



2008 Year End Review and 2009 Forecast – An Analysis ***AIA Research Center***

Following four years of remarkable expansion, the U.S. aerospace industry continued to see growth in 2008, although at a more moderate rate. The Aerospace Industries Association (AIA) estimates that aerospace sales will reach \$204.4 billion in 2008, following sales of \$200.3 billion in 2007.

This year had more than its share of challenges for aerospace manufacturing, but the industry has successfully faced challenges before, and the fundamentals that drive aerospace remain extremely resilient. Indeed, as the global financial crisis continues to bring many industries to their knees, aerospace is largely flying above the storm. In recent years, aerospace companies have gained more solid financial footing in a number of ways, such as paying down debt and increasing solvency. These responsible strategies are now paying off, enabling aerospace companies to meet financial obligations and to continue to produce goods and services, maintaining their critical role of steady support to the U.S. economy. For positive economic indicators, look no further than employment, which continued to increase in 2008 for aerospace manufacturing, an accomplishment few other industries have been able to match in recent times.

Civil Aircraft Sales

The civil sector saw moderate growth in 2008, up almost \$400 million to \$80.6 billion. Transport aircraft made up the most significant portion of civil aircraft sales by value in 2008, and dipped temporarily due to the Boeing work-stoppage. Helicopters and general aviation aircraft shipments were up considerably over previous years, resulting in a net positive trend.

The U.S. civil aviation market has grown tremendously in recent years on the strength of global economic expansion, world trade, and aircraft innovations. However, airlines worldwide are facing an increasingly difficult business environment. While strategies such as cutting capacity and increasing ticket prices have positioned airlines to meet current economic troubles, the market conditions forebode weakening demand for air transportation. International and domestic passenger traffic has slid in recent months, with the global economic upheaval effecting even booming markets like China and the Middle East. Air transportation, strongly correlated with economic growth, is clearly poised for long term expansion, but the near-term may bring difficult times as passengers struggle with overall poor economic conditions.

Airlines have tempered their fleet replacement and expansion plans due to softening demand, bringing new aircraft orders down significantly and extending delivery dates. Orders began to slow in early 2008, and as the year progressed, rapidly deteriorating market conditions hastened the decline. Slumping corporate profits and customer financing problems have impacted short term demand for business jets. Large civil aircraft are also affected, with airlines facing tighter credit terms. However, aircraft backlogs provide a measure of longer-term optimism for the industry; Boeing alone has a backlog approximately seven times the current production rate.

Military Aircraft Sales

Sales of military aircraft were up in 2008 to \$54.7 billion. This segment reflected the gradual rise in aircraft research and development, aftermarket labor and materials, and UAV production and support.

For aircraft production, fighter planes are responsible for the largest share of revenues, followed by helicopters and military transports.

U.S. defense spending, a broad driver of aerospace sales, continued to rise in 2008. Since fiscal year (FY) 2003, supplemental spending to support troops in Iraq and Afghanistan has boosted the baseline budget and has led to large increases in procurement for additional equipment, spares, and maintenance services. Overall, U.S. weapons procurement grew from \$54 billion in FY 2001 to \$146 in FY 2008. Moving forward, supplemental funding is likely to decrease as operations in Iraq scale back. Weaker R&D funding is also expected, which will likely have long term consequences for the competitiveness of the overall U.S. manufacturing industry.

Historically, defense spending has been somewhat insulated from trends in the overall economy, but spiraling government deficits related to recent federal bailouts and reduced tax revenue may lead to downward pressure on defense budgets. However, the delay between defense funding and the actual shipment of the purchased equipment can take several years, which would cause a lag between any future budget declines and current outlays. Since new procurement spending is basically committed for FY 2009, and the new administration will have limited impact on FY 2010, aerospace companies will likely see defense sales growth continue on-pace through calendar year 2012.

Missile Sales

The missile segment enjoyed strong growth in 2008, up 6.7 percent to \$13.2 billion. The U.S. remains the largest buyer of missiles and is heavily committed to missile research and development. U.S. Army, Navy, Air Force and Department of Defense-wide spending on missile research and development increased 11 percent this year. Procurement stayed fairly level, up slightly to \$7.9 billion total.

Space Sales

Space sales, made up primarily of research and development, and production and services, were up 4.2 percent to \$33.4 billion. Although research and development in the space sector was fairly flat in 2008, production and services was up 15 percent, accounting for most of the segment's growth. U.S. commercial satellites and launch services business grew dramatically, with NASA and Defense Department space contracts up only slightly.

Exports

To maintain their competitive edge, U.S. aerospace companies have also become more geographically balanced in recent years, thereby reducing their reliance on any one market. As such, foreign trade has become increasingly important to the industry. Over the last year, foreign customers bought U.S. aerospace products in record numbers. Further, the relative depreciation of the U.S. dollar made U.S. aerospace exports more affordable to overseas purchasers. As the dollar strengthens, U.S. aerospace products may lose some price advantage, but not to a significant degree.

Exports of U.S. aerospace products are expected to increase modestly in 2008 to \$99.2 billion. Civil transport aircraft, well over a third of total industry exports, will be lower this year due to the Boeing work-stoppage, coming in at \$37.5 billion for the year. However, 2008 was another big year for general aviation aircraft, which were exported at record levels. Foreign demand for military aircraft, engines, and parts also increased. Japan remains the biggest market for the industry, buying roughly 8.5% of aerospace exports. For the first half of 2008, Canada and the U.K. rounded out the top three export markets.

Imports

Although the U.S. will import fewer civil transports and general aviation aircraft this year, total aerospace imports are expected to increase by \$2 billion to \$38.6 billion. Imports of helicopters and aircraft engines are on track for big increases, and aircraft engines and parts make up well over half of U.S. aerospace

imports. France, Canada, the U.K., Japan, and Germany will be the top five aerospace suppliers to the U.S. for the year, accounting for three fourths of all aerospace imports.

Trade Balance

International trade has continued to flourish in 2008, with record aerospace exports and imports expected. The positive trade balance for aerospace products will stay in record territory in 2008, with a surplus of over \$60.6 billion. While the overall U.S. chronic trade deficit will continue in 2008, the aerospace industry will make a significant positive impact on the nation's trade balance. Foreign suppliers of aerospace products imported to the U.S. are more concentrated than U.S. export markets, illustrating the broad reach of U.S. aerospace around the world.

Orders & Backlog

Orders for aircraft and parts and search and navigation equipment decreased 14 percent from last year's record number to \$233.7 billion. Despite this drop in new orders, the backlog in 2008 will be higher than ever, at \$404.5 billion. This backlog is comprised largely of civil transport aircraft, valued at \$293.4 billion for 3,721 aircraft as of September 30th. The backlog is buoyed by unfilled orders from foreign customers, 81 percent of the backlog value with 2,878 aircraft on order. The growing importance of foreign orders reflects the trend towards a more globally-spread customer base.

Employment

The aerospace industry is predicted to add 10,000 workers to its ranks in 2008, closing the year with 655,500 direct employees. Aerospace employment has risen steadily since 2003, with data up to the third quarter 2008 reflecting increased employment opportunities. Aircraft manufacturing makes up roughly one third of industry employment, and has grown by 5,000 employees since last year. Production workers, approximately half of the total workforce, will take home \$29.58 per hour, and log 43.5 hours of work weekly.

Profit

According to preliminary data from the U.S. Census Bureau, the aerospace industry will have profits of \$20.9 billion in 2008. This is an increase from last year's figures, with profits as a percent of sales increasing to 8.6 percent. Aerospace manufacturing profits as a percent of sales, assets, and equity remain healthier than for the manufacturing industry at large, which has experienced faltering profit margins in recent years.

Outlook

Despite an uncertain economy, the outlook for the U.S. aerospace industry remains strong. The current upturn, begun in 2004, has been the strongest and broadest since World War II. Additionally, the commercial and military segments are prospering simultaneously, an almost unprecedented occurrence. The industry's key advantages position aerospace as one of the few U.S. manufacturing industries with visible long-term demand growth, solid prospects which promise to propel the industry to new heights.

Following the Boeing work-stoppage, which compressed overall industry sales in 2008, production rates are expected to normalize in 2009, pushing industry growth up 4.8 percent from the current year. Defense sales will likely continue to increase in the near term, as Defense Department budgets are mostly in place. For the next twelve months, many orders for large civil aircraft are locked into the system, with financing in place, alleviating concerns that the tight credit market will have a significant impact on aerospace sales next year.



TABLE I

AEROSPACE INDUSTRY SALES BY PRODUCT GROUP

Calendar Years 1995-2009

Year	TOTAL SALES	Aircraft			Missiles	Space	Related Products & Services
		Total	Civil	Military			
CURRENT DOLLARS (billions)							
1995	\$107.8	\$55.0	\$24.0	\$31.1	\$7.4	\$27.4	\$18.0
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)	173.3	112.2	62.1	50.1	9.1	33.5	18.6
2006	186.9	126.4	72.6	53.8	11.3	32.9	16.3
2007	200.3	134.4	80.2	54.2	12.4	32.0	21.5
2008(P)	204.4	135.3	80.6	54.7	13.2	33.4	22.5
2009(E)	214.3	143.5	86.6	57.0	13.3	34.1	23.3
CONSTANT DOLLARS^b (billions)							
1995	\$115.4	\$58.9	\$25.7	\$33.3	\$7.9	\$29.3	\$19.2
1996	122.7	63.3	28.2	35.1	8.4	30.5	20.4
1997	136.6	73.5	38.9	34.7	8.3	32.0	22.8
1998	153.0	86.8	51.4	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	147.8	84.3	50.0	34.3	10.1	28.8	24.6
2002	146.1	76.2	39.6	36.6	12.3	33.2	24.4
2003	137.0	68.1	30.3	37.8	12.6	33.5	22.8
2004	141.2	71.7	29.5	42.3	13.3	32.6	23.5
2005(a)	151.4	98.0	54.2	43.7	8.0	29.2	16.2
2006	157.5	106.5	61.2	45.3	9.5	27.7	13.8
2007	163.7	109.9	65.5	44.3	10.1	26.2	17.6
2008(P)	162.0	107.2	63.8	43.4	10.5	26.4	17.8
2009(E)	164.8	110.4	66.6	43.8	10.3	26.3	17.9

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

Note: Sum of terms may not equal totals due to rounding.

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 II

AEROSPACE INDUSTRY SALES BY CUSTOMER

Calendar Years 1995-2009

Year	TOTAL SALES	Aerospace Products and Services			Related Products & Services	
		Total	Department of Defense	NASA and other Agencies		Other Customers
CURRENT DOLLARS (billions)						
1995	\$107.8	\$89.8	\$42.4	\$11.4	\$36.0	\$18.0
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	152.3	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)	173.3	154.8	80.0	11.0	63.7	18.6
2006	186.9	170.6	86.8	9.5	74.3	16.3
2007	200.3	178.8	87.6	9.9	81.3	21.5
2008(P)	204.4	181.9	89.3	10.4	82.2	22.5
2009(E)	214.3	191.0	91.8	10.7	88.5	23.3
CONSTANT DOLLARS^c (billions)						
1995	\$115.4	\$96.1	\$45.4	\$12.2	\$38.5	\$19.2
1996	122.6	102.2	44.7	13.0	44.5	20.4
1997	136.6	113.9	45.4	13.2	55.2	22.8
1998	153.0	127.5	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	147.8	123.2	48.9	14.1	60.2	24.6
2002	146.1	121.8	55.3	15.7	50.7	24.4
2003	137.0	114.2	59.8	14.5	39.9	22.8
2004	141.2	117.6	63.5	14.5	39.6	23.5
2005(a,b)	151.4	135.1	69.9	9.6	55.7	16.2
2006	157.5	143.8	73.1	8.0	62.7	13.8
2007	163.7	146.2	71.7	8.1	66.4	17.6
2008(P)	162.0	144.1	70.7	8.2	65.2	17.8
2009(E)	164.8	146.9	70.6	8.2	68.1	17.9

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

Note: Sum of terms may not equal totals due to rounding.

- 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 1984-2008

(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(P)	196,903	233,653	404,469

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 prior to 1992 reported using 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

	2004	2005	2006	2007	2008 ¹
TOTAL BACKLOG:					
Number of Aircraft	1,062	1,791	2,451	3,427	3,721
Value (in millions)	\$76,345	\$133,197	\$184,610	\$270,728	\$293,414
Boeing:					
B-717 (MD-95)	18	5	-	-	-
B-737	771	1,123	1,560	2,076	2,292
B-747	27	58	116	125	115
B-757	2	-	-	-	-
B-767	25	30	28	52	64
B-777	167	288	299	357	359
B-787	52	287	448	817	891
Foreign Order Backlog:					
Percent of Total Backlog:					
Number of Aircraft	53.5%	69.2%	70.6%	75.3%	77.3%
Value	63.0%	75.8%	75.6%	78.8%	80.5%
Number of Aircraft	568	1,239	1,730	2,581	2,878
Value (in millions)	\$48,109	\$100,971	\$139,554	\$213,418	\$236,260
Boeing:					
B-717 (MD-95)	2	-	-	-	-
B-737	347	684	1,008	1,493	1,712
B-747	27	44	85	101	98
B-757	2	-	-	-	-
B-767	24	29	27	24	36
B-777	114	240	233	284	279
B-787	52	242	377	679	753
U.S. Order Backlog:					
Number of Aircraft	494	552	721	846	843
Value (in millions)	\$28,236	\$32,226	\$45,055	\$57,310	\$57,154
Boeing:					
B-717 (MD-95)	16	5	-	-	-
B-737	424	439	552	583	580
B-747	-	14	31	24	17
B-757	-	-	-	-	-
B-767	1	1	1	28	28
B-777	53	48	66	73	80
B-787	-	45	71	138	138

Source: Aerospace Industries Association, based on company reports.

1. As of end of third quarter.



TABLE V
CIVIL AIRCRAFT SHIPMENTS
Calendar Years 1995-2009

Year	TOTAL	Transport Aircraft ¹	Helicopters	General Aviation
NUMBER OF AIRCRAFT SHIPPED				
1995	1,625	256	292	1,077
1996	1,662	269	278	1,115
1997	2,269	374	346	1,549
1998	3,115	559	363	2,193
1999	3,456	620	361	2,475
2000	3,780	485	493	2,802
2001	3,559	526	415	2,618
2002	2,893	379	318	2,196
2003	2,928	281	517	2,130
2004	3,432	283	805	2,344
2005	4,087	290	947	2,850
2006	4,443	398	898	3,147
2007	4,729	441	1,009	3,279
2008(P)	4,976	433	1,214	3,329
2009(E)	5,348	493	1,387	3,468
VALUE (millions of dollars)				
1995	\$18,299	\$15,263	\$194	\$2,842
1996	20,805	17,564	193	3,048
1997	31,753	26,929	231	4,593
1998	41,449	35,663	252	5,534
1999	45,161	38,171	187	6,803
2000	38,637	30,327	270	8,040
2001	42,399	34,155	247	7,997
2002	35,000	27,574	157	7,269
2003	27,523	21,033	366	6,124
2004	27,089	20,484	515	6,090
2005	31,082	21,941	816	8,325
2006	36,425	25,875	832	9,718
2007	42,485	29,160	1,385	11,940
2008(P)	43,240	27,393	1,666	14,181
2009(E)	47,855	31,175	1,904	14,775

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.
- P. Preliminary.
- E. Estimate.



TABLE VI

AEROSPACE BALANCE OF TRADE

Calendar Years 2004-2008

(Millions of Dollars)

	2004	2005	2006	2007	2008 ^P
BALANCE OF TRADE:					
<i>Current Dollars</i>	\$31,002	\$39,783	\$54,809	\$60,614	\$60,633
<i>Constant Dollars</i> ¹	28,106	34,739	46,201	49,556	48,045
AEROSPACE EXPORTS:					
<i>Current Dollars</i>	\$56,817	\$67,432	\$85,262	\$97,224	\$99,237
<i>Constant Dollars</i> ¹	51,510	58,882	71,872	79,487	78,635
AEROSPACE IMPORTS:					
<i>Current Dollars</i>	\$25,815	\$27,649	\$30,453	\$36,610	\$38,604
<i>Constant Dollars</i> ¹	23,404	24,143	25,670	29,931	30,590

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 2004-2008

(Millions of Dollars)

	2004	2005	2006	2007	2008 ^P
TOTAL IMPORTS	\$25,815	\$27,649	\$30,453	\$36,610	\$38,604
<i>Aircraft:</i>	<u>11,655</u>	<u>10,891</u>	<u>10,775</u>	<u>13,296</u>	<u>12,533</u>
Military	10	40	2	12	35
Civil:	<u>11,645</u>	<u>10,851</u>	<u>10,772</u>	<u>13,284</u>	<u>12,498</u>
Transports	5,248	5,988	4,946	6,916	6,604
General Aviation	4,602	3,680	3,986	4,532	4,161
Helicopters	492	513	682	889	1,052
Other ¹	1,304	670	1,159	947	682
<i>Aircraft Engines:</i>	<u>2,629</u>	<u>3,271</u>	<u>3,739</u>	<u>3,880</u>	<u>4,544</u>
Turbine	2,600	3,183	3,650	3,812	4,418
Piston	29	88	90	69	126
<i>Aircraft and Engine Parts</i>	10,841	12,707	15,055	18,528	20,734
<i>Spacecraft, Missiles, Rockets, and Parts</i>	691	779	884	905	793

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 2004-2008

(Millions of Dollars)

	2004	2005	2006	2007	2008 ^P
TOTAL EXPORTS	\$56,817	\$67,432	\$85,262	\$97,224	\$99,237
TOTAL CIVIL EXPORTS	\$47,771	\$57,588	\$71,857	\$83,979	\$86,512
<i>Complete Aircraft:</i>	<u>22,568</u>	<u>28,104</u>	<u>39,461</u>	<u>47,559</u>	<u>46,881</u>
Transports	18,577	21,888	32,897	40,297	37,525
General Aviation	1,486	2,443	3,349	3,911	4,924
Helicopters	313	565	671	1,117	934
Used Aircraft	2,164	3,185	2,511	2,197	3,455
Other Aircraft	28	24	33	37	44
<i>Aircraft Engines:</i>	<u>5,271</u>	<u>6,762</u>	<u>6,202</u>	<u>7,127</u>	<u>8,534</u>
Turbine	5,081	6,564	6,032	6,953	8,350
Piston	191	198	170	174	183
<i>Aircraft & Engine Parts, Including Spares</i>	19,267	22,248	25,588	28,469	30,473
<i>Missiles, Rockets, & Parts</i>	20	21	28	13	25
<i>Spacecraft, Satellites, & Parts</i>	645	453	578	811	600
TOTAL MILITARY EXPORTS	\$9,046	\$9,844	\$13,405	\$13,246	\$12,725
<i>Complete Aircraft:</i>	<u>2,289</u>	<u>2,392</u>	<u>4,464</u>	<u>4,174</u>	<u>4,797</u>
Transports	332	171	375	789	1,984
Helicopters	158	156	618	791	182
Fighters & Fighter Bombers	1,674	1,976	3,351	2,303	1,744
Used Aircraft	86	45	20	119	745
Other Aircraft	39	43	101	172	143
<i>Aircraft Engines:</i>	<u>280</u>	<u>411</u>	<u>414</u>	<u>414</u>	<u>408</u>
Turbine	198	302	312	277	323
Piston	82	109	102	137	85
<i>Aircraft and Engine Parts, Including Spares</i>	5,362	5,811	6,936	7,185	6,082
<i>Missiles, Rockets, & Parts</i>	998	1,084	1,452	1,359	1,316
<i>Spacecraft, Satellites, & Parts</i>	117	146	139	114	122

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.

P. Preliminary.



TABLE IX

AEROSPACE RELATED EMPLOYMENT

Calendar Years 1997-2008

Thousands of Workers

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		
ALL WORKERS							
1997	713.6	471.9	270.8	97.1	104.0	83.0	158.7
1998	741.1	495.0	281.5	100.5	113.0	83.6	162.5
1999	708.5	468.0	263.3	98.5	106.2	79.2	161.4
2000	666.1	438.4	242.7	98.1	97.6	78.4	149.4
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	645.6	411.7	228.6	85.1	98.0	75.3	158.6
2008(P)	655.5	422.9	233.7	85.3	104.0	75.8	156.7
3Q07	648.0	413.3	229.4	85.2	98.7	75.5	159.2
4Q07	651.5	417.6	231.4	86.2	100.0	75.4	158.5
1Q08	652.3	419.8	232.6	85.8	101.4	75.3	157.2
2Q08	656.7	424.1	234.6	85.2	104.3	75.9	156.7
3Q08	657.4	424.9	233.8	84.9	106.2	76.3	156.2
PRODUCTION WORKERS							
1997	345.8	260.5	132.4	60.1	68.0	23.0	62.3
1998	360.8	274.6	138.9	60.6	75.1	23.2	63.0
1999	336.6	252.1	127.3	55.3	69.5	21.6	62.9
2000	304.1	227.2	110.3	54.1	62.8	20.6	56.3
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	358.7	241.7	110.4	63.1	68.2	46.9	70.1
2008(P)	366.3	301.0	112.3	D	74.6	N/A	65.3 (b)
3Q07	363.7	245.5	112.0	64.1	69.4	47.7	70.5
4Q07	369.9	252.3	114.5	66.4	71.4	48.2	69.5
1Q08(a)	300.7	300.7	113.5	D	72.6	N/A	D
2Q08	301.7	301.7	113.1	D	74.8	N/A	D
3Q08	300.5	300.5	110.4	D	76.3	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.



TABLE X

NET PROFIT AFTER TAXES

Calendar Years 1984-2008

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	12,572	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	15.1
2008(P)	20,856	8.6	6.7	23.5	6.6	6.2	14.3

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.