HEXCEL CORP /DE/
Form 10-K/A
February 27, 2006

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 10 K/A

ý **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2004

or

o **Transition Report Pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934**

For the transition period from to

Commission File Number 1-8472

Hexcel Corporation

(Exact name of registrant as specified in its charter)

Delaware	**94-1109521**
(State of Incorporation)	(I.R.S. Employer Identification No.)

281 Tresser Boulevard

Stamford, Connecticut 06901

(Address of principal executive offices and zip code)

Registrant s telephone number, including area code: **(203) 969-0666**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
COMMON STOCK	NEW YORK STOCK EXCHANGE PACIFIC STOCK EXCHANGE

Securities registered pursuant to Section 12(g) of the Act:

7% CONVERTIBLE SUBORDINATED DEBENTURES DUE 2011

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes ý No o

The aggregate market value of the registrant s common stock held by non-affiliates was $280,246,735 based on the reported last sale price of common stock on June 30, 2004, which is the last business day of the registrants most recently completed second fiscal quarter.

The number of shares outstanding of each of the registrant s classes of common stock, as of the latest practicable date.

Class	Outstanding as of February 23, 2006
COMMON STOCK	93,071,626

Documents Incorporated by Reference:

Proxy Statement for Annual Meeting of Stockholders (to the extent specified herein) Part III.

EXPLANATORY NOTE

The purpose of this Amendment No. 1 to the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 11, 2005 is to file a revised report, excluding the financial statements of BHA Aero Composite Parts Co., Ltd., the notes thereto, and the related Report of Independent Registered Public Accounting Firm.

Except as otherwise expressly noted herein, this Amendment No. 1 to the Annual Report on Form 10-K does not reflect any other events occurring after the March 11, 2005 filing of the Company s Annual Report 10-K for the fiscal year ended December 31, 2004.

The Items of the Annual Report on Form 10-K for the fiscal year ended December 31, 2004, which are amended herein are:

1. Item 15(a). 1 Financial Statements, has been amended to exclude the financial statements of BHA Aero Composite Parts Co., Ltd., the notes thereto, and the related Report of Independent Registered Public Accounting Firm.

PART I

ITEM 1. Business.

General Development of Business

Hexcel Corporation, founded in 1946, was incorporated in California in 1948, and reincorporated in Delaware in 1983. Hexcel Corporation and its subsidiaries (herein referred to as Hexcel or the Company), is a leading developer and manufacturer of advanced structural materials. The Company develops, manufactures, and markets lightweight, high-performance reinforcement products, composite materials and composite structures for use in the commercial aerospace, industrial, space and defense, and electronics markets. The Company s products are used in a wide variety of end products, such as commercial and military aircraft, space launch vehicles and satellites, soft body armor, wind turbine blades, printed wiring boards, high-speed trains and ferries, cars and trucks, window blinds, bikes, skis and a wide variety of other recreational equipment.

The Company serves international markets through manufacturing facilities and sales offices located in the United States and Europe, and through sales offices located in the Pacific Rim and Australia. The Company is also an investor in four joint ventures; one of which manufactures and markets reinforcement products in the United States; one of which manufactures and markets composite materials in Japan; and two of which manufacture composite structures and interiors in Asia.

Narrative Description of Business and Business Segments

Hexcel is a vertically integrated manufacturer of products within a single industry: Advanced Structural Materials. Hexcel s advanced structural materials business is organized around three strategic business segments: Reinforcements, Composites, and Structures.

Reinforcements

The Reinforcements business segment manufactures and markets industrial fabrics and other specialty reinforcement products. The following table identifies the Reinforcements business segment s principal products and examples of the primary end-uses:

BUSINESS SEGMENT	PRODUCTS	PRIMARY END-USES
REINFORCEMENTS	Industrial Fabrics and Specialty Reinforcements	Structural materials and components used in aerospace, defense, wind energy, automotive, marine, recreation and other industrial applications
		Raw materials for prepregs and honeycomb
		Soft body armor and other security applications
		Electronic applications, primarily high-technology printed wiring board substrates
		Solar protection and other architectural applications

Civil engineering and construction applications

Industrial Fabrics and Specialty Reinforcements: Industrial fabrics and specialty reinforcements are made from a variety of fibers, including carbon, aramid and other high strength polymers, several types of fiberglass, quartz, ceramic and other specialty fibers. These reinforcement products are used internally by Hexcel s Composites business segment and sold to third-party customers for use in a wide range of applications, which are categorized below by the Company in order of size. Revenues derived from Reinforcements for Composites include both third-party customer sales and internal sales to the Composites business segment. Third-party revenues from Ballistics are larger than from Reinforcements for Composites :

Reinforcements for Composites: Hexcel manufactures fabrics and specialty reinforcements that are used to make advanced composite materials and structures for the commercial and military aerospace industries. These reinforcements are used in primary and secondary structural applications such as wing components, horizontal and vertical stabilizer components, fairings, radomes and engine nacelles as well as overhead storage bins and other interior components. Hexcel reinforcements are also used in the manufacture of a variety of industrial and recreational products such as wind energy blades, automotive components, boats, surfboards, skis and other sporting goods equipment and certain civil engineering and construction applications. Products from this category are also used extensively as raw materials for prepregs and honeycomb manufactured by the Composites business segment.

Ballistics: Hexcel manufactures reinforcement fabrics used in ballistic applications such as soft body

armor, helmets, blankets and panels. These products offer bullet, fragment and puncture resistance and are used worldwide by military services, government agencies, police departments and prison systems. The Company also manufactures Hexform VIP™, a composite armor system used for ballistic protection in vehicle doors and panels.

Electronics: Hexcel s fiber glass fabrics are used to manufacture the substrate materials for printed wiring boards. The Company focuses on high-technology multilayer and other specialty boards that are used in electronics applications such as high-end computers, advanced networking telecommunications and cable television equipment and certain automotive components.

Architectural: Hexcel manufactures engineered fabrics used in solar protection and other specialty architectural applications.

General Industrial: Hexcel reinforcement products are also used in a variety of general industry applications including wall coverings, window shades, movie screens, insulating and binding tapes for cables and wires, and automotive components.

Reinforcements

KEY CUSTOMERS	MANUFACTURING FACILITIES
Armor Holdings	Anderson, SC
Composites One	Decines, France
Cytec Engineered Materials	Les Avenieres, France
DHB Industries	Seguin, TX
Endicott Interconnect Technologies	Statesville, NC
Isola Laminate Systems	Washington, GA
Nelco	
Polyclad Laminates	
Rogers Corporation	

The Reinforcements business segment s net sales to third party customers were $319.4 million in 2004, $232.8 million in 2003, and $217.9 million in 2002, which represented approximately 30%, 26% and 26% of the Company s net sales, respectively. In addition, approximately 24%, 26% and 24% of the Company s total production of reinforcement products was used internally to manufacture composite materials in 2004, 2003, and 2002, respectively.

The Reinforcements business segment also has a 50% equity ownership interest in TechFab LLC (TechFab), headquartered in the United States. TechFab manufactures non-woven reinforcement materials used in the manufacture of construction and roofing materials, sail cloth and other specialty applications. TechFab revenues were approximately $30 million in 2004. At December 31, 2004, Hexcel had an equity investment balance in TechFab of $5.7 million. Hexcel has no significant exposure to loss in connection with this joint venture.

Composites

The Composites business segment manufactures and markets carbon fibers, prepregs, structural adhesives, honeycomb, specially machined honeycomb parts and composite panels, fiber reinforced thermoplastics, moulding compounds, polyurethane systems, gel coats and laminates.

The following table identifies the Composites business segment s principal products and examples of the primary end-uses:

BUSINESS SEGMENT	PRODUCTS	PRIMARY END-USES
COMPOSITES	Carbon Fibers	Raw materials for fabrics and prepregs
		Filament winding for various space, defense and industrial applications
	Prepregs and Other Fiber-Reinforced Matrix Materials	Composite structures
		Commercial and military aircraft components
		Satellites and launchers
		Aeroengines
		Wind turbine rotor blades
		Yachts, trains and performance cars
		Skis, snowboards, hockey sticks, tennis rackets and bicycles
	Structural Adhesives	Bonding of metals, honeycomb and composite materials
		Aerospace, ground transportation and industrial applications
	Honeycomb, Honeycomb Parts & Composite Panels	Composite structures and interiors
		Semi-finished components used in:
		Helicopter blades
		Aircraft surfaces (flaps, wing tips, elevators and fairings)
		High-speed ferries, truck and train components
		Automotive components and impact protection

Carbon Fibers: Magnamite® carbon fibers are manufactured for sale to third party customers and for use by Hexcel in manufacturing certain reinforcements and composite materials. Carbon fibers are woven into carbon fabrics, used as reinforcement in conjunction with a resin matrix to produce pre-impregnated composite materials (referred to as prepregs) and used in filament winding and advanced fiber placement to produce finished composite components. Key product applications include structural components for commercial and military aircraft, space launch vehicles, wind blade components, and certain other applications such as recreational equipment.

Prepregs: HexPly® prepregs are manufactured for sale to third party customers and for use in manufacturing composite laminates and monolithic structures, including finished components for aircraft structures and interiors. Prepregs are manufactured by combining high performance reinforcement fabrics or unidirectional fibers with a resin matrix to form a composite material with exceptional structural properties not present in either of the constituent materials. Reinforcement fabrics used in the manufacture of prepregs include glass, carbon, aramid, quartz, ceramic and other specialty reinforcements. Resin matrices include bismaleimide, cyanate ester, epoxy, phenolic, polyester, polyimide and other specialty resins.

Other Fiber-Reinforced Matrix Materials: New fiber reinforced matrix developments include HexMC®, a carbon fiber epoxy sheet moulding compound that enables small to medium sized composite components to be mass produced. Hexcel s HexFIT® film infusion material is a product that combines resin films and dry fiber reinforcements to save lay-up time in production and enables the manufacture of large contoured composite structures, such as wind turbine blades. Resin Film Infusion and Resin Transfer Moulding products are enabling quality aerospace components to be manufactured using highly cost-effective processes.

Structural Adhesives: Hexcel manufactures and markets a comprehensive range of Redux® film and paste adhesives. These structural adhesives, which bond metal to metal and composites and honeycomb structures, are used in the aerospace industry and for many industrial applications.

Honeycomb, Honeycomb Parts and Composite Panels: HexWeb® honeycomb is a lightweight, cellular structure generally composed of nested hexagonal cells. The product is similar in appearance to a cross-sectional slice of a beehive. It can also be manufactured in asymmetric cell configurations for more specialized applications. Honeycomb is primarily used as a lightweight core material and acts as a highly efficient energy absorber. When sandwiched between composite or metallic facing skins, honeycomb significantly increases the stiffness of the structure, while adding very little weight.

Hexcel produces honeycomb from a number of metallic and non-metallic materials. Most metallic honeycomb is made from aluminum and is available in a selection of alloys, cell sizes and dimensions. Non-metallic materials used in the manufacture of honeycomb include fiberglass, carbon fiber, thermoplastics, non-flammable aramid papers, aramid fiber and other specialty materials.

Hexcel sells honeycomb as standard blocks and in slices cut from a block. Honeycomb is also supplied as sandwich panels, with facing skins bonded to either side of the core material. Hexcel also possesses advanced processing capabilities that enable the Company to design and manufacture complex fabricated honeycomb parts and bonded assemblies to meet customer specifications.

Aerospace is the largest market for honeycomb products. Hexcel also sells honeycomb for non-aerospace applications including automotive parts, high-speed trains and mass transit vehicles, energy absorption products, marine vessel compartments, portable shelters, and other industrial uses. In addition, the Company produces honeycomb for its Structures business segment for use in manufacturing finished parts for airframe Original Equipment Manufacturers (OEMs).

Composites

KEY CUSTOMERS	MANUFACTURING FACILITIES
Alenia	Casa Grande, AZ
Alliant Techsystems	Dagneux, France
BAE Systems	Decatur, AL
The Boeing Company	Duxford, England
Bombardier	Linz, Austria
CFAN	Livermore, CA
CTRM Aero Composites	Parla, Spain
Cytec Engineered Materials	Pottsville, PA
Durakon Industries	Salt Lake City, UT
EADS (Airbus)	Welkenraedt, Belgium
Easton	
Embraer-Empresa	
Gamesa	
GKN	
Goodrich	
Lockheed Martin	
Northrop Grumman	
Snecma	
United Technologies	
Vestas	

In January 2004, the Company announced the consolidation of activities of its Livermore, California facility into its other manufacturing facilities, principally into its Salt Lake City, Utah plant. The Livermore, California facility will continue to operate until the Company has successfully transferred its production from Livermore to its other manufacturing facilities.

The Composites business segment s net sales to third party customers were $683.9 million in 2004, $584.8 million in 2003 and $532.4 million in 2002, which represented approximately 64%, 65% and 62% of the Company s net sales, respectively. Net sales for Composites are highly dependent the number of large commercial aircraft produced as further discussed under the captions Significant Customers, Markets and Management s Discussion and Analysis of Financial Condition and Results of Operations. In addition, about 3% of the Company s total production of composite materials was used internally by the Reinforcements and Structures business units.

The Company also owns a 45% equity interest in DIC-Hexcel Limited (DHL), a joint venture with Dainippon Ink and Chemicals, Inc. (DIC). This Composites joint venture is located in Komatsu, Japan, and produces and sells prepregs, honeycomb and decorative laminates using technology licensed from Hexcel and DIC. Revenues of DHL for the twelve months ended December 31, 2004 were $10.2 million. Due to DHL s recognition of net losses in prior years, no equity investment balance remains for DHL at December 31, 2004. As of December 31, 2004, Hexcel had no significant exposures to loss relating to this joint venture. On January 20, 2005, Hexcel entered into a letter of awareness whereby Hexcel became contingently liable to pay DIC up to $1.8 million with respect to DHL s new debt obligations under certain circumstances.

Structures

The Structures business segment manufactures and markets composite structures for use in the aerospace industry. Composite structures are manufactured from a variety of composite and other materials, including prepregs, honeycomb and structural adhesives, using such manufacturing processes as autoclave processing, multi-axis numerically controlled machining, heat forming and other composite manufacturing techniques. Composite structures include such items as aerodynamic fairings, wing panels and other aircraft components.

The following table identifies the Structures business segment s principal products and examples of the primary end-uses:

BUSINESS SEGMENT	PRODUCTS	PRIMARY END-USES
STRUCTURES	Composite Structures	Aircraft structures and finished aircraft components, including:
		Wing to body fairings
		Wing panels
		Flight deck panels
		Door liners
		Helicopter blade tip caps

The Structures business segment s net sales to third party customers were $71.2 million in 2004, $79.3 million in 2003 and $100.5 million in 2002, which represented approximately 6%, 9% and 12% of the Company s net sales, respectively. The revenue decline in the Structures business segment reflects the decline in The Boeing Company s (Boeing) commercial aircraft production over the period and the continued transition of composite part fabrication work to its Asian joint ventures.

The Structures business unit has equity investments in two Asian joint ventures. They consist of BHA Aero Composite Parts Co., Ltd. (BHA Aero) and Asian Composites Manufacturing Sdn. Bhd. (Asian Composites).

In 1999, Hexcel formed BHA Aero with Boeing International Holdings, Ltd. (Boeing International) and Aviation Industries of China (now known as China Aviation Industry Corporation I) to manufacture composite parts for secondary structures and interior applications for commercial aircraft. This joint venture is located in Tianjin, China. During the fourth quarter of 2004, BHA Aero and its equity owners (Hexcel, Boeing International and China Aviation Industry Corporation 1 (AVIC)) reached agreement on a re-capitalization of BHA and a refinancing of BHA s third party loans. Pursuant to the terms of the agreement, Hexcel and Boeing International agreed to purchase newly issued registered capital of BHA for $7.5 million in cash, resulting in an increase in each of their respective ownership interests from 33.33% to 40.48%. Upon the completion of the equity investment, BHA will refinance its existing bank loans with a new five year bank term loan. The new five year bank term loan will be supported by guarantees from Boeing and AVIC. In addition, as part of the refinancing, Hexcel has agreed to reimburse Boeing and AVIC for a proportionate share of the losses they would incur if their guarantees of the new bank loan were to be called, up to a limit of $6.2 million. Upon completion of the refinancing, Hexcel s standby letter of credit of $11.1 million, which supports BHA s current bank loan, would terminate and would not be reissued. On January 19, 2005, Hexcel and Boeing International made their respective cash equity investments of $7.5 million in BHA. The refinancing of BHA s bank debt was

completed on January 26, 2005 and Hexcel s standby letter of credit terminated on February 15, 2005.

Also in 1999, Hexcel formed Asian Composites with Boeing Worldwide Operations Limited, Sime Link Sdn. Bhd., and Malaysia Helicopter Services Bhd. (now known as Naluri Berhadto), to manufacture composite parts for secondary structures for commercial aircraft. Hexcel has a 25% equity ownership interest in this joint venture, which is located in Alor Setar, Malaysia.

Under the terms of the joint venture agreements, Hexcel and Boeing have transferred the manufacture of certain semi-finished composite components to these joint ventures. Additional work will be transferred in 2005. Hexcel purchases the semi-finished composite components from the joint ventures, inspects and performs additional skilled assembly work before delivering them to Boeing. The joint ventures also manufacture composite components for other tier 1 aircraft component manufacturers. During 2004, these Asian joint ventures had combined revenues of $28.0 million.

Structures

KEY CUSTOMERS	MANUFACTURING FACILITY
Boeing	Kent, WA
Mitsubishi Heavy Industries	Tianjin, China (JV)
Sikorsky	Alor Setar, Malaysia (JV)

Financial **Information About Business Segments and Geographic Areas**

Financial information and further discussion of Hexcel s business segments and geographic areas, including external sales and long-lived assets, are contained under the caption Management s Discussion and Analysis of Financial Condition and Results of Operations and in Note 20 to the accompanying consolidated financial statements of this Annual Report on Form 10-K.

Significant Customers

Approximately 19.3%, 22.7% and 23.9% of Hexcel s 2004, 2003 and 2002 net sales, respectively, were to The Boeing Company (Boeing) and related subcontractors. Of the 19.3% of sales to Boeing and its subcontractors in 2004, 13.0% related to commercial aerospace market applications and 6.3% related to space and defense market applications. Approximately 20.7%, 19.6% and 16.3% of Hexcel s 2004, 2003 and 2002 net sales, respectively, were to European Aeronautic Defence and Space Company (EADS), including its business division Airbus Industrie (Airbus), and its subcontractors. Of the 20.7% of sales to EADS and its subcontractors in 2004, 17.5% related to commercial aerospace market applications and 3.2% related to space and defense market applications.

(in millions)	2004	2003	2002
Commercial:			
Boeing and subcontractors	**$ 139.5**	$ 137.8	$ 145.3
EADS and subcontractors	**187.7**	145.7	120.9
Total	**$ 327.2**	$ 283.5	$ 266.2
Space and Defense:			
Boeing and subcontractors	**$ 67.4**	$ 65.4	$ 57.6
EADS and subcontractors	**34.4**	30.2	17.5
Total	**$ 101.8**	$ 95.6	$ 75.1

Note: Certain prior years revenues have been reclassified to conform to the 2004 presentation.

Markets

Hexcel s products are sold for a broad range of end uses. The following tables summarize net sales to third-party customers by market and by geography for each of the three years ended December 31:

	2004	2003	2002
Net Sales by Market			
Commercial aerospace	**43**%	43%	46%
Industrial	**33**	31	30
Space and defense	**18**	20	17
Electronics	**6**	6	7
Total	**100**%	100%	100%
Net Sales by Geography (a)			
United States	**49**%	48%	50%
U.S. exports	**7**	8	8
Europe	**44**	44	42
Total	**100**%	100%	100%

(a) Net Sales by Geography based on the location in which the sale was manufactured.

Note: Certain prior years revenues have been reclassified to conform to the 2004 presentation.

Commercial Aerospace

The commercial aerospace industry is the largest user of advanced structural materials. The economic benefits airlines can obtain from weight savings in both fuel economy and aircraft range, combined with the design

enhancement that comes from the advantages of advanced structural materials over traditional materials, have caused the industry to be the leader in the use of these materials. While military aircraft and space craft have championed the development of these materials, commercial aerospace has had the greater consumption requirements and has commercialized the use of these products. Accordingly, the demand for advanced structural material products is closely correlated to the demand for commercial aircraft.

The use of advanced structural materials in commercial aerospace is primarily in the manufacture of new commercial aircraft. The aftermarket for these products is very small as many of these materials are designed to last for the life of the aircraft. The demand for new commercial aircraft is driven by two principal factors, the first of which is airline passenger traffic (the number of revenue passenger miles flown by the airlines) which affects the required size of airline fleets. According to industry sources, passenger traffic has grown at an annual compound rate of 5.3% in the period 1974 to 2003. Global economic conditions cause actual passenger traffic growth to fluctuate from year to year, but passenger traffic has only declined on two occasions since 1969: 1991 and 2001to 2003. While the tragic events of September 11, 2001 caused the decline in air travel and thereby passenger traffic, 2004 traffic figures suggest that the industry is returning to a 5% annual compound growth rate. Growth in passenger traffic requires growth in the size of the fleet of commercial aircraft operated by airlines worldwide.

The second factor, which is less sensitive to the general economy, is the replacement and retrofit rates for existing aircraft. The rate of retirement and refurbishment of passenger and freight aircraft, resulting mainly from obsolescence, is determined in part by the regulatory requirements established by various civil aviation authorities worldwide as well as public concern regarding aircraft age, safety and noise. These rates may also be affected by the desire of the various airlines to improve operating costs with higher payloads and more fuel-efficient aircraft, which in turn is influenced by the price of fuel. When aircraft are retired from commercial airline fleets, they may be converted to cargo freight aircraft or scrapped.

Each new generation of commercial aircraft has used increasing quantities of advanced structural materials, replacing metals. This follows the trend previously seen in military fighter aircraft where advanced structural materials may now exceed 50% of the weight of the airframe. The most recently launched commercial aircraft programs continue the trend of increasing usage of advanced structural materials. For instance, Airbus has indicated that the A380 is being built with 22% advanced structural materials by weight. The first A380 aircraft are already in production with the first flight planned for 2005 and deliveries anticipated to start in 2006 following the certification of the aircraft. Hexcel has successfully contracted with its customers to supply a significant amount of the advanced structural materials for the initial production of this aircraft and is completing the qualification of its products. During 2003, Boeing announced its plan to develop and launch the Boeing 787 which it targeted to utilize an even greater percentage content of advanced structural materials. In December 2004, Airbus announced its plan to develop and sell the A350 aircraft with a greater expected percentage content of advanced structured materials than its A380 aircraft.

This trend continues to expand the market opportunity for advanced structural materials, and Hexcel and other composite materials manufacturers are developing a wide range of materials to meet the challenges of new commercial aircraft programs. In undertaking the design of new aircraft, manufacturers select the materials of construction based upon the database of prior usage, where an existing material will meet its performance requirements, and from new products developed by their suppliers, where a new material is required. While Boeing has chosen an existing product from another supplier to use as the advanced structural material product form for the wings and fuselage of the Boeing 787, the remaining opportunities for advanced structural materials are significant, and the Boeing 787 will likely be an important aircraft for Hexcel. The benefit Hexcel ultimately derives from new aircraft programs depends upon a number of factors, including the design requirements of its customers, the suitability of the Company s products to meet those requirements, the competitive position of the Company s products against similar products offered by competitors, and the requirements awarded to the Company by its customers.

Reflecting the demand factors noted above, the number of commercial aircraft delivered by Boeing and Airbus declined by 31% from 1993 to 1995. At the lowest point during this period, Boeing and Airbus reported combined deliveries of 380 aircraft. Beginning in 1996, however, aircraft deliveries by Boeing and Airbus began to rise, growing to a combined record peak of 914 aircraft in 1999. Although relatively stable in 2000 and 2001, combined aircraft deliveries declined to 684 aircraft in 2002 and further declined to 586 aircraft in 2003. Commercial aircraft deliveries increased modestly to 605 aircraft in 2004.

In light of the tragic events that occurred on September 11, 2001 and the negative impact on passenger traffic and airline profitability, the deferral of existing commercial aircraft orders by airlines as well as a reduction in new orders caused Boeing and Airbus to significantly reduce their production and delivery of commercial aircraft in 2002 and 2003 compared to 2001. The impact of such changes on Hexcel is typically influenced by two factors:

the mix of aircraft produced and the inventory supply chain effects of reduced aircraft production. The dollar value of Hexcel s materials varies by aircraft type twin aisle aircraft use more Hexcel materials than narrow body aircraft and newer designed aircraft use more Hexcel materials than older generations. On average, Hexcel delivers products into the supply chain about six months prior to aircraft delivery. Depending on the product, orders placed with Hexcel are received anywhere between one and eighteen months prior to delivery of the aircraft to the customer. With the impact of the reduction in demand for commercial aircraft following September 11, 2001, the Company s annual commercial aerospace revenues declined approximately 28% from 2001 to 2003. With the prospect of increased aircraft deliveries in 2005 and the initial ramp up of production of the A380, Hexcel s commercial aerospace revenues increased by approximately 19% in 2004.

Set forth below are historical deliveries as announced by Boeing and Airbus:

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Boeing (including McDonnell Douglas)	409	312	256	271	375	563	620	491	527	381	281	285
Airbus	138	123	124	126	182	229	294	311	325	303	305	320
Total	547	435	380	397	557	792	914	802	852	684	586	605

Commercial aerospace represented 43% of Hexcel s 2004 net sales. Approximately 70% of these revenues can be identified by the Company as sales to Boeing, Airbus and their subcontractors for the production of new large commercial aircraft. The balance of the Company s commercial aerospace sales are related to regional and business aircraft manufacture, the production of aircraft engines and nacelles (the casing that contains the engine on an aircraft wing), and other commercial aircraft applications. Regional aircraft production has also increased over time, but does not directly follow the cycle of large commercial aircraft deliveries. These applications also exhibit increasing utilization of composite materials with each new generation of aircraft.

Industrial Markets

Hexcel groups under this market segment its revenues from applications for its products outside the aerospace and electronics markets. A number of these applications represent emerging opportunities for the Company s products. In developing new applications, the Company seeks those opportunities where advanced structural material technology offers significant benefits to the end user, often applications that demand high physical performance. Within this segment, the major end market sub-segments include in order of size ballistics (e.g., soft body armor), wind energy, recreational equipment (e.g., bicycles, snowboards, tennis rackets and hockey sticks), and surface transportation (e.g., automobiles, mass transit and high-speed rail, and marine applications). Hexcel s participation in these market applications is a valuable complement to its commercial and military aerospace businesses, and the Company is committed to pursuing the utilization of advanced structural material technology where industrial customers can generate significant value.

Space and Defense

The space and defense markets have historically been innovators in the use of, and sources of significant demand for, advanced structural materials. The aggregate demand by space and defense customers is primarily a function of procurement of military aircraft that utilize advanced structural materials by the United States and certain European governments. The Company is currently qualified to supply materials to a broad range of over 80 military aircraft and helicopter programs. These programs include the F/A-18E/F Hornet, the F-22 Raptor, and the Eurofighter/Typhoon, as well as the C-17, the V-22 Osprey tiltrotor aircraft, and the Blackhawk, Tiger and NH90 helicopters. In addition, there are new programs in development such as the F-35 (Joint Strike Fighter or JSF) and the EADS A400M military transport planned to enter production later in the decade. The benefits that the Company obtains from these programs will depend upon which ones are funded and the extent of such funding. Space applications for advanced structural materials include solid rocket booster cases, fairings and payload doors for launch vehicles, and buss and solar arrays for military and commercial satellites. The production of both launch vehicles and satellites has declined in recent years from a peak in the late 1990s.

Contracts for military and some commercial programs contain provisions for termination at the convenience of the U.S. government or the buyer. For example, the Department of Defense announced the cancellation of the RAH-66 Comanche program on February 23, 2004. The prime contractors for these programs flow down these provisions to materials suppliers such as the Company. In the case of such a termination, Hexcel is entitled to recover reasonable costs incurred plus a provision for profit on the incurred costs. In addition, according to the terms of a contract, the Company may be subject to U.S. government cost accounting standards in accordance with applicable Federal Acquisition Regulations.

Electronics

The Company is one of the largest Western producers of high-quality, lightweight fiberglass fabrics used in the fabrication of printed wiring substrates. Our focus is on high-technology multilayer and other specialty boards that are used in electronics applications such as high-end computers, advanced networking and telecommunications and certain automotive components.

Starting in the first quarter of 2001, the electronics industry experienced a severe downturn, and a corresponding inventory correction began working its way through the supply chain significantly impacting demand for fiberglass fabric substrates. As the downturn continued through 2002 and 2003, competition intensified for the business that remained and pricing pressure increased because of excess production capacity throughout the industry. Meanwhile, the migration of electronics equipment production from the U.S. to Asia accelerated, placing additional pressure on the Company s electronics business. To respond to these market changes, the Company restructured its operations, focusing its activities on those applications demanding higher performing materials while continuing to serve the needs of its existing key customers. Despite some improvement in overall electronics market conditions during 2004, the Company remains focused on high-technology and specialty applications for its electronics materials.

Further discussion of Hexcel s markets, including certain risks, uncertainties and other factors with respect to forward-looking statements about those markets, is contained under the caption Management s Discussion and Analysis of Financial Condition and Results of Operations.

Backlog

In recent years, Hexcel s customers have increasingly demanded shorter order lead times and just-in-time delivery performance. While the Company has many multi-year contracts with its major aerospace customers, most of these contracts specify the proportion of the customers requirements that will be supplied by the Company and the terms under which the sales will occur, not the specific quantities to be procured. The Company s electronics and industrial customers have always desired to order their requirements on as short a lead-time as possible. The Company has recognized that over the last few years the twelve-month order backlog is no longer a meaningful trend indicator and, as a result, ceased monitoring it in the management of the business.

Raw Materials and Production Activities

Hexcel s manufacturing operations are vertically integrated. The Company produces materials used in the manufacture of industrial fabrics, composite materials and composites structures as well as sells these materials to third party customers for their use in the manufacture of their products.

The Company manufactures high performance carbon fiber from polyacrylonitrile (PAN) precursor it produces at its Decatur, Alabama facility. The primary raw material for PAN is acrylonitrile. Hexcel consumes approximately 50% of the carbon fiber it produces and sells the remainder of its output to third-party customers. However, as one of the world s largest consumers of carbon fiber, the Company purchases significantly greater quantities of carbon fiber than it produces for its own use. The sources of carbon fiber it can use are dictated by its product qualifications. With the increasing demand for carbon fiber, particularly in aerospace applications, the supply of carbon fiber tightened in 2004. As a result, the supply of carbon fiber available for recreational and industrial applications has become restricted and is affecting the ability of

the Company and other producers to supply products for these applications until carbon fiber output increases. In response to increasing demand, all carbon fiber manufacturers have announced plans to increase their manufacturing capacity over the next two to three years. In February 2005, Hexcel announced its plans to expand its PAN and carbon fiber capacity by about 40% to serve the growing needs of its customers and its own downstream products. This investment is estimated to cost $80 million and take three years to complete.

The Reinforcements business segment purchases glass, aramid and other high-strength fibers as well as carbon fiber to manufacture industrial fabrics. The Composites business segment consumes approximately 25% of the output of the Reinforcements business, by value, in the form of reinforcements for composite products. The Company purchases glass yarn from a number of suppliers in the United States, Europe and Asia. Aramid and high strength fibers are produced by only a few companies. With the large increase in demand for soft body armor and other ballistic products for the military services, these fibers are in short supply thus limiting the near term potential for further growth in production of ballistic materials.

In addition to reinforcement fabrics and fibers, the Composites business segment purchases, among other raw materials, epoxy and other specialty resins, aramid paper and aluminum specialty foils to use in the manufacture of its composite products. When entering into multi-year contracts with its aerospace customers, the business targets to get back-to-back commitments from its key raw material suppliers.

The Structures business segment purchases composite materials internally and from other composite material manufacturers based on specifications. It also purchases semi-finished composite parts from its Asian Composites and BHA Aero joint ventures.

Hexcel s manufacturing activities are generally based on a combination of make-to-order and make-to-forecast production requirements. The Company coordinates closely with key suppliers in an effort to avoid raw material shortages and excess inventories. However, many of the key raw materials the Company consumes are available from relatively few sources, and in many cases the cost of product qualification makes it impractical to develop multiple sources of supply. While the unavailability of these materials could under certain circumstances have a material adverse effect on the Company s consolidated results of operations, the Company does not currently expect the current shortages of carbon fiber or aramid and other high strength fibers mentioned above to have such an effect.

Research and Technology; Patents and Know-How

Hexcel s Research and Technology (R&T) departments support the Company s businesses worldwide. Through R&T activities, the Company maintains expertise in chemical and polymer formulation and curatives, fabric forming and textile architectures, advanced composite structures, process engineering, application development, analysis and testing of composite materials, computational design, and other scientific disciplines related to the Company s worldwide business base.

Hexcel s products rely primarily on the Company s expertise in materials science, textiles, process engineering and polymer chemistry. Consistent with market demand, the Company has been placing more emphasis on cost effective product design and lean manufacturing in recent years while seeking to improve the consistency of its products. Towards this end, the Company has entered into formal and informal alliances, as well as licensing and teaming arrangements, with several customers, suppliers, external agencies and laboratories. The Company believes that it possesses unique capabilities to design, develop and manufacture composite materials and structures. The Company has over 400 patents and pending applications worldwide, has licensed many key technologies, and has granted technology licenses and patent rights to several third parties in connection with joint ventures and joint development programs. It is the Company s policy to actively enforce its proprietary rights. The Company believes that the patents and know-how rights currently owned or licensed by the Company are adequate for the conduct of its business.

Hexcel spent $21.3 million for R&T in 2004, $17.7 million in 2003 and $14.7 million in 2002. Although a portion of the year-over-year increase was due to the impact of changes in foreign currency exchange rates, the Company increased its R&T spending in 2004, to support new products and new commercial aircraft qualification activities. These expenditures were expensed as incurred.

Environmental Matters

The Company is subject to federal, state, local and foreign laws and regulations designed to protect the environment and to regulate the discharge of materials into the environment. The Company believes that its policies, practices, and procedures are properly designed to prevent unreasonable risk of environmental damage and of associated financial liability. To date, environmental control regulations have not had a

significant adverse effect on the Company s overall operations.

The Company s aggregate environmental related accruals at December 31, 2004 and 2003 were $4.1 million and $4.0 million, respectively. As of December 31, 2004 and December 31, 2003, $1.0 million and $1.3 million, respectively, were included in accrued liabilities, with the remainder included in other non-current liabilities. As related to certain of its environmental matters, the Company s accruals were estimated at the low end of a range of possible outcomes since there was no better point within the range. If the Company had accrued for these matters at the high end of the range of possible outcomes, the Company s accruals would have been $1.6 million and $1.3 million higher at December 31, 2004 and December 31, 2003, respectively. These accruals can change significantly from period to period due to such factors as additional information on the nature or extent of contamination, the methods of remediation required, changes in the apportionment of costs among responsible parties and other actions by governmental agencies or private parties, or the impact, if any, of the Company being

named in a new matter.

Environmental remediation spending charged directly to the Company s reserve balance for 2004, 2003 and 2002, was $1.0 million, $2.4 million and $1.4 million, respectively. In addition, the Company s operating costs relating to environmental compliance were $6.0 million, $4.9 million and $4.4 million, for 2004, 2003 and 2002, respectively and were charged directly to expense. Capital expenditures for environmental matters approximated $1.1 million, $0.7 million and $0.9 million for 2004, 2003 and 2002, respectively. The Company expects the level of spending on remediation, environmental compliance and capital spending in 2005 to approximate spending levels in prior years. A discussion of environmental matters is contained in Item 3, Legal Proceedings, and in Note 17 to the accompanying consolidated financial statements included in this Annual Report on Form 10-K.

Sales and Marketing

A staff of salaried market managers, product managers and salespeople sell and market Hexcel products directly to customers worldwide. The Company also uses independent distributors and manufacturer representatives for certain products, markets and regions. In addition, the Company operates various sales offices in the United States, Europe and the Pacific Rim.

Competition

In the production and sale of advanced structural materials, Hexcel competes with numerous U.S. and international companies on a worldwide basis. The broad markets for the Company s products are highly competitive, and the Company has focused on both specific markets and specialty products within markets to obtain market share. In addition to competing directly with companies offering similar products, the Company competes with producers of substitute structural materials such as structural foam, wood and metal. Depending upon the material and markets, relevant competitive factors include approvals, product performance, delivery, service, price and customer preference for sole sourcing.

Employees

As of December 31, 2004, Hexcel employed 4,406 full-time employees, 2,387 in the United States and 2,019 in other countries. The number of full-time employees as of December 31, 2003 and 2002 was 4,084 and 4,245, respectively. The increase in full-time employees in 2004 was in response to higher demand for the Company s products across all markets, particularly from commercial aerospace and industrial market applications. The decrease in full-time employees in 2003 was primarily due to the Company s business consolidation and restructuring programs, which included the right-sizing of its businesses in response to the forecasted reductions in commercial aircraft production, the continued weakness in the electronics market and the closure of manufacturing facilities. For further discussion, refer to Management s Discussion and Analysis of Financial Condition and Results of Operations and to Note 3 to the accompanying consolidated financial statements of this Annual Report on Form 10-K.

Other Information

The Company s internet website is www.hexcel.com. The Company makes available, free of charge through its website, its Form 10-Ks, 10-Qs and 8-K s, and any amendments to these forms, as soon as reasonably practicable after filing with the Securities and Exchange Commission.

ITEM 2. Properties

Hexcel owns and leases manufacturing facilities and sales offices located throughout the United States and in other countries, as noted below. The corporate offices and principal corporate support activities for the Company are located in leased facilities in Stamford, Connecticut. The Company s research and technology administration and principal laboratories are located in Dublin, California; Duxford, United Kingdom; and Les Avenieres, France.

The following table lists the manufacturing facilities of Hexcel by geographic location, approximate square footage, and principal products manufactured. This table does not include manufacturing facilities owned by entities in which the Company has a joint venture interest.

Manufacturing Facilities

Facility Location	Approximate Square Footage	Business Segment	Principal Products
United States:			
Anderson, South Carolina	432,000	Reinforcements	Industrial Fabrics
Burlington, Washington	86,500	Composites	Honeycomb Parts
Casa Grande, Arizona	294,000	Composites	Honeycomb and Honeycomb Parts