



***2009 Year End Review and 2010 Forecast***  
***AIA Research Center***

The aerospace industry is still smarting from 2008, a year when the world's financial markets nearly collapsed, sending many industries – including several segments of the aerospace industry – into a tailspin. Yet, aerospace entered this difficult period strong and resilient, and the momentum generated by a remarkable period of growth carried the industry through the last year, and will push aerospace sales to another record year in 2009. AIA estimates that aerospace sales will reach \$214.1 billion in 2009, up more than 4 percent from 2008.

Moving forward, the aerospace industry is likely to endure further turbulence before breaking through to clearer skies. At times, rudder control may seem sluggish, as the market conditions that spur aircraft sales are largely exogenous to the aerospace industry, in that they are tied to a rebound of the overall economy. Already though, a few bright spots are appearing, such as indications of stabilization of some aerospace metrics. Just recently, Boeing reported that fewer customers were deferring jet orders, while IATA reported that international scheduled traffic results show moderately improving conditions.

**Civil Aircraft Sales**

Despite the extremely difficult economic environment, the civil aerospace sector is expected to register moderate growth in 2009, improving by nearly \$1.9 billion to \$82.5 billion. Sales of large commercial jetliners– the largest segment of civil aircraft sales by value –will have a relatively strong year, although most of the growth is due to recovery from the work stoppage at Boeing last year. Other segments of the civil aircraft sector are not expected to achieve similar gains. General aviation aircraft and civil helicopter shipments were down in 2009. The depressed market has also taken a toll on aftermarket services. However, on balance, the positive growth expected from the market for large jetliners is likely to result in a net positive trend for civil aerospace.

The business jet market was one of the early casualties of the global economic downturn, and is likely to suffer relatively more than most other aerospace sectors. After an unprecedented five-year industry expansion, business jet sales dropped sharply in 2009, and production cuts have been widespread throughout the industry. In the used market, inventories appear to have stabilized, but they remain near record highs while prices continue to fall.

**Military Aircraft Sales**

Sales of military aircraft are higher in 2009 at \$61.7 billion, a year-over-year increase of more than 8 percent. There is across-the board improvement in the sector: fighters and military rotorcraft will have particularly good years; military transports registered strong growth; and, adding to the tally, military aircraft R&D increased more than 15 percent in 2009.

**Missile Sales**

Sales of missile systems continued their upward trend in 2009, reaching \$14.8 billion, an 11 percent improvement. Spending on missile research and development by the U.S. Army, Navy and Air Force increased significantly, while Department of Defense-wide spending by the Missile Defense Agency decreased by nearly 8 percent, resulting in a net decrease of R&D spending for the year.

## **Space Sales**

Sales of space systems, which include military, civil, and commercial programs, will improve modestly in 2009, rising 4.1 percent to \$40.4 billion. Research and development in the space sector was fairly flat, while NASA outlays and Defense Department space contracts improved 7 and 4 percent, respectively.

## **Exports**

Exports of U.S. aerospace products will decrease 17 percent to \$78.9 billion in 2009. Civil exports will decrease by 16 percent, while a 23 percent drop is expected for total military exports. From 2003 through 2008, Japan was the top purchaser of U.S. aerospace export products, accounting for an annual average of 10 percent. However, the first three quarters of 2009 show France moving into the lead at 10 percent, with the United Kingdom and Japan ranking second and third, respectively.

International demand for U.S. aerospace products and services is becoming both increasingly important and less certain. Several global trends point toward the potential for increased international sales of U.S. aerospace products. For example, improved relations between the U.S. and India may result in a new, high-growth market. A weaker dollar also improves the competitiveness of U.S. aerospace products to international customers. Countering these trends toward higher foreign aerospace sales are factors like the weak global economy and oil price volatility, which could lead some international customers to delay major defense orders.

## **Imports**

Total aerospace imports will decrease by nearly 34 percent to \$25.0 billion in 2009. The various product categories dropped fairly uniformly, with the exception of *aircraft and engine parts*, the largest segment as measured by value, which fell by 44 percent to \$11.2 billion. The U.S. import market is significantly more concentrated than the export market, with 50 percent of U.S. aerospace imports originating from the top two suppliers, Canada and France.

## **Trade Balance**

International trade of aerospace products stalled in 2008, and slipped further in 2009. So far this year, U.S. imports and exports are both off. In total, U.S. trade in aerospace products generated a net inflow of \$53.9 billion, creating a surplus 6 percent lower than the 2008 surplus.

In 2009, the overall U.S. trade deficit will be \$514.3 billion, with total imports reaching \$1,089.7 billion and exports finishing at \$1,604 billion. However, with aerospace exports representing 7.2 percent of total U.S. exports, the industry's trade surplus will make a significant positive impact on the nation's trade balance.

## **Orders & Backlog**

Aerospace orders will continue on a downward trend in 2009, falling by an estimated 33 percent to \$154.5 billion. Lackluster airline traffic and the sizable backlog already in place indicate that orders will continue to decline in the near future. Already, falling orders have had a negative effect on the aerospace backlog, which in 2009 will decrease for the first time since 2003. Through the first three quarters of 2009, civil transport aircraft accounted for 73 percent of the backlog, with \$269.6 billion in unfilled orders.

## **Employment**

For the first time since 2003, aerospace employment is forecast to fall in 2009, to 641,100 from 657,100 workers. Despite the setback, aerospace employment is faring better than most other industries. For 2008, the most recent year for which complete annual data are available, employment for all manufacturing firms fell by 3.2 percent and employment at durable goods manufacturers fell by 3.8 percent, while aerospace employment increased by 1.5 percent. In addition, the average hourly wage in

the aerospace industry rose by 6 percent in 2008, with the average worker taking home nearly \$30 per hour.

### **Profit**

Net profit after taxes for the aerospace industry increased 6.5 percent to \$15.6 billion in 2009. The growth is primarily due to profits getting back on track after the work stoppage at Boeing in the third quarter of 2008. Given the overall economic conditions, sales and profit for the aerospace industry are more than holding their own in 2009. Over the same period, profits for the overall manufacturing industry dropped 12 percent on sales that fell 21 percent.

### **Outlook**

Aerospace is well known as a cyclical industry. Overall, recent years have been very prosperous for the industry, as evidenced by the first simultaneous civil and military aerospace upturn in 25 years. While a number of factors are likely to drag on the industry over the coming months, a possible ace or two in the hole may prevent – or at least reduce the severity of – a downcycle similar to those the aerospace industry has experienced in the past. First and foremost are the new programs in the pipeline. Never before has the civil aviation sector had such a game-changer as the 787 ready to enter the market just as it is needed most.

On the military side, the eventual ramp-up of the Joint Strike Fighter is expected to at least partially offset the potential impact of one or two aircraft program reductions or cancellations. Sales of unmanned aircraft systems are also likely to bolster military aerospace sales. Demand for unmanned systems by the U.S. military has increased more than 600 percent since 2004, and is forecast to double again between 2010 and 2015.

Other considerations are the resilient single-aisle market and the fact that replacement demand remains high, and may be driven higher if fuel costs increase. The setbacks suffered by the business aviation industry have been substantial, but they are expected to be short-lived. As the global economy strengthens, net new business aviation orders are expected to begin recovering in 2010, leading to growth of new business aircraft deliveries in 2011/2012.



## TABLE I

### AEROSPACE INDUSTRY SALES BY PRODUCT GROUP

Calendar Years 1996-2010

Year	Total Sales	Aircraft			Missiles	Space	Related Products & Services
		Total	Civil	Military			
<b>CURRENT DOLLARS (billions)</b>							
1996	\$116.8	\$60.3	\$26.9	\$33.4	\$8.0	\$29.0	\$19.5
1997	131.6	70.8	37.4	33.4	8.0	30.8	21.9
1998	148.0	84.0	49.7	34.3	7.7	31.6	24.7
1999	153.7	88.7	52.9	35.8	8.8	30.5	25.6
2000	144.7	81.6	47.6	34.0	9.3	29.7	24.1
2001	151.6	86.5	51.3	35.2	10.4	29.5	25.3
2002	152.4	79.5	41.3	38.1	12.8	34.6	25.4
2003	146.6	72.8	32.4	40.4	13.5	35.9	24.4
2004	155.7	79.1	32.5	46.6	14.7	35.9	26.0
2005(a)	173.6	112.2	62.1	50.1	10.8	33.6	17.1
2006	189.4	125.4	71.6	53.8	11.7	34.9	17.3
2007	201.8	135.1	80.2	54.9	12.6	36.3	17.8
2008	205.7	137.6	80.6	57.0	13.3	38.8	16.1
2009(P)	214.1	144.1	82.5	61.7	14.8	40.4	14.8
2010(E)	214.4	140.0	76.7	63.3	16.7	40.9	16.9
<b>CONSTANT DOLLARS<sup>b</sup> (billions)</b>							
1996	\$122.6	\$63.3	\$28.2	\$35.1	\$8.4	\$30.5	\$20.4
1997	136.6	73.5	38.8	34.6	8.3	32.0	22.8
1998	152.9	86.7	51.3	35.4	8.0	32.7	25.5
1999	157.5	90.9	54.2	36.7	9.0	31.3	26.3
2000	144.7	81.6	47.6	34.0	9.3	29.7	24.1
2001	147.7	84.2	49.9	34.3	10.1	28.7	24.6
2002	146.0	76.2	39.6	36.6	12.3	33.2	24.3
2003	136.9	68.0	30.3	37.7	12.6	33.5	22.8
2004	141.1	71.7	29.5	42.2	13.3	32.6	23.5
2005(a)	151.5	97.9	54.2	43.7	9.4	29.3	14.9
2006	159.5	105.6	60.3	45.3	9.9	29.4	14.6
2007	164.8	110.3	65.5	44.9	10.3	29.6	14.5
2008	162.0	108.4	63.5	44.9	10.4	30.6	12.7
2009(P)	164.5	110.8	63.4	47.4	11.4	31.0	11.3
2010(E)	161.3	105.3	57.6	47.6	12.6	30.7	12.7

Source: Aerospace Industries Association (AIA), based on company reports, *The Budget of the United States Government*, and data from the National Aeronautics and Space Administration (NASA) and the Departments of Commerce and Defense.

a. Beginning in 2005, sales numbers for individual product groups are not comparable to figures in prior years due to revised survey methodology. However, total annual sales data remain comparable across all years of the time series.

b. Based on AIA's aerospace composite price deflator, (2000=100).

E. Estimate.

P. Preliminary.



**TABLE X**  
**NET PROFIT AFTER TAXES**  
**Calendar Years 1984-2009**

Year	AEROSPACE INDUSTRY PROFITS			ALL MANUFACTURING CORPORATIONS			
	Millions of Dollars	As a Percent of:			Profits as a Percent of:		
		Sales	Assets	Equity	Sales	Assets	Equity
1984	\$3,639	4.1	4.7	14.1	4.6	6.0	12.5
1985	3,274	3.1	3.6	11.1	3.8	4.6	10.1
1986	3,093	2.8	3.1	9.4	3.7	4.2	9.5
1987	4,582	4.1	4.4	14.6	4.9	5.6	12.8
1988	4,883	4.3	4.4	14.9	6.0	6.9	16.2
1989	3,866	3.3	3.3	10.7	5.0	5.6	13.7
1990	4,487	3.4	3.4	11.5	4.0	4.3	10.7
1991	2,484(a)	1.8	1.9	6.1	2.5	2.6	6.4
1992	(1,836)	(1.4)	(1.2)	(5.2)	1.0	1.0	2.6
1993	4,621	3.6	3.5	13.2	2.8	2.9	8.1
1994	5,655	4.7	4.3	14.8	5.4	5.8	15.6
1995	4,633	3.8	3.5	11.1	5.7	6.2	16.2
1996	7,150	5.6	5.1	17.1	6.0	6.5	16.8
1997	7,221	5.2	4.8	17.3	6.2	6.6	16.6
1998	7,701	5.0	4.8	18.0	6.0	6.1	15.7
1999	10,214(b)	6.5	6.2	21.8	6.2	6.1	16.5
2000	7,260	4.7	4.3	14.2	6.1	5.9	15.2
2001	6,565	3.9	3.6	11.6	0.8	0.8	1.9
2002	6,547(c)	4.1	3.7	11.7	3.3	2.9	7.7
2003	7,243	4.2	3.3	12.3	5.4	4.7	12.2
2004	9,504	5.2	4.0	14.3	7.1	6.5	15.9
2005	12,573	6.4	4.7	16.8	7.4	6.9	16.4
2006	14,106	6.7	5.1	18.4	8.1	7.6	17.5
2007	18,715	8.2	6.7	24.5	7.3	6.7	15.2
2008	14,568	6.1	4.7	18.6	4.2	3.8	8.9
2009(P)	15,580	6.7	6.8	34.8	4.6	2.6	6.4

Source: Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations* and AIA estimates.

- a. Reflects unusually large non-operating expenses totaling \$3.4 billion and \$8.7 billion in 1991 and 1992, respectively, due to restructuring charges and the implementation of a change in accounting for future retirement benefit costs.
- b. Includes non-operating income (less interest expense) totaling \$4.4 billion.
- c. Includes non-operating expenses (less interest expense) totaling \$3.5 billion.
- P. Preliminary.
- ( ) Denotes net loss.



## TABLE II

### AEROSPACE INDUSTRY SALES BY CUSTOMER

Calendar Years 1996-2010

Year	TOTAL SALES	Aerospace Products and Services				Related Products & Services
		Total	Department of Defense	NASA and other Agencies	Other Customers	
<b>CURRENT DOLLARS (billions)</b>						
1996	\$116.8	\$97.3	\$42.5	\$12.4	\$42.4	\$19.5
1997	131.6	109.7	43.7	12.8	53.2	21.9
1998	148.0	123.3	42.9	13.3	67.0	24.7
1999	153.7	128.1	45.7	13.4	69.0	25.6
2000	144.7	120.6	47.5	13.4	59.7	24.1
2001	151.6	126.4	50.1	14.5	61.8	25.3
2002	152.4	127.0	57.7	16.4	52.9	25.4
2003	146.6	122.2	64.0	15.5	42.7	24.4
2004	155.7	129.8	70.1	16.0	43.7	26.0
2005(a,b)	173.6	156.5	78.2	15.0	63.3	17.1
2006	189.4	172.0	83.2	15.6	73.2	17.3
2007	201.8	184.0	86.1	16.2	81.7	17.8
2008	205.7	189.7	90.5	17.4	81.9	16.1
2009(P)	214.1	199.3	97.2	18.1	84.1	14.8
2010(E)	214.4	197.6	100.8	18.3	78.4	16.9
<b>CONSTANT DOLLARS<sup>c</sup> (billions)</b>						
1996	\$122.6	\$102.2	\$44.6	\$13.0	\$44.5	\$20.4
1997	136.6	113.8	45.4	13.2	55.2	22.8
1998	152.9	127.4	44.4	13.8	69.3	25.5
1999	157.5	131.3	46.8	13.7	70.7	26.3
2000	144.7	120.6	47.5	13.4	59.7	24.1
2001	147.7	123.1	48.8	14.1	60.2	24.6
2002	146.0	121.7	55.3	15.7	50.7	24.3
2003	136.9	114.1	59.8	14.5	39.8	22.8
2004	141.1	117.6	63.5	14.5	39.6	23.5
2005(a,b)	151.5	136.6	68.2	13.1	55.2	14.9
2006	159.5	144.9	70.1	13.2	61.7	14.6
2007	164.8	150.2	70.3	13.3	66.7	14.5
2008	162.0	149.4	71.2	13.7	64.5	12.7
2009(P)	164.5	153.2	74.7	13.9	64.6	11.3
2010(E)	161.3	148.6	75.8	13.8	59.0	12.7

Source: Aerospace Industries Association (AIA), based on company reports; *The Budget of the United States Government*, and data from the National Aeronautics and Space Administration (NASA) and the Departments of Commerce and Defense.

- a. Beginning in 2005, sales numbers for individual product groups are not comparable to figures in prior years due to revised survey methodology. However, total annual sales data remain comparable across all years of the time series.
- b. Beginning in 2005, NASA sales were reported separately from other agencies.
- c. Based on AIA's aerospace composite price deflator, (2000=100).
- E. Estimate.
- P. Preliminary.



## TABLE III

### SHIPMENTS, ORDERS, AND BACKLOG: Aircraft & Parts and Search & Navigation Equipment

As of End-of-Year 1984-2009

(Millions of Dollars)

Year	Shipments	Orders	Backlog
1984	\$79,135	\$91,620	\$118,664
1985	91,337	100,889	128,216
1986	101,832	107,993	134,377
1987	103,590	114,835	145,622
1988	107,955	137,443	175,110
1989	110,603	153,430	217,937
1990	125,822	150,329	242,444
1991(1)	132,182	132,645	242,907
1992	137,114	118,369	220,233
1993	123,850	100,815	197,198
1994	112,511	98,621	183,308
1995	110,928	115,279	187,659
1996	110,840	134,142	210,961
1997	132,787	143,071	221,245
1998	150,077	138,407	209,575
1999	152,728	140,329	197,176
2000	144,740	165,994	218,430
2001	153,571	146,897	211,756
2002	140,889	129,635	200,502
2003	135,955	132,524	197,071
2004	145,305	148,335	200,101
2005	152,081	184,119	232,139
2006	165,036	213,773	280,876
2007	184,334	271,177	367,719
2008	196,782	231,067	402,004
2009(P)	200,729	154,543	355,817

Source: U.S. Census Bureau, "Manufacturers' Shipments, Inventories, and Orders," and AIA estimates.

Note: Not seasonally adjusted; includes aircraft engine and parts manufacturing.

1. Data reported prior to 1992 uses previous industrial classification system, and equals aircraft, missiles, and space vehicles manufacturing sectors.

P. Preliminary.



## TABLE IV

### CIVIL TRANSPORT AIRCRAFT BACKLOG

As of End-of-Year

	2005	2006	2007	2008	2009 <sup>1</sup>
<b>TOTAL BACKLOG:</b>					
Number of Aircraft .....	1,791	2,451	3,427	3,714	3,435
Value (in millions) .....	\$133,197	\$184,610	\$270,728	\$296,217	\$269,621
<b>Boeing:</b>					
B-717 (MD-95)	5	-	-	-	-
B-737	1,123	1,560	2,076	2,270	2,118
B-747	58	116	125	114	107
B-757	-	-	-	-	-
B-767	30	28	52	70	57
B-777	288	299	357	350	303
B-787	287	448	817	910	850
<b>Foreign Order Backlog</b>					
<b>Percent of Total Backlog:</b>					
<b>Number of Aircraft .....</b>	69.2%	70.6%	75.3%	77.8%	78.9%
<b>Value .....</b>	75.8%	75.6%	78.8%	81.1%	81.6%
Number of Aircraft .....	1,239	1,730	2,581	2,891	2,711
Value (in millions) .....	\$100,971	\$139,554	\$213,418	\$240,092	\$220,100
<b>Boeing:</b>					
B-717 (MD-95)	-	-	-	-	-
B-737	684	1,008	1,493	1,703	1,627
B-747	44	85	101	97	91
B-757	-	-	-	-	-
B-767	29	27	24	42	31
B-777	240	233	284	271	244
B-787	242	377	679	778	718
<b>U.S. Order Backlog</b>					
Number of Aircraft .....	552	721	846	823	724
Value (in millions) .....	\$32,226	\$45,055	\$57,310	\$56,124	\$49,521
<b>Boeing:</b>					
B-717 (MD-95)	5	-	-	-	-
B-737	439	552	583	567	491
B-747	14	31	24	17	16
B-757	-	-	-	-	-
B-767	1	1	28	28	26
B-777	48	66	73	79	59
B-787	45	71	138	132	132

Source: Aerospace Industries Association, based on company reports.

1. As of end of third quarter.





**TABLE V**  
**CIVIL AIRCRAFT SHIPMENTS**  
**Calendar Years 1996-2010**

<b>Year</b>	<b>TOTAL</b>	<b>Transport Aircraft<sup>1</sup></b>	<b>Helicopters</b>	<b>General Aviation</b>
<b>NUMBER OF AIRCRAFT SHIPPED</b>				
1996	1,662	269	278	1,115
1997	2,269	374	346	1,549
1998	3,122	559	363	2,200
1999	3,485	620	361	2,504
2000	3,794	485	493	2,816
2001	3,575	526	415	2,634
2002	2,904	379	318	2,207
2003	2,935	281	517	2,137
2004	3,445	285	805	2,355
2005	4,094	290	947	2,857
2006	4,443	398	898	3,147
2007	4,729	441	1,009	3,279
2008	4,548	375	1,094	3,079
2009(P)	3,213	502	988	1,723
2010(E)	2,907	468	937	1,502
<b>VALUE (millions of dollars)</b>				
1996	\$20,805	\$17,564	\$193	\$3,048
1997	31,753	26,929	231	4,593
1998	41,676	35,663	252	5,761
1999	46,201	38,171	187	7,843
2000	39,155	30,327	270	8,558
2001	43,043	34,155	247	8,641
2002	35,450	27,574	157	7,719
2003	27,833	21,033	366	6,434
2004	27,815	20,484	515	6,816
2005	31,424	21,941	816	8,667
2006	37,044	25,875	802	10,367
2007	42,486	29,160	1,385	11,941
2008	38,964	24,076	1,540	13,348
2009(P)	41,368	29,695	1,443	10,230
2010(E)	38,242	27,677	1,386	9,179

Source: Aerospace Industries Association, based on company reports, data from the General Aviation Manufacturers Association (GAMA), and AIA estimates.

- 1. Includes all U.S.-manufactured civil jet transport aircraft plus the turboprop-powered Lockheed L-100.
- E. Estimate.
- P. Preliminary.



**TABLE VI**  
**AEROSPACE BALANCE OF TRADE**

**Calendar Years 2005-2009**

*(Millions of Dollars)*

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009<sup>P</sup></b>
<b>BALANCE OF TRADE:</b>					
<i>Current Dollars</i>	\$39,783	\$54,809	\$60,614	\$57,389	\$53,897
<i>Constant Dollars<sup>1</sup></i>	34,713	46,163	49,499	45,198	41,419
<b>AEROSPACE EXPORTS:</b>					
<i>Current Dollars</i>	\$67,432	\$85,262	\$97,224	\$95,082	\$78,912
<i>Constant Dollars<sup>1</sup></i>	58,838	71,812	79,396	74,885	60,643
<b>AEROSPACE IMPORTS:</b>					
<i>Current Dollars</i>	\$27,649	\$30,453	\$36,610	\$37,694	\$25,015
<i>Constant Dollars<sup>1</sup></i>	24,125	25,649	29,897	29,687	19,224

Source: Aerospace Industries Association, based on data from the U.S. Department of Commerce and AIA estimates.

*Note: Trade balances may not equal the difference between exports and imports due to rounding.*

1. Based on AIA's aerospace composite price deflator, (2000=100).

P. Preliminary.



## TABLE VII

### U.S. IMPORTS OF AEROSPACE PRODUCTS

Calendar Years 2005-2009

(Millions of Dollars)

	2005	2006	2007	2008	2009 <sup>P</sup>
<b>TOTAL IMPORTS</b>	\$27,649	\$30,453	\$36,610	\$37,694	\$25,015
<i>Aircraft:</i>	<u>10,891</u>	<u>10,775</u>	<u>13,296</u>	<u>12,480</u>	<u>9,464</u>
Military .....	40	2	12	52	0
Civil:	<u>10,851</u>	<u>10,772</u>	<u>13,284</u>	<u>12,428</u>	<u>9,464</u>
Transports .....	5,988	4,946	6,916	6,460	4,941
General Aviation .....	3,680	3,986	4,532	4,066	2,430
Helicopters .....	513	682	889	1,143	853
Other <sup>1</sup> .....	670	1,159	947	758	1,240
<i>Aircraft Engines:</i>	<u>3,271</u>	<u>3,739</u>	<u>3,880</u>	<u>4,328</u>	<u>3,727</u>
Turbine .....	3,183	3,650	3,812	4,195	3,606
Piston .....	88	90	69	133	121
<i>Aircraft and Engine Parts</i>	12,707	15,055	18,528	19,989	11,156
<i>Spacecraft, Missiles, Rockets, and Parts</i>	779	884	905	896	668

Source: Aerospace Industries Association, based on data from the U.S. Department of Commerce and AIA estimates.

Notes: Import data include non-military aircraft parts and aerospace products previously exported from the United States.  
Totals may not equal sum of terms due to rounding.

1. Includes used aircraft, gliders, balloons, and airships.

P. Preliminary.



## TABLE VIII

### EXPORTS OF U.S. AEROSPACE PRODUCTS

Calendar Years 2005-2009

(Millions of Dollars)

	2005	2006	2007	2008	2009 <sup>P</sup>
<b>TOTAL EXPORTS</b>	\$67,432	\$85,262	\$97,224	\$95,082	\$78,912
<b>TOTAL CIVIL EXPORTS</b>	\$57,588	\$71,857	\$83,979	\$82,264	\$69,003
<i>Complete Aircraft:</i>	<u>28,104</u>	<u>39,461</u>	<u>47,559</u>	<u>42,422</u>	(a)
Transports .....	21,888	32,897	40,297	33,326	
General Aviation .....	2,443	3,349	3,911	4,818	
Helicopters .....	565	671	1,117	948	
Used Aircraft .....	3,185	2,511	2,197	3,284	
Other Aircraft .....	24	33	37	46	
<i>Aircraft Engines:</i>	<u>6,762</u>	<u>6,202</u>	<u>7,127</u>	<u>8,505</u>	
Turbine .....	6,564	6,032	6,953	8,334	
Piston .....	198	170	174	171	
<i>Aircraft &amp; Engine Parts, Including Spares</i>	22,248	25,588	28,469	30,777	
<i>Missiles, Rockets, &amp; Parts</i>	21	28	13	25	
<i>Spacecraft, Satellites, &amp; Parts</i>	453	578	811	535	
<b>TOTAL MILITARY EXPORTS</b>	\$9,844	\$13,405	\$13,246	\$12,819	\$9,910
<i>Complete Aircraft:</i>	<u>2,392</u>	<u>4,464</u>	<u>4,174</u>	<u>4,520</u>	<u>1,951</u>
Transports .....	171	375	789	1,548	334
Helicopters .....	156	618	791	300	626
Fighters & Fighter Bombers ...	1,976	3,351	2,303	1,930	726
Used Aircraft .....	45	20	119	590	121
Other Aircraft .....	43	101	172	152	144
<i>Aircraft Engines:</i>	<u>411</u>	<u>414</u>	<u>414</u>	<u>423</u>	<u>448</u>
Turbine .....	302	312	277	344	376
Piston .....	109	102	137	80	72
<i>Aircraft and Engine Parts, Including Spares</i>	5,811	6,936	7,185	6,311	6,002
<i>Missiles, Rockets, &amp; Parts</i>	1,084	1,452	1,359	1,425	1,322
<i>Spacecraft, Satellites, &amp; Parts</i>	146	139	114	139	187

Source: Aerospace Industries Association, based on data from the U.S. Department of Commerce and AIA estimates.

Note: Totals may not equal sum of terms due to rounding.

a. Civil aerospace export data suppressed by U.S. Census Bureau beginning first quarter 2009.

P. Preliminary.



## TABLE IX

### AEROSPACE RELATED EMPLOYMENT

Calendar Years 2001-2009

Period	Total Employment	Aircraft, Engines, and Parts				Guided Missiles, Space Vehicles, & Parts	Search, Detection, & Navigation Instruments
		Total	Aircraft	Aircraft Engines & Engine Parts	Other Aircraft Parts & Equipment		
<b>ALL WORKERS (000's)</b>							
2001	660.7	434.5	241.3	95.6	97.6	76.5	149.8
2002	618.4	396.7	220.2	87.9	88.6	73.6	148.1
2003	587.1	371.9	209.1	81.3	81.5	70.2	145.0
2004	592.0	369.9	207.2	79.2	83.5	71.6	150.5
2005	611.7	380.0	211.3	81.9	86.8	75.1	156.6
2006	631.8	398.5	221.7	84.4	92.4	75.5	157.7
2007	646.8	413.6	230.2	85.3	98.1	75.5	157.6
2008	657.1	427.1	237.0	85.1	105.0	76.8	153.2
2009(P)	641.1	412.5	234.8	76.9	100.8	76.3	152.2
3Q08	661.1	430.8	238.7	85.5	106.6	77.2	153.1
4Q08	650.7	421.6	231.9	82.8	106.9	77.2	151.9
1Q09	652.0	423.5	239.2	79.3	105.0	76.3	152.1
2Q09	640.2	411.3	234.4	76.9	100.1	76.2	152.6
3Q09	631.0	402.7	230.9	74.5	97.3	76.4	151.9
<b>PRODUCTION WORKERS (000's)</b>							
2001	297.4	225.7	108.5	53.6	63.6	18.7	53.0
2002	263.3	203.7	97.2	49.9	56.6	15.7	43.9
2003	249.5	189.3	92.8	45.4	51.1	15.1	45.1
2004	244.2	185.4	89.4	43.8	52.2	12.9	45.9
2005	270.0	191.9	90.4	45.5	56.0	20.9	57.2
2006	326.9	214.1	99.9	54.1	60.1	39.3	73.5
2007	359.5	242.6	111.2	63.1	68.3	47.2	69.7
2008	365.0	N/A	112.1	D	75.3	N/A	63.5 (b)
2009(P)	353.1	N/A	112.0	D	71.1	N/A	62.6 (b)
3Q08(a)	303.9	N/A	112.5	D	76.6	N/A	D
4Q08	292.5	N/A	104.4	D	76.6	N/A	D
1Q09	298.0	N/A	113.9	D	74.7	N/A	D
2Q09	289.2	N/A	111.8	D	69.9	N/A	D
3Q09	284.3	N/A	110.3	D	68.6	N/A	D

Source: Aerospace Industries Association, based on data from the Bureau of Labor Statistics (BLS).

- a. Beginning in 2008, quarterly total for production workers does not include the series: Search, Detection, and Navigation Instruments.
- b. AIA estimate (series discontinued by BLS).
- D. Series discontinued by BLS.
- P. Preliminary.