BEST EXPORT MARKETS

FOR

U.S. AIRCRAFT AND PARTS, 2004

Best Export Markets for U.S Aircraft and Parts was compiled by Valdeci Cannon, under the supervision of Maurice Kogon, Director of the El Camino College Center for International Trade Development (CITD) in Hawthorne, California.

The report is based largely on FY 2004 Country Commercial Guides (CCGs) prepared by United States Commercial Service (USCS) posts abroad. All CCGs include a standard chapter "Leading Sectors for U.S. Exports. This report drew from those CCGs, which specifically recommended Aircraft & Parts as a best prospect for U.S. exports, based on near-term growth potential or a large market receptive to additional U.S. suppliers.

The entire report is also available as a Word document, in print or electronically, for $25.00. To order, contact the El Camino College CITD at: 310-973-3173 or mkogon@elcamino.edu.

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FOR
U.S. AIRCRAFT AND PARTS, 2003

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This Product Market Brief provides an overview of the world market for U.S. Aircraft, Spacecraft And Spacecraft Launch Vehicles, based on an analysis of the latest available trade statistics and market research.

Export Growth: U.S exports of Aircraft, Spacecraft and Spacecraft Launch Vehicles fell from $25.3 billion in 2000 to $24.4 billion in 2003, a decrease of 3.5% over the three year period.

Leading Foreign Markets: The leading markets in 2003 (all valued above $1 billion) were: Japan (11% of total), China (9%), Singapore (8%), Australia (7%), Netherlands (7%), United Kingdom (6%), Korea (5%), and Italy (4%). Other major markets (above $600 million) were Canada (3%), Ireland (3%), Vietnam (3%), Vietnam (3%), United Arab Emirates (3%); Thailand (3%); and Germany (2%).

Fastest Growing Markets: Of the major, large-volume markets, those with the highest 3-year growth rates (2000-2003) were: Vietnam (+202,102%), Singapore (+477%), Italy (+313%), United Arab Emirates (+226%), Australia (+124%), Japan (+123%), Ireland (+83%), Netherlands (+75%), and China (+48%). Other (smaller-volume) high-growth markets over the three-year period were Mexico (+124%) and Panama (+44%). Significant, emerging new markets since 2000 were Hungary, Cyprus, Ethiopia, French Guiana and Uzbekistan.

Declining Markets: Of the major, large volume markets, those with declines in 2000-2003 U.S. exports were: Spain (-84%), Sweden (-84%), Germany (-74%), United Kingdom (-50%), South Africa (-47%), France (-38%), Taiwan (-32%), and Korea (-10%).

U.S. Market Share: The U.S. accounted for 37.3% of total world exports of Aircraft, Spacecraft and Parts in 2002 (SITC 792), based on the latest available United Nations data). The nearest competitor countries in 2002 were France and Germany, each with 15.2 % shares of world exports.

Best Market Prospects: The markets listed below appear to be particularly promising for U.S. exports of Aircraft, Spacecraft And Spacecraft Launch Vehicles over the next two years.

Australia
Austria
Belgium
Canada
Czech Rep.
Finland
France
Indonesia
Ireland
Japan
Kenya
Korea
Morocco
Nepal
Netherlands
Nigeria
Romania
Russia
Singapore
Spain
Switzerland
UK
Vietnam

I. EXPORT MARKET OVERVIEW

HS - 8803: PARTS FOR AIRCRAFT, SPACECRAFT AND SPACECRAFT LAUNCH VEHICLES

This Product Market Brief provides an overview of the world market for U.S. Parts for Aircraft, Spacecraft and Spacecraft Launch Vehicles, based on the latest available trade statistics and market research.

Export Growth: U.S exports of Parts for Aircraft, Spacecraft and Spacecraft Launch Vehicles fell from $15.2 billion in 2000 to $14.9 billion in 2003, a decrease of 2.3% over the three year period.

Leading Foreign Markets: The leading markets in 2003 (all valued above $1 billion) were: Japan (14.3% of total), the United Kingdom (11.3%), and France (6.8%). Other major markets (above $500 million) were Canada (6.3%), Germany (5.4%), Netherlands (5%), Korea (4.6%), Singapore (4.3%), Brazil (3.8%) and Israel (3.6%).

Fastest Growing Markets: Of the major, large-volume markets, those-showing-the highest 3-year growth rates (2000-2003) were: Singapore (+28.4%), Brazil (+10.9%), and Israel (+8.2%). Other (smaller-volume) high-growth markets over the 3-year period were Malaysia (+56.5%), Spain (+38.1%), Turkey (+37.7%), China (+25.1%), Denmark (+25.0%), Sweden (+14.9%), and Mexico (+8.9%).

Declining Markets: Of the major, large volume markets, those with declines in 2000-2003 U.S. exports were: Canada (-35.9%), Germany (-11.4%), United Kingdom (-5.6%), and Japan (-1.9%).

U.S. Market Share: The U.S. accounted for 37.3% of total world exports of Aircraft, Spacecraft and Parts in 2002 (SITC 792), based on the latest available United Nations data). The nearest competitor countries in 2002 were France and Germany, each with 15.2 % shares of world exports.

Best Market Prospects: The markets listed below appear to be particularly promising for U.S. exports of Parts for Aircraft, Spacecraft and Spacecraft Launch Vehicles over the next two years.

Australia
Austria
Belgium
Canada
Czech Rep.
Finland
France
Indonesia
Ireland
Japan
Kenya
Korea
Morocco
Nepal
Netherlands
Nigeria
Romania
Russia
Singapore
Spain
Switzerland
UK
Vietnam

A. U.S. EXPORT STATISTICS

TOP 30 U.S. EXPORT MARKETS, 2000-2003

HS - 8802: AIRCRAFT, SPACECRAFT AND SPACECRAFT LAUNCH VEHICLES
In 2003 Rank Order

Country	2000	2001	2002	2003	Percent Change 2000 - 2003	Percent Change 2002 - 2003	Percent Share 2003
	In US$ 1,000s						
Japan	1,213,276	380,483	1,712,801	2,702,416	122.74%	57.78%	11.06%
China	1,461,262	2,177,130	3,146,136	2,168,856	48.42%	-31.06%	8.87%
Singapore	341,939	2,894,073	2,216,833	1,974,460	477.43%	-10.93%	8.08%
Australia	692,103	487,822	2,699,977	1,730,219	149.99%	-35.92%	7.08%
Netherlands	946,932	509,208	567,760	1,653,065	74.57%	191.16%	6.76%
United Kingdom	2,722,555	3,056,364	1,058,964	1,372,341	-49.59%	29.59%	5.62%
Korea	1,251,364	1,710,247	1,552,474	1,126,026	-10.02%	-27.47%	4.61%
Italy	257,082	154,161	1,082,365	1,060,535	312.53%	-2.02%	4.34%
Canada	704,821	1,269,590	1,128,261	832,073	18.05%	-26.25%	3.40%
Ireland	439,105	518,535	608,626	804,989	83.32%	32.26%	3.29%
Vietnam	350	48,000	75,028	707,710	202102.86%	843.26%	2.90%
Taiwan	1,001,882	825,376	452,627	683,219	-31.81%	50.95%	2.80%
United Arab Emirates	201,585	234,080	907,921	657,305	226.07%	-27.60%	2.69%
Thailand	383,551	417,752	87,182	614,495	60.21%	604.84%	2.51%
Germany	2,196,792	1,839,514	768,033	573,271	-73.90%	-25.36%	2.35%
France	825,334	1,002,106	1,802,052	508,890	-38.34%	-71.76%	2.08%
Mexico	223,207	556,049	307,696	500,449	124.21%	62.64%	2.05%
Hungary	0	0	0	296,005	NA	NA	1.21%
South Africa	511,827	596,600	248,636	270,116	-47.23%	8.64%	1.11%
Panama	173,200	10,588	185,110	248,348	43.39%	34.16%	1.02%
Cyprus	0	100,643	100,296	236,557	NA	135.86%	0.97%
Bahrain	202,600	73,190	22,514	202,124	-0.23%	797.77%	0.83%
India	210,953	274,212	217,283	201,248	-4.60%	-7.38%	0.82%
Ethiopia	150	0	0	183,868	122478.67%	NA	0.75%
Spain	1,127,692	389,970	332,757	176,035	-84.39%	-47.10%	0.72%
Israel	121,532	462,219	244,732	170,410	40.22%	-30.37%	0.70%
Brazil	249,887	863,137	620,691	169,560	-32.15%	-72.68%	0.69%
French Guiana	0	105,000	232,973	138,939	NA	-40.36%	0.57%
Uzbekistan	0	0	0	130,817	NA	NA	0.54%
Sweden	805,967	120,394	119,234	128,925	-84.00%	8.13%	0.53%
Sub Total Top 30	**18,266,948**	**21,076,443**	**22,498,962**	**22,223,271**	**21.66%**	**-1.23%**	**90.94%**
Sub Total Other	**7,058,252**	**7,146,286**	**6,385,375**	**2,215,075**	**-68.62%**	**-65.31%**	**9.06%**
Total to World	**25,325,200**	**28,222,729**	**28,884,337**	**24,438,346**	**-3.50%**	**-15.40%**	**100.00%**

A. U.S. EXPORT STATISTICS

TOP 30 U.S. EXPORT MARKETS

HS - 8803: PARTS FOR AIRCRAFT, SPACECRAFT AND SPACECRAFT LAUNCH VEHICLES
In 2003 Rank Order

Country	2000	2001	2002	2003	Percent Change	Percent Change	Percent Share
	In 1,000 Dollars				2000 - 2003	2002 - 2003	2003
Japan	2,168,599	2,342,427	2,077,293	2,128,278	-1.86%	2.45%	14.29%
United Kingdom	1,778,024	1,832,415	1,711,901	1,678,922	-5.57%	-1.93%	11.28%
France	986,343	1,134,779	1,039,350	1,014,650	2.87%	-2.38%	6.81%
Canada	1,466,251	1,316,035	1,021,824	939,236	-35.94%	-8.08%	6.31%
Germany	913,730	922,790	780,815	810,056	-11.35%	3.74%	5.44%
Netherlands	711,485	680,467	675,337	751,092	5.57%	11.22%	5.04%
Korea	655,733	914,269	772,538	684,210	4.34%	-11.43%	4.60%
Singapore	494,675	648,220	606,659	635,170	28.40%	4.70%	4.27%
Brazil	509,051	695,449	612,110	564,596	10.91%	-7.76%	3.79%
Israel	492,172	492,118	527,564	532,628	8.22%	0.96%	3.58%
Australia	484,223	492,444	443,880	454,255	-6.19%	2.34%	3.05%
Italy	398,712	441,548	387,806	401,490	0.70%	3.53%	2.70%
Taiwan	399,528	413,695	415,710	381,880	-4.42%	-8.14%	2.56%
China	225,036	268,516	268,723	281,498	25.09%	4.75%	1.89%
Spain	153,236	182,055	186,015	211,681	38.14%	13.80%	1.42%
Turkey	152,018	198,405	176,617	209,299	37.68%	18.50%	1.41%
Saudi Arabia	277,047	323,168	153,611	194,780	-29.69%	26.80%	1.31%
Egypt	195,692	167,269	167,358	188,439	-3.71%	12.60%	1.27%
Switzerland	298,420	199,468	187,612	169,558	-43.18%	-9.62%	1.14%
Mexico	153,843	134,850	158,703	167,595	8.94%	5.60%	1.13%
Thailand	148,193	142,172	143,898	163,875	10.58%	13.88%	1.10%
Hong Kong	165,486	172,135	159,161	131,399	-20.60%	-17.44%	0.88%
Greece	122,108	105,418	122,703	124,506	1.96%	1.47%	0.84%
Sweden	105,585	123,344	114,814	121,270	14.86%	5.62%	0.81%
Malaysia	74,934	98,388	104,788	117,265	56.49%	11.91%	0.79%
New Zealand	110,474	137,987	143,775	113,744	2.96%	-20.89%	0.76%
Denmark	85,430	83,375	85,112	106,444	24.60%	25.06%	0.71%
Ireland	126,490	120,710	96,125	105,496	-16.60%	9.75%	0.71%
Sub Total Top 30	**13,852,518**	**14,783,916**	**13,341,802**	**13,383,312**	**-3.39%**	**0.31%**	**89.88%**
Sub Total Top Other	**1,386,623**	**1,426,854**	**1,335,809**	**1,506,294**	**8.63%**	**12.76%**	**10.12%**
Total to World	**15,239,141**	**16,210,770**	**14,677,611**	**14,889,606**	**-2.29%**	**1.44%**	**100.00%**

B. WORLD EXPORTS OF AIRCRAFT, SPACECRAFT & PARTS, 1998-2003 (SITC: 792)
Value in US$ 1,000s

Exporter	1998	1999	2000	2001	2002	% Share 2002
USA	51,386,048	48,479,536	39,918,304	42,793,408	42,023,616	37.3%
France	15,053,928	15,101,627	16,605,480	17,209,616	17,169,664	15.2%
Germany	12,238,742	13,954,179	14,855,435	17,174,528	17,123,056	15.2%
United Kingdom	8,726,680	7,822,552	9,831,782	9,211,248	8,741,923	7.8%
Canada	4,907,079	5,445,108	6,726,371	8,530,697	7,416,428	6.6%
Italy	2,745,783	2,803,955	3,581,905	2,751,140	3,869,781	3.4%
Brazil	1,317,514	1,899,189	3,574,539	3,553,509	2,798,690	2.5%
Spain	995,368	1,357,567	1,401,821	1,342,552	1,846,354	1.6%
Japan	1,734,496	1,804,435	1,492,115	1,729,388	1,294,580	1.1%
Israel	748,226	853,587	933,302	945,102	1,073,261	1.0%
Switzerland	601,325	882,700	714,022	621,682	1,065,615	0.9%
Australia	255,302	239,282	346,399	397,301	944,875	0.8%
Singapore	597,499	477,660	669,778	850,357	936,658	0.8%
Norway	102,304	58,621	83,606	352,237	768,594	0.7%
Sweden	1,081,076	481,639	370,707	473,572	592,809	0.5%
Netherlands	520,964	347,134	630,268	599,057	586,511	0.5%
Belgium Lux	540,727					0.0%
Belgium		712,099	535,230	709,310	510,207	0.5%
China	438,010	566,001	533,163	397,019	436,659	0.4%
Mexico	931,137	382,779	298,428	383,524	400,119	0.4%
Russian Fed	603,614	101,419	166,392	319,297	380,665	0.3%
Austria	486,325	235,577	269,421	266,509	272,155	0.2%
Denmark	280,671	502,757	328,910	238,069	256,915	0.2%
Korea Rep.	968,117	442,690	631,821	449,402	245,626	0.2%
Malaysia	1,162,790	704,233	302,379	224,327	232,072	0.2%
S.Afr.Cus.Un	176,244	184,784				0.0%
Portugal	67,337	90,885	206,256	221,718	134,078	0.1%
Greece	109,341	98,070	118,127	34,201	132,457	0.1%
Turkey	123,425	517,437	670,903	524,655	126,794	0.1%
Poland	87,708	73,305	198,291	183,201	125,760	0.1%
Ireland	347,403	301,665	260,771	201,144	105,171	0.1%
Ukraine	152,194	121,822	139,255	135,227	100,884	0.1%
Sub Total Top 30	**109,487,377**	**107,044,294**	**106,395,181**	**112,822,997**	**111,711,977**	**99.2%**
Sub Total Other	**1,159,317**	**1,659,295**	**1,500,840**	**1,499,499**	**895,563**	**0.8%**
World Total	**110,646,694**	**108,703,589**	**107,896,021**	**114,322,496**	**112,607,540**	**100.0%**

B. MARKET SIZES – AIRCRAFT & PARTS

The Best Markets Matrix (below) provides comparative market size data on 17 countries considered "best prospects" for U.S. exports of Aircraft and Parts. The countries are listed in alphabetic order, not in rank order. The data on total market, import market, and imports from the U.S. are based on local sources and reflect the best estimates of USCS commercial officers in each country.

Statistical accuracy and comparability to other sources (e.g., "USDOC Bureau of Census") are affected by a number of factors; including lack of published figures in certain markets, variances in data collection techniques, sources of data, and industry definitions.

HIGH POTENTIAL EXPORT MARKETS FOR U.S. AIRCRAFT AND PARTS

MARKET SIZE

(Values in $ Millions)

	Total Market			Total Imports			Imports from U.S		
COUNTRY	**2001**	**2003**	**% Change**	**2001**	**2003**	**% Change**	**2001**	**2003**	**% Change**
Australia	1,810.0	1,800.0	-0.55%	1,510.0	1,520.0	0.66%	1,130.0	1,145.0	1.33%
Austria	532.0	209.0	-60.71%	1,734.0	811.0	-53.23%	494.0	469.0	-5.06%
Brazil	6,144.0	4,812.0	-21.68%	807.0	675.0	-16.36%	280.0	185.0	-33.93%
Canada	7,654.0	8,232.0*	7.55%	7,045.0	7,468.0*	6.00%	3,797.0	3,759.0*	-1.00%
France	12,552.0	16,000.0	27.47%	12,694.0	15,400.0	21.32%	7,089.0	8,500.0	19.90%
Indonesia	225.8	211.3	-6.42%	224.0	210.0	-6.25%	35.6	41.1	15.45%
Italy	2,350.0	2,450.0	4.26%	1,310.0	1,480.0	12.98%	620.0	640.0	3.23%
Japan	6,087.0	9,946.0	63.40%	1,986.0	4,222.0	112.59%	1,643.0	2,991.0	82.05%
Kenya	N/A	N/A	N/A	N/A	N/A	N/A	254.0	N/A	N/A
Netherlands	5,207.0	8,654.0	66.20%	26,438.0	27,548.0	4.20%	1,356.0	1,734.0	27.88%
Pakistan	1,562.7	2,127.0	36.11%	426.6	475.0	11.35%	57.6	85.0	47.57%
Singapore	5,078.0	5,294.0	4.25%	4,090.0	3,983.0	-2.62%	3,586.0	3,397.0	-5.27%
Spain	2,667.0	3,210.0	20.36%	1,947.0	2,343.0	20.34%	1,292.0	1,555.0	20.36%
Switzerland	1,391.0	1,455.0	4.60%	1,685.0	1,655.0	-1.78%	720.0	525.0	-27.08%
United Kingdom	24.9	25.9	4.02%	14.0	13.2	-5.71%	6.0	6.1	1.67%

*2002 Values

III. BEST-PROSPECT MARKET ASSESSMENTS

Following are overviews of 17 “best prospect” markets for U.S Aircraft and Parts, based on observations of USCS posts in each country. The countries appear in alphabetical order. For more detailed market research on aircraft and Parts in these and other specific markets, see relevant industry Sub sector Analyses (ISAs) listed in Chapter V. For general commercial and economic information on individual countries, see the relevant Country Commercial Guides (CCGs).

AUSTRALIA

Reflecting the changes in the U.S. aerospace industry since the end of the cold war, Australia has seen a period of consolidation and rationalization in recent years. The recognition that companies with substantial operations in Australia tend to emerge as winners in defense projects has acted as a catalyst for the establishment of Australian subsidiaries by the major aerospace companies such as Boeing, BAe, EADS, Lockheed Martin and recently, Sikorsky. The Australian aerospace industry is dependent for its critical mass on the defense department, which accounts for one-third of turnover. The interdependent relationship between Australian aviation establishments and defense business has been highlighted recently with Australia's $150 million commitment to the development phase of the Joint Strike Fighter. Australian companies are vying for potential subcontract work that may see them integrated long-term into aerospace business.

The industry already operates in both the civil and defense aerospace markets and is important for maintaining Australia's strategic defense capability. It supplies to the Boeing 700 series, the Airbus 300 series, the domestic light aircraft industry, and supports defense aircraft such as the FA-18 Hornet, the C130J Hercules, the Hawk lead-in fighter and the Boeing 737 Airborne Early Warning & Control (AEW&C) project.

The industry in Australia is comprised of commercial aviation, defense aerospace and general aviation. The sector comprises several hundred small to medium enterprises (SMEs) across a diverse range of specialist and technical businesses that form part of the critical supply chain to the prime companies and assembly operations.

Commercial aviation is comprised of aircraft used for international and domestic trunk services and regional fleets, for which the local industry provides repair and modification up to 747-size aircraft. The commuter routes on Australia's east coast form one of the busiest air traffic lanes in the world. Qantas is the major player by far in domestic commercial aviation. Despite gradual deregulation of the airline industry through the 80's, culminating with the repeal of the two-airline policy in 1990, attempts to break into the market have met with failure or only limited success. According to the Bureau of Transport Economics, in the years since deregulation, over forty airlines have entered and exited the regional aviation industry. Virgin Blue has gained between 14-17% of the domestic market, and is working hard to increase its share, working in the lower-cost segment of air travel.

General aviation (GA) and charter are supported nationwide by maintenance and repair companies based at or near the major airports. About one-half of these establishments account for most of the turnover. Nearly all are located in New South Wales and Victoria, where the larger airline companies have major facilities and/or large maintenance bases. The GA sector is made up of all non-scheduled flying activity by registered aircraft, other than that performed by major international and domestic airlines. Major categories of GA are private, business, training, aerial agriculture and charter. This sector also includes the growing sub-sectors of ultra light operations, gliders, hang gliders and autogyros. Charter and flight training comprise the largest share of the market, and the use of light fixed and rotary-wing aircraft is one of the fastest-growing areas.

Australia boasts one of the highest per-capita uses of light aircraft in the world, with over 11,000 aircraft utilizing over 277 licensed airports, many of which can be categorized as airfields. However, 80% of Australian airspace, which, in total, accounts for 10% of the world's airspace, does not have radar coverage. Airservices Australia, the agency responsible for the management of air traffic control in the Australian flight information region, would like to improve this situation, at least partly, through increased use of the global positioning system.

Total imports of aircraft goods currently run at about $1.5 billion, representing around 4.5% of Australia's total manufactured imports. Completed aircraft comprise about 66% of the imported value, and parts and components 24%. Other aircraft-related commodities make up the remainder (10%).

AUSTRIA

The Austrian market for civil aviation aircraft, parts, and equipment totaled approximately $201million in 2002 and is expected to grow by 5% in 2003. With domestic-based manufacturing limited to one company, Diamond Aircraft Industries, the vast majority of the market is served by imports. In terms of market position, U.S. companies represent 48% of the imports followed by France (18%), Germany, (12%) and Canada (19%.

The principal end-users of civil aviation aircraft, parts and equipment are local charter airlines and the Austrian Airline's Group including: Austrian Airlines, Lauda Air, Tyrolean Airways, Rheintalflug (a commuter airline). Emergency medial services and the police use civilian helicopters. The market for corporate fleets and business charter operators is expected to increase by about 5% by the end of 2004.

Diamond Aircraft Industries, in Wiener Neustadt, manufactured a total of 101 single engine motor gliders (including 32 HK 36, 48 Katanas and 21DA 40's - a four seat single engine glider) in 2002, most of which were exported.

BRAZIL

Air transportation is a critical link in Brazil's infrastructure. The country is vitally dependent upon its civil aviation system to link the sparsely inhabited areas with the country's major economic centers. Combining this dependence on air transport with the national policy to establish a modern market economy, U.S. commercial aircraft and parts manufacturers have good market prospects in Brazil.

According to Brazil's Department of Civil Aviation (DAC), Brazil holds the world's third largest business aviation fleet, surpassed only by the US and Mexico. The Brazilian total fleet is approximately 9 million aircraft including airplanes and civil and military helicopters. In 2002 the Brazilian market for aircraft and parts was approximately $675 million. Total imports in 2001 were $807 million, and $1 billion in 2000. In 2002, Spain exported to Brazil $219 million (32%) followed by United States with $185 million (27%). The world airlines crisis has affected the Brazilian aircraft and parts market, which is expected to have very slight growth in 2003.

Embraer is Brazil's largest aircraft manufacturer. Embraer's headquarters is located in Sao Jose dos Campos, in the state of Sao Paulo. Embraer leads a group with widely diversified interests in the aerospace field. The group's activities include the design, development, production and marketing of a range of turboprop and jet aircraft for regional airline and military use, turboprop aircraft for general aviation, corporate and agricultural utilization, and aviation-related mechanical and hydraulic systems. Embraer is a major buyer of equipment and parts for its own production line, as well as a major international supplier for the aviation market. The United States is its largest customer and largest supplier of parts. U.S. has a 65% share of Embraer purchases.

The Brazilian aircraft parts industry is not well developed. However the industry is able to supply around 20-25% of the market since most engine manufacturers have a local presence.

The following products in the aircraft and parts sector are expected to have the best potential in Brazil during 2002-2003: civilian aircraft, civilian helicopters, turbojet aircraft engines, civilian aircraft parts, air speed instrumentation, aircraft engines, aircraft control systems, aircraft propeller parts and aircraft accessories. There are no official statistics regarding local production for airport and ground support equipment.

CANADA

Canada's aerospace industry offers major opportunities for US exporters of kits, components, systems, and equipment to be installed in new commercial aircraft built in Canada. The total market in 2003 is expected to rebound to 2001 levels, with American import growth of 2-3% expected in 2004. US suppliers already account for more than 50% of Canada's aerospace imports.

Canada's purchases of aircraft components are needed to support the country's export-oriented aerospace industry, whose 400 plus firms place Canada fifth in the world in employment in the sector (after the United States, France, the United Kingdom, and Germany). The aerospace industry in Canada employs 80,000 workers, including over 40,000 in Quebec alone. Quebec-based companies such as Bombardier Aerospace, Bell Helicopter Textron, CAE, Pratt & Whitney Canada, and Rolls Royce Canada make Montreal one of the top three aviation industry cities in the world, along with Seattle and Toulouse.

Canada has become a Level 3 partner for Lockheed-Martin's Joint Strike Fighter program. This participation has brought Canadian firms more than 26 program-related contracts so far. As these aerospace firms look for US suppliers and partners to help them fulfill contractual obligations, there will be solid opportunities for US aerospace manufacturers. As OEMs in Canada continue to expand outsourcing, this should create more export opportunities for American aerospace firms as well.

FRANCE

The French aerospace industry's revenues in 2002 decreased by 2% to 24.6 billion Euros compared to 25 billion Euros for 2000. For the eighth consecutive year, the value of orders for aircraft, although down 27% from 2001, outweighed industry revenues (deliveries) continuing to show the long-term growth of this market. This trend of greater orders than revenues is likely to reverse in the near term.

Employment in France's aerospace sector fell by 3.5% to 101,500 mostly as a result of forced early retirement packages and the letting go of non-permanent staff. The decline in employment is expected to continue despite the development of new projects in the industry, such as Airbus's A380 double-decker super-jumbo and the proposed A400M military transport.

The best prospect in this market for American aerospace firms continues to be opportunities associated with the creation of the new aircraft, notably, the Airbus A380 and to a lesser degree (as it is a military program), Airbus Military Company's A400M. In that regard, the US Commercial Service office in Toulouse is working to help identify the appropriate channels - often via first and second tier companies in the supply chain - for American small and medium sized companies wishing to do work for these programs. It is important to keep in mind however that as with Boeing, Airbus is sourcing whole assemblies and reducing its work with direct suppliers, except in cases where a potential supplier is able to propose technical innovations.

Orders and Production Rates: Although down significantly from previous years due to the overall slowdown of the industry, Airbus received 233 firm orders for aircraft in 2002, representing 57% of the market share in terms of number of aircraft and 54% in value terms. Airbus production rates have remained above the 300 aircraft per year level for the past three years, with 303 aircraft delivered in 2002, although this still represents a decrease from 325 planes delivered in 2001. The year 2002 saw the certification of three new Airbus aircraft: their

smallest, single aisle A318, the high capacity A340-600 and the ultra long range A340-500. At the end of 2002, Airbus had an accumulated backlog of 1505 aircraft, which represents over five years of output at current production rates.

The A380 super-jumbo program has received a total of 129 orders and commitments from a total of eleven customers. Most of the major systems for the aircraft have already been contracted, many of which have gone to US companies. Contracts for the aircraft's structures have also been solidified, with the participation of several risk-sharing partners. Airbus Military has received 180 orders from European governments for its A400M military transport aircraft program, officially launched since May 2003, and forecasts an additional market of at least 200 planes.

Dassault Falconjet sold 72 aircraft in 2002, an increase from the 27 sold in 2001, (2001 figures however do not take into account post Sept.11 cancellations of 46 aircraft by United's Avolar) but far from the record 90 aircraft sold in 2000. Dassault manufactured 66 Falconjet aircraft in 2002. Since its official launch in 2001, Dassault's new long-range business-jet, the Falcon 7x, has gained over 40 orders. The Franco-Italian (50-50) consortium, ATR, holds half of the world's rapidly shrinking market for regional turbo prop aircraft with its ATR 42 and ATR 72 models. Based near Toulouse, ATR sold 69 aircraft in 2002, split between 16 new and 53 second-hand. Eurocopter, with a claimed 47% of the world's market for helicopters, is the largest single manufacturer of civilian and para-public helicopters in the world, with 301 new orders for helicopters in 2002, down from 375 in 2001. Eurocopter experienced a 12% increase in turnover delivering a total of 367 helicopters in 2002, an increase from 335 the previous year.

Airlines and Maintenance: The semi-privatized national carrier Air France is still the dominant French airline, and has recently reported positive net profits of 120 million Euros million for its 2002 fiscal year, contrary to the industry trend. Smaller low cost carriers that use regional airports are experiencing rapid growth in response to a healthy national economy and the EU directive for national market liberalization. With local government incentives, foreign airlines such as EasyJet, Ryanair have won significant advances in the market by offering both short-haul international and national point-to-point routes to otherwise infrequently visited departments.

Plans are still being discussed to construct a third airport in the Paris Ile de France region that would accommodate an increase in flights, and are mostly in response to political pressure, not current infrastructure overcapacity.

Maintenance support for both American and European aircraft is a large industry in France, primarily handled by two companies, Air France Industries based outside of Paris at Charles De Gaulle Airport and Sogerma, located in Marignac at the Bordeaux airport.

To stay competitive with international products, the French civil aerospace industry procurement departments have been forced to adapt to a business model based on economic, rather than nationalistic merits, with cost becoming the key requirement for selecting suppliers. French companies are also more aggressively targeting civilian and military users with foreign partnership agreements as a means to boost international sales.

With new projects in various stages of development and the increased value of the Euro vis-à-vis the US Dollar, the French market provides substantial opportunity to the most competitive and innovative US aerospace firms.

INDONESIA

The increase in the number of airline passengers over the last two years has been impressive. A major contributing factor to this growth has been the rise in the number of new airlines, offering promotional fares. In 2002, passenger traffic increased around 25% from 2001 and reached 11.4 million passengers. The airline industry is predicted to remain attractive in 2003, with passenger numbers expected to reach around 12.5 million people, or about 10% higher than 2002.

There are 15 airline companies currently operating in Indonesia: Garuda Indonesia, Merpati Nusantara Airlines (MNA), Mandala Airlines, Bouraq Indonesia, Dirgantara Air Service (DAS), Pelita Air Service, Lion Mentari Airline, Bayu Indonesia Air, Airmark Indonesia Aviation, Jatayu Gelang Sejahtera, Star Air, Republic Express, Kartika Airlines, Indonesian Airlines Avi Patria, and Metro Batavia. The first five companies are relatively experienced players in the industry, while the other 10 have initiated operations over the last two years. Two other companies, Air Wagon International (Awair) and Seulawah Air, have temporarily stopped operations. In addition, the Directorate General of Air Communication has granted new licenses to 14 other companies; however, they have not started their operations yet.

In 2003, airline companies plan to add approximately 50 new aircraft to their fleets. These new aircraft will be used to cover expanding routes or to replace old aircraft. According to industry experts, around 70% of the 180 existing aircraft in operation are more than 20 years old. Although not all of these firms intend to buy new aircraft, there are excellent opportunities for U.S. aircraft leasing companies to lease their aircraft to Indonesian airlines. In addition, with more aircraft in operation in Indonesia, there will also be a greater need for more aircraft spare-parts and services in the near future.

Indonesia's imports of aircraft spare parts totaled $224 million in 2001. In preliminary data for 2002, the total import value decreased slightly by 10% and amounted to $200 million. The import value for American aircraft spare parts totaled $35.9 million in 2001 and increased to $37.4 million in 2002 (preliminary figures). The actual import value of U.S. products could be higher than was recorded since many Indonesian companies imported various U.S. products through Singapore. The other major suppliers to Indonesia's market were Singapore, Britain, Japan, France and Germany. With more new airline companies in operation this year, the total market should increase by 5% and the share of U.S. products could increase by 10% in 2003.

U.S. suppliers are particularly strong in the following markets: Turbo propellers and parts, aircraft electrical wiring sets, and aircraft launch gear, and aircraft parts.

JAPAN

Japan's aerospace sector continues to represent a lucrative market for U.S. firms. In 2002, the U.S. share of the imported aerospace market was 81%, followed by France at 12%. Domestic production by Japanese aerospace companies has averaged about $12 billion annually in recent years.

Defense orders comprise about 60% of Japan's aircraft industry. The Japan Defense Agency (JDA)'s latest projects to develop the next-generation maritime patrol aircraft (P-X) and cargo transport aircraft (C-X) are likely to offer business opportunities for U.S.-made aircraft engines, avionics, and aircraft parts and supplies, in partnerships with Japanese manufacturers.

On the commercial side, competition between Boeing and Airbus is heating up, with Airbus stepping up marketing of their A380 550-seat super jumbo jet, due for service in 2006, by teaming up with 15 Japanese manufacturers in joint production of aircraft components. Boeing, on the other hand, is focusing on the joint development of the fuel-efficient 7E7 200-250 seat aircraft. In April 2003, All Nippon Airways (ANA) announced its decision to streamline its current 52-plane narrow-body fleet by purchasing 45 Boeing 737 aircraft.

Japan's major aerospace manufacturers have long engaged in joint production of aircraft and aircraft components with overseas manufacturers including Boeing, and are usually enthusiastic about opportunities to work with U.S. makers of advanced aerospace technologies and equipment. In defense programs, license production of U.S. aircraft, engines and military hardware have been the ongoing practice with Japanese manufacturers.

One other potential market is for general aviation including corporate jets. The opening

of the second runway in Narita Airport has eased the burden on access of business jets. New airports are being built in Nagoya, Kobe and Kita Kyushu, among other places, due for opening in 2005. This expansion of landing slots should begin to create potential opportunities for Japan's fledgling corporate jet market. Industry experts expect Japan's current fleet of 42 corporate jets to increase to over 100 by 2005.

KENYA

The privatized national carrier, Kenya Airways (KA) received three Boeing 737-300 in 1997-98 and three 767-300 in 2000-2001. To meet its expansion plans, in June 2002, KA took delivery of its first of two 737-700s and will take delivery of a Boeing 777 in May 2004, followed by two more 777s in 2005. Kenya has no domestic production of aircraft. Although the Kenyan tourist industry has declined in recent years, there is evidence of resurgence and small aircraft operators have indicated their intention to increase their fleet to meet growing demand, especially to cater to regional tourism. U.S. firms are encouraged to maintain their marketing presence, as big-ticket items take many years before a purchase contract is signed. Nairobi's Wilson Airport is the busiest general aviation airport in Africa and serves as the regional small aircraft maintenance center. U.S. exporters should also maintain their presence and expand marketing activities for smaller civil aircraft, especially in the face of strong marketing by South African firms.

NETHERLANDS

Aircraft parts and associated equipment rank third on the list of top twenty commodities exported from the United States to the Netherlands. This can be broken down into commercial and military aircraft parts and equipment.

On the commercial side, the Netherlands has five national airlines, of which KLM is the flag carrier. The other four airlines are Martinair, Transavia, Air Holland and Dutchbird. Although foreign suppliers continue to work on increasing their market share in the Netherlands, all five airlines still operate with predominantly U.S.-made aircraft.

KLM is in the midst of a renewal program and currently has a fleet of 219 aircraft. Between October 2003 and mid-2005, KLM will take delivery of ten new Boeing 777-200ER aircraft. In the second phase, planned for 2005 through 2010, the airline will replace eight MD-11s and 12 Boeing 767s with a combination of Airbus A330-200s and Boeing 777-200ERs.

Transavia has 26 aircraft of the type 757-200, 737-700, 737-800. Transavia is working on its cost efficiency and standardizing its fleet. In the beginning of April 2003, Transavia bought two new Boeing 737-700 directly from the Boeing factory in Seattle. In 2003 Transavia will add 7 new Boeing 737-700 aircraft to the fleet, all from the Next Generation Family. Due to the unstable market since the attacks of September 11 2001, the supply of 2 new Boeing 737-800 has been postponed until 2004.

Martinair owns a modern fleet of 6 MD-11 airplanes, one Boeing 757-200, three 747-200, 6 Boeing 767-300's and 2 A320 Airbuses. Air Holland has a fleet of 4 Boeing 757 and 3 Boeing 737 aircraft. At the moment the future of Air Holland is not certain, so there are no plans to expand the fleet. Dutchbird, which has been fully operational since November 2000, has a fleet of 3 Boeing 757-200 aircraft and 2 Airbus A320 aircraft. At the end of July 2003 a new Airbus PH-BMD will reinforce the Dutchbird's fleet.

On the military side, the Netherlands offers U.S. companies a wide variety of trade opportunities in the defense sector. Best prospect areas include high-tech commodities with state-of-the-art capabilities, such as specialized surface vessels (design technology, systems technology and platform automation), radar and electro-optical sensors, simulators, data and telecommunications systems, composite materials, electronics and data processing. Major programs include:

- F-16 Replacement: Supply, logistics and technical applications to maintain these aircraft for the next twenty years offers U.S. industry opportunities.
- Submarines: The RNLN submarine force consists of four modern conventional boats built and maintained at the Rotterdam Dockyard, delivered between 1988-1993. A mid-life upgrade is planned to begin 2007.
- AH 64-D Apache: The RNLAF took delivery in May 2002 of the last of their 30 new AH-64 D model Apaches. Systems upgrades and continuous maintenance opportunities exist.

Imports of U.S. aircraft parts and equipment are expected to remain stable over the coming years, offering ample opportunities to U.S. suppliers.

NIGERIA

The Federal Aviation Authority (under the Federal Government Ministry of Aviation) continues to restructure the aviation industry that is plagued by a drastic reduction in operational aircraft. The ban on the use of BAC 111 aircraft is yet to be lifted by the Federal Government and aircraft operators are still searching to purchase fifteen-to-twenty year old aircraft mostly from U.S. sources. Private airlines with U.S.-origin aircraft in their fleet (mostly Boeing 727s and 737s) are the only ones now operating the lucrative domestic routes thus increasing the U.S. share of the aviation/avionics sector of the economy. With the government paying more attention to safety regulations and monitoring the operation of airlines in Nigeria, it is expected that airline operators will purchase or wet-lease U.S. origin aircraft in 2004 with attendant supply of parts and services. Grounded planes will need replacement of engines, component parts and navigational equipment from U.S. sources. Some airline operators, in anticipation of increased patronage, are seeking serviceable but reliable aircraft to replenish their fleet and the U.S. aviation market will be the first choice.

PAKISTAN

Good prospects exist for lease-cum-sales of aircraft (new and used), including engines and parts, mass transit equipment and public transportation vehicles. The national flag carrier, Pakistan International Airlines (PIA) has embarked on its plan to upgrade its fleet, and has signed a multi-year contract with Boeing for the purchase of up to eight Boeing 777 aircraft during the next five years. In addition, the two existing private sector carriers plan to expand their operations on domestic and international routes, and are in the market for used passenger and cargo aircraft. Also with the major reconstruction work taking place in Afghanistan, Pakistani freight forwarders see tremendous potential in moving goods from the port of Karachi to the Afghan hinterland by way of cargo planes.

Most promising subsectors and estimated market size for 2003 are: Leasing of Aircraft (wet & dry lease), Aircraft Parts ($350 million)

RUSSIA

Despite a growing need on the part of Russian airlines for quiet, fuel-efficient Western manufactured aircraft, sales are severely constrained by high import tariffs of 20% plus VAT of 20% on aircraft and parts. If and when these tariffs are reduced (which most observers believe likely within a few years) the market for Western aircraft, particularly used aircraft will be very significant.

The Russian government and industry representatives are looking for broader cooperation with foreign firms in order to revitalize their domestic industry and integrate it into the global aviation industry. This includes the further development of new generations of Russian aircraft, able to compete in fuel-efficiency and able to meet the demands of international noise standards.

Currently the Russian civil aviation fleet consists of 5,898 aircraft of which 3,983 are airplanes. Only 71 aircraft may be considered

‘new generation’ and this number includes domestic types IL-96, Tu-204, Tu-214 and 49 imported foreign-made craft. Industry experts estimate that by 2010, Russia's existing aircraft fleet will not be able to satisfy the country's transportation needs. Around 50% of its current fleet has been in operation for more than 20 years. By 2010 the overall fleet of aircraft will be decreased by 46.6%. Only 4% of the existing Russian aircraft fleet meets Stage-3 noise standards currently in effect in EU countries and the United States. The majority of aircraft need upgrading or replacement, including replacement of engines and avionics.

Despite of the global decrease in demand for air transport services, Russian airlines continued to experience growth in passenger and cargo transportation in 2002. Total passenger transportation grew by 5.7% and reached 27.8 million passengers, while cargo and mail traffic on both international and domestic routes, grew by 2.2% to about 0.63 million tons. Passenger transportation on in-country routes continues to grow and reached almost 17 million passengers in 2002. After suffering losses for much of the 1990s, the Russian airline industry’s profits in 2002 increased by 43% overall compared to 2001. However, Russian airlines are discouraged from procuring new Western-made aircraft due to high import duties and Value Added Tax, while at he same time Russian aircraft manufacturers cannot deliver sufficient modern aircraft able to meet new noise standards coming into force in the European Union in 2006.

The civil aviation sector dropped dramatically in the 1990s, with production falling from 500 airplanes and 215 helicopters in 1990 to only 14 and 40 respectively in 1998. After 1998, production of civilian aircraft dropped to 7 airplanes in 1999 and 4 in 2000. In 2001 production in Russia's aerospace industry has grown 5%, however production of new aircraft is still almost frozen. The Russian aircraft industry consists of about 300 design bureaus, plants and research facilities, and includes 10 major aircraft designers and over 20 major manufacturing facilities. It suffers from a lack of financing for aircraft construction and needs significant restructuring. Currently, the Russian government is discussing possible measures to revitalize the industry, including consolidation through mergers and providing state guarantees for aircraft leases.

Major partnership arrangements are being established with European and U.S. firms. Such cooperative projects with foreign companies should provide capital needed to sell newly designed aircraft in domestic and international markets. However, limiting this potential is a 1998 law that restricts foreign ownership in aerospace companies to 25%. Large purchases of imported commercial aircraft by Russian airlines are currently blocked by tariff barriers and a lack of financing. A 20% import duty and 20% VAT make importing aircraft prohibitive unless a waiver is granted.

As part of its long-term plan to resurrect the domestic aircraft industry, the Russian government is supporting the development of a locally-produced regional passenger jet. In March 2003, the Russian Aerospace Agency selected Sukhoi to work on the Russian Regional Jet project jointly with Ilyushin, Yakovlev and Boeing. The airplane will be built in Russia with the intention of marketing it both in Russia and abroad. The new jet will have three modifications, seating 60, 75, and 95 passengers. Boeing will assist in the design, manufacture, marketing and after sales support of the airplane.

While purchases of western aircraft are still questionable due to high import tariffs, Russian manufacturers are looking for Western components and significant cooperative projects. Over the long run, the Russian market presents significant opportunities for U.S. aerospace trade and investment. U.S. commercial aircraft and U.S. aircraft makers (such as Boeing, United Technologies, General Electric, Lockheed Martin, and Raytheon) are engaged in joint production projects and component supply. Many U.S. companies are working with Russian partners on joint projects ranging from supply of fasteners and avionics to joint production of jet engines. Best prospects for U.S. firms include exports of components for

engines and avionics, as well as new manufacturing equipment, which will enable Russian producers to bring their products up to world standards.

SAUDI ARABIA

As part of its privatization efforts, the Saudi Government recently passed a resolution sanctioning private companies to operate domestic flights. The SAG has not yet released any information pertaining to the rules and regulations for establishing a private domestic carrier.

Since 1945, Saudi Arabian Airlines (SAUDIA) has been the only carrier to fly from/to Saudi destinations. In recent years, however, there have been a number of private aviation companies, which leased aircraft and provided chartered flights, especially for business people. One of these companies is the National Aviation Services (NAS), which is one of the largest and fastest growing private aviation companies.

In 2002, Saudi Arabian Airlines carried more than 31 million passengers, up 4% from the previous year. Domestic passengers represented more than 20% of the total or 6.4 million passengers. Private companies are expected to compete with the national carrier, breaking Saudi monopoly in this vital sector. Industry analysts predict that private companies will be able to capture close to 30% of the domestic passenger load.

The last order was finalized between SAUDIA and Boeing/McDonnell Douglas in October 1995 for 61 aircraft worth $6 billion. The final aircraft was delivered in August 2001. Industry sources expect the latest government decision to enhance orders for new aircraft, especially for mid-size low-range aircraft.

SINGAPORE

Singapore's aerospace industry has been growing steadily through the years. 2002 was no exception despite the dire times faced by the airlines industry such as the ever-present threats of terrorism and SARS. In 2002, Singapore's aerospace industry's output surged 16.8%, to $2.27 billion. Repair and Overhaul (R&O) operations accounted for 90.3% of the 2002 industry output. Manufacturing accounted for the remaining 9.7%.

Singapore has the most comprehensive and competitive R&O sector in the Asia-Pacific. It has capabilities ranging from simple module overhaul and exchange for small aero-engines, to highly sophisticated component repair for large commercial engines, as well as maintenance of small general aviation aircraft and business jets, to regional large wide-body jetliners. There is also a comprehensive avionics repair and overhaul cluster. At present, aerospace manufacturing in Singapore comprises mainly the production of precision sub-assemblies and components.

Asia-Pacific air passenger traffic plunged 44.8% in April 2003, and 18.5% globally, due to the combined effects of the Iraq war and, more particularly, the impact of SARS. In its May 2003 report, Abacus said while most markets are still well below pre-SARS levels, bookings by travellers from Asia to Europe and Asia to the Middle East have nearly returned to pre-SARS levels. In a previous report, IATA expected Asia to lead the growth in the world air travel market in the long term despite its present economic woes.

Singapore Airlines (SIA), Asia's most profitable carrier, said in February that it would defer plans to place new orders for aircraft as the then war in Iraq and the fatal respiratory disease curbed demand for travel. However, SIA also said then that it expected to place orders at the end of 2003 to replace older planes and expand capacity. Additionally, major aircraft manufacturers and airliners firmly believe Asia-Pacific will return to robust traffic growth, with Boeing predicting the region's share of world's traffic to increase from 14% to 19% over the next two decades. All this certainly augurs well for the local aviation industry.

SPAIN

Spain's aerospace sector is small but constantly growing and there is increased competition in the Spanish air transport market. The liberalization of Spain's internal air transport system has resulted in increased demand that creates opportunities for U.S. manufacturers and distributors. Currently U.S. companies are enjoying a tremendous increase in their exports for flight simulators, propellers, rotor blades and assorted aircraft parts, systems and components that have increased over 70% in the last year.

Most of Spain's aerospace manufacturing is sold in Europe or exported to the United States. There is an increasing demand especially for products related to composites materials: contour tape laying heads for composite tape laying machines, fiber placement systems with computer numerical control, etc. U.S. products and services are considered second to none in terms of price and quality, thus U.S. exporters have an extremely good chance of doing business in Spain. Boeing's recent decision to open a research and development center in Madrid, the first of its kind outside of the U.S., is a good indicator of Spain's importance in the aerospace sector.

Spain's aerospace sector, primarily located in Andalucia, Madrid, and the Basque Country, is benefiting greatly from its recent internationalization and offers many opportunities for foreign companies. Spain has a highly competitive aerospace sector. It is also part of the nucleus of the European aeronautical sector although it ranks behind the three largest players (Germany, France and the United Kingdom). The largest local company, CASA has a minority participation in the European consortium Airbus.

The Spanish aerospace market is growing and shows greater potential due to the open market situation and demand for new technology. For example, ITP's (Industria de Turbo Propulsores S.A.) sales increased by 20% in 2002, compared to the previous year. Iberia projects it will grow approximately 10% this year. Air traffic in general has also grown significantly. Madrid's Barajas Airport has constructed an additional terminal to accommodate the 11% increase in passengers, planes and cargo.

The privatization of Iberia, the merger of Aviaco and Binter into the Iberia group (which now enjoys one of the best reputations among all the airlines worldwide), and the purchase of new airplanes by Spanair, Air Europa and Air Nostrum are driving new opportunities for U.S. businesses. There are now more companies requesting airline licenses from the civil aviation authorities than ever before. This has resulted in an increase in the total number of airplanes operating in Spain and a steady expansion of the spare parts market. This trend is expected to continue as the underdeveloped regional markets come on-line.

The biggest demand for aeronautical products include component manufacturers, aeronautical software programming, avionics equipment, testing systems, equipment for ground support, extruded metal companies and plastic fabricators.

In additional to CASA-EADS, there are two other dominant companies in Spain; Gamesa, a manufacturer of structural parts of airplanes, and ITP (Industria de Turbo Propulsores, S.A.), an aircraft engine producer.

Recently, the newest opportunity for the Spanish aeronautical sector has been the Airbus A-380 project, the European 600 passenger SuperJumbo. Airbus has already received the first 50 orders for this project, which are scheduled for release in 2006. The first test flights are planned for 2004. Airbus now has 46% of the worldwide civilian airline market. This has increased opportunity for U.S. firms selling parts and components to Airbus.

Currently, local Spanish manufacturers are unable to meet the demands of production levels. These companies are forced to look to the international market for help. As a result, many Spanish sub-contractors are exploring the possibility of international agreements in order to meet the increased demand, offering excellent export opportunities for U.S. companies.

To decrease operating costs, several airlines are considering operational leasing from U.S. companies. This service market is expected to increase dramatically in the short term. U.S. aircraft manufacturers face competition from domestic companies (small aircraft) and from Airbus, the European consortium companies (small aircraft) and from Airbus, the European consortium.

SWITZERLAND

The Swiss aviation industry continues to be mired in a tepid market environment. A new airline, called SWISS, created around Crossair, the former regional carrier of Swissair, with a $2 billion rescue package secured by the federal and regional governments as well as large businesses in Switzerland, continues to shed airplanes, routes and personnel. The local press is reporting that Swiss is talking to several airlines about various forms of cooperation.

The overall Swiss aircraft and parts market is supplied by a handful of accomplished suppliers of aircraft, engines and parts, although Switzerland has only a modest number of end-users (carriers for airborne transport). Despite a more complex economic environment, imports of aircraft parts and components are expected to show an increase in the coming years, primarily due to replacement of aging jetliners the Swiss flagship carrier has in its current fleet.

Swiss International Air Lines Ltd., the parent company of "Swiss," has an overall aircraft fleet of 111 units, taking over 52 long-haul aircraft from its predecessor, Swissair. Last year, Airbus Industrie secured an order for 12 A340-300 wide-body jetliners estimated at SF 3 billion ($2.3 billion) from Swiss International Air Lines Ltd. The first unit is slated to join Swiss's fleet in June 2003. Environmental friendliness, reduced noise emissions, comfort and lower maintenance costs were cited as the overriding reasons for winning the Airbus contract, winning over the Boeing 777-200. The A340-300 will succeed the aging MD-11 aircraft, which has an average age of 9.29 years. The latest deal cements Airbus's place as Switzerland's largest aircraft supplier, eclipsing rival Boeing. Brazil's Embraer 170 is slated to join Swiss's aircraft fleet in summer 2004, while the Embraer 195 will make its network debut in 2006. They are earmarked to replace the Saab 2000 as well as the AR85/100.

Prior to the introduction of A310-200 airplanes to the former carrier Swissair in the early 1980's, Swissair had had a long history of procuring airliners predominantly from Boeing of the DC-9 and DC-10 families. Airplanes of the A320 superseded the initial Airbus acquisitions (A310-200) and A330 makes, while the Boeing contingent was replaced with airplanes manufactured by McDonnell Douglas (MD-11).

Swiss's major suppliers for spare/replacement parts as well as components are the three aircraft producers Boeing, Airbus Industries and the Brazilian plane maker Embraer, while engines are procured either from Pratt & Whitney or CFM, a joint-venture partnership between General Electric and Snecma. Another important cornerstone pertaining to the aircraft industry is the furnishings and interior fittings market segment, predominantly supplied either by Recaro of Germany, Rumbolt from Great Britain, or from the Italian manufacturer Avon Interior. The dominant supplier of tires for Swiss is the French manufacturer Michelin, complemented by Goodyear and Bridgestone.

Switzerland's lone aircraft manufacturer, Pilatus Aircraft Ltd., developed a new trainer aircraft, the single-engine PC-21. In November 1998, the plane maker privately funded the development of a new training system. Its costs are assessed at SF 200 million ($156 million), with the per-unit production costing about SF 9 million ($7 million). Funds generated by the sale of the highly successful PC-12 aircraft were used to fund the research and development costs for the PC-21. In 2002, Pilatus Aircraft Ltd. had a total of 46 units rolling off its assembly bays, comprising 1 trainer unit, 46 PC-12 and 2 units of the PC-6. Last year, Pilatus Aircraft Ltd. and its subsidiary companies registered gross sales of SF 353.1 million ($276 million), down 27% from previous levels (from $376 million to $276 million). The total number of aircraft sold fell a

sharp 35% from 75 to 49 units last year. The Pilatus Group's 2002 annual results are a clear reflection of the global economic recession.

Under the Federal Defense Enterprise Act passed by the Swiss Parliament in 1997, six former government-owned armament plants were privatized and amalgamated into one singular body - the RUAG technology group. The RUAG Holding, a private stock corporation began as an independent company on January 1, 1999. This armaments and industrial corporation comprises the following five subsidiaries: RUAG Aerospace, RUAG Components, RUAG Electronics, RUAG Land Systems, and RUAG Munition. The shareholder rights in the holding company are exercised by the DDPS (Department of Defense, Protection of the Population and Sport). Strategic command of the group rests with the Board of Directors of the holding company, consisting of three representative of the federal government and four private industry representatives.

UNITED KINGDOM

The UK's aerospace industry is currently the second largest in the world with a turnover in 2002 standing at $25.8 billion. However the industry is experiencing its worst downturn since the Second World War. As a result of recent events, the UK aerospace industry has become increasingly dependent on the military sector. The events of September 11 and the launch of the US-led war on terror have unleashed a huge wave of spending on military projects, which is helping to support the aerospace industry through the current downturn. The UK is also launching a number of substantial defense programs that will provide guaranteed revenues for aerospace companies for many years to come.

The UK's aviation industry has seen considerable consolidation in the past few years, much of it transnational: Westland (owned by GKN), merged with Augusta (owned by Finmeccanica SpA of Italy) in 2000, meanwhile rumors of a tier one Anglo-American alliance for BAe Systems continue. The global downturn in the industry could well accelerate the process of consolidation.

Civil Aerospace: Civil aerospace is the larger of the two main sectors by turnover but it is currently experiencing its worst downturn in decades. In the medium and long term it is predicted however, that the commercial air transport industry will resume growth with opportunities for both new aircraft types and updated versions of existing aircraft. There is a consistently strong demand for aircraft parts and components for MRO and in particular, the fight for passengers in a depressed market has generated demand for in-flight entertainment equipment. A new generation of products - including personal distributed video, audio/video-on-demand, in-flight satellite television and in-flight internet - are giving airlines the opportunity to make a difference in an area where until now, most airline services have become indistinguishable. In a similar vein, this need to differentiate and brand airlines has created opportunities for aircraft reconfiguration and cargo capacity.

After extensive revenue losses among the larger airlines, the struggle to absorb new aircraft scheduled for delivery is a problem that is only a little less acute for the low-cost carriers. Airlines' financial difficulties over the past two to three years have delayed some ambitious plans, these include the integration of new reservations and billing systems and customer relationship management policies, which may now be accelerated. Although confidence in air travel is steadily returning, the fear of further terrorist attacks remains and has led to increased spending on both aircraft and airport security and on aircraft and passenger insurance.

Military Aerospace: Defense spending in the UK has accounted for a declining proportion of GDP and overall government spending, so that, until recently, the civil aerospace sector had been the key driver of growth in the industry. Nonetheless, some major military development projects are underway. Large programs such as the Eurofighter, Future Strategic Tanker Aircraft Programme, and F-35 Joint Strike Fighter (JSF) should support military sales over the next 10 years. The F-35 JSF, for example, which will

use some stealth technology to reduce its radar profile, is the largest single military aircraft program in history. The impact on the defense sector of the war in Iraq is difficult to quantify. It will certainly lead to increased demand for the replacement of certain weapons, stockpiles of which were reduced by the war. For example, Boeing is producing its smart-bomb kits as fast as it can restock the UK forces. Nonetheless, defense budgets in the UK could be cut as domestic political priorities take precedence.

One of the key areas of increased military spending is in strategic airlift requirements. This increased spending is intended to remedy the deficiencies in this area that were evident in the European Rapid Reaction Force in Kosovo and in the Gulf war. Other future defense competitions will decide the supply of UAV's and UCAV's. Successful will have to demonstrate cutting-edge data link and software-related data fusion capabilities if they are to win any of these procurement contracts. Other than for existing aircraft and helicopter programs, the UK will be spending more on security related products and training contracts. For instance, the MOD is moving forward with its Ground Based Air Defense (GBAD) program competition, to be awarded in 2005. Additionally, amid mounting global tensions, the space and satellite manufacturing sector's products are likely to play an ever more crucial role, specifically in the handling of military communications and surveillance.

Valid opportunities exist for companies to supply a wide range of goods and services to the Ministry of Defense (MOD), by competitive tender and through the Government's Private Finance Initiative (PFI) and Public/Private Partnership (PPP) Schemes. One particular development is the public-private lease arrangements, which will allow the RAF to lease operational hours without owning the airframe.

IV. TRADE EVENTS -- AIRCRAFT AND PARTS

Trade events, such as trade shows, trade missions and catalog shows, offer excellent opportunities for face-to-face interaction with foreign buyers and distributors. Of the many U.S. and international events held throughout the year, some are vertical (single industry theme) and some horizontal (many industries represented). The events organized or approved by the U.S. Department of Commerce can be especially useful for first-time or infrequent participants – they require less lead time to register and typically involve more handholding.

The Trade-Event Scheduling Web sites listed below allow selective searches for upcoming events by industry, location, type and date. They typically provide the event organizer, event descriptions and costs, and people to contact for more information.

To find upcoming events for Aircraft & Parts, use industry search terms relating to Aircraft, Aerospace, Avionics and the like.

Schedules for U.S. Government Organized or Sponsored Events

Domestic USDOC Events: **http://www.export.gov/comm_svc/us_event_search.html**

International USDOC Events: **http://www.export.gov/comm_svc/intl_event_search.html**

USDA (Food & agriculture) Events: **http://www.fas.usda.gov/scripts/agexport/EventQuery.asp**

Schedules for Commercially Organized Events

Expo 24-7 (**http://www.expo24-7.com/default.asp**)
TSNN (**http://www.tsnn.com/**)
ExpoWorldNet (**http://www.expoworld.net/**)
Exhibition Center - Foreign Trade Online (**http://www.foreign-trade.com/exhibit.htm**)

V. AVAILABLE MARKET RESEARCH
AIRCRAFT AND PARTS

All the reports listed below are in-depth, country-specific surveys of the market for a specific industry sector or sub-sector, written by U.S. commercial staff in these countries. Each report analyzes demand trends, the competition, business practices, distribution channels, promotional opportunities, and trade barriers. They also list relevant trade contacts in the country.

All the reports can be obtained in print or electronically from:

CENTER FOR INTERNATIONAL TRADE DEVELOPMENT
13430 Hawthorne Blvd, Hawthorne, California 90250 USA
Phone: (310) 973-3173 Fax: (310) 973-3132 E-mail: **mkogon@elcamino.edu**

HELICOPTERS
(AUSTRALIA - 03/25/2003)

CIVIL AEROSPACE MARKET
(AUSTRIA - 07/31/2003)

AIRCRAFT AND PARTS
(AUSTRIA - 07/03/2002)

CIVIL AVIATION AIRCRAFT
(AUSTRIA - 11/25/1999)

REGIONAL/BUSINESS AIRCRAFT & PARTS
(AUSTRIA - 05/03/2000)

AIRPORT SERVICES AND EQUIPMENT
(BELGIUM - 06/11/2001)

AIRCRAFT & PARTS
(BRAZIL - 08/27/2003)

HELICOPTERS & PARTS
(BRAZIL - 03/19/2003)

AIRCRAFT AND PARTS
(BRAZIL - 02/14/2000)

AIRCRAFT AND ENGINE PARTS
(CANADA - 06/11/2002)

AIRCRAFT AND PARTS
(COLOMBIA - 06/03/2003)

SMALL AIRCRAFT AND PARTS
(COSTA RICA - 03/28/2003)

DANISH DEFENSE MARKET OVERVIEW 2003 (UPDATE)
(DENMARK - 04/16/2003)

COMMUTER AND BUSINESS AIRCRAFT
(DENMARK - 04/27/2000

CIVILIAN AIRCRAFT MANUFACTURERS IN FRANCE
(FRANCE - 10/09/2003)

REGIONAL/BUSINESS AIRCRAFT & PARTS
(FRANCE - 09/30/2000)

COMMERCIAL AVIATION
(GERMANY - 08/12/2003)

CIVIL AEROSPACE MARKET
(HUNGARY - 05/29/2003)

AIRPORT AND GROUND SUPPORT EQUIPMENT
(INDIA - 08/14/2000)

AVIATION SERVICES
(IRELAND - 09/28/2001)

AIRCRAFT/AIRCRAFT PARTS
(JAPAN - 08/14/2002)

AIRCRAFT AND PARTS
(MEXICO - 08/01/1999)

AIRCRAFT/AIRCRAFT PARTS
(NEW ZEALAND - 08/10/2000)

AVIATION AND GROUND EQUIPMENT
(PAKISTAN - 05/23/2001)

AIRCRAFT AND AIRCRAFT PARTS
(RUSSIA - 10/01/2002)

AEROSPACE & PARTS - SPAIN
(SPAIN - 08/02/2001)

BUSINESS/REGIONAL AIRCRAFT

(SPAIN - 06/27/2000)

AIRCRAFT AND PARTS - REGIONAL/BUSINESS
(SWITZERLAND - 03/03/2000)

AIRCRAFT PARTS FOR REPAIR & MAINTENANCE
(TAIWAN - 05/16/2000)

AIRCRAFT AND AIRCRAFT PARTS
(THAILAND - 04/01/1999)

COMMERCIAL AIRCRAFT PARTS
(UNITED KINGDOM - 09/27/2001)

AIRCRAFT MAINTENANCE
(VENEZUELA - 07/21/2003)

AIR TRAFFIC MANAGEMENT SYSTEMS
(VIETNAM - 03/04/2004)

CIVIL AIRCRAFT MARKETS
(VIETNAM - 03/28/2003)

HELICOPTERS AND PARTS
(VIETNAM - 02/01/1999)