenia produces composite fuselage and horizontal stabilizers for the B787. Fuselage parts are integrated in the industrial complex in Grottaglie prior to shipment to the Boeing assembly facility in Everett, WA.
- EADS Airbus: Alenia Aermacchi is a partner in the European Aeronautic Defense and Space Company N.V. (EADS). It produces aero structures for the A321, A330 and A340–500/600, and supplies fuselage parts for the A380. In an equal-share joint venture with EADS, Alenia Aeronautica owns ATR that dominates the regional turboprop market.
- Superjet 100: In partnership with the Russian company Sukhoi, Alenia has developed an advanced environmentally-friendly regional jet. Finmeccanica owns 25 percent of Sukhoi’s civil division.
- ATR: The EADS and Alenia Aermacchi JV hold four-fifths of its market segment worldwide. ATR will produce 70 planes in 2012 and 80 in 2013. The turboprop market has gained importance due in part to rising fuel costs. Alenia is involved in the production of ATR-42 and ATR-72 tails and fuselages.
- Falcon: Alenia Aermacchi produces nacelles and the rear section for the Falcon series of business airplanes.

U.S. companies remain leaders in terms of the strength of aircraft manufacturers and also in the supply of aircraft parts. In Europe, more than 70 percent of aircraft related imports originate from the United States, and 30 percent of these imports are parts and components. U.S. exports of civil aircraft, engines and parts to Italy totaled 630 million USD in 2011. U.S. suppliers will continue to benefit from this competitive advantage.

Market Entry

The best market entry strategy is the identification of tier 1 companies that integrate products with their own in order to provide comprehensive solutions to the most relevant players in Italy.

Market access in this industry is rooted in strong relationships with key players. U.S. companies that do not wish to operate with a direct presence should have an agent or distributor that is well introduced and knowledgeable. Distribution practices and industrial competence play a fundamental and very delicate role in the aerospace industry. Entry is often by direct sales to end users through an agent/distributor, or through an indirect distribution channel (retailers, wholesale dealers, installers, etc.). Most manufacturers make use of an established distribution network that covers all related services as installation, routine maintenance and after sales support.

Financing and trade practices adhere to normal Italian business standards. The majority of financial transactions are handled through private agreements and banking institutions. Italian firms indicate that some U.S. suppliers are too rigid in their payment terms and have thus lost business to other suppliers. Financing is considered as much a competitive factor as the product itself, the delivery date, or after-sales service. While some U.S. manufacturers request payment upon receipt of the goods, more successful sellers offer terms allowing settlement of the account from 60 to 120 days following the invoice date, which is the most common practice in Italy. More information regarding the business climate can be found in the Country Commercial Guide, bit.ly/YO9nU3.

Current Market Trends

The Italian aerospace industry is characterized by clusters located in close proximity of Alenia Aemacchi and its subsidiaries. The regions that host these clusters include Piedmont, Lombardy, Lazio, Puglia and Campania. Incentives are provided by regional policies to support investments. Technological and manufacturing know-how includes: fixed wing (Alenia), rotating wing (Augusta Westland), propulsion, software, fuselage components, design and assembly of parts (in aluminum, titanium and composite materials), metallurgy, mechanics, electro-mechanics, electronics, manufacturing and processing of plastics, rubber and all high-performance materials for complex applications. About 25 percent of the national companies operating in the sector are located in the Campania cluster (29 major companies plus 130 sub-suppliers). The Piedmont cluster is a production and scientific pole whose focus is technological innovation. Turin University Polytechnic and other specialized research centers provide design and R&D services. Five regional players and over 300 SMEs stand out at national and international level, both in civil and military fields.

The tendency during the last several years has been the creation of inter-regional clusters in order to streamline the supply chain to match activities with the expertise of Italy's research centers and universities. Inter-regional clusters have been formed by the Campania and Puglia regions, and by Campania, Puglia and Piedmont.

With its industrial backbone of smaller enterprises, Italian industry has made an effort to support subsystem integrators who have the necessary financial and management resources. Secondly, Italian industry policy aims to strengthen its stake in the civil market, particularly since it must lessen the dependency on the defense market that has been reduced due to budget constraints. The partnership with Sukhoi is an example of Italy's goal to become an important player in the civil aviation market. Another trend of Italian aviation companies is the establishment of production sites in North Africa and global sourcing.

The Alitalia (main carrier) fleet is perhaps the youngest in Europe and comprised of 142 aircraft. A modernization process began in 2009 with the introduction of the new Airbus A320. On the long-haul routes, service is provided by the Boeing 777-200ER and Airbus A330. On medium-haul routes, service is provided by the Airbus A321, A320 and A319. Service on the

regional routes is provided by the Embraer 175 and 190. Alitalia's low cost carrier Air One has acquired a fleet of 10 Airbus A320 aircraft in 2012.

Competitors

The European aerospace industry is more integrated than any other industry by cross-border ownerships and manufacturing networks. European companies have been quite successful during the last decade and gained market share globally in large civil aircraft and helicopter markets. EADS profits reached 1.57 billion USD in 2012, with a 19 percent increase.

Europe holds an extremely strong position in large civil aircraft and in helicopters. The third largest manufacturer is ATR that continues a conservative approach by relying mainly on turboprop technology versus its larger competitors. Europe has a considerable market for turboprop aircraft, and Piaggio is another important manufacturer. Its P180 Avanti is the world's fastest turboprop.

Business and General Aviation, the segment with the smallest aircraft, is dominated by U.S. and other North American manufacturers. However, the French Dassault plays a relevant role with about 20 percent market share. In General Aviation, Europe holds about a third of the relevant market with the 3 firms PiaggioAero (Italy), Pilatus Aircraft (Switzerland), and SOCATA (France).

Europe leads in the civil helicopter market with Eurocopter and Agusta Westland. Agusta Westland's international network of collaborations has allowed the Anglo-Italian Group to broaden its product range thus opening up new markets. The Group has developed a holistic approach from product definition, to the sales process, to aircraft delivery, training, maintenance and spare parts support. Agusta Westland develops all avionics resulting in added flexibility and cost containment. The beginning of this year saw the onset of corruption allegations for Agusta Westland with ongoing investigations related to an Indian government order for 12 AW101 VIP helicopters.

In the engine market, aside from the large OEMs and corresponding joint ventures, there are several first and second tier suppliers including Avio S.p.A.

Smaller, technology driven firms that currently contribute to European excellence in the market sometimes face competition from emerging countries. For the Italian aerospace industry, this means North African manufacturers that are becoming prominent on the lower end of the supply chain.

U.S. manufacturers have virtually abandoned the market for small, single engine aircraft, leaving the French to dominate this sector of the market, with the Germans specializing in turbo engines. However, the U.S. know-how remains unparalleled, and there is still a broad range and a fairly large number of U.S. aircraft in use. U.S. companies producing light aircraft, jet engines and piston and turboprop engines of innovative design have good opportunities in this expanding market. Key factors that drive success are after-sale service (possibly in Italy)

and the medium to long term financing (generally 36 to 60 months) at competitive rates. Aeronautical financial services companies can provide leasing terms that respond to the needs of the market.

Current Demand

The European region will invest 800 billion USD in new airplanes. About half will be in the single-aisle segment (390 billion USD), 43 percent in the twin-aisle segment (340 billion USD), just 1 percent in RJs (10 billion USD) and the remaining 8 percent (60 billion USD) in large aircraft like the 747 and A380. Single-aisle airplanes will dominate new airplane deliveries over the next 20 years due to short haul travel in Europe and the increase of low cost carriers brought about by European liberalization. Liberalization, as well as fragmentation and new mid-size, long-range airplanes such as the 787, the 777-200LR and 777-300ER, will increase the need for intermediate twin-aisle jets. Two hundred large airplanes will be delivered, mostly to replace older aircraft.

Airbus estimates a need for 28,200 new airplanes (for passengers and cargo) between 2012 and 2031 with an investment of 4 trillion USD of which 1.7 trillion for twin-aisle airplanes and 1.6 trillion for single-aisle airplanes.

Airplane retirements and replacements are among the major factors driving demand. Forecasts indicate that, in the next 20 years, over 3,800 airplanes will be removed from service in Europe and be replaced by new airplane. Major factors influencing airplane retirements include age and parking duration, airplane usage, operator's geographical location, flight hours and cycles, and technological advancement. Key issues include the need to cut fuel costs, reduce emissions and noise levels, all of which can be obtained by replacing older planes with newer generation aircraft.

Business aviation is an important segment in point-to-point air travel and has seen rapid growth in recent years. Business aviation is concentrated in 6 European countries including Italy which holds about 10 percent of the market share. The increase in demand for regional and national flights in Italy has been influenced by the dissatisfaction of many business users with the state-owned railway service.

The general aviation industry has defined roadmaps to reduce aircraft environmental impact by 50 percent. New lighter, more aerodynamic planes using satellite-linked avionics will reduce fuel consumption and noise. The ambitious goals involve materials, power, fuel, "smart wings," cockpit advances and independent energy sources for equipment.

In October 2011, Alenia Aeronautica announced the 2012–2020 corporate strategy with a 3.9 billion USD (1.3 billion USD for the civil sector) investment plan for the development of a new regional aircraft and innovative unmanned aerial vehicles (UAV).

Barriers

The main issue that U.S. companies face in Italy (and Europe as a whole) is strong competition due to the competence of Italian industrial players. Nevertheless, as mentioned previously the U.S. benefits from its leading position in the industry. The key lies in forming strategic partnerships with Italian companies that are well-introduced.

Trade Events

Aerospace & Defense Meetings Torino

October 23–24, 2013 • Turin, Italy • bciaerospace.com/turin

This B2B event aims to assist large firms and SMEs involved in the global aviation and space industries, to explore specific market opportunities in both the civil and defense areas. Meetings are pre-arranged between OEMs, Tier 1 suppliers and other supply chain manufacturers.

Trade Associations

- Federazione Aziende Italiane per l'Aerospazio, la Difesa e la Sicurezza (AIAD) (Italian Federation of Aerospace, Defense and Security Industries): www.aiad.it/en/homepage.wp
- Torino Piemonte Aerospace: torinopiemonteaerospace.com
- Lombardy Aerospace District: aerospacelombardia.it
- Lazio Aerospace Technology District: lazioconnect.it/en/welcome
- Campania Aerospace: www.campaniaaerospace.it
- Apulia Aerospace District: apulianaerospace.eu



Japan

Summary

Japan offers a lucrative market for imported aircraft, parts, and engines. U.S. firms have an overwhelming presence in the market due to long-standing relationships, some spanning over 50 years, with domestic manufacturers and trading firms. U.S. firms are presented with opportunities in the market as the domestic industry undertakes international projects, develops transport and patrol aircraft for defense, and develops small jets and small jet engines for civil aviation. U.S. firms that are new to the market should consider partnering with trading firms that are knowledgeable in aircraft industry networks.

Market Entry

Specialized trading firms market imports to domestic end-users including manufacturers, airlines, private users, law enforcement, defense, and other government agencies. Many U.S. manufacturers also have partnerships with their Japanese counterparts. New-to-market firms should consider partnering with trading firms knowledgeable in aircraft industry networks.

Current Market Trends

In the civil aircraft market, Japanese manufacturers such as Mitsubishi Heavy Industries, Kawasaki Heavy Industries, and Fuji Heavy Industries, supply about 35 percent of the content for the Boeing 787. The launch customer, All Nippon Airways, received the first 787 from Boeing in September 2011. Production is expected to increase.

Mitsubishi Heavy Industries established Mitsubishi Aircraft Corporation (MJET) in April 2008 to undertake the design, type certification, procurement, sales and marketing and customer support of Mitsubishi Regional Jet (MRJ). MJET announced in October 2007 that it selected Pratt & Whitney to supply Geared Turbofan engines for the aircraft. This next-generation engine will make the planes 20-30 percent more efficient and about 15 percent cheaper to operate.

Statistics

Capital: Tokyo
Population: 127,368,088 (est. 2012)
GDP: USD 5,984 trillion (est.)
Currency: Yen
Language: Japanese

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than conventional regional jets. Other U.S. manufacturers such as Parker Aerospace (hydraulic systems), Hamilton Sundstrand Corporation (electrical power system), and Rockwell Collins (flight control system) are also suppliers of MRJ. The first MRJ flight is scheduled in late 2013.

Current Demand

(USD thousands)	2010	2011	2012
Total Market Size	12,497	12,635	15,948
Total Local Production	11,472	13,664	13,756
Total Exports	7,519	9,222	10,048
Total Imports	8,544	8,193	12,240
Imports from the U.S.	6,653	6,010	8,832

Data Sources: Total Local Production: Ministry of Economy, Trade and Industry, Total Exports: Ministry of Finance, Total Imports: Ministry of Finance, Imports from U.S.: Ministry of Finance

Competitors

According to the Ministry of Finance, in 2012, imports of aircraft products amounted to USD 12.2 billion. Among them, U.S. aerospace products accounted for 72.2%. U.S.-made aircraft, parts and supplies, and engines enjoy an overwhelming presence in the market. However, for new-to-market manufacturers this may pose a competitive challenge.

Barriers

Generally, Japan does not levy import duties on aircraft or aircraft parts. The Civil Aircraft Agreement Product Coverage lists about 250 items that are duty-free provided they are for use in civil aircraft or ground flying trainers or for incorporation therein, in the course of their manufacture, repair, maintenance, rebuilding, modification or conversion.

Overall, U.S. suppliers have ample opportunities to tap into the market as Japanese manufacturers expand their horizons through partnerships with foreign firms and as they also develop domestic aircraft and engines.

Trade Events

Aerospace Industry Exhibition Tokyo 2013

October 2–4, 2013 • Tokyo, Japan • www.tokyoaerospace.com/en

This biennial show is organized by the Tokyo Metropolitan Government and Tokyo Big Sight.

Trade Associations

- The Society of Japanese Aerospace Companies (SJAC): www.sjac.or.jp/en_index.html
- Japan Business Aviation Association (JBAA): jbaa.org/english/index_e.html



Jordan

Summary

Air transport plays an important role in Jordan, which has heavily invested in tourism projects over the past decade. There are three major airports in Jordan through which over 3 million passengers pass each year. The Jordan Civil Aviation Regulatory Commission, which falls under the jurisdiction of the Ministry of Transport (MoT), is responsible for safely and securely developing, managing, and operating the civil aviation airports and airspace in Jordan.

The continuous growth in cargo and passenger volumes traveling through Jordanian airports warrants the upgrade of Jordanian airports' and security equipment. This trend, coupled with the events of September 11, the November 2005 bombings in Amman and other recent terrorist attempts in airports around the world warrant upgrades in airport security equipment.

Market Entry

The Jordan Civil Aviation Authority (JCAA) falls under the jurisdiction of the Ministry of Transport (MoT) and is responsible for safely and securely developing and operating the civil aviation airports and airspace in Jordan. Other government entities responsible for safety & security include Public Security Directorate (Police), Civil Defense Department, Jordanian Armed Forces and the General Intelligence Department.

Aircraft manufacturing in Jordan is restricted to licensing to assemble and service light general aviation type aircraft and manufacturing Canadian and German designs. Jordan Aircraft Maintenance Company (Jormaco) and Jordan Air Motive Limited Company (JALCO) are dynamic aircraft maintenance centers specializing in aircraft maintenance and component repair and overhaul. Finally, there are three Jordanian Airlines: Royal Jordanian and its subsidiary Royal Wings, and Jordan Aviation; there are two main aviation academies in Jordan: the Royal Jordanian Air Academy (RJAA) and the Mid-East Aviation Academy (MAA).

Statistics

Capital: Amman
Population: 6.5 million
GDP: USD 5,900 per capita
Currency: Jordanian Dinars
Language: Arabic (official);
English, French

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Current Market Trends

The Royal Jordanian's medium-haul fleet now comprises 15 A320 single-aisle jetliners, including four A321s, seven A320s and four A319s. Meanwhile, the flag carrier is planning to introduce Boeing 787 Dreamliners on long-haul routes. The first batch of airplanes is expected to join the carrier's fleet by 2014 and will gradually replace the currently operating A340s and A330s in the next four years. With its fleet of 33 aircraft, Royal Jordanian operates flights to some 60 destinations and more than 850 other cities through its partners.

Current Demand

The Government of Jordan has high ambitions for the Kingdom to become a regional hub, therefore, the demand for aircraft and spare parts, maintenance equipment, and aircraft systems for manufacturing will continue to rise. The Civil Aviation Regulatory Commission has recently been formed. It is believed that services in civil aviation will be outsourced, which will create significant potential for US companies that specialize in civil aviation and airport management.

Jordan Aerospace Industries is seeking agreements with manufacturers of aircraft communication and auxiliary systems to meet the demand in Iraq for surveillance aircraft and agricultural aircraft equipped with a state of the art crop spraying and monitoring system. JAI has also created coalitions and partnerships in Iraq for a multi-purpose manufacturing facility for light aircraft in Northern Iraq that will also create opportunities for light aircraft manufacturers in the US. Finally, the aircraft maintenance companies will continue to need spare parts and equipment to sustain their operations.

Royal Jordanian, through the fleet modernization program, the airline aims to upgrade the level of cabin service offered to passengers, reduce maintenance costs and replace aging aircraft.

Barriers

The U.S.-Jordan Free Trade Agreement, which came into full effect in 2010, continues to create advantages for U.S. exporters for high-quality products at more attractive prices, as tariff barriers on the majority of goods traded between the United States and Jordan were eliminated. Because of the FTA there has been a surge in bi-lateral trade increasing 600 percent over the past ten years. (In other words, under the terms of the FTA, import duties and other trade barriers between Jordan and the United States have been phased out by the onset of 2010.)

The United States-Jordan FTA has expanded the trade relationship by reducing barriers for services, providing cutting-edge protection for intellectual property, ensuring regulatory transparency, and requiring effective labor and environmental enforcement.

Trade Associations

- Ministry of Transport: mot.gov.jo/en
- Civil Aviation Regulatory Commission: carc.gov.jo
- Royal Jordanian Airlines: rj.com
- Jordan Aircraft Maintenance Limited (JorAMCo): www.joramco.com.jo
- Jordan Airmotive Limited Co. (JALCO): jordanairmotive.com
- Queen Alia International Airport (QAIA) Concessionaire (Alfa Consortium consisting of Aéroports de Paris (France), J&P (Cyprus), ADIC (UAE), Noor (Kuwait) and EDGO (Jordan))

Kazakhstan

Summary

Kazakhstan is an emerging aerospace and defense hub for markets in Central Asia. After gaining its independence in 1991, Kazakhstan made a decision of necessity to collaborate with foreign companies; aviation in Kazakhstan made significant progress. Innovations and changes were made by renewing the national fleet, purchasing foreign airliners and increasing safety of airports and planes.

In 2010, Kazakh airlines transported 3.4 million passengers; in 2011, 4.1 million; and in 2012 nearly 5 million. Twenty-seven foreign airlines are making flights to Kazakhstan. More than 30 big cities are open to citizens of Kazakhstan and local airlines are planning to develop more international routes.

Currently, there are 20 active airports in the country. Of the 15 airports licensed for international flights, 10 have been qualified under ICAO standards: Astana—IIIA and Almaty—IIIB categories of ICAO; Atyrau—II category; Pavlodar, Chimkent, Karaganda, Zhezkazgan, Aktobe, Ust-Kamenogorsk, Kyzylorda—1 category. Currently, passenger carriages on regular flights are performed by 58 aircraft, including 41 western-made aircraft (Boeing 767/757/ 737, Airbus 319/320/321, Embraer 190/145, etc.). Unscheduled (charter) and business flights are performed by around 40 aircraft (Ty-54/134, Як-42/40), as well as 15 western-made planes, such as the Cessna 650, Challenger CL-850, etc.

Aerial work is performed by around 233 aircraft, of them 156 planes and 77 helicopters. Most planes are Soviet-made (An-2, Yak-18, Yak-52) and the helicopters include Mi-8, Mi-2 as well as Agusta Westland, BELL, MD-500 and other types. Servicing of offshore drilling rigs is performed by 6 western-made helicopters of the Eurocopter type, satisfying the current need. Annually, woods patrolling work involves about 20 aircraft, including helicopters: Mi-8, Mi-2, as well as Agusta Westland, BELL, MD-500, etc. Work on flyby of power transmission lines, gas- and oil-pipelines is generally performed by helicopters: Mi-8, Mi-2, as well as Agusta Westland and Eurocopter.

Statistics

Capital: Astana
Population: 16,588,459
GDP: USD 186.2 billion
Currency: Tenge
Language: Kazakh, Russian

Contact

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Through 2016, USD 540 million will be allocated to 7 airports for reconstruction and purchasing of special equipment. Also, project IATA e-freight will be completed in 2015.

Market Entry

Kazakhstan is located in the center of the communication flow between Europe and Asia and has a huge transport capacity, which is able to implement national transit resources. In fact, all inland flights in Central Asia must go through Kazakhstan.

It is highly recommended to establish a local presence or select a local partner for effective marketing and sales distribution in Kazakhstan.

Current Market Trends

One of the major priorities for aviation in Kazakhstan is to develop international routes and domestic flights. In order to reach those goals, millions of U.S. dollars are being spent annually on developing airports and aircraft, by renewing or replacing equipment. There are still a lot of Soviet/Russian technologies that need to be modernized. The noisy and often fear-inducing Soviet-designed and built planes have underpinned air travel throughout the former Soviet Union for decades. The emphasis over the past few years, though, has been to buy more modern planes with a better safety record from Boeing, Airbus and Embraer. In order to improve technical maintenance, the government plans to create a support center for aircraft maintenance in accordance with international requirements, with the consulting support of leading international companies. This will solve the problems of public demand for air transportation, expansion of transport capacity and competitiveness of enterprises in Kazakhstan by increasing safety, quality and efficiency of transport as a result of the modernization of the fleet. U.S. companies should consider Kazakh aviation business, given its rapid development and high expectations for growth.

Current Demand

As aviation infrastructure continues to grow, demand for all types of aviation equipment increases as well. Many types of service are needed: parts and components, equipment and software, aviation fuel, land support equipment, etc. Also, there are specific aircraft performance needs, such as: medical flights; woods patrolling; aerial photography operation; aerial chemical works; power transmission lines flyby; oil and gas; sanitary works; servicing offshore drilling rigs in Caspian Sea; training, sport and cultural events; personal-purpose flights.

Competitors

Major international companies include Russian based United Aircraft Corporation, Ilyushin Aviation Complex, Tupolev, Yakovlev, Mikoyan, MI Helicopters, Irkut Corporation, Sobol, Sokhol; the Netherlands-based EADS (and its French subsidiary Airbus), BAE Systems (UK), Bombardier (Canada), Eurocopter (France) and Brazil's Embraer.

Barriers

Kazakhstan is a landlocked country. Therefore, transportation costs can be high to deliver goods/equipment to Kazakhstan. Starting January 1, 2010, Kazakhstan became a member of the Customs Union with Russia and Belarus, which means increased custom tariffs for all equipment imported from other countries.

Trade Events

TransitKazakhstan 2013

September 18–20, 2013 • Almaty, Kazakhstan • transitkazakhstan.kz
Annual international exhibition of transport and logistics. Organized by ITECA.

Kazakhstan Defense Expo (KADEX) 2014

May 22–25, 2014 • Astana, Kazakhstan • kadex.kz
Third international exposition of arms and military equipment. First air show in Astana. Organized by the Ministry of Defense of the Republic of Kazakhstan, RSE Kaspex, and Astana Expo.

Trade Associations

- Kazakhstan Ministry of Transport and Communications: mtc.gov.kz/en

Republic of Korea

Summary

Korea's aerospace market is nearly USD 4.39 billion (as of 2012) and includes the expansion of fleet and route expansions planned for both passenger and cargo operations. While imports account for a portion of its high technology products, Korea is continuously developing its capability to produce indigenous aerospace products that require highly-advanced technologies. Korea imports a significant amount of its aerospace parts and components, however the country is also increasingly emerging as an exporter of parts and components as it continues to grow as a major industry player and supplier for some of the world's major manufacturers including Boeing and Airbus.

Korean Air (KAL), Korea's largest airline company, plays an important role in Korea's civil aerospace market. KAL now has a fleet of 148 aircraft, including:

- Boeing 747-400: 15
- Boeing 777-200ER: 18
- Boeing 777-300ER: 11
- Boeing 777-300: 4
- Boeing 737-800: 20
- Boeing 737-900ER: 4
- Boeing 737-900: 16
- Airbus A330-200: 7
- Airbus A330-300: 16
- Airbus A300-600: 3
- Airbus A380-800: 6
- Boeing 747-400F: 23 (cargo)
- Boeing 747-8F: 2 (cargo)
- Boeing 777F: 3 (cargo)

KAL is the largest consumer of aircraft, equipment, components, and various aerospace services as well as being one of the major exporters of aerospace parts and components.

Statistics

Capital: Seoul
Population: 49 million
GDP: USD 1.234 trillion
Currency: Korean won
Language: Korean

Contact

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Asiana Airlines is the second largest airline company in Korea currently operating a total of 80 aircraft. Additionally, there are five Low Cost Carriers (LCC): Jeju Air, Jin Air, Air Busan, Easta Air, and T-Way Air. All of these airlines have growth in their forecast.

In the first half of 2012, and despite Korea's sluggish growth (EOY GDP 2.3%), over 22 million Koreans traveled outside Korea. This was twice the number compared to the first half of 2011. Some 1.5 million passengers utilized the LCC. Of all Korean air travelers, 6.8 percent used LCCs. LCCs are expected to increase up to 10 percent in the near future.

Korea has two state-owned airport companies, Incheon International Airport Corporation (IIAC) and Korea Airport Corporation (KAC). IIAC is the nation's largest and has its main international airport in Incheon City.

Incheon Airport was voted the top in the 'airport service quality' survey for the eighth year in a row and has won the highest score in the Airport Service Quality (ASQ) category organized by the Airports Council International (ACI) consisting of 1,700 airports around the world. It is also consistently named Best Airport in the Asia-Pacific and Best Airport in the 25 to 40 million passenger category.

KAC operates total of 14 airports in Korea (Kimpo, Kimhae, Jeju, Daegu, Ulsan, Chunju, Muahn, Kwangju, Yeosu, Pohang, Yangyang, Sacheon, Kunsan, and Wonju) of which seven have international status with routes mainly to either China or Japan.

Market Entry

In 2012, Korea was the 11th largest market for U.S. aerospace exports. Total U.S. exports to Korea exceeded USD 1.5 billion, accounting for 78 percent of the total value of Korea's aerospace imports.

For the commercial sector, the Korean aerospace market is open to foreign firms including U.S. companies. Top U.S. aerospace exports to Korea include: complete aircraft, civilian aircraft engines, equipment and parts, military airplane parts, and helicopters. The U.S. military has a sixty year history in Korea and continues to be the dominant foreign suppliers of aerospace/defense products and services with dominant import market share. This trend will continue for several years.

All of the U.S. aerospace exports are duty-free as of March 15, 2012 and as a result of the implementation of the Korean-U.S.FTA (KORUS).

Current Market Trends

The Korean aerospace market is still very much dependent on imports (of the total market supply in 2012, 58% are from imports).

In 2010, the Ministry of Knowledge Economy (MKE) report disclosed its “Aerospace Industry Primary Plan (2010–2019)” designed to raise Korea’s aerospace indigenous production from USD 2 billion (2009) to USD 20 billion by 2020. The plan also states that Korean aerospace exports should rise to USD 10 billion, or 3 percent of global market share by 2019. This industrial plan aims to take Korea from 16th place—to the world’s seventh largest aerospace producer. Additionally, the goal is to: “push Korean industry into importing core technologies, develop domestic capabilities to deliver a ‘complete aircraft,’ and bring effective R&D investment that will contribute to Korea’s aerospace industry.”

Korea is continuing to develop its indigenous aerospace industry including the production of military helicopters, super-sonic training jets (T-50 was the first supersonic jet developed in Korea), UAVs, MRO parts and components, and continued work-share for commercial aircraft components for both Boeing and EADS-Airbus.

In 2008, Korea Aerospace Industries (KAI) introduced its first non-military private aircraft, “Naraon,” making Korea the 28th nation in the world to build and fly an indigenous plane. In 2011, Korean Aerospace Research Institute (KARI) succeeded in developing an unmanned tilt-rotor aircraft and, together with Korean Airline (KAL), Korea’s largest airline company, plans to commercialize it. If successful, Korea will be the first in the world, after the U.S., to commercialize a tilt rotor UAV. Additionally, in March 2013, the Korean aerospace company Korea Aerospace Industries Ltd. (KAI) won a USD 1.22 billion contract to exclusively supply wing parts to Europe’s Airbus SAS. The contract calls for the building of wing bottom panels (WBP) for the very popular A320 passenger jets and marks the single largest civilian aircraft components deal won by a local company in Korea.

On January 2013, Korea had succeeded in launching a two-stage rocket, the Korea Space Launch Vehicle-1 (KSLV-1), from its Naro-Space Center on Korea’s southwestern coast. Korea is the 11th country capable of sending rockets into space to launch satellites.

Korea’s local production of aerospace products is continuously growing (marked around USD 2.8 billion in 2012) and its exports are also growing (to USD 1.5 billion in 2012). Currently, the Korean aircraft part and components industry is driven by Korea operating (KAL) one of the largest commercial aircraft fleets in Asia.

Current Demand

Media sources recently disclosed the following growth plans for Korea’s airlines:

- Korean Air will acquire 9 new aircraft in 2013 and another 53 by 2018;
- Asiana Air will acquire 4 new aircraft in 2013; and
- The five LCCs have disclosed plans to acquire 2 new aircraft each in 2013.

Additionally, Korean Air and Boeing have recently announced their plan to build Asia’s largest flight training center to include a flight simulation center in Incheon, Korea.

Competitors

Europe's Airbus, etc. is the major competitor to U.S. companies in Korea's aerospace market.

Barriers

There are no major trade barriers to U.S. products and services in this aerospace/commercial sector.

Trade Events

Korea Aerospace & Defense Exhibition (Seoul Air Show 2013)

October 29–November 3, 2013 • Seoul, Korea • seoulairshow.com/eng

International aerospace & defense exhibition.

Trade Associations

- Korea Aerospace Industries Association: aerospace.or.kr/dbhome/user/aeroe
- Korea Aerospace Research Institute: kari.re.kr/eng
- Korea International Trade Association: kita.org
- Korean Air: koreanair.com
- Korea Aerospace Industries, Ltd.: www.koreaaero.com/english

A vertical graphic of the Mexican flag, showing the green, white, and red stripes and the national coat of arms (an eagle on a cactus) in the center.

Mexico

Summary

The aviation sector in Mexico recovered with more dynamism during the last year. It had been affected by various negative conditions but it shows a steadier trend for the current year and beyond. The sector consists of two main domestic airlines, but currently Aeromexico is the most important local carrier with around 40% market share. Several low cost carriers and regional airlines have disappeared, along with the second main local carrier, Mexicana, whose suspension of activities two years ago impacted several local and foreign suppliers.

The macro-economic conditions provide a positive outlook for the industry. Some firms have announced important capital investments to renew fleets and expand routes internally and to other foreign destinations. The four low cost carriers: Interjet, Volaris, VivaAerobus, and Aeromar are increasing their market presence and are dedicated to a different type of airline transportation service, which is relatively new for the nation's passengers.

In 2012, the total number of passengers expanded by more than 8% (annual average), almost double compared to 2011 (30.5 million were transported by local carriers). This increase has supported the expansion of other related services linked to air transportation: hotel/tourism services, MRO, testing, financial, aviation parts, airport infrastructure, etc. and is contributing to better aviation infrastructure for the whole country.

Market Entry

The Mexican aviation industry does not have specific barriers for U.S. firms. However, Mexico has not approved an open skies policy due to the fact that any airline may provide services at any time, if all documentation has been supplied to authorities and is in order. With several airline alliances and mergers going on, it is common to find any large international carriers flying into Mexico.

Statistics

Capital: Mexico, D.F.
Population: 112.3 million
GDP: USD 1.657 trillion
Currency: Mexican peso (MXN)
Language: Spanish

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As in any other market, foreign carriers should be aware of the high number of competitors and also the market potential for other aircraft related services. Several aerial services, such as aerial photography, aerial mapping, aerial films, etc. should have approval from the Mexican Ministry of Communications and Transports (SCT) and the Statistics and Geography Institute (INEGI).

Mexico's proximity to the U.S. makes it very easy for private aviation firms to operate in the northern parts of the country: Baja California, Los Cabos, and Sonora. At the same time, several charter flights offer service to the Riviera Maya at very good rates creating new demand for goods and services to serve the aviation industry, including those for business aviation.

Current Market Trends

The aviation industry is moving from low prices to better connections and schedules. Air transportation has targeted groups of passengers that before were using ground transportation. If the market has more options for business and pleasure trips, the whole sector will benefit: airports, tax authorities, hotels, services providers, and the aerial communication infrastructure.

This year, the new government will announce new transportation plans that may include new airports (including one for Mexico City) and developments carried by concessioned airports groups (GAP, OMA, ASUR and the federal entity ASA). Each group of airports has its own remodeling and maintenance programs. Some of them have ground equipment in needs of renewal and/or specific supply needs that require imported technologies.

In terms of MRO and/or FBO, Mexico offers services in different cities throughout the country. Nevertheless, U.S. suppliers may be interested in aircraft pilot training, flight simulators, new academic institutions, etc.

Current Demand

Both private and public sector entities have demand of parts and spare parts. In commercial aviation, the most relevant airplanes together with low-cost carriers drive such demand. Many parts and equipment are imported by local trading firms that worked for these airlines for a long time as their suppliers. In the public sector, there is a demand for old military aircraft parts and helicopter parts, as well as permanent sophisticated flight training.

Regarding military aircraft, the Mexican Air Force (part of the Ministry of Defense) is building a new Air College in Zapopan, State of Jalisco. This project may be concluded before September 2013. The Ministry of Defense requires that its suppliers have a local address in Mexico to compete in international public tenders and be included in its suppliers registry.

Airport equipment demand varies depending on the budget available for each airport and forecasts done in their five-year plans. Those airports with the highest traffic, such as Mexico City, Cancun, Monterrey, Guadalajara, and Tijuana will require more aviation services and ground support equipment. On the other hand, new demand will come from new airports in operation, as in the case of the new Palenque airports (ASA) that will be ready within the next few months (3Q). It is important to underline that Mexico has 60 other medium and small airports that have their own budgets and planned purchases.

Competitors

Even though U.S. products and equipment enjoy a clear preference from potential purchasers, the sector faces competition from several French and Spanish firms that have regional market penetration in co-lateral industries, such as tourism, aerospace, and communications. U.S. firms attempting to enter in this market should have a local partner to establish brand recognition and offer local assistance and after sales services.

Many commercial troubles were resolved with NAFTA's implementation, including the access to public tenders and the adoption of the national treatment criterion. International public tenders are complex, but there are several law firms that may assist any U.S. firm to participate in these tenders.

Barriers

Mexico does not impose any specific barrier to U.S. products and service in this sector. Perhaps the greatest challenge for U.S. firms is to offer product information in Spanish and /or to have a sales representative able to talk with potential clients in Spanish. Those firms with bilingual staff may have a market advantage.

Trade Events

AERO EXPO 2013

April 18–20, 2013 • Toluca, Mexico • aeroexpo.com.mx/aeroexpo13-ing.html

Mexico's main aviation trade show. It has a market presence of over 10 years and it will host airlines, airports, aircraft manufacturers, civil, military, and commercial suppliers, as well as government agencies, such as the Army, Air Force and the Navy.

EXPO CIAM 2013

June 7–9, 2013 • Quintana Roo, Mexico • expo-ciam.com

An aviation trade show where networking is the key element. It has a golf tournament and recreational activities to promote interaction between exhibitors and visitors.

Trade Associations

- Aero Transportation National Chamber (CANAERO): canaero.org.mx
- Mexican Federation of Aerospace Industry (FEMIA): femia.org.mx

The Netherlands

Summary

The Dutch civil aviation industry is transparent, making it relatively easy to identify the key players. Nevertheless, U.S. companies are highly recommended to consider working with a local representative in order to take advantage of upcoming opportunities in a timely manner. Although competition is strong, U.S. suppliers with advanced technology and a good price/quality ratio can expect to do well in the Netherlands.

Market Entry

It is very important to work with a local partner or to consider opening a local sales office. A reputable agent with good contacts can provide important and timely information, which is often not readily available through public sources. In addition, in light of complicated tender and import procedures, it can be challenging to beat the competition and sell effectively without a competent agent. Companies choosing local representatives can expect to benefit from their knowledge of the market, local technical expertise, existing customer base, local marketing and sales experience, and services such as installation, maintenance, training, and after-sales service.

The Dutch are receptive to U.S. made aviation products, which are well known for their innovation and quality. In addition to compliance to EU product standards, price and quality are the dominant purchasing factors.

Current Market Trends

To maintain their prominent position on the European market, the Dutch make a great effort to sustain an initiative, known as "Maintenance Valley," to support and stimulate the national aircraft maintenance, repair and overhaul (MRO) sector.

Statistics

Capital: Amsterdam
Population: 16.73 million
GDP: USD 701.4 billion
Currency: Euro
Language: Dutch

Contact

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The program aims to take the Netherlands to the top as a center for state-of-the-art industrial maintenance, logistical processes, and repair in both civil and military aviation.

Maintenance Valley is based on one of the largest military air force bases in the Netherlands and the adjacent civilian premises where Stork (owner of the demised Fokker Aircraft) has one of its large manufacturing plants and aircraft service centers. In addition to the air force base, the military premises include the Royal Netherlands Air Force’s training institute, the logistics center, and it the meteorological service. Stork Fokker Elmo is a leading player in design, manufacturing and support for the electrical wiring interconnection systems (EWIS) for aircraft, aero-engine and defense system applications. Combined, the two entities harbor a great deal of MRO knowledge.

Note worthy is the fact that the Dutch are a level two partner in the system development and demonstration (SDD) phase of the F-35 aircraft. When nations decide to procure this aircraft, Maintenance Valley might come up for consideration as the regional maintenance center.

Current Demand

The demand for U.S. civilian aircraft, engines, equipment, and parts have fluctuated throughout the years, as seen in the table below. The rise in statistics reflect aircraft and parts replacement. The decline in exports represent economic downturns or a period immediately following a major purchase/replacement.

U.S. Exports to Netherlands						
(USD thousands)	2006	2007	2008	2009	2010	2011
Civilian aircraft, engines, equipment, & parts	1,805,426	1,553,390	1,795,882	1,696,100	1,412,451	1,765,621

Source: U.S. Census Bureau

Currently, the rising cost of new aircraft means that private owners and airlines are less inclined to replace their fleet. Instead, they tend to choose for aircraft life extension through major maintenance and repair work.

Competitors

U.S. companies can expect severe competition from both Dutch and European manufacturers. Considering the relatively small geographic size of the Netherlands, Dutch manufacturers tend to supply to both the military and the civil aviation industries. A list of Dutch manufacturers is available on request.

In addition, the Royal Dutch Airlines (KLM) is the Netherlands' flagship carrier with the largest civil maintenance organization in the country. It employs approximately 5,000 technical staff members. KLM Engineering and Maintenance together with Air France Industries (AFI) carry out aircraft maintenance, repair and modifications for the Air France KLM fleet and various other airlines worldwide.

Barriers

Offset requirements can be perceived as a non-trade barrier. In the Netherlands, they are applied consistently to all parties, whether a procurement involves a company from an EU or non-EU country. There are no trade barriers against U.S. products and services.

Trade Events

ATC Global 2013

March 12–14, 2013 • Amsterdam, Netherlands • bit.ly/ZrvNdu

The largest Air Traffic Management exhibition in the international marketplace.

ATC Global 2014

March 11–13, 2014 • Amsterdam, Netherlands

Trade Associations

- Netherlands Aerospace Group: nag.aero/en
- National Aerospace Laboratory: nlr.nl

Available Market Research

- 2012 Country Commercial Guide

Norway

Summary

In 2012, Oslo Airport Gardermoen was the largest airport in the Nordic region measured by the amount of traffic. The airport is owned by Avinor, a state owned commercial enterprise that operates 46 airports in Norway, including 12 in cooperation with the Norwegian Armed Forces. Avinor operations also include air traffic control towers, control centers and technical infrastructure for aircraft navigation. Avinor was established as a fully State owned limited liability company in 2003, and the ownership is administrated by the Norwegian Ministry of Transport and Communications.

Statistics provided by the Confederation of Norwegian Enterprises (NHO), department of civil aerospace, shows that around 70% of people traveling by air in Norway do not have any other travel arrangement opportunities. 34% of the tourists traveling to Norway come by air. The Norwegian aerospace industry employs close to 61,000 people and the value system paying over USD 1.56 billion in taxes. In 2011, there were 33 million airline travels in Norway and over 200,000 international flights connect Norway to 130 airports in 35 countries around the globe.

Market Entry

Norway, like most countries, is a member of the ICAO (International Civil Aviation Organization), and therefore the country also adjusts to the regulations of technical standards provided by the ICAO. Norway is not an EU member, but the country commits to the EU regulations through the EEA (European Economic Area), which also connects and commits Norway to act in line with the EASA standards (European Aviation Safety Agency). In addition, the EU regulations are harmonized with national regulations of the aerospace industry, but a large part of the civil aerospace industry is regulated internationally.

Statistics

Capital: Oslo
Population: 5 million
GDP: USD 499.8 billion (est.)
Currency: NOK
Language: Norwegian

Contact

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Current Market Trends

In 2012, the Oslo Airport was the largest airport in the Nordic region when measured by the amount of traffic. Due to increased volume of travelers through Oslo, the process of expanding the airport capacity to handle 28 million passengers per year started in 2011, and the expansion is expected to be completed in 2017.

In addition to commercial airline traffic, there is also a high demand for offshore helicopter service; the offshore industry transports personnel to the offshore oil rigs and more than 30,000 flights are made each year. Some of the largest operators here are Bristow, CHC Helicopter Service AS, and Norsk Helicopter AS. Sikorsky has a significant share of the market for helicopters offshore.

The Norwegian Military ordered 14 NH-90 helicopters back in 2001; the delivery was planned in two steps, first delivery of 6 helicopters in 2011, and the rest within 2016. Norway has so far received one helicopter, and the situation is not considered optimal by the military and/or politicians. There is an ongoing dialogue between industry players and decision makers discussing and looking into other options. Contract award for 16+6 new search and rescue helicopters by the Ministry of Justice and the Police is also expected by September this year. There are also other opportunities in the Armed Forces.

Current Demand

Norwegian Air Shuttle announced in January 2012 the largest order ever made by a European airline company, ordering in total 222 planes from Boeing and Airbus. The company will start intercontinental flights, for example a direct flight from Norway to the U.S. in the spring of 2013.

Scandinavian Airlines System has had a challenging time over the last few years trying to compete with the low-price carriers operating in the Scandinavian market. It seems like the company has been able to stabilize as of now, and recently released information that it is looking into upgrading and renewing its ageing fleet. There is speculation about SAS being up for sale, but no announcement has been made.

Competitors

- Norwegian Air Shuttle: norwegian.no/en
- Scandinavian Airlines: sas.no/en
- Widerøe: wideroe.no/en
- Ryanair: ryanair.com

Barriers

Few major barriers exist. However, one is regulation regarding usage of foreign crew when established with a HQ in Norway. Norwegian Air Shuttle is the fastest growing airline company in Norway, and is rapidly expanding its intercontinental flight offerings. The company wants to keep its HQ in Norway, but use foreign cabin crew in order to be price competitive on the international market along with other low cost airlines. The Norwegian Government recently did not approve the use of foreign crews, and the company is therefore considering moving one part of the company abroad.

In general it is important to mention that the environmental focus of the nation reflects in the initiatives made by the airports, and three of the largest airports in Norway have signed the Airport Carbon Accreditation with the Airport Council International and will work towards becoming carbon neutral. The industry in total accounts for 2.1% of today's national greenhouse gas emissions in Norway.

Norway has strict regulations on travel miles programs, and have not allowed airline companies to credit travelers with mileage when traveling domestically. Even though there still exists a ban on domestic mileage programs, SAS announced in February 2013 that it will reintroduce the system—and at the same time the company filed a complaint through the EFTA surveillance board to the ESA.

Trade Events

No major local shows take place in Norway, but the Norwegian industry players usually attend the Paris Air show and the Farnborough Air show in the U.K.

Trade Associations

- Norwegian Aerospace Industry Cluster (NAIC):
www.fsi.no/fsi_english/naic-norwe



Panama

Summary

Panama's market for aerospace equipment and technology has been increasing over the years as it has been consolidated as one of the major air hubs in the region. The Tocumen International Airport has been expanded significantly and other airports in the country are being upgraded to be able to receive an increased influx of passengers, mostly tourists.

Market Entry

Panama has no significant restrictions for exporters of aerospace equipment. Import duties are at maximum of 15% and the U.S./Panama Free Trade Agreement offers excellent opportunities for U.S. exporters. The U.S. Dollar is the currency and the country has excellent connectivity both in transportation and telecommunications. U.S. equipment is considered to be of excellent quality.

Current Market Trends

The market is basically driven by COPA airlines which is a major regional airline. The Tocumen International Airport in Panama City is currently the main COPA hub with flights to many destinations in the U.S. and the Latin America region. Major U.S. airlines also operate in Panama as well as important airlines from Europe, Asia and Latin America.

Current Demand

Regarding wide body aircraft, Boeing has been the main supplier of Copa Airlines. The small aircraft market is widely divided among a number of suppliers including Beachcraft, Cessna, Piper and other suppliers. The increase in traffic at the Tocumen Airport as well as the construction of a new international airport in Rio Hato (Western Panama), and the expansion and modernization of the Enrique

Statistics

Capital: Panama City
Population: 3.5 million
GDP: USD 36 billion
Currency: U.S. Dollar (USD)
Language: Spanish

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Malek Airport in David, the France Field in Colon and the Howard airport in Panama City, will have an impact on the demand for new aircraft and services in Panama.

Competitors

COPA has been acquiring Embraer Aircraft from Brazil for its short range flights. The helicopter market is dominated by Bell with participation from suppliers from Italy. The fix wing market is very competitive with a number of participants from the United States, which dominates this market.

Barriers

There are no significant barriers for entering the Panamanian market as Panama has no aircraft or airport equipment manufacturing. After the establishment of democracy in 1989 all the governments have been pro business and most of trade barriers have been eliminated.

Trade Events

Expocomer

Panama City, Panama • expocomer.com

Panama's major horizontal trade show, including participation of many countries from all over the world.

Trade Associations

- American Chamber of Commerce of Panama: panamcham.com
- Camara de Comercio, Industrias y Agricultura de Panama:
www.panacamara.com



The Philippines

Summary

The Philippines aerospace industry is thriving due to significant private sector investment and the government's efforts to upgrade air-related infrastructure. The Philippine government has allocated USD 115 million to rehabilitate the country's key airports. The single largest aircraft sale in history took place in 2012 when Philippine Airlines signed a USD 7 billion aircraft deal with Airbus. This was followed by sales opportunities for engines and training equipment. Most recently, Malaysia's Air Asia announced that it has bought a stake in ZestAir. This investment will allow the airline to undertake a five-year re-fleeting program.

Market Entry

The best way to market aerospace products and services is through agents and distributors. The distributor/agent must be familiar with local regulations, have access to key customers, and have the capability to provide after-sales support. However, in the case of jet aircraft and engine sales, Philippine airlines prefer to deal directly with the manufacturers.

Republic Act 9184 (RA 9184), or the Philippine Government Procurement Law, dictates that companies interested to bid on government projects must be 60% Philippine owned. This requires foreign manufacturers to work with a local agent or distributor in order to participate in government procurement.

Current Market Trends

The Philippines aerospace industry is poised for aggressive development. President Benigno Aquino III has included transport infrastructure improvement, tourism growth, meeting international aviation safety standards and improving the business climate as among the top priorities of his administration.

Statistics

Capital: Manila
Population: 103 million
GDP: USD 389.8 billion
Currency: Philippine Peso (PHP)
Language: Filipino, English, others

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Airport Development

In 2012, the Philippine Department of Budget and Management (DBM) allocated USD 115 million for the rehabilitation of the Ninoy Aquino International Airport (NAIA), build a new airport in Lagazpi, and upgrade two other airports in Visayas and Mindanao. Apart from these, the Department of Transportation and Communications (DOTC) has begun the tender for the expansion of the Mactan Cebu International Airport. The President believes that key infrastructure projects will boost tourism growth. He aims to have 10 million tourists by 2016.

Common Carrier Tax (CCT)

President Aquino signed Republic Act (RA) 10374 on March 7, 2013. Under RA 10374, international flights are now exempted from paying the CCT, which is equivalent to 3% percent of the airline's gross turnover and the Gross Philippine Billings Tax (GPBT), which is 2% of the gross turnover, provided that their home countries give the same tax exemption to Philippines carriers. Foreign carriers in the Philippines have requested this reprieve from the CCT for several years now. The signing of RA 10374 is considered a major step to invite more foreign carriers to fly to the Philippines and improve the country's competitiveness in the international travel industry.

Meeting International Aviation Safety Standards

The U.S. Federal Aviation Administration (FAA) downgraded the Philippines from Category 1 to Category 2 in 2007. In 2009, the International Civil Aviation Organization (ICAO) identified several Significant Safety Concerns (SSCs) with Philippine aviation safety standards. This was followed by the European Union blacklist which banned Philippine carriers from flying to its member-countries.

Finally, after over five years, the Philippines showed signs of improvement. The ICAO sent safety audit teams on October 2012 and February 2013. On March 2013 the Deputy Director of ICAO wrote to the Civil Aviation Authority of the Philippines (CAAP) and informed them that "the corrective actions taken by the Philippines have successfully addressed and resolved the SSCs identified by ICAO."

Current Demand

- Aircraft re-fleeting and upgrade of commercial airlines
- Rotary wing aircraft for Multi-Role/VIP use (for government/private sector); Search and Rescue Helicopters (for the Philippine Coast Guard); and Combat Utility Helicopter (for the Philippine Air Force)
- Aircraft Rescue and Fire Fighting (ARFF) Vehicles
- Flight Simulators for the newly acquired aircraft
- Flight Inspection Aircraft

- Airport security equipment including screening equipment for both passenger and cargo, and closed-circuit television (CCTV) cameras.
- Unmanned aerial vehicles (UAV) for surveillance

Competitors

The U.S., while having an excellent reputation for quality and reliability, is facing stiff competition from European and Asian companies. Airbus is a major competitor in the Philippine civil aviation industry. Boeing lost a 54-aircraft deal to Airbus in 2012. Flag carrier Philippine Airlines signed a USD 7 billion deal in August 2012 for 54 Airbus jets as part of its re-fleeting efforts. These included 10 A330's and the remaining 44 divided between A320's and A321 New Engine Order (NEO). Pratt and Whitney, GE and Rolls-Royce are competing aggressively for the jet engines of the newly acquired aircraft.

European rotary wing aircraft manufacturers, Eurocopter and Augusta Westland are major competitors for the SAR and CUH projects of the government. Smiths Detection of Germany is the screening equipment in majority of Philippine airports. Asian suppliers of CCTV are preferred due to their affordability compared to their U.S. competitors.

Trade Associations

- Civil Aviation Authority of the Philippines (CAAP): caap.gov.ph
- Department of Transportation and Communications (DOTC): dotc.gov.ph
- Manila International Airport Authority (MIAA): www.miaa.gov.ph

Poland

Summary

The civil aviation sector in Poland continues to undergo many changes concurrent with the country's recent accession to the European Union. The liberalization of Poland's air transportation industry and implementation of the "open skies" agreement as of May 1, 2004 has created a new operating environment, which promises vastly increased competition. Until 2008 the number of passengers served at Polish airports was growing rapidly, with the world's fastest annual growth rate in some years. While growth stopped at the end of 2008 and in 2009 due to the global economic crisis, the growth trend has returned.

The number of passengers passing through Polish airports has been growing significantly over the last few years. In 2010 the figure reached almost 20.5 million and 21.9 million in 2011 and 24.7 million in 2012. The last year's increase reached 13% growth and this trend is expected to continue over the next several years at an average rate 5.5%. The Polish Civil Aviation Office predicts that the total number of passengers served by Polish airports will reach 26 million in 2013, almost 40 million in 2020 and 59 million in 2030.

In recent years, the structure of the Polish air sector has changed significantly—first, regarding growth in the number of passengers—mostly attributed to low cost airlines, and second, regional airports have noted a much higher passenger growth rate than at the Chopin Airport in Warsaw.

Poland's national airline, LOT, has been experiencing big financial problems. For several years the company kept delaying its much needed restructuring. As a result, over the last two years LOT reported annual losses of 50 million USD. In December 2012, the Polish government introduced significant changes to the management of the airline and announced plans to cut the number of employees by over 25% and also make cuts in the number of connections. At the same time the government decided to subsidize the airline with 125 million USD. This decision was questioned by the EU Commission shortly after.

Statistics

Capital: Warsaw
Population: 38.3 million
GDP: USD 510 billion
Currency: Polish Zloty (PLN)
Language: Polish

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LOT is owned by the State Treasury of Poland and LOT employees. The Polish government is reported to have had serious talks with potential investors interested in acquiring LOT shares and plans to privatize the airline by the end of 2013.

LOT is the first European airline to fly new Boeing 787s—the first two aircraft were delivered in late 2012 and three more were supposed to be delivered by the end of March 2013. However, the known problems with the batteries overheating in the Boeing 787 aircraft delayed the deliveries. Recently LOT announced it will not fly Boeing 787s until October 2013. LOT has been modernizing its fleet not only with B787s but also with other aircraft, purchasing new mid range aircraft, mostly Embraers. EuroLot, a company owned by the State Treasury and LOT, has been renewing its fleet with Bombardier Q400NG aircraft.

The year 2012 witnessed the big debut of a new Polish airline, privately owned OLT Express. In April 2012, the airline began promoting new connections between regional airports at very advantageous prices, but after four months went bankrupt due in part to problems with the parent company.

Poland's current airport network consists of one central airport (Warsaw Frederic Chopin), one regional central airport (Krakow Balice), 11 regional airports, and in addition several small airports, sporting and training airports owned by the Polish Aeroclub, a number of post Russian military airports, and a few facilities owned by manufacturing enterprises. In 2012, two new regional airports were opened—in Modlin near Warsaw and in Lublin. After a few months of operation Modlin Airport reported problems with a cracking runway and is closed for reconstruction of the runway. The completion date is not yet known, but some sources say the repair will take until November 2013 to complete.

The Civil Aviation Office (ulc.gov.pl) is the primary Polish civil aviation authority and falls under the authority of the Ministry of Transport, Construction and Maritime Economy.

The last seven years have shown visible advancement in the general aviation sector in Poland. Thanks to a new aviation law introduced in 2003, pilots have found the qualifying process much simpler and the registration of general aviation aircraft has become even easier. Over the last few years, the main area of growth has been in the use of more affordable aircraft, such as ultralight aircraft. Recent notable developments for small aircraft include the introduction of advanced avionics (including GPS) and composite materials to make small aircraft lighter and faster. Ultralight and homebuilt aircraft have also become increasingly popular for recreational use, since they are much less expensive than certified aircraft.

Market Entry

U.S. companies interested in the Polish market should consider cooperation with Dolina Lotnicza, a 'cluster' of suppliers in the southeastern part of Poland. This organization has proven to be very effective in reaching out to the industry in Poland and abroad.

Networking opportunities within the supply chain arise from initiatives of the Dolina Lotnicza as well as individual events organized by large aerospace investors in Poland such as Pratt & Whitney and Sikorsky.

For smaller U.S. companies, however, the initial route to market will still typically involve the appointment of a suitably-qualified agent, representative or distributor.

Current Market Trends

The most important trends observed in the civil aviation sector include a growing number of passengers of low cost airlines, and a growing number of passengers of regional airports (versus Chopin Airport in Warsaw).

With regard to general aviation, a growing number of individuals are interested in obtaining pilots licenses. The qualifying process and the registration of general aviation aircraft has become much simpler. These pilots are potential buyers of new general aviation aircraft, parts, and navigation aids.

Current Demand

The development plans for airports typically call for construction/expansion of passenger and cargo terminals, extension of aprons and runways and installation of Instrumental Landing Systems (ILS). Development plans are provided in further detail at the individual airports' web sites.

The Polish Ministry of Transport, Construction and Maritime Economy posted a detailed description of projects done in eight major Polish commercial airports. The November 2012 report is available in Polish (bit.ly/Z3LB6O), and the previous report is available in English (bit.ly/15mJ0IT).

The biggest and most important buyers of commercial aircraft are LOT Polish Airlines (lot.com) and EuroLot (eurolot.com). There are also small local companies in Poland offering cargo flights and aero-taxi flights, who might be interested in making purchases. The current list is available via the Civil Aviation Office (bit.ly/10hpVH5).

PZL Mielec, PZL Swidnik, EADS PZL Okecie, and other smaller aircraft producers would likely be interested in purchasing various types of parts and equipment.

Main Competitors

The biggest competition comes from EU countries, mainly Germany, France, Italy, and Spain. This is the case with aircraft, parts, airport equipment and services. Other significant suppliers come from Brazil (Embraer) and Canada (Bombardier).

Barriers

Poland has the same duty schedule as the European Union. For the majority of aerospace products there are no custom duties. The exact schedule can be found at bit.ly/12neoDZ.

There is a 23% VAT tax in Poland based on CIF value of the product.

In the civil aviation sector, European Union organizations have taken over responsibilities from national authorities. The European Aviation Safety Agency EASA (<http://www.easa.europa.eu>) based in Cologne, Germany has responsibility for aircraft and parts certification as well as the design and maintenance standards for aircraft and parts. The Agency is responsible for the airworthiness and environmental certification of all aerospace products, parts, and equipment designed, manufactured, maintained or used under the regulatory oversight of EU Member States. The Agency also does all post-certification work such as the approval of changes to, and repairs of, aeronautical products and their components. All type-certificates are issued by the European Aviation Safety Agency and are valid throughout the European Union. This agency is also responsible for the approval and oversight of the organizations involved in the design of aerospace products, parts and appliances, and for foreign organizations involved in the manufacture or maintenance of aerospace products. The Agency authorizes national aviation authorities to act on its behalf for certification purposes. In Poland, the Civil Aviation Office CAO (Urząd Lotnictwa Cywilnego, or ULC) is accredited by EASA to perform these tasks.

Trade Associations

- Aviation Valley—Association of Group of Entrepreneurs of Aviation Industry: aviationvalley.pl/pl
- Polish Aeroclub: aeroklub-polski.pl

Available Market Research

- Poland: Country Commercial Guide (2012)
- Poland: General Aviation Equipment Market (2011)
- Poland: An Overview of the Aerospace Market (2010)
- Poland: Civil Aviation (2009)



Portugal

Summary

Portugal has 3 international airports on its mainland in the cities of Lisbon, Porto, and Faro, in addition to 7 regional airports. Évora, Covilhã, Alverca, and Ponte de Sor are the main centers of the aerospace industry in Portugal, and they are lead by the Brazilian conglomerate Embraer and Portuguese company OGMA.

The leading Portuguese aerospace companies are OGMA and TAP Portugal. TAP Portugal is the country's primary flag-carrier, although there are other domestic airlines that provide services in and outside of the country. OGMA, an aircraft maintenance company, is jointly owned by the state and by Embraer, the latter having a 65% shareholding in the company. In addition to these companies, there are several highly qualified SMEs as well as subsidiaries of international corporations which manufacture aerospace products and provide related services. Most of these companies are already well-established within the global supply chain.

Persistent economic difficulties cast doubt on the growth of this sector and could restrict participation to the key companies who have already secured their position in this market. In addition, the difficulty in planning for the future associated with the presence of fierce global competition makes it hard to determine whether smaller, fragile companies in the aerospace sector will be able to maintain their footing.

However, the Portuguese government has selected the aerospace industry as a critical area to develop and improve for the coming years, and it has prioritized the creation of an aeronautical cluster which maximizes the sector's potential and best utilizes its investments. In 2012, Portugal imported USD 338 million for Schedule B chapter 88—aircraft, spacecraft, and parts thereof—an increase of 16.4% over the last year (Global Trade Atlas). In addition, Portugal saw a total increase of 5.6% in air passengers from 2010 to 2011, which may be associated with a rise in foreign tourism.

Statistics

Capital: Lisbon
Population: 10.8 million
GDP: USD 237.5 billion
Currency: Euro
Language: Portuguese

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Market Entry

Market entry in the aerospace industry can be established by obtaining access to the suppliers of the Embraer/OGMA programs. By partnering with the national players in the aerospace sector, small and medium businesses can integrate themselves into the supply chain.

Current Market Trends

Historically the aerospace sector in Portugal has been dependent on military funding, but due to a budget deficit in recent years the Portuguese government's approach to the aerospace industry has shifted from direct financial support to a stronger involvement of private investment.

The key corporate player in the Portuguese aerospace industry, Embraer, a Brazilian aerospace conglomerate and the world's third largest aircraft manufacturer, has partnered with the Portuguese government and opened two new factories building metallic and composite structures in Évora. Embraer invested 100 million and 77 million Euros in the opening of these factories respectively.

The government considers such partnerships essential to growing the aerospace sector, not only to efficiently mobilize resources but also as opportunities for technological development. It has instituted a qualification program to train employees for specialized areas in the sector ensuring that companies launching aerospace operations in Portugal can count on a competent workforce.

Current Demand

This sector offers opportunities ranging from metallic pieces to chair upholstery. There is potential for partnerships in manufacturing:

- Composites and new materials
- Avionics and critical application software
- Maintenance, repair, and overhaul (MRO)
- Aircraft interiors, design and development
- Precision tooling & molding

Small and medium businesses also have the possibility of accessing the Embraer supply chain for the production of airframes, creation of new military and civilian aircraft, and the MRO of commercial, executive and military fixed and rotary fleets.

Competitors

The aerospace sector in Portugal is now characterized by Embraer and Synergy Aerospace, two Brazilian companies that privately took over Portugal's primary aerospace companies, TAP Portugal and OGMA. In 2005 Embraer bought a majority shareholding in OGMA, Portugal's

state-owned aircraft maintenance company. In October 2012, the Portuguese government chose another Brazilian conglomerate, Synergy Aerospace, as the sole bidder in the privatization of the Portuguese state carrier TAP Portugal. These companies are now the major key players in Portugal's aerospace industry.

Barriers

Portugal is in the midst of a severe euro zone debt crisis. In May 2011, Portugal sought a €78 billion bailout from the EC/IMF/ECB Troika, conditioned on implementing an austerity program of fiscal consolidation and deep-reaching structural reforms. While Portugal has made notable progress on its commitments, external developments in the euro area may impact its progress.

Battling low economic growth, high fiscal deficits, and record high unemployment, there is little room for public spending as a means of alleviating the impact of the current economic slowdown. Budget tightening has targeted the public sector which, in turn, has limited economic growth. In addition, Portugal still has one of the highest Value Added Tax (VAT) rates in Europe at 23%.

For information regarding tariffs and customs regulations applied to aerospace products exported to Portugal, visit the TARIC consultation for HS Code Chapter 88 at bit.ly/15mKqgz.

Trade Events

Aerospace Meetings Lisboa

September 25–27, 2013 • Lisbon, Portugal • bciaerospace.com

One of the leading events dedicated to information about the aerospace services and technology industry. The exhibition will showcase all types of aerospace services and technology, leasing and financing technology, aircraft, and parts manufacture technology.

Trade Associations

- Portuguese Association for the Aerospace Industry (PEMAS): pemas.pt
- Portuguese Association of Space Industries (Proespaco): www.proespaco.pt/eng

Romania

Summary

The civil aviation sector in Romania is growing. With 16 civilian airports, Romania has significant infrastructure capacity given current air traffic demand; however, airports need to be modernized and equipped to respond to international standards of safety and security. Airport security is managed at a high level by the Ministry of Transport and implemented at the airport level. There is strong interest by Romanian authorities at both levels to procure security equipment in the near future, including body scanners and explosive detection systems.

While air traffic has been steadily increasing, forecasts predict further higher traffic demand driven by the economic growth in the region, the growing ties with the EU and by traditional European tourism and business travellers. Romania enjoys a strong international passenger base of users travelling mainly between Romania and Germany, Austria, U.S., Israel, Italy, Greece and Turkey. It is estimated that about 60% of international passengers visit the country for tourism. In 2012, tourism in Romania increased by about 10%. Airports that are expected to experience significant traffic growth in the near future are Bucharest, Cluj, Timisoara, and Constanta.

TAROM is Romania's flag carrier and serves an estimated two million passengers a year. However, Romania has experienced significant market penetration from low cost carriers (higher than 40%), including Wizz Air, Blue Air and Carpatair. TAROM continues to be the only carrier providing services to some ten destinations in the country, in addition to multiple destinations overseas. It is anticipated that in the future routes will be predominantly served by low cost carriers.

The Romanian Air Traffic Services Administration (ROMATSA) is a self-financing public enterprise under the authority of the Ministry of Transport, being the national certified Air Navigation Services Provider (ANSP) responsible for the provision of Air Traffic Services (ATS) and having the oversight of air traffic management facilities throughout the country. ROMATSA plays a leading role

Statistics

Capital: Bucharest
Population: 21.4 million
GDP: USD 267.2 billion
Currency: Lei
Language: Romanian

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in Romania's aviation sector and is one its most regarded stakeholders, working in close cooperation with the Ministry of Transport, the civil aviation, the military, airlines and airspace users.

Romania is member of the International Civil Aviation Organisation (ICAO) since 1965, the European Organization for the Safety of Air Navigation (EUROCONTROL) since 1996, and European Aviation Safety Agency (EASA) since 2007. As such, Romania has agreed to make numerous technological improvements—i.e., the implementation of the Single European Sky ATM Research Program (SESAR) technologies and optimization of Air Traffic Control Centers—in order to create a seamless and unified European and global air traffic control network. As part of this program, Romania joined in 2004 with Bulgaria to create a Functional Airspace Block (FAB) called the Danube FAB.

ROMATSA aims to develop a long-term modernization program of the surveillance systems for air traffic services with the technical assistance of one of the most prestigious specialized companies of the United States of America. The technical assistance for the "Romania: Aviation Surveillance Modernization" is provided under the USTDA Grant (U.S. Trade and Development Agency) awarded to ROMATSA in 2012.

In accordance with the terms of reference for the above mentioned study, the U.S. company will develop high-level operational and technical recommendations regarding automation, surveillance, data communications, traffic flow management, and performance based navigation that support the Local Single Sky Implementation (LSSIP) in line with the ATM Master Plan and developments within the Single European Sky for a safe and effective implementation of the DANUBE FAB. This effort will produce a series of related reports that identify the critical elements of a detailed long-term development plan.

Romania is also developing an aircraft parts manufacturing and MRO industry. Companies such as Aerostar currently work in civil sector producing landing gears, wing assemblies and providing MRO services. This sector is expected to provide good opportunities to U.S. firms interested in the market.

Market Entry

The Romanian market is extremely open to U.S. companies. However, local representation when working in Romania is advisable. U.S. companies that have successfully entered the market do so by either establishing a local office or developing local representation agreements. There is high interest by Romanian counterparts to develop such relations.

Current Market Trends

Romania presents a number of opportunities for U.S. companies in the subsectors of security, safety, environment, aircraft MRO and air traffic control and airspace management.

There are a number of opportunities for procurement of security equipment. The Ministry of Transport has recently completed a security modernization program, in which U.S. companies played an integral role.

ROMATSA's plan for modernization would require the implementation of modern airspace management technologies, including ADS-B, WAM, secondary radars, specialized software. Training associated with NextGen technologies and air traffic management would also provide opportunities to U.S. firms.

Current Demand

There are a number of requirements for procurement of security equipment. Further acquisition needs of body scanners, explosive detection systems, security management systems and cargo security will be internationally tendered, as Romania complies with EU regulations.

There are a number of requirements for specialized training and consulting in several areas:

- Environment—Key airlines, the Ministry and other stakeholders are working on developing procedures and programs that would reduce CO₂, optimize environmental management systems and deal with issues such as bird strikes. Specialized assistance and training would be needed in this area.
- Romania's accident investigation sector is now developing. As required by EU regulation, Romania has established an independent accident investigation body. Consulting services in the area of institutional strengthening and training could be required.
- TAROM, ROMATSA, the AeroClub, and the Romanian Academy are developing a new training center for mechanics and air traffic controllers. Specialized consulting services for curriculum development and training would be required.
- Training associated with NextGen technologies and air traffic management will also be required.

Competitors

European companies remain the strongest competitors in the Romanian market. Historical ties with Romania, geographical proximity and knowledge of EU regulations provide some advantages to European competitors. However, there is strong interest in working with U.S. firms.

Barriers

There is one main barrier encountered on the Romanian market: the airlines have to have the capacity to fulfill the European requirements and their certification in the European market EASA. The reliable and recommended solution in such cases is to create a partnership with a local company.

Trade Events

International Military Equipment Exhibition, EXPOMIL

September 26–29, 2013 • expomil.ro/home

Since 1999, this semiannual exhibition has enrolls in the international circuit of military services and national defense events. The institutions and organizations involved in the development of EXPOMIL 2013 include:

- Ministry of Economy
- Ministry of Defense
- Ministry of Internal Affairs
- Ministry of Foreign Affairs
- Ministry of Justice
- Romanian Intelligence Service and the Romanian Employers' Association of Manufacturers of Military Equipment (PATROMIL)
- Romanian Aeronautical industry Employers' Organization (OPIAR)

Trade Associations

- Association of Romanian Aeronautical Companies (OPIAR): opiar.ro/index1.html
- Romanian Business Association of the Military Technique Manufacturers (PATROMIL): patromil.ro

Available Market Research

- 2012 Romanian Airport Market Overview

Russian Federation

Summary

The Russian aviation industry is controlled by state-owned corporations United Aircraft Corporation (UAC) and Russian Technologies (Rostech RT). The Russian government “strategic” significance of the aviation industry is explained by the integrative role it plays in the Russian economy. Due to its close relationship with other associated industries—component manufacturing and machine-building—the Russian aviation industry has a significant influence on Russia’s development towards a more innovative economy. The Russian government currently pursues the development of aviation through its state strategy “Development of the Aviation Industry for 2013–2025.” The program was approved in December 2012 and the total amount of funding to be allocated is 1.7 trillion Rubles (appx. USD 56.6 billion).

As part of the aviation development strategy, the Russian government is interested in international cooperation on new aircraft projects and the transfer of Western technology. This is an opportunity for U.S. companies to get a foothold in the Russian economy and to engage in mutually beneficial aviation projects.

Despite Russia’s ambitious aviation development program, the industry is not able to deliver civilian aircraft in the required quantities to meet growing air traffic demand. The production of new civil aircraft in recent years has not exceeded 7-9 units per year, while pre-existing Soviet aircraft have become too inefficient to operate in terms of fuel efficiency and flight safety. Many airlines have embarked on comprehensive aircraft replacement programs. Major international manufacturers—Boeing, Airbus, Bombardier and Embraer—are currently filling this niche. The predominance of Western aircraft fleets in Russia also provides impetus for the growth of related aviation segments including air components, spare parts, MRO operations and airport ground support equipment, representing additional business opportunities for U.S. suppliers.

Statistics

Capital: Moscow
Population: 140 million
GDP: USD 1857.77 billion
Currency: Russian ruble (RUB)
Language: Russian

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Market Entry

When doing business in the Russian market, it is often not the product, but the attitude and the way in which business is performed that really matters. The desired attitude is best described by Russian partners when asked how U.S. firms can succeed in this market: "It is important to invest oneself." This means not only a financial investment such as setting up a representative office, sharing costs for product promotion or trade show booth rental with a Russian partner, but also, most importantly, a certain degree of commitment to Russian partners. This is especially true, when it comes to forging strategic partnerships with Russian high level aviation industry representatives, such as UAC, Rostech RT and 'Helicopters of Russia' Holding. Frequent contact, including trips to Russia to meet with Russian partners and principle customers and physical presence at trade shows, are all very important in the Russian market. Building brand recognition and a long-term approach are very important.

Current Market Trends

The demand for aircraft in Russia is driven by the growing air traffic needs. Despite the economic downturn of 2008–2009, the average growth rate of passenger traffic between 2001 and 2012 amounts to 11.4% annually. The cargo traffic for the same period was 6.1% annually. International air traffic is the most dynamic segment of this market. The major share of domestic air traffic belongs to long-distance flights, primarily through Moscow. The local and regional air traffic has less than 13% of the market, but it plays an important role in Russia's air transportation. In 2012, the Russian Government intensified efforts to support regional aviation in order to connect the outlying regions and satisfy unmet regional air traffic needs. Under an innovative scenario of Russian economy's development, the air traffic is forecasted to grow at 6.3-7.8% annually within the next 20 years.

Current Demand

The share of Western made aircraft in Russian airlines' fleets amount to 63%. As of January 2013, the active commercial fleet of Russian operators totals 2,745 aircraft units, including 645 mainstream aircraft, 294 regional passenger aircraft, 137 cargo aircraft and 1,111 helicopters. Between 2008 and 2012, Russian airlines' fleets received 540 Western manufactured passenger aircraft and 50 new Russian aircraft. During the same period, 14 Western cargo aircraft and 8 Russian made aircraft were delivered. In 2012, the Russian airlines' fleet received 133 passenger aircraft, including 114 Western aircraft, 15 new Russian aircraft and 4 previous generation Russian aircraft. Due to the large number of aging Soviet aircraft in Russian fleets, fleet renewal is expected to continue in the near future. By 2031, it is forecasted that Russian airlines will require 1,540-1,870 of long-haul aircraft with a significant share of narrow-body aircraft with varying seating capacity, and 420-500 regional passenger aircraft. The market need for cargo aircraft is much less significant and is not expected to exceed 260 aircraft.

Barriers

According to Russian legislation, commercial aircraft are divided into seven groups. Some of them are either fully or temporarily exempt of the import duty. The others are subject to 20% import duty, a customs fee (up to USD 30,000) and 18% VAT. The end users may have to pay up 40% of the original price in taxes or duties. Unlike private individuals, commercial operators can reimburse VAT, according to Russian tax code. With Russia's WTO accession, the import duty (for helicopters and civil aircraft) is expected to be reduced to an average of 7.8% within the seven year implementation period from the date of accession (August 2012).

Trade Events

MAKS-2013

August 27–September 1, 2013 • Moscow, Russia • aviasalon.com/en
International aviation and space show.

Trade Associations

- United Aircraft Corporation: uacrussia.ru/en

Saudi Arabia

Summary

On 3 April 2013, the International Air Transport Association (IATA) announced that demand for air travel continues to rise with much of the growth in commercial aviation coming from the emerging markets, especially the Middle East. The Middle East witnessed year-on-year demand expanded by 10.6%. Capacity expansion remained constant at 9.7 percent, and load factors rose to 77.7%—the highest growth statistics for any commercial aviation market globally. Likewise, the Saudi Arabian national flag carrier Saudia reported carrying more than 23.7 million passengers and averaging a load factor of 77 percent. Saudia passenger totals are divided with approximately 67% of passenger loads reflecting domestic traffic and the remainder is Saudi Arabia originating international traffic. Saudi Arabia is also served by the privately owned National Air Service (NAS Air) which accounts for an additional 3 million plus passengers per annum. In December 2012, the Government of Saudi Arabia issued licenses to Bahrain-based Gulf Air and Middle East One World alliance heavyweight Qatar Airways to offer domestic flight service in Saudi Arabia.

Saudi Arabia had taken delivery of 15 Embraer 170 regional jets in 2011 and has completed taking delivery of its fleet of Airbus A320 series aircraft. For 2013, the airline is taking delivery of 2 B747-8F freighter aircraft, taking continued delivery of its ordered B777-300ER aircraft, and is looking towards the delivery of the B787-9 Dreamliner in 2015. Therefore, it is unlikely that Saudi will look at fleet expansion until sometime in 2015. Current trends also reflect significant increases in demand to Europe and the United States. Saudia is planning to increase flight frequency to Turkey, France and North America. The airlines has signaled its interest in serving Toronto's Lester Pearson International and Los Angeles' LAX with the 777-300 ER series aircraft.

Statistics

Capital: Riyadh
Population: 26,939,583 (est. 2013)
GDP: USD 740.5 billion
Currency: Saudi Riyal
Language: Arabic

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Given continued passenger growth projections in Saudi Arabia, the Government of Saudi Arabia announced the allocation of up to USD 53 billion for the construction and upgrading of aerodrome facilities, air traffic control, and system wide modernization in the major and secondary markets in Saudi Arabia. Phase one of the Jeddah International Airport Expansion should be completed by 2014, Riyadh International Airport expansion should commence later in 2013, and other secondary airports are in various stages of being upgraded. Opportunities related to aerodrome infrastructure design, IT, air traffic control, airport operations technology, and related infrastructure would afford the greatest business opportunity for U.S. firms seeking opportunities in the Saudi market.

Market Entry

The Saudi Arabian national airline Saudia and the airports are entities reporting to the General Authority of Civil Aviation (GACA). Contracting and awards are conducted under competitive bid in government procurement with pre qualification, bid, best and final offer (BAFO) negotiations taking place under set terms and conditions and test and evaluation processes and procedures established for the specific project. U.S. companies interested in commercial aviation projects and tenders should be preregistered with the Saudi government agency and have a presence in country to assist in defining capabilities under the proposed scope of work. Additional business opportunity in the aviation and aerospace sector arises under Saudi Arabia's defense offsets regime, where indirect offsets in the areas of maintenance, repair and overhaul (MRO), avionics repair, and aircraft fleet support would also afford business opportunities in the Kingdom of Saudi Arabia.

Current Market Trends

Continued near 10 percent growth in passenger numbers and load factors at 77% at Saudia Airlines, the market continues to indicate growing demand in the commercial aviation market in Saudi Arabia. With recent purchases of Airbus narrow-body aircraft and Embraer regional jets having been completed and delivery received, there is little in terms of new aircraft acquisitions in Kingdom until 2015—when Saudi completes delivery of its remaining B777-300 ER and B787-9 orders. Therefore, the market trend is in the area of commercial and civil aviation infrastructure, ATC, and airport expansion and upgrading. The market over the next several years will be dictated by how much of the USD 53 billion in infrastructure funding will be allocated to expansion of aerodromes, facilities, and infrastructure.

Current Demand

The commercial aviation market in Saudi Arabia is currently finalizing delivery of orders previously signed. The Saudi fleet will be fully delivered by 2015. At this time, current demand is related to supply of technology and components on the airport expansion program and modernization of the commercial aviation sector in Saudi Arabia.

Competitors

- Commercial Aircraft: EADS Airbus
- Aerodrome, commercial aviation infrastructure, ATC technology: Western European, Korean, Chinese engineering and construction firms.
- Commercial Aerospace hardware/software: EADS, Finmechanicca, Siemens, and others.

Barriers

Companies are to operate to international aerospace standards, must be prequalified for General Authority of Civil Aviation contracting and procurement procedures. There are no prohibitions are barriers for qualified companies contracting with the General Authority of Civil Aviation.

Trade Events

Dubai Air Show

November 17–21, 2013 • dubaiairshow.aero

The flagship commercial and defense aviation exhibition in the Middle East. The Dubai Air Show will attract 950 exhibitors and 57,000 attendees the 2013 air show.



Singapore

Summary

The Asia Pacific aerospace industry has made remarkable strides over the past decade given the positive economic growth across the region. Singapore has become an industry leader by carving out its own niche market within the Asian aerospace industry. Singapore has become the region's aerospace hub, a leader in aerospace maintenance, repair, and overhaul (MRO) services, and has promoted significant investment in research and development (R&D). Given Singapore's strong position in the industry, and home to many aviation base operations, incentives for American firms to enter the Greater Asia aerospace market have increased.

Market Entry

Many American exporters use agents or distributors to serve the Singapore and other markets in Southeast Asia. Finding prospective partners presents no problem. Singapore firms are aggressive when it comes to representing new products and usually respond enthusiastically to new opportunities. Most Singapore companies are open to joint venture proposals and many are interested in manufacturing under license.

Financial: Shipments to Singapore are generally made under letters of credit and sight drafts, depending on the exporter's preference and the extent of past dealings with the purchaser. Standard credit terms are 30 to 90 days. The foreign departments of most major banks are well equipped to provide service and advice on matters of foreign trading and credit.

Quotations should be on a C&F basis whenever possible. The prices given may be either in Singapore or U.S. dollars. Exporters making quotations in Singapore dollars should consult their banks for the prevailing exchange rate. Singapore uses the metric system, so it is often beneficial for price/quantity quotations to be prepared accordingly.

Statistics

Capital: Singapore
Population: 5.18 million
Currency: Singapore Dollar (SGD)
Language: English (official);
Mandarin, Malay, Tamil

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Current Market Trends

Despite the potential of the Asia Pacific region, several multinational manufacturers are limiting their presence in emerging markets in the region. This is because of the complexity of the aerospace manufacturing market, its regulatory issues, quality and safety requirements, and low manufacturing volumes. Other issues that have deterred OEMs from entering the industry include supply chain and operational inefficiencies and high component costs. Technology, price and after-sales service are the main selling factors in Singapore. However, prospective exporters to Singapore should be aware that competition is strong and that buyers expect good after-sales service.

Current Demand

Singapore's aerospace industry revolves around MRO activities. With the expected growth in air traffic in the region, the demand for MRO services will also increase. MRO services will continue to support Singapore as the regional MRO services hub in an attempt to supply the increasing demand.

Singapore has become the region's MRO Hub as a result of the Government of Singapore's (GOS) specialization initiatives within the aviation industry during the 1990s. Emphasis on specialization has produced a significant level of aerospace research and development in Singapore and spurred growth of the aviation industry in the region. Major aerospace companies that have R&D facilities in Singapore include Boeing, Thales, Rolls-Royce, GE and ST Aerospace.

Singapore also has an established OEM market that is supplemented with an international supply chain for the aerospace industry. As a result, the OEM sector experienced close to a 14% Compounded Annual Growth Rate (CAGR) over the last decade. Products designed and manufactured in Singapore include: engine casings, engine gears, and valves to seat actuators, electrical power systems and galley equipment.

One of the recent positive developments within Singapore's aerospace industry has been the announcement of the Air Cargo Express (ACE) Hub in Changi Airport's free trade zone. Singapore is now the fourth busiest air cargo hub in Asia and the regional air cargo hub growth will only strengthen its position.

In order to support the future development of Singapore's aerospace industry, a new aerospace park is being developed at the Seletar Aerospace Park (SAP) and will host a variety of aerospace activities including R&D and MRO services. The SAP is expected to contribute USD 3.0 billion value-added activities annually and create 10,000 new aerospace-related jobs by 2018.

Competitors

The aerospace manufacturing industry is facing strong competitive forces, and is forcing industry players to adjust their outlook for long-term growth. Rising oil prices has caused Western suppliers to look toward lower cost regions such as the greater Asia-Pacific region. Singapore's connectivity and infrastructure make it an ideal location for aerospace companies to setup regional headquarters and distribution centers in the Asia-Pacific region.

Most major aerospace and aircraft parts and service providers are represented in Singapore. Some of the major aerospace corporations located in Singapore are: Rolls-Royce, GE Aviation, Boeing, Pratt & Whitney, Lockheed Martin, Raytheon, Lufthansa Technik, Messier-Dowty, Nordam, Rockwell Collins and Honeywell, as well as Embraer, Thales, and EADS. Embraer chose Singapore as its regional logistics and spare parts hub, and rotatable support to regional airline customers.

Rolls-Royce has established in Singapore its first hollow titanium wide chord fan blades (WCFBs) manufacturing facility outside the UK.

Singapore has expanded its manufacturing capabilities in high precision aircraft component and systems, and has a complete range of MRO capabilities for both passenger and freight aircraft. Singapore companies have also been successful in building on their capabilities in maintenance and overhaul, high precision engine components and systems, and have substantial R&D investments in repair development and engineering design.

Barriers

There are excellent opportunities for U.S. firms to sell aviation equipment and systems to Singapore as the country is virtually a free port. There are no duties, taxes or tariffs for aviation related equipment from the U.S. The challenge is in competing with suppliers from around the world on prices and product quality.

Currently, American companies that wish to establish MRO facilities require approval from the U.S. Transportation Security Administration's (TSA) Large Aircraft Security Program (LASP). More information regarding LASP and TSA security regulations and programs can be found at go.usa.gov/TWrv.

All imported goods for local consumption are taxable under the Goods and Services Tax (GST), which is levied at 7.0%. Goods kept in the Free Trade Zone are not subject to GST, but will be charged if they are later released for local consumption.

Technical Requirements and Standards: The electrical power supply specifications in Singapore are 230 volts, 50 cycles, single phase and 415 volts, 50 cycles, 3 phase. American equipment for use in Singapore must conform to these electrical requirements.

Internationally recognized standards, such as those approved by the Federal Aviation Administration, are fully acceptable in Singapore. Questions relating to aviation standards and regulations should be directed to the Civil Aviation Authority of Singapore CAAS (caas.gov.sg).

Trade Events

Singapore Air Show 2014

February 11–16, 2014 • Singapore • singaporeairshow.com.sg

Singapore Airshow will be held for the fourth time in 2014. The 2014 series will also incorporate an Unmanned Systems Pavilion and a Land Defense Pavilion to showcase advanced products and services in these two categories as well as best practices and market ideas for application in the aerospace industry. This will be an opportune time for U.S. aerospace and defense suppliers of equipment and services to introduce their wares to industry and military leaders who are expected to be present for the event.

Trade Associations

- Association of Aerospace Industries (Singapore): aaais.org.sg

Available Market Research

- Singapore Aerospace Industry 2012 (January 2012)

Slovak Republic

Summary

In 2012 Slovak commercial air transport was available from Bratislava, Košice, Žilina and Poprad—Tatry international airports. VIP WINGS is the primary domestic carrier, also servicing the domestic Bratislava—Košice connection. Most international commercial service was provided by Travel Service, Ryanair, Norwegian Air Shuttle, UT Air and EL AL, CSA/Air France/Delta Airlines/Alitalia/Aeroflot/KLM, Lufthansa/Austrian Airlines and EuroLOT. The primary international destinations were Alicante, Alghero, Barcelona, Bari, Bologna, Birmingham, Bristol, Brussels, Burgas, Dublin, Edinburgh, Gerona, Gdansk, Copenhagen, Las Palmas, Liverpool, London, Malaga, Manchester, Milan-Bergamo, Moscow, Palma de Mallorca, Paris, Pisa, Prague, Rome, Stockholm, Tel Aviv, Trapani, Vienna and Warsaw.

Summer charter flights to Turkey, Greece, Egypt, Bulgaria, Spain, Tunis, Italy, Morocco, Israel and Portugal were operated by Vip Wings, Sayegh Aviation Europe, Air Explore, Air Cairo, Air Arabia, AMC Airlines, Arkia Israeli, Astra Airlines, BH air, Bulgarian Air Charter, Free Birds airlines, Nouvelair Tunisie, Onur Air, Tunis Air, Sky Airlines and Shyphax airlines.

Winter charter flights were operated mostly by Russian and Ukrainian airlines: Nordavia, Orenburg Airlines, Red Wings, Wind Rose, Yamal Airlines and Holidays Czech Airlines.

Commercial air transportation in Slovakia is hampered by the close proximity (30 miles) of Bratislava to the Vienna International Airport and the availability of long-haul flights from there.

In 2012 Slovak airport companies and air control service providers received State budget subsidies totaling Euro 10,750,400 (USD 14mil) from the Ministry of Transport, Construction, and Regional Development. This support is intended for airport security, control and dispatch of flights exempt from consideration

Statistics

Capital: Bratislava
Population: 5.39 million
GDP: USD 93 billion (2012)
Currency: Euro
Language: Slovak

Contact

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payments and for safe and secure operation, administration, maintenance and investments in airport infrastructure.

Market Entry

Market entry to Slovakia is easy. Besides EU regulations, there are no country specific business barriers in place at the moment. For updated information it is recommended to verify any information with the two most important aviation institutions—Ministry of Transport, Construction and Regional Development of the Slovak Republic and the Civil Aviation Authority of the Slovak Republic.

Current Market Trends

The number of passengers handled at all Slovak international airports has been dropping since 2008. Compared to 2012, Bratislava airport dropped last year by almost 11%, Košice by 12%, Žilina by 75 % and Piešťany by 8%. Only Poprad-Tatry airport grew by 25 % thanks to charter flights which transported over 50% of all the airport's passengers.

All Slovak airports strive to:

- Minimize the impact of the world economic situation and retain business clientele
- Make more remote regions accessible in order to enable the development of tourism and enhance the local economy's performance
- Optimize the costs and find financial resources, preferably EU funds, to invest in ongoing projects
- Continue to implement Safety Management Systems and to continuously improve the quality management system according to standard STN EN ISO 9001/EN ISO 9001:2000, STN EN ISO 14001/EN ISO 14001:2004 (EMS) and OHSAS 18001/EN:1999 (OSH)

Current Demand

Current interest in travel is limited as a consequence of the current economic situation—the fluctuating Euro, higher State taxes, companies' ongoing problems (companies use new technology to save on corporate travel), and reduced household income (households are more cautious with their spending and tend not to go on weekend breaks or second or third holidays).

Bratislava airport continues to show bigger business potential in cargo. Year 2011 was historically successful, when compared to year 2010 the volume of carried cargo continuously grew throughout the whole year by 16% up to 20,530 tons while international carried cargo grew by 38%. (Major increase was caused mainly due to DHL's complementary Leipzig-Bratislava-Sofia scheduled route from Brussels to Bratislava). In 2012, cargo at Bratislava airport grew by additional 10% up to 22,563 tons compared to FY 2011.

Competitors

The top three scheduled transport air carriers in 2012 were Ryanair, Czech Airlines and Danube Wings operated by VIP Wings, while the nonscheduled air carriers were Travel Service, Central Charter Airlines Slovakia (Sam Air) and Nesma Airlines.

The three biggest air craft producers and repair facilities by turnover are TOMARK, s.r.o. (division TomarkAero), Letecke opravovne Trencin, a.s. and AERO SLOVAKIA a.s.

The Civil Aviation Authority of the Slovak Republic also provides lists of:

- Registered aircraft and operators: bit.ly/11wD23A
(Note: OPERA JET is an exclusive representative of Gulfstream Aerospace Corporation from Savannah, GA for Slovakia, the Czech Republic, Hungary, Bulgaria and Romania.)
- Companies registered to provide other civil aviation services (cargo, mail, catering, cleaning, air field): bit.ly/13jplsQ
(Note: REKMA TRADING is an authorized distributor of U.S.-based companies CRAFTCO Inc. from Chandler, AZ, International CHEM-CRETE Corporation from Richardson, TX and Keizer-Morris International from North Branch, MI.)
- Aerial work operator permit holders: bit.ly/17H8QXk
- Air operator certificates holders: bit.ly/11htel8
- Approved maintenance organizations: bit.ly/17H8QXk

Barriers

According to aviation professionals, political influence and interference in the Slovak air transport market remain the biggest barriers to entry.

Trade Events

Slovak International Air Fest (SIAF) 2013

August 31–September 1, 2013 • siaf.sk/en

Organized by the Slovenská letecká agentúra, Ltd under the auspices of the Slovak Ministries of Defense, Interior and Transportation. It offers static demonstrations of civil and military aviation as well as acrobatics. SIAF 2012 welcomed over 100,000 visitors who came to see over 100 aircraft and helicopters from 14 countries.

Trade Associations

- Association of aviation producers of the Slovak Republic: bit.ly/173TFpL
- Aviation Amateurs Association of the Slovak Republic: laa.sk
- Additionally, in Slovakia there are 42 aviation clubs and organizations: bit.ly/11i72PO

Available Market Research

- Slovak Airports Future Development 2010



South Africa

Summary

The South African aerospace sector has been well developed by US players; the best growth prospects are in the region, especially in those commodity-driven economies of the continent that are enjoying booming business travel as well as mining and exploration activities.

Market Entry

The South African commercial and general aviation environment is a mature market with a low entry threshold. The muted growth prospects in South Africa are more than off-set by the upbeat prospects in most of the continent. The South African defense environment is difficult to navigate for new-to-market entrants and requires a judicious selection of local partners that meet ascriptive supplier criteria set by defense procurement agency Armscor.

Current Market Trends

Growth of commercial and general aviation in Southern Africa is slowing down. High operating costs and a sluggish economy are taking their toll on discount airlines and general aviation. The biggest growth can be expected in other sub-Saharan African states as they ramp up their capacity to meet consistent growth in passenger travel, air freight, and utility transport. South Africa is the MRO and marketing hub for most of sub-Saharan Africa; many South African MRO service providers enjoy certification by African Directorates of Civil Aviation. The right Johannesburg-based partner can develop the rest of the region for U.S. principals.

The prospects for defense-related procurement are muted, largely due to current fiscal constraints, but remain likely in the medium term in tactical lift, maritime surveillance and certain UAV applications.

The successful hosting of the 2010 World Cup Soccer event in South Africa, attendant freight handling upgrades, and an improved regulatory and oversight framework mean that South Africa's significant airport developments have been

Statistics

Capital: Pretoria
Population: 52 million
GDP: USD 578.6 billion (est.)
Currency: South African Rand
Language: English, others

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completed for the foreseeable future. In 2010–11 the ten most important airports in South Africa (excluding Lanseria International Airport) had 4760000 annualized aircraft movements. The country's air transport sector has been forecast to grow to USD 475 million by 2015.

Current Demand

The single most important aviation procurement for 2013 will be an expected upgrade of the national carrier South African Airways (SAA) fleet amounting to as many as 33 new aircraft. The best prospects for U.S. suppliers in the civilian space are:

- Ground Support Equipment
- UAVs
- Passenger Transport Vehicles
- Cargo De-Grouping and Logistics
- Air Traffic Control
- Instrument Landing Systems

Due to a shortage of skilled technicians and a low throughput from training institutions there are definite opportunities in training systems to upgrade the skills' pool.

There is also demand for commercial and general aviation solutions:

- Engine Management Systems
- Precision Tooling
- Maintenance, Repair, and Overhaul (MRO) Certification
- Flight Training Systems

Competitors

European, Brazilian and Canadian suppliers are well established in South Africa. Used lifter aircraft from Russia and the Ukraine dominate the discount lifter business in Africa.

Barriers

There are few barriers to entry; FAA Certification of systems is often a sufficient criterion to ensure acceptance in South Africa and in the region. Few USG export controls are in place.

Trade Events

Aviation Outlook Africa 2013

July 23–26, 2013 • Johannesburg, South Africa • bit.ly/12nsjtQ

Africa Aerospace and Defense (AAD) 2014

September 17–21, 2014 • Pretoria, South Africa • aadexpo.co.za

Trade Associations

- South African Aerospace, Maritime and Defence Industries' Association (AMD), Pretoria: amd.org.za

Spain

Summary

Spain's aerospace sector is an approximately USD 8.2 billion industry, the fifth largest in Europe and employs more than 45,700 people. Looking at specific sectors, 70 percent of sales can be attributed to systems and frames, 11 percent to engines, 10 percent to equipment, and 9 percent to space. In previous years, 30% of Spanish aerospace imports came from the U.S. (USD 436.6 million in 2010). Spain's aerospace industry is primarily located in Madrid (57% employment), Andalusia (21% employment), and the Basque Country (11% employment). Spain's most important aerospace companies are world leaders in the manufacturing of small and medium-sized aircraft, aircraft gas-turbine engines, flight simulators, and aircraft and engine maintenance. The aerospace industry dedicated 15 % of sales to R&D 2010.

Currently, Spain has 49 airports and around 60 private aerodromes. According to Airbus' forecast, air traffic in Spain will almost double by 2030 and Spanish airlines' will need some 400 new passenger aircraft over the next 20 years. The total market value for the renewal and eco-efficient expansion of the Spanish passenger aircraft fleet is estimated at USD 45 billion.

The savings bank, Caja Madrid, recently merged with Valencia's savings bank Bancaja and others, forming Bankia. Bankia holds approximately 12 percent of the shares of International Consolidated Airlines Group, S.A., which is the company that was created when Iberia and British Airways merged in 2011. It is now the largest single shareholder of the airline company.

In 2012, Spanair, one of the largest airline carriers in Spain, suspended its operations due to financial difficulties. As a result, it has since filed for bankruptcy, sparking a government investigation.

Statistics

Capital: Madrid
Population: 47,370,542
GDP: USD 1.407 trillion
Currency: Euro (€)
Language: Spanish

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The landmark agreement on Cooperation in the Regulation of Civil Aviation Safety between the European Union and the United States that took effect in May 2011 will increase safety, create opportunities for businesses and boost trade in aeronautical products and services, while also diminishing cumbersome technical and administrative procedures for the recognition of certificates on both sides of the Atlantic.

Recently, due to stiff competition from low-cost airlines like Ryan Air and new high-speed trains like the AVE, Iberia decided to create a low-cost option for its customers called Iberia Express. The focus of the new project will be on destinations within Spain and Europe. The move, however, has been opposed by many pilots and cabin crew members who fly and operate Iberia planes and periodic strikes have impacted Iberia's operations. The new section of Iberia started operations on March 25th, 2012.

Market Entry

Foreign firms doing business in Spain enjoy free movement of capital in a market economy where business profits can be transferred without restrictions. In general, foreign products are imported by an irrevocable letter of credit. Other forms of payment, however, can be negotiated when a continued relationship between exporter and importer/ distributor exists. U.S. exporters are advised that market access will be most successful when forming partnerships with Spanish aerospace firms. Current Dollar/Euro exchange rate favors U.S. exporters to Spain, as U.S. products are cheaper than their European competitors.

Current Market Trends

U.S. exporters are clear leaders in the Spanish airplane and transportation import sector. In the sector of Airplanes & other Aircraft greater than 2,000kg and less than 15,000kg, U.S. imports fell approximately USD 44 million from 2009 to 2010. Despite this slight decrease, US exports in this sector still account for 36% of the total market share. Markets not dominated by U.S. exporters during 2010 were airplanes & other aircraft larger than 15,000kg, helicopters and parachutes and parts thereof. In these markets, U.S. exporters captured between 2 and 18 percent market share, respectively, facing stiff competition from Italian, French and Chinese exporters.

Madrid's Barajas airport serves as Europe's gateway to Latin America. In the past decade, air traffic at Barajas has doubled and Spanish airlines have been forced to upgrade their ageing fleets to meet increased demand. This new development will lead to a sharp rise in demand for spare parts.

The Spanish government's Strategic Plan for the aeronautical industry 2008–2016 aims to reinforce traditional technologies, to diversify its scope to innovative areas such as UAVs and other propulsion systems, and to reinforce the subsystem and auxiliary industry. For example,

UAVs have become popular as tools for Spain and its fight against forest fires. Spain has one of Europe's largest air-firefighting units due to the high number of forest fires each year.

Current Demand

Current best prospects for U.S. exporters are: avionics equipment, CNC (computerized numerical control) specialized machinery and software, ground support equipment, landing gear, aviation fuel, and pre-assembled components and parts. There is an increasing demand for air transport companies that offer the following services: executive flights, air ambulance, medical flights, corporate flights, air cargo, aerial photography, charters, registration and licensing of airplanes and maintenance service.

Competitors

- **IBERIA**, Spain's largest passenger airline and market leader for travel between Europe and Latin America. The company that resulted from the merger of Iberia and British Airways, International Airlines Group (IAG) has reported a solid set of results in its first year as a combined entity of British Airways (BA) and Iberia (IB), with a net profit of €555 million (USD 745.5 million) and an operating profit of €407 million. IBERIA operates a leading maintenance company, IBERIA MANTENIMIENTO. Currently, it is ranked ninth in the world in maintenance and engineering. It is the second aeronautical company in Spain based on revenue and staff, and the first company in high tech, repair and modification of aircraft.
- **AIRBUS ESPAÑA**, based in Getafe, Puerto Real and Illescas produces important parts for various Airbus models. These sites use groundbreaking technologies, such as automatic tape layering, resin transfer molding and fiber placement.
- **ALESTIS AEROSPACE**, a Seville-based aerostructure supplier and manufacturer of composite materials was established in 2009 from the merger of several small aeronautic companies around Spain with support from the regional government of Andalusia. Spain's financial crisis and credit crunch compelled the company to file for bankruptcy in 2012 alarming companies such as its largest customer EADS that depend on Alestis for composite ribs, panels and skins for the Airbus 320, A380 and the A350 project. In early 2013 the company was restructured and laid off 234 Spanish workers
- **AERNNOVA** activities involve all areas from conceptual design to testing, certification, production, and product support of large aero structures and aircraft interior components, both in light alloy and composite materials. AERNNOVA, in addition to its headquarters in Vitoria, has a subsidiary in Mexico and an engineering center in the U.S (Michigan) Aernnova (Michigan).

- ITP is present mainly in the aircraft gas-turbine engine industry, where it is involved in R&D, design and maintenance. In 2009, ITP's sales exceeded USD 700 million, a noticeable jump from previous years.
- AIR EUROPA has been a member of the Sky Team alliance since 2007. AIR EUROPA currently flies to Spain, Europe, North Africa, the Caribbean, and South America. It is currently the third largest airline in Spain, after Iberia and Vueling.
- VUELING AIRLINES began operations in 2004 at its main operations base in Barcelona. In July 15, 2009, Vueling and IBERIA low-budget carrier, Clickair, merged. Since this merger, Vueling has become the second largest Spanish carrier: In 2010, Vueling flew more than 11 million passengers.
- GESTAIR Group is a private aviation innovator in pioneer and the biggest player in the Spanish corporate aviation industry. It boasts of a fleet of over 30 airplanes but it operates a total of 81 (including private jets owned by Spanish and international individuals).

Barriers

U.S. firms must pay higher import duties in Spain than do their European counterparts. However, U.S. firms can compete based on lower production costs, high quality and a favorable exchange rate. Import duties are determined on a case-by-case basis and can be found at www.taric.es.

Trade Events

Aerospace and Defense Meetings Sevilla 2014

May 5–8 2014 • Sevilla, Spain • bciaerospace.com/sevilla

Bi-annual show for the aerospace and defense industries. At the last edition held in 2012, 300 companies from 25 countries participated in 6,000 one-on-one meetings. U.S. companies interested in participating in the show are encouraged to notify the U.S. Commercial Service office in Spain.

Sweden

Summary

The Swedish aerospace industry is considered strategically important and over the years Sweden has managed to build an internationally recognized world-class industry. Leading companies within this sector are Volvo Aero Corporation, Saab and the Swedish Space Corporation, which are of great importance to U.S. suppliers. U.S. parts and components are frequently used in the production of Swedish aerospace products.

Strong market potential exists for U.S. suppliers with quality products in most areas of aircraft, avionics, supply of technology, as well as aircraft parts and components. Exporting U.S. products to the Swedish market is a straightforward process as there are no trade barriers or market impediments.

In 2012, Swedish imports of aircraft, spacecraft and parts was estimated at USD657 million while exports were estimated at USD603 million. As mentioned above, U.S. parts and components are frequently used in the production of Swedish aerospace products and U.S. suppliers clearly dominate the import market—currently with 75 percent of imports.

Market Entry

Exporters sometimes employ agents/distributors to represent them. However, the major buyers often prefer to operate without going through a middleman in order to save on costs. For early information on sales opportunities many exporters employ local consultants to report on market trends and demands. In the sales process, it is common that the exporter offers to assist in the required certification procedures and prepares the appropriate documentation including manuals and pilot instructions.

Statistics

Capital: Stockholm
Population: 9.4 Million
GDP: USD 395.8 billion
Currency: SEK
Language: Swedish

Contact

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Current Market Trends

The market demand for aircraft and aircraft parts is closely linked to the volume of airline passenger traffic, which, following the economic downturn fell worldwide in 2009. Since then, the business travellers have returned, which is shown in increased travel between the three major cities in Sweden: Stockholm, Gothenburg and Malmo.

Current Demand

The market demand for aircraft and aircraft parts is closely linked to the volume of airline passenger traffic. Following a decrease of 9 percent in 2009, the business travelers have returned, which is shown in an increased travel between the major cities Stockholm, Gothenburg and Malmo. In total, there were 32.4 million passengers in scheduled and charter traffic at Swedish airports during 2012, with Stockholm-Arlanda and Gothenburg-Landvetter seeing the largest volume of traffic.

The largest single buyer of U.S. aircraft and parts is the SAS Group, which is the main airline in the Nordic region. In addition to SAS, there are several smaller airlines operating in Sweden: TUI Fly Nordic, Malmo Aviation, Novair, West Air Sweden, Nextjet and Air Sweden.

Competitors

Most of the major international manufacturers of aircraft and parts are represented in Sweden. The Swedish aerospace industry is well developed and is active in research, development and production in most aerospace segments, including engine production, avionics, space applications, and communications and positioning systems. Although the Swedish aerospace industry can be seen as a competitor, it is also a major buyer of U.S. products.

The U.S. was the largest supplying country in 2012 with 75 percent of the imports (USD499 million), followed by South Africa (USD21 million) and the UK (USD18 million).

Barriers

Exporting U.S. products to Sweden is a straightforward process as there are no trade barriers or market impediments.

There is no customs duty for most civil aircraft and parts. A small duty applies for some accessories, e.g. parachutes incur a duty of 2.7 percent.

In order to be registered in Sweden, new aircraft need to be approved and certified by the European Aviation Safety Agency (EASA). The requirements are similar to those in the U.S.

Trade Events

CEAS 2013, “Innovative Europe”

September 16–19, 2013 • Linköping, Sweden • www.ceas2013.org

A joint event merging the biennial CEAS European Air & Space Conference and the eight Congress on aeronautics and astronautics arranged each third year by the Swedish Society of Aeronautics and Astronautics. This forum will be aimed at exchanging information in the wide field of aerospace, and also a unique forum and meeting place for socializing and networking among colleagues and friends from aerospace industry, institutions, academia and associations.

Many Swedes also visit large international shows as Paris Air Show in France and Farnborough Air Show in the U.K. The NBAA show in the U.S. and the EBACE show in Switzerland are also popular.

Available Market Research

- Sweden: An Overview of the Aerospace Market, June 2010



Thailand

Summary

Opportunities for the sale of aviation and airport and ground support equipment in Thailand are prevalent for U.S. companies, since U.S. aviation technology is well received by Thai buyers. Thailand is a net importer of aviation equipment, including aircraft, parts, and maintenance services. The demand for aircraft and associated parts in Thailand is also increasing. In the next six years, the national flag carrier, Thai Airways, is planning to renew its fleet of aircraft along with the expansion of Thailand's major airport, Suvarnabhumi, where billions of U.S. dollars will be spent on aircraft, parts, airport construction and ground equipment.

Market Entry

Thailand relies on imported aerospace and defense products and is a net-importer of aviation equipment, including aircraft, parts, maintenance services, and airport/ground support equipment. The demand for aircraft and parts in Thailand is also increasing as the national flag carrier, Thai Airways, is renewing its fleet of aircraft, along with the Thai military's modernization plans.

Over the past four years, the annual Thai defense budget has ranged from USD 4–6 billion. It will fund the long-awaited development plan of the Thai Armed Forces including aircraft, related parts, equipment, and maintenance services.

Current Market Trends

Current projects include the expansion of existing airports including the Suvarnabhumi (SBM) Airport and the Phuket Airport; the satellite terminal building at the SBM is to be constructed by 2017. Phuket Airport plans to build a second terminal, as well as expand the runway to accommodate larger airplanes.

Passenger traffic to six major Thai airports has increased steadily with a record-high 74 million passengers in 2012, and is expected to reach 83 million passengers in 2013. Bangkok's Suvarnabhumi airport has already surpassed Hong Kong, and is now the six largest airport (in terms of air traffic) in the world.

Statistics

Capital: Bangkok
Population: 66 Million
GDP: USD 345.6 billion
Currency: Thai Baht
Language: Thai Baht

Contact

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The Thai military's aviation units are undergoing modernization programs with the support of the Thai government. They continue to develop and upgrade their air combat capabilities. Prioritizing maintenance requirements versus new procurements will be their critical tasks. The Bangkok's first airport, Don Muang, will continue to be refurbished and serve as the primary domestic hub.

Current Demand

- Aircraft, communication equipment, avionics, and associated parts used in maintaining and servicing aircraft.
- Airport and ground support equipment and services, including safety and security, passenger and baggage screening, ground support vehicles, and airfield lighting.
- Clean energy and clean technology equipment for the aviation industry.

Competitors

The Thai aerospace and defence markets attract equipment manufacturers from all over the world. The main suppliers come from the United States, the UK, Europe, China, and Israel. The United States has been one of the largest suppliers of defence equipment to Thailand, through both Foreign Military Sales (FMS) and Direct Commercial Sales (DCS) channels. In recent years, European countries such as France, Sweden and Italy have become more prominent and competitive aerospace equipment suppliers to Thailand, providing the GRIPEN fighter jets and avionics to the Thai Air Force.

However, Thailand puts a great deal of emphasis on inter-operability between its armed forces and U.S. military forces, as evidenced by the joint military exercises held annually between the two countries—Cobra Gold and CARAT (Cooperation Afloat Readiness and Training).

Barriers

Thai buyers are price-conscious, given that the major buyers are mostly government-owned agencies with a limited budget. International bidding competition is common practice for the Thai civil aviation industry. For procurement of replacement parts and supplies, Thai buyers prefer placing orders directly with manufacturers/suppliers.

Trade Events

Defense and Security 2013

November 4–7, 2013 • Bangkok, Thailand • asiandefense.com

One of the fastest-growing military exhibitions in the region. The show is based on four unique concepts: Exhibiting, Technical and Special Seminars/Presentations, Live Demonstrations, and Networking. For 2013, special focus is on homeland security technology and state-of-the-art solutions. This event is an excellent business networking venue to mingle with international military officers and delegations, especially from ASEAN countries.

Turkey

Summary

Turkey is an emerging aerospace and defense (A&D) hub for markets in Europe, the Middle East, Europe, the Caucasus, and North Africa. With a population of nearly 80 million people and, given its proximity to developed and emerging markets, and growing economy and population base, Turks have come to rely on domestic and international air service increasingly over the past few years.

Turkey has many airports that are open to domestic and international flights. There are a total of 46 airports in Turkey (68 total when military airports are included), 24 of which serve for international flights. Istanbul Ataturk Airport serves almost 40% of the total air traffic in Turkey

Compared to a decade ago, there has been a 372% increase in domestic passengers, an increase of 77% in international passengers and an increase of 153% in total (including domestic & international). The growth of the economy has also boosted the aviation industry, which is reflected in skyrocketing total passenger figures. Turkey's strategic location ensures unrivaled advantages in airline, MRO, cargo and air taxi services in the region. The construction of new airports and expansion of the existing ones also provide export opportunities for manufacturers of ground control equipment, safety/security systems, communications equipment, runway and landing lighting and automated landing systems.

Market Entry

Market Entry is pretty straight forward like any other European market. In conjunction with its January 1, 1996 accession to the European Union's customs union, Turkey has adopted a new import regime. Since April 2004, all electronics need to be CE certified. Most Turkish civil aviation products fall under the CE marking requirement.

Statistics

Capital: Ankara
Population: 80 Million
GDP: USD 783 billion
Currency: Turkish lira (TRY)
Language: Turkish

Contact

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All electronic and electrical goods and any product emitting radio transmission frequencies are such items. Software and some mechanical items do not require a CE marking. FAA or ICAO second hand certified parts and re-furbished aerospace parts are allowed and can be used without further regulation or restriction.

Current Market Trends

Construction of new airports and expansion of the existing ones also provide export opportunities for manufacturers of ground control equipment, safety/security systems, communications equipment, runway and landing lighting and automated landing systems. Turkey has many modern airports that are open to international and domestic flights. The major international airports are Atatürk in Istanbul, Antalya, Esenboğa in Ankara and Adnan Menderes in Izmir. In addition to the 46 airports in Turkey, the government intends to construct new airports in Bingöl, Iğdır, Hakkari Yüksekova, Şırnak, Kütahya-Afyon-Uşak, Istanbul, Çukurova and Diyarbakır. The cost for airport modernization and construction is projected around TL 4 billion.

New Istanbul Airport

On January 24th, State Airports Authority released an RFP for the construction of a new Istanbul Airport under a BOT project. The airport will be constructed on an area of around 76.5 million square meters on the Black Sea Coast Line on the European Side between Yeniköy and Akpınar. The airport will have a more than 110 million passenger/year capacity, which may gradually be increased to 150 million passengers per year if need be. The operation period will be 25 years and the total cost is expected to be around 7 billion Euros excluding financing costs. Companies will compete over rent, which will be paid to DHMI for the 25 year operational period. The consortium with the highest offer will be awarded the contract. The tender date is May 3, 2013.

Space Projects

In November 2011, The government set up a Space Technologies Directorate under the supervision of the Transportation Ministry. It is intended to become the country's first National Space Agency. Space is a priority area for scientific and technological progress and Turkey has been pursuing 17 satellite programs which are expected to come into orbit from 2012 to 2020. Over the next five years satellite contracts will amount to USD 2 billion (projected).

Current Demand

- Aircraft, aircraft parts
- MRO services (maintenance, repair, and overhaul, including airframe/component maintenance, rotatable logistics and/or fleet management options)
- Pilot Training, equipment & software
- Radar and flight control personnel training

- Airport ground support and ancillary (support) systems (integrated computer systems for air traffic control, engineering and operations)
- ILS Systems/automated landing systems
- Navigation aids
- Airport Security Systems

Subsectors

- Large Civil Aircraft, Regional Aircraft
- Business and General Aviation
- Helicopters
- Engines
- Maintenance, Repair, & Overhaul
- Manufacturing & Design
- Avionics
- Space

Main Competitors

Major international companies include the Netherlands-based EADS (and its French subsidiary Airbus), BAE Systems (UK), Finmeccanica (Italy), Bombardier (Canada) and Brazil's Embraer.

Almost all civil aviation equipment is imported from the United States, Europe or Japan. U.S. air traffic control equipment manufacturers will find traditional rivals in the Turkish market. Companies including Thales and Selex compete for air traffic control and Siemens and Heimann for x-ray technology that can often be found at Turkish airports.

Every 3–4 years, as the technology evolves, DHMI is looking to renew systems that are already in use, including software. Most of the companies in these markets are European, with a recent push from Korean firms. Turkey is also part of Eurocontrol, a European Airports Association that pools money for upgrades in security and equipment. DHMI consistently upgrades its systems and is reimbursed by Eurocontrol, easing financing constraints.

Trade Events

IDEF 2013

May 7–10, 2013 • Istanbul, Turkey • idef13.com/en
Regional event covering defense and aviation.

Ukraine

Summary

Ukraine has an aging fleet of Soviet designed aircraft, representing good opportunities for U.S. aircraft and parts. Even though Ukraine has a well developed aerospace industry, local aircraft production is insignificant due to a lack of government financing.

The State-owned Antonov Corporation is the major Ukrainian designer and manufacturer of civilian aircraft. It includes the Antonov Design Bureau, Kyiv Aviant Factory, Kharkiv Aircraft Production Company, and Kyiv Aircraft Repair Plant No. 410. Because of the lack of financing and interrupted supply chains (mainly from Russia), production output has been minimal over the past decade. However, recent orders for new regional jets AN-148 and the AN-158 aircraft by Ukrainian, Russian and Kazakhi regional airlines might revive serial production, thereby creating market opportunities for U.S. manufacturers of high-tech machine tools and smaller aircraft components, avionics, navigation systems and other large integrated components.

Ukraine does not manufacture helicopters, which are in demand with various Ukrainian agencies and private companies. The Ukrainian Civil Aviation Authority has certified for use in Ukraine the following Western helicopter types: Bell-430, 429, and 407; Eurocopter-130, Augusta, Enstrom-480, Robinson 44, 44-II Raven.

In 2011, the major suppliers of aircraft and parts to Ukraine were Russia, with 55% of total imports, followed by Germany (10.4%), and the United States (10%). In 2012, Brazil is expected to become a major player in the Ukrainian market since recently signing a USD 400 million deal with Dniproavia for the purchase of 10 Embraer-190's with an option for another five.

There are 43 domestic air carriers, five of which fly internationally. While the occupancy rate is relatively high, the yield is bad due to the high fuel costs and landing fees.

Statistics

Capital: Kyiv
Population: 45.559 million
GDP: USD 165.24 billion (est.)
Currency: Ukrainian Hryvnya (UAH)
Language: Ukrainian

Contact

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Market Entry

Basic applicable market entry strategy is through an authorized agent or distributor.

The key to marketing to the industrial sector is based on the ability of the agent or distributor's regional network.

Problems have arisen for U.S. companies that sell through their Euro-zone distributors. Unfavorable currency exchange rates and higher European taxes and/or duties may decrease the price competitiveness of U.S. products. Additionally, working through European distributors is perceived by many Ukrainian businesses as an additional layer of bureaucracy and overhead cost they are reluctant to absorb. Ideally, a U.S. company interested in conducting a successful business operation in Ukraine should have an in-country representative and an established network of distributors and sellers. While considering entry into the Ukrainian market, interested American companies may contact the Ukrainian Logistics Association (ula-online.org), whose members include major Ukrainian and international logistics companies.

Current Market Trends

There is a trend to invest in smaller, more fuel efficient aircraft like the Embraer, Falcon, Cessna Citation and the Gulfstream to achieve operational efficiency and to meet market demand.

Current Demand

Demand for additional new passenger aircraft is declining due to the economic downturn, with the exception of replacements. There are 43 domestic air carriers, five of which fly internationally. While the occupancy rate is relatively high, the yield is bad due to the high fuel costs and landing fees.

There is a demand for additional passenger lease emergency medical and rescue helicopters. In addition, the Ukrainian State Border Control Service is expected to place an order for up to 24 patrol helicopters in 2012–2013. The Ukrainian Civil Aviation Authority has certified for use in Ukraine the following Western helicopter types: Bell-430, 429, and 407; Eurocopter-130, Augusta, Enstrom-480, Robinson 44, 44-II Raven.

Competitors

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Barriers

Ukraine continues to create new and maintain existing barriers to imports, including unpredictable discriminatory fees and product certification regimes. Non-tariff barriers include non-transparent standards, costly and cumbersome certification procedures, import licenses.

Trade Events

Kyiv International Aviation and Space Salon AVIASVIT-XXI Location

Last week of September 2014 • Kyiv, Ukraine • aviasvit.com.ua/en

Modern aviation and space machinery, units, and components, airport equipment and services, technology, equipment and materials for machine-building, aviation show with demonstration flights of airplanes, gliders and other aircraft.

Trade Associations

- State Aviation Administration of Ukraine (certification, licensing, airworthiness): avia.gov.ua
- Ministry of Infrastructure of Ukraine: mtu.gov.ua
- The Ukrainian State Border Control Service: dpsu.gov.ua/en
- Ukraine International Airlines: flyuia.com
- Aerosvit Airlines: aerosvit.com
- Dniproavia: dniproavia.com/en
- Wind Rose: windrose.aero/eng
- ANTONOV Company: antonov.com
- State Space Agency of Ukraine:
www.nkau.gov.ua/nsau/nkau.nsf/Main1E/indexE



United Kingdom

Summary

The United Kingdom has the world's sixth largest economy and the third largest in Europe. Highly developed, sophisticated, and diversified, the UK market is the largest in Europe and the fifth largest in the world for U.S. goods exports. The UK is the second largest global market for U.S. services exports after Canada, and U.S. exports of goods and services combined are valued at more than USD 100 billion annually. The U.S.-UK investment relationship is largest in the world with a cumulative bilateral stock in direct investment valued at nearly USD 1 trillion. The UK aerospace industry is the second largest in the world behind the U.S. Total UK civil aerospace sales in 2011 were USD 17.7 billion. The UK does not produce any large civil aircraft and most domestic production is exported. These exports are made up in large part by wings for Airbus and Rolls-Royce aircraft engines. The aerospace industry is a major category for U.S. exports in the United Kingdom. U.S. exports to the UK of civil aircraft, aircraft engines, and aircraft parts were USD 6.2 billion in 2012.

Market Entry

The UK has the world's second largest aerospace industry. It is a highly developed industry in which indigenous players such as BAE Systems, GKN and Rolls-Royce; European players such as Airbus, Finmeccanica and Thales; and U.S. firms such as Boeing, GE, Spirit and UTC are all highly competitive. The aerospace supply chain is well-integrated with the primes, who are all looking at rationalizing the number of their suppliers. This means that U.S. suppliers looking to enter the market may need to look at a lower tier of the supply chain than they might usually. U.S. suppliers should consider using a local distributor or agent familiar with the key players in the market.

Statistics

Capital: London
Population: 63 million
GDP: USD 2.43 trillion (est.)
Currency: Pound Sterling (£/GBP)
Language: English

Contact

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Current Market Trends

Despite the current weak economic conditions in Europe, global air travel is forecast to nearly double by 2030. This is expected to create demand for an additional 9,500 helicopters by 2020, and 27,000 large civil aircraft, 24,000 business jets and 5,800 regional jets by 2030. The UK's position in the global aerospace market means it should be well-placed to benefit from this demand. The UK's Aerospace Growth Partnership, which comprises the UK government and leading aerospace companies in the UK, is focusing on maintaining its position in the global market, broadening its base around the world and concentrating on the single aisle aircraft market.

Current Demand

GDP growth in mature western markets is likely to remain weak for some time. However, BRIC nations are forecast to retain strong growth. The perception is that there remain good opportunities for the aerospace industry, but there are still concerns that the ongoing crisis in the euro-zone area could further damage confidence. Overall, however, the UK civil aerospace industry should continue to do well supplying into both Boeing and Airbus.

Competitors

The major non-U.S.-owned civil aerospace manufacturers in the UK are: Airbus (wings), Bombardier (structural components), Finmeccanica (helicopters), Rolls-Royce (engines), Safran (undercarriage) and Thales (electronics/systems). A|D|S, the UK's aerospace and defence trade association, has about 2,600 member companies.

Barriers

With such a well-integrated supply chain, new U.S. suppliers must demonstrate a clear competitive advantage if they are to be successful in the UK. With most of the major aerospace manufacturers in the UK looking to streamline their supply chains, there are fewer opportunities to supply and these will tend to be further down the supply chain. As long as suppliers are compliant with EU regulations/standards, they should not encounter any significant technical barriers to entry.

Trade Events

Helitech International

September, 24–26, 2013 • London, UK • helitechevents.com

The 2011 show attracted almost 4,000 attendees from 59 countries. The event will now be held annually, with 2013 confirmed as ExCeL London and the 2014 edition to be held in Berlin.

Farnborough International Airshow

July 14–20, 2014 • Farnborough, UK • farnborough.com

Farnborough International Airshow (FIA) will be the largest aerospace trade show in the world in 2014. Nearly 300 U.S. companies exhibited at FIA 2012, many of them in the U.S. Department of Commerce-certified U.S. Pavilion.

Trade Associations

- ADS Group: adsgroup.org.uk
- British Helicopter Association: britishhelicopterassociation.org

Available Market Research

- export.gov/unitedkingdom/doingbusinessintheuk
- export.gov/unitedkingdom/servicesforuscompanies/ukmarketresearch

Vietnam

Summary

Aviation is one of the top priority sectors for development by the Government of Vietnam as it plays a critical role in the country's national economic growth. The aviation sector is overseen and managed by the Civil Aviation Administration of Vietnam (CAAV), which reports to Vietnam Ministry of Transport.

According to the CAAV, Vietnam's overall aviation market in 2012 has a total throughput of 25.3 million passengers, a year-on-year increase of 6.5 percent and a total throughput of 527,000 tons of cargo, a year-on-year increase of 10.9 percent. CAAV projected that the market would grow at 9.8 percent for passenger volume and 9.9 percent for cargo load in 2013. This continued strong market growth presents opportunities for U.S. companies as Vietnam makes large investments in airport construction and upgrade, aircraft fleet expansion, air traffic service enhancement and aircraft maintenance, repair and overhaul service development.

Market Entry

As the major aviation project sponsors and buyers are Airports Corporation of Vietnam (ACV), Vietnam Airlines Corporation (VNA) and other domestic airlines, and Vietnam Air Navigation Service Corporation (VANSCORP), American companies are recommended to establish close relationships with these entities. In addition, American firms are recommended to work with local agents or representatives to maintain and develop those relationships as well as explore and pursue business opportunities effectively.

Statistics

Capital: Hanoi
Population: 90 million (2012)
GDP: USD 138 billion (2012)
Currency: Dong
Language: Vietnamese

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Current Market Trends

CAAV estimates that Vietnam would require a huge investment of about USD 15 billion to fulfill its aviation sector development plan by 2020. Of this, USD 8 billion is needed chiefly for aircraft fleet expansion, USD 5 billion for airport construction and upgrade, and the remaining USD 2 billion for airport operations and air traffic management.

Air Fleet Development

According to its development plan to 2020, VNA plans to invest more than USD 8 billion in expanding and upgrading its aircraft fleet as well as other related facilities. Funding for aircraft fleet expansion mainly comes from the VNA and government budget and bond sales, as well as foreign commercial loans with sovereign guarantees.

According to VNA's fleet expansion plan approved by the Vietnamese Prime Minister in October 2007, this national air carrier, in the period of 2006–2015, is expected to purchase 43 aircraft including twenty A321s (150 passengers), eight B787-8s (280 passengers), five ATR72s (70 passengers), and ten A350s (300 passengers).

Airport Development

At present, the government budget can only meet about 20 percent of the total investment required for airport development. Raising sufficient funds for this development is an immense challenge for Vietnam now and in the future. During the period 2012–2020, several other airports are planned to be constructed or upgraded including Long Thanh (International), Chu Lai (Cargo), Cat Bi (Hai Phong), Quang Ninh (International). The lion's share of the investment in airport projects is expected to come from Official Development Assistance (ODA) loans from foreign governments such as Japan as well as financing from the private sector. Currently, ACV operates and manages a total network of 22 airports in Vietnam, including 8 international and 14 domestic ones.

Air Traffic Management

Vietnam Air Navigation Service Corporation (VANSCORP) will spend over USD 67 million on its 46 new and ongoing air traffic management projects from 2012 to 2015. Funding for these projects comes mainly from VANSCORP's own budget accumulated from its business activities.

Maintenance, Repair and Overhaul (MRO) Services

Market demand for MRO services is expected to increase significantly as there are currently limited local MRO capabilities in Vietnam and all aircraft operators in Vietnam are planning to expand their fleets considerably in coming years. Vietnam Airlines currently operates a fleet of 70 airplanes and is planning to expand its fleet to 105 by 2015 and 150 by 2020. Jetstar Pacific, Air Mekong and Viet Jet Air currently operate 7, 4, and 1 and are planning to expand their fleets to 15, 12, and 3 by 2014 respectively.

Current Demand

As Vietnam is looking to fulfil its ambitious aviation development plan by 2020, the country has high demand for architectural, engineering and construction services, construction management services, airport ground support equipment, air traffic management, security equipment, telecommunication systems, aircraft and parts, and training services.

Competitors

Competition facing American aviation companies in Vietnam include but is not limited to companies from France (Airbus, Thales, Eurocopter), Austria (Rosenbauer), Sweden (Safegate), Italy (BAI), Finland (Jotron, Bronto Skylift), and Japan (JAC, Shinmaywa Industries).

Barriers

American aviation companies face two major challenges in doing business in Vietnam. Firstly, most procurement in key airport projects in Vietnam is funded by ODA loans, which tie the purchases of goods and services to suppliers from donor countries. Secondly, it requires a great deal of time and effort for U.S. firms to understand and follow complicated local procurement practices under the Vietnamese Tender Law.

Trade Events

U.S.-Vietnam Aviation Cooperation Working Group Conference

September, 25–26, 2013 • Ho Chi Minh City, Vietnam

The fourth conference organized by the U.S. Commercial Service in Vietnam since May 2012. This event aims to help U.S. aviation firms to gain market exposure and develop relationships with Civil Aviation Administration of Vietnam, Airports Corporation of Vietnam, Vietnam Airlines and other airlines as well as many important aviation agents.

Singapore Air Show 2014

February 11–16, 2014 • Singapore • singaporeairshow.com.sg

The Singapore Airshow is Asia's largest and one of the top three most important air shows in the world. The latest state-of-the-art systems and equipment are displayed at the show by top aerospace companies around the world.

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[CS Global Aerospace Team \(export.gov/industry/aerospace\)](http://export.gov/industry/aerospace)

Information on industry-specific trade events, trade leads, newsletters, and more.

[Trade Finance Guide \(export.gov/tradefinanceguide\)](http://export.gov/tradefinanceguide)

A quick reference for U.S. exporters. Offers the basics of numerous financing techniques, from open accounts, to forfeiting, to government assisted foreign-buyer financing.

[A Basic Guide to Exporting \(export.gov/basicguide\)](http://export.gov/basicguide)

First published in 1938, the recently-revised Basic Guide is designed to help U.S. businesses, especially small and medium-sized enterprises, face the challenges of today's global economy.

[Free Trade Agreements \(export.gov/fta\)](http://export.gov/fta)

Learn how Free Trade Agreements can help make exporting easier for you.



Professional Trade Compliance Consulting Services

Compliance Assurance helps companies in the aerospace industry comply with United States export and import regulations, including the International Traffic In Arms Regulations (ITAR), Export Administration Regulations (EAR), Foreign Trade Regulations (FTR) and Customs and Border Protection (CBP) regulations. We are a trade compliance consulting firm that can assess your compliance with the myriad of trade regulations and develop customized export compliance program to assure your company's compliance with the laws and regulations affecting the aerospace industry.

Our consultants are industry practitioners and former government employees who assist aerospace companies with commodity jurisdiction and classification, Department of State, Directorate of Defense Trade Controls registration, licensing and agreements, technology control plans, brokering activities, Department of Commerce licensing, training, documentation and with countless other import and export compliance challenges.

Export control reforms currently underway are dramatically affecting the aerospace industry. Commodities moving from the U.S. Munitions List to the Commerce Control List will change the way aerospace products are classified and licensed. Compliance Assurance can help you stay abreast of these and other regulatory changes affecting the aerospace industry. For more information, visit us on the web at www.WeAreCompliant.com. Are you compliant?



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Subsector Reference Chart

Rating Definitions	Commercial Aircraft	Business Aircraft	Helicopters	UAVs, components and payloads	Aircraft and Engine Parts	Aircraft Interiors	Airport and Ground Support Equipment	Aviation Services	Maintenance and Spare Parts	Airborne Equipment and Systems	Pilot and Nav aids	Composite Materials	Spacecraft, Satellites and Parts	Subcontracting
Rating Definitions 1 Little to no probability of success for U.S. exporters 2 More challenges than opportunities 3 More opportunities than challenges 4 Very high probability of success for U.S. exporters														
Europe														
Austria	3	4	2	4	4	3	3	3	4	3	3	3	4	3
Belgium	3	3	2	4	3	3	3	4	4	3	3	4	3	4
Czech Republic	2	3	2	3	3	2	3	2	3	3	2	3	3	3
Denmark	2	3	3	3	3	2	3	3	3	2	3	2	1	3
France	3	2	1	2	3	3	2	1	2	3	2	3	1	3
Germany	3	3	3	3	3	3	2-3	2-3	2-3	4	4	3	2-3	3
Greece	3	2	3	3	3	1	2	3	2	3	2	2	3	3
Ireland	3	2	2	1	3	3	3	2	3	2	3	3	1	1
Italy	3	3	2	2	3	3	3	3	3	3	3	3	2	3
Kazakhstan	3	4	3	4	4	3	3	2	3	3	2	3	3	2
Netherlands	3	3	2	4	3	3	3	3	3	3	3	3	2	2
Norway	3	3	4	4	4	2	2	2	4	3	2	2	3	2
Poland	3	3	3	2	3	3	3	3	3	3	3	3	1	3
Portugal	2	3	3	2	4	3	3	4	4	3	3	3	4	3
Romania	2	3	2	2	3	2	3	3	4	3	3	3	4	3
Russia	3	3	3	4	3	4	3	1	2	3	2	3	2	2
Slovakia	1	2	2	1	1	1	2	2	2	1	1	1	1	2
Spain	2	2	2	3	2	2	2	2	2	2	2	2	3	2
Sweden	3	3	3	3	3	2	2	2	3	2	3	2	3	2
Turkey	4	4	4	3	4	3	4	3	4	3	4	4	4	2
Ukraine	3	2	4	3	4	2	3	3	3	2	3	3	3	2
United Kingdom	3	3	3	2	4	2	3	3	3	2	3	3	4	2
Western Hemisphere														
Brazil	3	4	3	3	3	4	3	4	4	3	3	3	3	3
Canada	4	3	3	2	3	2	3	2	4	3	3	4	3	3
Colombia	3	3	2	3	3	2	3	3	4	4	3	2	2	2
Mexico	3	4	3	2	3	2	3	3	4	2	2	3	1	2
Panama	4	3	3	3	3	1	4	4	3	3	2	2	1	3

Rating Definitions 1 Little to no probability of success for U.S. exporters 2 More challenges than opportunities 3 More opportunities than challenges 4 Very high probability of success for U.S. exporters	Commercial Aircraft	Business Aircraft	Helicopters	UAVs, components and payloads	Aircraft and Engine Parts	Aircraft Interiors	Airport and Ground Support Equipment	Aviation Services	Maintenance and Spare Parts	Airborne Equipment and Systems	Pilot and Nav aids	Composite Materials	Spacecraft, Satellites, and Parts	Subcontracting
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Middle East/Africa

Jordan	2	2	2	2	3	2	3	3	3	3	3	2	3	3
Saudi Arabia	3	3	2	4	4	2	2	3	4	3	3	4	3	3
South Africa	4	3	2	4	4	2	3	3	4	3	3	4	2	2

Asia/Southeast Asia

Australia	3	3	3	3	3	3	3	3	3	3	3	3	3	3
China	4	4	4	1	3	3	3	3	4	3	3	3	1	2
Hong Kong	3	4	3	1	3	3	3	3	3	3	3	3	2	2
India	4	2	2	2	4	3	3	3	4	3	2	3	3	2
Indonesia	4	3	4	2	4	3	3	3	4	3	2	3	4	2
Japan	4	3	4	3	3	3	3	2	3	3	3	3	3	3
Republic of Korea	3.5	3	2	4	4	2	3	1	3	2.5	3	3	4	2
Philippines	4	4	4	3	3	3	3	2	3	3	3	3	1	1
Singapore	3	2	2	3	3	2	3	3	4	3	3	3	2	3
Thailand	3	2	3	3	3	1	3	3	3	2	3	2	1	1
Vietnam	3	3	3	1	4	3	4	3	3	3	3	1	1	3

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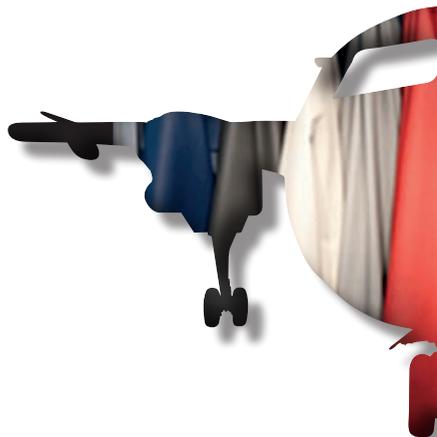
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