

FILE NAME: Allied Signal Bendix (ASB)

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ALLIED-SIGNAL INC.

CAPITAL STRUCTURE
LONG TERM DEBT

Issue	Rating	Amount Outstanding	Times Charges Earned 1986 1985	Interest Dates	Call Price	Price Range 1986 1985
1. S.F. Debenture 9s, 2000	A1	29,848,000		A&O 1	10103.30	100 - 90
2. ELTRA Corp. deb. 8 1/2s, 2001	A1	29,025,000		J&J 15	10103.60	91 1/2 - 77
3. Money multiplier notes	A1	100,181,000		None	N.C.	86 - 75
4. 6 1/2% notes, 1988	A1	109,734,000		J&D 15	100	92 1/2 - 81
5. 6 1/2% notes, 1990	A1	63,108,000		J&D 15	100	96 1/2 - 84 1/2
6. Zero coupon serial bonds, due 1985-09	A1	99,890,000		Q	100	86 1/2 - 72 1/2
7. 9 1/2% notes, 1988	A1	100,000,000		M&N 1	N.C.	100 - 99 1/2
8. S.F. debenture 9 1/2s, 1997	A1	200,000,000		J&D 15	N.C.	105 1/2 - 100 1/4
9. Debenture 9 1/2s 2016	A1	100,000,000		J&D 1	N.C.	101 1/2 - 86 1/4
10. 8% eurodollar bonds, 2006	A1	100,000,000		May 15	N.C.	
11. The Bendix Corp., 8.35% notes, 1990	A1	18,825,000	4.49 2.37	Jan. 10	10103.51	
12. 6 1/2% euroyen bonds, 1993	A1	99,000,000		M&N 1	100	
13. UOP, Inc. s.f. deb. 6 1/2s, 1993	A1	1,219,000		M&S 15	10100.93	89 1/2 - 78 1/2
14. The Signal Cos. Inc. deb. 5 1/2s, 1997	A1	12,457,000				82 - 68
15. The Signal Cos. Inc. conv. subord. deb. 5 1/2s, 1994	A2	8,121,000		F&A 15	10101.05	145 - 125
16. The Signal Cos. Inc. subord. exchngbl. deb. 8s, 2009	A2	103,428,000		J&J 15	10101.00	101 1/2 - 86 1/4
17. The Signal Cos. Inc. 11 1/2% euromote, 1992	A1	125,000,000		Feb. 20		111 1/2 - 106 1/2
18. Environmental Improv. Rev. Bonds and note oblig.		136,000,000				
19. Capitalized leases		148,000,000				
20. Foreign currency bonds		190,000,000				
21. Other debt		106,000,000				

CAPITAL STOCK

Issue	Par Value \$1	Rating	Shares Outstanding	Earned per Sh. 1986 1985	Divs. per Sh. 1986 1985	Call Price	Price Range 1986 1985
1. Common			175,674,387	\$3.26 \$2.28	\$1.80 \$1.80		54 1/2 - 36 1/4

(*)Excluding current portion. (S)Subject to change; see text. (B)Based avg. shs. on continuing operations. (D)See text. (A)Also paid one sh. Henley Group Inc. for each 4 shs. held and one com. stk. purchase right for each sh. held.

HISTORY

Incorporated in Del. in 1985 as successor to a company originally incorporated Dec. 17, 1920 under a perpetual charter in New York as Allied Chemical & Dye Corp.; name changed to Allied Chemical Corp. Apr. 28, 1958; name changed to Allied Corp. ("Allied") Apr. 27, 1981; present name adopted Sept. 19, 1985 upon acquisition of The Signal Companies, Inc. ("Signal"); see below.

Originally formed to consolidate by stock ownership the control of (1) The Barrett Co., incorporated in New Jersey, Feb. 6, 1903 as American Coal Products Co. and name changed to The Barrett Co. in 1915 (2) General Chemical Co., incorporated in New York, Feb. 15, 1899 (3) National Aniline & Chemical Co., Inc., incorporated in New York, May 26, 1917 (4) Semet-Solvay Co., incorporated in New York, July 8, 1895, and (5) The Solvay Process Co., incorporated in New York, Sept. 28, 1881. For details of above acquisitions, see Moody's 1949 Industrial Manual.

During 1947, General Chemical Co., Semet-Solvay Co. and The Solvay Process Co., together with certain minor subsidiaries, were merged. Business formerly conducted by these companies, as well as business formerly conducted by National Aniline & Chemical Co., Inc. and Barrett Co., which was merged in 1941, is now conducted as companies or the operations have been sold.

During 1952 Nitrogen Division was formed to take over manufacture and sale of ammonia and other nitrogen and related products previously made by Solvay Process Division and sold by Barrett Division.

In 1954 acquired Mutual Chemical Co. of America; merged Mar. 1, 1955.

In 1955, company formed Allied Chemical International Division which specialized in operations outside the U.S. and Canada. Organization was restructured and merged into the operating companies.

In 1959, company started first privately owned plant for production of uranium hexa-fluoride from uranium concentrates for sale under contract to Atomic Energy Commission at Metropolis, Ill.

On Feb. 20, 1962, acquired Union Texas Natural Gas Corp. (Del.) (Union Texas Petroleum) for \$52,795 common shares.

In Sept., 1963 formed Fibers Division for fiber program.

In May 1964, acquired Southern Propane Co. in exchange for 200,000 common shares. Now operated as part of a subsidiary supervised by Union Texas Petroleum.

In Jan., 1966, acquired certain assets of Polymer Chemicals Division of W.R. Grace & Co.

In Feb. 1966, company and Aerojet General Corp. agreed to form jointly owned Idaho Nuclear Corporation for purpose of managing and operating a portion of National Reactor Testing station at Idaho Falls, Ida., under a 5-year contract which expired June 30, 1971, for the U.S. Atomic Energy Commission. In May 1969 the Corp. was reorganized, Aerojet General Corp. assuming a 52% interest with Allied Chemical and Phillips Petroleum sharing the remainder. On July 1, 1971, Allied Chemical entered into a new contract covering sole management of the National Reactor Testing Station's chemical processing plant and related activities. In early 1979, Co. did not renew this contract which expired in Sept., 1979.

In 1966 acquired 50% interest in Jim Robbins Seat Belt Co. which was increased to 100% on Aug. 1, 1967 (merged into Co. on Oct. 31, 1974).

On Aug. 1, 1967 sold Barrett building materials business to Jim Walter Corp. for \$20,000,000 cash and 731,607 \$2 conv. series 1 3rd preferred shares of Jim Walter Corp., which were sold in Apr. 1968 for \$46,969,169.

In Oct. 1967, acquired 50% interest in Daal Specialties Ltd. and Daal Specialties (Collingswood) Ltd. Interest increased to 100% in June 1969. Now operated as Daal Specialties (Canada) Ltd. under direction of Automotive Sector.

On Mar. 2, 1970, company and a Gulf Oil Corp. subsidiary (General Atomic Co.) formed Allied Gulf Nuclear Services, a partnership, for the construction and operation of a nuclear fuel recovery plant at Barnwell S.C.

In 1971 acquired a group of small seat belt producers called Klippan Companies, with plants in West Germany, France, Italy, Sweden and Switzerland (sold and/or shutdown in 1982).

In early 1974 Gulf Oil Corp. went into partnership with Scallop Nuclear Inc., a subsidiary of the Royal Dutch Shell Group. Subsequently sold a 50% interest in General Atomic Co., to Scallop Nuclear, which resulted in a name change to Allied-General Nuclear Services (AGNS). General Atomics investment in AGNS was subsequently transferred to Valley Pines Associates, as partnership between Gulf and Scallop Nuclear. The joint venture built a plant at Barnwell, S.C. costing approx. \$250 million to process used nuclear fuel from nuclear power plants. The Barnwell plant, with processing capacity of 1,500 metric tons of spent atomic fuel per year, is mutually owned by Valley Pines Associates and a wholly-owned subsidiary of the Co., Allied Chemical Nuclear Products, Inc.

Actions by the federal government have had the effect of preventing AGNS from obtaining the necessary licenses to operate the facility. While the current administration has stated that it favors reprocessing, management does not believe that private operation of the Barnwell facility is feasible, or commercially practicable.

In 1981 established an \$87,000,000 after-tax reserve for the write-off and eventual shutdown of the AGNS facility. However, AGNS continues to believe that the Barnwell plant is a national and international asset that should be used by the Government in the management of high level radioactive wastes.

In Mar. 1983, AGNS filed a lawsuit against the Federal government seeking damages in excess of \$500 million as a result of the government's reversal in 1977 of its long-standing policy of inducing private sector entry into the nuclear fuel reprocessing business. AGNS contends that the government's actions in effect constituted a taking over of the AGNS facility for public use without just compensation in violation of the Fifth Amendment. The government has filed an answer generally denying AGNS' allegations and has filed a motion to dismiss the lawsuit.

In May 1984, AGNS filed a motion seeking judgment that the Government's 1977 actions constituted a "taking" of the Barnwell plant as a matter of law and for the Court to dismiss the Government's motion.

In Oct. 1977, acquired from Gardiner Big River Inc., a co. owned by French interest, an ammonia plant in Helena, Ark. The plant's principal operations were shutdown in early 1982.

In Apr. 1978, Co. sold to Tejas Gas Corp. the Winnie System pipeline for \$7,000,000. Purchase price was a combination of cash and the assumption by Tejas of certain obligations of Co. The sale includes the 328-mile intrastate leased pipeline contracts, gas-sale contracts and transportation agreements.

In Sept. 1978 Co. sold its vinyl chloride monomer and ethylene facility in Baton Rouge, La. to ICI Americas Inc.

In May 1979, Co. sold its South Point, Ohio plant to Ashland Oil, Inc.

Effective July 1, 1979, AC Holding Corp., a subsidiary acquired 94.8% of com. stk. of Eltra Corp., a diversified manufacturer of electrical, consumer and industrial goods, for \$51.50 per share. On Nov. 5, 1979, acquired balance of shares outstanding. Total cost of acquisition was about \$598,000,000.

In July 1979, Co. sold its Thermosets Business and related assets including its plants in Toledo, Ohio and Los Angeles, Calif. to Plaskon Products Inc.

In Sept. 1979, Co. discontinued its operations in coal and coke, paving materials and certain other businesses which subsequently resulted in the selling of the paving materials business, the Detroit, Mich. and Ashland, Ky. coke plants, Moundsville South plant and Shannon Branch, W.Va. coal mine, and the transfer of the Harewood, W.Va. coal mine to Armo Inc.

In Dec. 1979, sold 3 caustic/chlorine plants to Linden Chemicals & Plastics Inc.

In Jan. 1980, Co. acquired new automotive seat belt manufacturing facilities thru acquisition of Toric Accessories International Ltd., England and a 50% interest in Klippan-Sassa S.A., Spain, which was subsequently increased to 100%.

In Feb. 1980, Co. sold its natural gas pipeline system in La. effective Jan. 1980.

In Feb. 1980, Co. acquired Myrra-Tek Inc. for about 170,000 shs. of Co. com. stk.

In Mar. 1980, acquired Valley Mineral Products Corp. for common stock.

In Apr. 1980, Eltra Corp., subsidiary, acquired remaining 35% minority interest in one of its West German operations Mergenthaler Linotype GmbH of Eschborn BEI Frankfurt.

In Nov. 1980, Allied Chemical Canada Ltd., a subsidiary of company, announced the acquisition of a 10% equity interest in Bio Logicals, a private Toronto-based biotechnology firm.

In Dec. 1980, entered the Mexican aluminum sulfate market through a 49% equity investment in Alkamex, S.A., a leading supplier of alum for the Mexican market.

In Jan. 1981, acquired a 49% interest in Alkamex, S.A.

In July 1981, completed acquisition of Bunker Ramo Corp. for approximately \$347,000,000 in new series C pfd. stock, cash and notes.

Also, in July 1981, acquired a 20% interest in Calgene, Inc.

In Aug. 1981 acquired Apollo Lasers, Inc., a manufacturer of industrial and scientific lasers for approximately \$8,000,000 in common stock.

In Oct. 1981, acquired Fisher Scientific Co. for approximately \$311,000,000 in new series D pfd. stock & cash.

In Oct. 1981, acquired West Coast Refractories and Mineral Division of Interpace Corp.

In late 1981, acquired Gyrex Corp.

Also in 1981, sold sulfuric acid plants at Buffalo, N.Y. and Chicago, Ill. and its toluene diisocyanate plant at Moundsville, West Va. and its two oil and gas affiliates operating in Canada.

Dispositions in 1982 include a sulfuric acid plant in Newell, Pa., Converse Rubber Co. (production and marketing of athletic footwear); Stanley G. Flagg Co. (manufacturer of malleable iron and brass fittings); Borg Textiles Co. (manufacturer of knitted deep pile fabrics); various Klippan (seat belt Cos.) Cos.; Selexol Process and Independent Cable Inc., a subsidiary of Prestolite Wire.

In Apr. 1982, acquired Supron Energy Corp. and Supron's domestic producing properties. Pursuant to agreement, Supron's oil and gas properties were transferred to a partnership jointly owned and

operated by Company and The Continental Group, Inc. Co.'s share of purchase price was \$357 million.

In Dec. 1982, acquired approx. 39% of the outstanding common stock of the Martin Marietta Corp. from The Bendix Corp. for approx. \$301,000,000.

In Aug. 1983 Martin Marietta Corp. repurchased 1.8 million shares of its common stock from Co. for \$95 million. Co.'s remaining 6,981,750 shares of Martin Marietta common stock were repurchased by Martin Marietta on Oct. 31, 1983 for about \$250 million.

On Jan. 31, 1983, Co. completed its acquisition of The Bendix Corp. (Bendix). Bendix is a diversified company which in 1982 reported its operations primarily in the following business segments: automotive, consisting of systems and components for the original equipment and replacement markets; aerospace-electronics, consisting of products and services for the aviation markets and defense and space programs; industrial, consisting of machine tools and accessories for the metalworking industry, and other products. Each share of common stock of Bendix outstanding on Jan. 31, 1983, was converted into 0.25 of a share of new series F preferred stock; two separate series of 6% original issue discount notes; and 1.3 shares of common stock. The aggregate value of the transaction including the purchase of approx. 55% of Bendix's outstanding common stock from Martin Marietta was approx. \$1.8 billion.

In Mar. 1983, acquired substantially all the assets of Semi-Alloys, Inc. for a total consideration in cash and shares valued at approx. \$97,000,000. Semi-Alloys was a manufacturer of components for high-reliability semiconductor packages.

In Apr. 1983, acquired Instrumentation Laboratory Inc., a maker of biomedical and analytical instruments for a total consideration in cash and common stock valued at approx. \$115 million.

In Dec. 1983, Co. discontinued its operations in machine tools and agricultural liquid fertilizers. (Sold substantially all the assets of machine tool business in April 1984 and the agricultural liquid fertilizer business in June 1984.)

In Sept. 1984, Unimar Co., a general partnership consisting of subsidiaries of Company and Ultramar PLC, completed the acquisition of ENSTAR Corp., an international oil and gas company. The Co. share of the cost of the acquisition was valued at approximately \$153 million.

In Nov. 1984, Co. acquired Amex Systems Inc., an aerospace company for approximately \$45 million.

In Dec. 1984, Co. discontinued one of its operations which was to be sold in 1985.

In Jan. 1985, Co. completed the acquisition of King Radio Corp. for approximately \$110 million.

In April 1985, Co. merged with its subsidiary The Bendix Corp.

In June 1985, Co. sold 50% of its interest in Union Texas Petroleum Holdings, Inc., the Company's oil and gas subsidiary.

On Aug. 6, 1985, Allied Corp. completed a tender offer for 22,000,000 shares of Signal Companies, Inc. outstg. common stock at \$45 per sh. for a total of \$990,000,000 and issued 15,100,000 shares of its common stock to Signal in exchange for 20,400,000 shares of Signal common stock. The combination resulted in each share of the common stock of Allied and Signal outstanding immediately prior to the consummation of the combination (other than shares held directly or indirectly by Allied and Signal) being exchanged for one share of Company common stock. Each outstanding share of each series of the preferred stock of Allied and Signal was converted into one share of a substantially similar series of the preferred stock of the Company. The Company issued 82,419,682 shares of its common stock and 7,366,517 shares of its various series of preferred stock to former holders of Allied common and preferred stock and 91,676,750 shares of its common stock and 898,028 shares of its preferred stock to former holders of Signal common and preferred stock.

In Dec. 1985, formed Allied-Signal International, Inc.

In Jan. and Feb. 1986, sold North American Refractories Co. and C&D Power Systems.

In April 1986, sold Prestolite Motor and Ignition.

On May 27, 1986, Co. paid a special dividend of 1 share of common stock of the Henley Group, Inc., a new company consisting of approximately 35 former business units of Allied Corporation and the Signal Companies, Inc., for each 4 shares of Co. common stock held of record on May 16, 1986. The Co. retained preferred stock of Henley after the dividend referred above representing approx. 15.6% of equity and voting power of Henley after giving effect to a \$1.3 billion public offering of Henley Common Stock.

In June 1986, sold the Fluoropolymer business units.

In May 1986, Co. acquired Materials Group of Oak Industries, Inc. for \$152 million in cash.

In Dec. 1986, Co. offered for sale seven operating units that make up the Electronics and Instrumentation sector, included in the aerospace electronics segment. The businesses offered for sale are: Ampex Corporation, Amphinol Corporation, Allied Linotype Company and the Engineered Components Group, including MPB Corporation, Neptune International Corporation, Revere Corporation of America and Sigma Instruments, Inc. The combined 1986 sales for these businesses were about \$1.5 billion, net income was \$54 million and total assets were approximately \$1.4 billion.

In Jan. 1987, Co. sold to Henley its remaining investment in Henley of convertible preferred for \$465 million.

On Mar. 31, 1987, Co. announced it had completed the sale of Allied Linotype Co.

On June 19, 1987, Co. announced that it has completed the divestiture of the seven businesses in its electronics and instrumentation sector. Total proceeds from the seven businesses were \$1.8 billion in cash.

SUBSIDIARIES

On Dec. 31, 1986, held or controlled following significant subsidiaries:

The Signal Companies, Inc.

Allied Corp.

Allied-Signal Canada Inc.

Ampex Corporation

The Garrett Corp.

Note: Co. also has numerous other consolidated subsidiaries, which are primarily totally-held indirectly by the Co., which if considered in the aggregate as a single subsidiary would not constitute a significant subsidiary.

BUSINESS & PRODUCTS

Company's operations are conducted under three business segments: aerospace/electronics, automotive and engineered materials. Co.'s products are used by many major industries, including textiles, steel, construction, petroleum and petrochemical refining, plastics, electronics, automotive, chemicals, housing, telecommunications, packaging, military and commercial aviation and aerospace, and in agriculture and the space program.

Aerospace/Electronics

The aerospace/electronics segment is comprised of the aerospace sector, which includes the Allied Bendix and Garrett aerospace business, and the electronics and instrumentation sector.

Aerospace segment, provides products and services primarily for military aircraft, civil air transport, and general aviation markets, and missiles and spacecraft oceanics and command, control communication and intelligence programs. The Allied Bendix aerospace business is comprised of two companies, the Aircraft Systems Co. and Electronics Systems Co.

Principal products of Aircraft Systems Co. are airborne weather avoidance radar systems; aircraft communications; automatic flight control systems; engine and flight instruments; motion sensing and air data systems; navigation and identification equipment; electric power generating systems; ignition and fuel control systems; aircraft wheels and brakes; test systems; electromechanical and hydraulic components; industrial control systems and ignition components and checkout equipment.

Products of Electronics Systems Co. are cryptographic equipment; identification of friend-or-foe systems; radar proximity fuses; pointing and control systems for land vehicles and spacecraft; gyroscopes for tactical missiles and aircraft; antisubmarine warfare systems; range instrumentation and training systems; ground surveillance equipment; meteorological data systems; chemical detecting instruments; and field engineering, management and support services.

Garrett designs, develops and manufactures a wide range of gas turbine engines, including turbo-prop, turbofan and turboshaft engines for use as power systems for commercial, industrial and military applications. Garrett gas turbine engines are used for primary propulsion and as auxiliary power to operate propulsion-start systems, electrical systems and environmental control systems. Garrett continues to fill production orders for a variety of other secondary power systems, many of them for ground-based military applications. Garrett is also expanding its activities in undersea propulsion and is developing an advanced technology steam-turbine propulsion system for the U.S. Navy's next-generation lightweight antisubmarine torpedo, the Mark 50.

Garrett control systems are used on a large percentage of the world's commercial airliners, as well as on many military and general aviation aircraft. These systems include air conditioning and pressurization. The Garrett environmental control system supplies conditioned air for cockpit and avionics cooling. Garrett also produces pneumatic control systems to govern engine speeds and temperatures, and actuators for such components as thrust reversers, trim controls and engine synchronizers.

Garrett's other aerospace products and services include heat transfer equipment, which is used in most of today's commercial airliners and military aircraft, and a number of business and general aviation aircraft. Garrett is also a leading producer of aircraft engine oil cooling systems, having built the first multi-contoured surface oil cooler. Other Garrett heat transfer products include electronic cooling systems, cooled mirrors for high-powered lasers and infrared radiation suppressors. Garrett also has long-term experience in cryogenics, both components and systems. Major programs include design and manufacture of miniature cryogenic refrigerators, liquid nitrogen cooling systems for commercial aircraft galley refrigeration and systems which supply hydrogen and oxygen reactants for spaceborne fuel cells. Garrett pioneered in developing supercritically-stored cryogenics for spacecraft applications.

For the year ended Dec. 31, 1986, sales to the U.S. Government, acting through its various departments and agencies and prime contractors,

amounted to \$2,177 million. Funded unfilled orders were \$4,861 million at Dec. 31, 1986. Including contracts for which funds have not been committed, the backlog of unfilled orders at Dec. 31, 1986 for products and services was \$5,437 million.

Electronics and Instrumentation Sector: The Company's electronics and instrumentation sector consists of the following operating units: Ampex Corporation; Amphinol Corporation; Allied Linotype Company; MPB Corporation; Revere Corporation of America; Sigma Instruments, Inc.; Neptune International Corporation and Endevo Corporation. The Co. has offered for sale all these business except Endevo, a manufacturer of sensors and transducers that measure vibration.

Ampex manufactures professional audio-video systems and recording tape for television-broadcast and production applications, tape for record mastering and data storage, instrumentation recorders and core memory systems for government applications, and video display terminals for the computer industry.

Amphenol produces a full line of electrical, electronic and fiber optic connectors for military, aerospace, business equipment, telecommunications and other commercial and industrial applications, as well as associated cables, cable assemblies and interconnection devices.

Linotype designs, manufactures, sells and services composition products and systems worldwide through direct sales organizations and distributors to the graphic arts industry. Composition products include text entry and typesetting devices and computerized data bases in a systems environment.

MPB, designs and manufactures a complete line of high-precision bearings, mechanical and electro-optical assemblies, spindles, idler pulleys and sprockets, test equipment for instrument bearings and computer-controlled machining systems.

Revere is involved in the design and manufacture of weighing, temperature measurement, and electrical and fluid sensing instruments.

Sigma Instruments specializes in the manufacture of electronic electromechanical control systems and sensing equipment; electromechanical switching devices; stepping motors and electronic motor controls; and power sensing, testing and control devices.

Neptune's fluid measurement and control products include residential water meters used in housing, industrial flowmeters used in the measurement of a wide variety of industrial liquids and gases, and automatic reading and billing systems, primarily used with residential water meters, linked by telephone lines or television cables to a central computer system.

Automotive

Automotive segment, primarily supplies systems and components to domestic and foreign manufacturers of passenger cars, light, medium and heavy trucks, and off-road vehicles and also supplies a variety of replacement parts.

Co.'s principal original-equipment products for cars and light trucks include disc and drum brakes, power brakes, boosters and master cylinders, master/slave braking systems, friction materials, spark plugs, steering components, safety restraints systems, turbochargers and heat exchangers; electronics and engine controls; engine cooling fans and air cleaner assemblies.

For manufacturers of medium and heavy trucks and off-road vehicles, Co. provides air and hydraulic brake actuation components; air and hydraulic drum and disc brakes; adaptive braking systems; slack adjusters; air dryers; fan clutches; cruise control devices and vehicle diagnostic systems; friction materials; turbochargers and heat exchangers; and steering components.

Aftermarket business includes replacement parts for most of above items and air, oil and fuel filters; and wire and cable products.

Automotive operations are located in the United States, Australia, Brazil, Canada, France, West Germany, India, Italy, Japan, Mexico, Portugal, Spain and the United Kingdom. Distribution and marketing are conducted in many other countries as well. Products are marketed under Bendix, Fram, Autolite, and other trade names.

For year Dec. 1986, worldwide passenger car and truck original equipment sales accounted for 63% of automotive segments net sales, with aftermarket 37% and sales to operations outside the U.S. accounted for 49% of worldwide sales.

Engineered Materials

Segment is composed of four divisions: Fibers; Fluorine Products; Plastics and Performance Materials; and Specialty Products.

Fluorine Products: Major products are fluorocarbons, hydrofluoric acid (HF), sulfur hexafluoride (SF₆), and uranium hexafluoride (UF₆).

Co. is world's largest producer of (HF) and industry leader in production and sale of products derived from HF.

Fluorocarbons are sold mainly as refrigerants, to original equipment and replacement manufacturers of air conditioning and refrigeration equipment and as solvents in precision cleaning applications such as electronics, optics and aerospace applications.

Co. processes uranium ore concentrates into UF₆, which is an essential intermediate in production of fuel elements for nuclear power reactors, for domestic and foreign customers.

The Co. is one of two domestic producers of SF₆, a gas used by utilities because of its electrical

regulatory properties in circuit breakers, switches, transmission lines and electronic mini-substations. **Plastics and Performance Materials:** Major plastic products are Paxon® high-density polyethylene resins for drums, pails, bottles, food containers, film and housewares and automotive applications; A-C® polyethylene products for floor finishes, rubber and plastic additives and textile finishes; and engineered plastics which are for a variety of industrial applications.

Tar products include binder pitch for electrodes, for aluminum and carbon industries, creosote oils to wood products industry for preservatives, oils for carbon black market or fuel markets, refined naphthalene as chemical intermediates, driveway sealer tar, and for roofing pitch for the construction industry.

The Engineered Plastics group manufactures and markets engineering plastics and packaging plastics. The Capron® nylon engineering plastics, Capron® nylon-6 thermoplastic film and Aclair® film markets consist of a large number of custom fabricators, manufacturers of power tools, appliances, electrical connectors, automotive and industrial parts, the meat and food packaging industries and special aerospace applications.

Specialty Products: The division is composed of three principal businesses: Norplex/Oak Division, UOP Inc. and Frye Copsystems, Inc.

Norplex/Oak manufactures circuit board laminates for the electronic and electrical industries. The Company's product line includes copper clad and unclad plastic laminates used in computer, telecommunication, instrumentation and military applications.

UOP designs and licenses process technologies and produces catalysts for petroleum and refining gas processing, petrochemical and food industries. UOP has designed and licensed more than 4,100 process units located in over 85 nations, including those that upgrade gasoline, break down petroleum components into gasoline or distillate, produce base materials for the manufacture of detergents, produce high quality diesel oil, jet fuel and naphtha from heavy oils and produce pure paraxylene. UOP also provides diverse engineering services and technical assistance to its customers and UOP manufactures a wide range of catalysts and specialty products used in the processes that it licenses.

Frye Copsystems is a producer of one-time carbon paper for business forms and information systems and of "carbonless" reproduction paper. Frye Copsystems also manufactures products for the computer supply market. Major products include magnetic ribbons used to encode and process checks, money orders and other financial documents and film and fabric ribbons, for printing services that are part of computerized word processing and information systems. Frye Copsystems markets its products under the Frye Copsystems®, Fryemark® and Impact®. In February 1987, the company announced that it has agreed for sale the Frye Copsystems business.

The principal raw materials used in the engineering materials segment are generally readily available and include cumene, natural gas, sulfur, naphthalic acid, ethylene and ethylene glycol, fluorine, hydrofluoric acid, carbon tetrachloride, chloroform, nylon resins, fluorocarbons, and coal pitch.

Fibers Co. is world's largest producer of nylon-6, third largest producer of nylon in the United States. Co. is also largest domestic producer of prolactam, primary intermediate for nylon-6, from which it produces fine and heavy denier yarns and molding compounds and film. These yarns are sold under trademarks Anso, Anso® IV, and Caprolan®. Fine deniers are sold to textile industry chiefly for use in manufacture of fabrics for apparel. Heavy deniers are used principally in carpet yarn, industrial fabrics, and automotive seat belts and tire cord. In addition, Co. produces heavy denier polyester yarns which are used in industrial fabrics, cordage, seat belts and tire cord.

Sources of Revenue: Net sales in millions of dollars by segments follow:

	1986	% of Total	1985	% of Total
Aerospace/Electronics	6,068	51	3,593	39
Automotive	2,874	24	2,428	27
Engineered Materials	2,819	24	2,081	23
Unallocated	33	1	1,013	11
Total	11,794	100	9,115	100

Includes amounts for businesses sold and Union Texas, the Co.'s oil and gas affiliate.

PRINCIPAL PLANTS & PROPERTIES

Company operates plants, research laboratories, and other facilities throughout the U.S., Canada and Europe. Plants are generally located to serve large marketing areas and to provide accessibility to raw materials and labor pools.

Principal plants, which are owned in fee, unless otherwise indicated, are as follows:

Engineered Materials	Automotive
Metropolis, Ill.	Hopewell, Va.
Baton Rouge, La.	Philadelphia, Pa.
Geismar, La.	Shreveport, La.
Moncure, N.C.	Columbia, S.C.
	Chesterfield, Va.

Greenville, Ala.
Torrance, Cal.
Harbor City, Cal.
Sao Paulo, Brazil
Fostoria, Ohio
Sumter, S.C.

Automotive

Chatham, Ont., Can.
Newport News, Va.
Glinde, W. Germany
St. Joseph, Mich.
Greenville, Ohio
Jackson, Tenn.

Aerospace/Electronics

Opelika, Ala.
Compton, Cal.
North Hollywood, Cal.
Los Angeles, Cal.
Sylmar, Cal.
Torrance, Cal.
Teterboro, N.J.
Fort Lauderdale, Fla.
Jacksonville, Fla.
Olathe, Kan.
South Bend, Ind.

Leased.

Owned by U.S. Govt. and managed by Co.

Partly-leased plant.

Union Texas Petroleum

Union Texas Petroleum Holdings Inc. ("Union Texas") had been a wholly owned subsidiary of Co. until mid-year 1985, when Co. sold 50% of its interest in Union Texas. Union Texas is engaged in oil and gas exploration, development and production, natural gas processing and petrochemical manufacturing.

Union Texas holds various interests (leasehold, contract or others) in producing oil and gas properties located in the United States, British Sector of the North Sea, Argentina, Spain, Pakistan, and Indonesia. Additionally, Union Texas has various interests in or rights to conduct exploratory activities on undeveloped acreage located in the United States and 6 countries throughout the world.

Union Texas has 37.81% interest in a joint venture which is developing oil and gas fields in East Kalimantan, Indonesia; and 20% interests in both Piper and Claymore Fields in the British Sector of the North Sea.

At Dec. 31, 1986, Company's 50% interest in Union Texas' worldwide net proved reserves were estimated to be 69 million barrels of liquid hydrocarbons (crude oil, condensate and natural gas liquids) and 1.1 trillion cubic feet of natural gas.

Other Properties:

An administrative and research and development complex is located at Morris Township, N.J. In addition there are approximately 100 other research laboratories and facilities which primarily provide direct support to the operating segments.

Company owns or leases warehouses, airplanes, railroad cars, barges, automobiles, trucks and material handling and data processing equipment. It also leases space for administrative and sales staffs.

Capital Expenditures (in \$000):

1986:	
Land & improv.	14,000
Mach. & equip.	15,000
Buildings	141,000
Off. furniture & equip.	68,000
Transport. equip.	12,000
Construction in progress	58,000
Total	708,000

LETTER TO STOCKHOLDERS

The following is the letter to stockholders by Edward L. Hennessey, Jr., Chairman and Chief Executive Officer, of Allied-Signal, Inc., as it appeared in Company's 1986 Annual Report:

To Our Shareholders:

1986 was an excellent year for Allied-Signal. In the first full year since the merger with The Signal Companies, Inc., sales and income from our aerospace and electronics, automotive and engineered materials businesses reached record highs, aided by a relatively strong economy in the United States, growth in our key industries and the decline of the dollar's value in some of our overseas markets which helped boost exports and limit imports. Moreover, we won valuable new contracts that will reap rewards for the Corporation into the 1990s and beyond.

The outstanding operating results were partially offset by substantially reduced profits from our oil and gas interests as the price of crude declined. Although disappointing, the situation emphasized the wisdom of our strategy to reduce our exposure in oil and gas which, as recently as 1984, produced 43 percent of the Corporation's net income.

In the kaleidoscope of events that marked 1986, four were central to the achievement of our goals to accelerate the growth of the Corporation and improve its profitability.

We created the Allied-Signal Aerospace Company, appointing one of the industry's most capable executives to maximize the potential of the aerospace businesses we acquired through mergers with The Bendix Corporation and Signal.

We offered for sale the seven diverse businesses of the Electronics and Instrumentation Sector, which among other products manufacture connectors, professional video recorders and phototypesetting equipment, to streamline our portfolio and sharpen our focus on our primary operations.

We expanded our network of regional business development offices to include China, India and Singapore which extends our reach into those emerging markets and furthers our globalization.

And we completed the spin-off of 35 non-strategic businesses to The Henley Group, Inc., a move that amounted to a billion dollar special dividend of Henley stock for our shareholders. In addition, the Corporation realized \$300 million and retained 19.3 million shares of Henley preferred stock.

In January 1987, we sold those shares back to Henley for \$465 million and we adjusted several support agreements for which Henley paid Allied-Signal an additional \$65 million. All of these transactions resulted in Allied-Signal and its shareholders receiving value of \$1.9 billion. We believe this sum exceeds what we might have realized had we sold the 35 businesses each on an individual basis.

The Henley spin-off represented another major step in our seven-year journey from a cyclical chemical/oil and gas company to an advanced technology enterprise. For those of us in management, 1986 was particularly gratifying. It was the year when the new company we envisioned back in 1979 actually emerged: a dynamic enterprise prospering through strong, growth businesses serving vital industries worldwide.

We have come a long way in altering the profile of the organization whose sales in 1978 were \$3.3 billion and whose total investment in research and development (R&D) was \$58 million. That year 87 percent of net income was derived primarily from two foreign oil and gas joint ventures with the balance from commodity chemicals, fibers and plastics as well as a small automotive seat belt operation; several businesses were losing money; the Company was involved in major litigation, including a series of cases that prompted a qualified opinion from its independent accountants, and a downgrade by the major credit rating agencies was a distinct possibility. In 1979 we embarked on our ambitious course. We discontinued or sold the unprofitable operations, resolved the major litigation to such an extent that the accountants' qualification was lifted, accelerated R&D spending and launched an aggressive asset redeployment program, over the next three years buying various companies to gain access to the electronics markets we had targeted as high potential.

The first major acquisition was Bendix in 1983. It not only augmented our electronics capabilities but provided our entry into the aerospace industry. It also made us one of the largest independent suppliers to the worldwide automotive industry. The 1985 merger with Signal added the critical mass we needed to become an even more important competitor in aerospace markets while also adding strengths to our automotive and engineered materials sectors.

Although our restructuring through so many acquisitions and divestitures was fast-paced and perhaps bewildering to some, it did give us the opportunity to establish footholds in high-technology growth industries. Those initiatives helped pave the way to our becoming what we are today: a composite of the very best of "old" Allied, Bendix and Signal; a new company that is focused in three areas with leading world positions in many product lines. And the Company is well balanced. It takes the collective contribution of the top seven businesses to provide more than 50 percent of our income.

Three of those businesses are part of our new Aerospace Company, which provides one of the broadest systems product lines in the entire aerospace industry, ranging from Bendix electronic-based cockpit avionics to Garrett primary propulsion powerplants to a wide range of subsystems and components for missiles, military land vehicles, spacecraft and underwater weapons. In 1986 our aerospace/electronics businesses contributed 52 percent to the Corporation's sales and 52 percent to its operating net income. The creation of this new company in November 1986—and the recruitment of Robert L. Kirk to lead it—is a very significant move for us. Kirk was previously responsible for a successful major aerospace operation and is a seasoned executive with more than 30 years' experience in the industry. He will spearhead the further growth of Allied-Signal's aerospace interests, building on the complementary skills and expertise of Bendix and Garrett to advance our participation in a rapidly changing industry.

With Bendix and Garrett we have an excellent base on which to build this new company and over time we expect to accelerate the process through carefully selected acquisitions that will further expand our market penetration or fill product or technology gaps.

Growing our automotive and engineered materials sectors is also a high priority. These operations each provided 24 percent to our 1986 sales and 19 and 29 percent, respectively, to our operating net income.

Through a global network of plants and technical centers, our automotive businesses are serving virtually every major vehicle manufacturer in the world, providing advanced braking systems, turbochargers and electronic systems and components. With outsourcing a key trend in the original-equipment market today, we continue to collaborate with automakers in the development of technologies for their vehicles of tomorrow, increasingly using computerized design, engineering and manufacturing methods to supply reliable, high-quality, cost-competitive products.