SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K

/ x / ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 /FEE REQUIRED/ FOR THE FISCAL YEAR ENDED DECEMBER 31, 1993 OR

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

Commission File Number 1-3610

ALUMINUM COMPANY OF AMERICA (Exact name of registrant as specified in its charter)

Pennsylvania (State of incorporation) 25-0317820

(I.R.S. Employer Identification No.)

425 Sixth Avenue, Alcoa Building, Pittsburgh, Pennsylvania 15219-1850 (Address of principal executive offices) (Zip Code)

Registrant's telephone number--area code 412

Investor Relations-----553-3042 Office of the Secretary----553-4707

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

Title of each class Name of each exchange on which registered

Common Stock, par value \$1.00

New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

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, and (2) has been subject to such filing requirements for the past 90 days. Yes / x / No

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. / /

As of March 1, 1994 there were 88,808,611 shares of common stock, par value \$1.00, of the Registrant outstanding. The aggregate market value of such shares, other than shares held by persons who may be deemed affiliates of the Registrant, was approximately \$6,609 million.

Documents incorporated by reference.

Parts I and II of this Form 10-K incorporate by reference certain information from the registrant's 1993 Annual Report to Shareholders. Part III of this Form 10-K incorporates by reference the registrant's Proxy Statement dated March 4, 1994, except for the performance graph and Compensation Committee Report.

ALUMINUM COMPANY OF AMERICA

Unless the context otherwise requires, Alcoa or the Company means Aluminum Company of America and all subsidiaries consolidated for the purposes of its financial statements.

PART I

Item 1. Business.

Alcoa is the world's largest integrated aluminum company, engaged in the production and sale of primary aluminum and semi-fabricated and finished aluminum products. It was formed in 1888 under the laws of the Commonwealth of Pennsylvania. Alcoa produces and sells alumina and alumina-based chemicals, a variety of other finished products, and components and systems for a multitude of applications. These products are used primarily by packaging, transportation (including aerospace, automotive, rail and shipping), building and industrial customers worldwide. Alcoa has operating and sales locations in over 20 countries.

Discussion of Alcoa's operations and properties by its three business segments follows.

The Alumina and Chemicals segment includes the production and sale of bauxite, alumina and alumina-based chemicals, and related transportation services.

The Aluminum Processing segment includes the production and sale of molten metal, ingot, and aluminum products that are flat-rolled, engineered or finished. Also included are power, transportation and other services.

The Non-Aluminum Products segment includes the production and sale of electrical, ceramic, plastic, vinyl, and composite materials products, manufacturing equipment, gold, magnesium and steel and

titanium forgings.

Most aluminum facilities located in the United States (U.S.) are owned by the parent company. Alcoa of Australia Limited (AofA) and Alcoa Aluminio S.A. (Aluminio) in Brazil are the two largest operating subsidiaries.

revenues by Market	(dolla 1993	rs in mi 1992	,
Packaging	\$2,606	\$2,803	\$2,554
Alumina and Chemicals	1,437	1,422	1,496
Transportation	1,397	1,526	1,569
Building and Construction	1,299	1,190	1,167
Distributor and Other	1,274	1,215	1,356
Aluminum Ingot	1,042	1,336	1,742
•			
Total Sales and Operating Revenues	\$9,055 =====	\$9,492 =====	\$9,884 =====

Segment and geographic area financial information are presented in Note K to the Financial Statements.

Competition

The markets for most aluminum products are highly competitive. Price, quality and service are the principal competitive factors in most of these markets. Where aluminum products compete with other materials, the diverse characteristics of aluminum are also a significant factor, particularly its light weight and recyclability. The competitive conditions are discussed later for each of the Company's major product classes.

The Company is examining all aspects of its operations and activities and is redesigning them where necessary to enhance effectiveness and achieve cost reductions. Alcoa believes that its competitive position is enhanced by its improved processes, extensive facilities and willingness and ability to commit capital where necessary to meet growth in important markets, and by the capability of its employees. Research and development, and an increased emphasis on internal technology transfer, has led to improved product quality, enhanced production techniques, new product development and cost control.

The dissolution of the Soviet Union and the lack of a mechanism to successfully integrate its economy with market economies significantly contributed to a global oversupply of aluminum in recent years. Prior to 1991 former Soviet aluminum producers primarily served internal markets. The internal market weakened substantially after the collapse of the Soviet Union. To earn hard currency, former Soviet aluminum producers began exporting significant quantities of aluminum. These exports caused an imbalance in demand and supply and resulted in severe downward pressure on aluminum prices.

In late 1993, discussions among the governments of six major primary aluminum producing nations were initiated to address the global aluminum supply situation. A multi-government accord was reached among Australia, Canada, the European Union (EU), Norway, Russia and the U.S. in late January 1994 under which the Russian industry will reduce its annual aluminum exports by 500,000 metric tons per year for up to two years, the EU will refrain from renewing import quotas on Russian ingot when the quotas expire at the end of February 1994, and certain of the participating governments will create a fund to assist in the modernization of the Russian industry. The accord recognizes that there is currently an excess of supply of between 1.5 and 2.0 million metric tons of annual production.

In February 1994, Alcoa announced that it would reduce primary aluminum production in its U.S. operations by an additional 100,000 metric tons per year. AofA separately announced a reduction of 25,000 metric tons at its Point Henry smelter in Geelong, Australia. Also, the joint venture smelter in Portland, State of Victoria in which AofA owns a 45% interest announced a reduction of 26,000 metric tons. Suriname Aluminum Company (Suralco), a wholly-owned subsidiary, announced a reduction of 3,000 metric tons that will continue until world aluminum supply is in better balance with demand. These reductions are in addition to Alcoa's indefinite curtailments during 1993 of 310,000 metric tons of U.S. smelting production.

Other Risk Factors

In addition to the risks inherent in the Company's business and operations as described in this Form 10-K, the Company is exposed generally to financial, market, political, business and economic risks in connection with its worldwide operations.

Major Interests Outside the United States

Alcoa International Holdings Company (AIHC), a subsidiary, holds most of the Company's investments in Australia, Hungary, India, Japan,

Mexico, the Netherlands and Norway, and several wholly owned subsidiaries that act as sales representatives and distributors outside the U.S. for products produced by various Alcoa operations. In 1988 AIHC issued \$250 million of voting preferred stock which represents 25% of its total voting stock. The preferred stock is held by unaffiliated third parties.

AofA, owned 51% by AIHC, operates integrated aluminum facilities in Australia, including mining, refining, smelting and fabricating facilities. More than half of AofA's 1993 revenues were derived from alumina, and the balance was derived principally from primary aluminum, rigid container sheet (RCS) and gold.

Alcoa Brazil Holdings Company (ABHC), owned 79% by the Company, holds Alcoa's interest in Aluminio, an integrated aluminum producer in Brazil. Aluminio operates mining, refining, smelting and fabricating facilities at various locations in Brazil. More than 20% of Aluminio's 1993 revenues were derived from primary aluminum, and exports accounted for approximately one-third of its revenues. Aluminio is owned 75% by ABHC; Alcoa's effective ownership in Aluminio is 59%.

Alumina and Chemicals Segment

Bauxite, aluminum's principal raw material, is refined into alumina through a chemical process and is then smelted into primary aluminum. Approximately half of the Company's alumina production in 1993 was sold to third parties. The Company sells alumina-based chemicals to customers in a broad spectrum of industries for use in refractories, ceramics, abrasives, chemicals processing and other specialty applications.

Bauxite

Most of the bauxite mined and alumina produced by the Company, except by AofA, is further processed into aluminum.

The Company has long-term contracts to purchase bauxite mined by a partially-owned entity in the Republic of Guinea. The current contracts expire in 1995. Alcoa is negotiating new agreements that are expected to be completed in 1994. This bauxite services most of the requirements of Alcoa's Point Comfort, Texas alumina refinery. Suralco mines bauxite in Suriname under rights which expire after the year 2000. Suralco also holds a minority interest in a bauxite mining joint venture managed by the majority owner, Billiton, an affiliate of the Royal Dutch/Shell Group (Shell). Bauxite from both mining operations serves Suralco's share of the refinery in Suriname referred to below.

AofA's bauxite mineral leases expire in 2003. Renewal options allow AofA to extend the leases until 2045. The natural gas requirements of the refineries are supplied primarily under a contract with the State Energy Commission of Western Australia. The contract expires in 2005 and imposes minimum purchase requirements.

Bauxite mining rights in Jamaica expire after the year 2020. These rights are owned by the joint venture with the government of Jamaica referred to in the next section.

Alumina

Alumina, a commodity, is sold by Alcoa principally from its operations in Australia, Jamaica and Suriname. Most of the alumina supply contracts are negotiated on the basis of agreed volumes over a multi-year time period to assure a continuous supply of alumina to the smelters which receive the alumina. Most alumina is sold under contracts where prices are negotiated periodically or are based on formulas related to aluminum ingot market prices or to production costs. An imbalance of alumina demand and supply has resulted in declining alumina prices.

AofA is the world's largest and one of the lowest cost producers of alumina. Its three alumina plants, located in Kwinana, Pinjarra and Wagerup in Western Australia, have in the aggregate an annual rated capacity of approximately 6.1 million metric tons. Most of AofA's alumina is sold under supply contracts to a number of customers worldwide.

An Alcoa subsidiary owns 55% of the 1.6 million metric ton per year alumina refinery in Paranam, Suriname and operates the plant. Billiton holds the remaining 45%.

An Alcoa subsidiary and a corporation owned by the government of Jamaica are equal participants in a joint venture, managed by the subsidiary, that owns an alumina refinery in Clarendon Parish, Jamaica. Annual alumina capacity at the Clarendon refinery will be increased from 800,000 to approximately 1,000,000 metric tons in the next several years.

Aluminio is the operator of the Alumar Consortium (Alumar), a cost-sharing and production-sharing venture which owns a large refining and smelting project near the northern coastal city of Sao Luis, Maranhao, Brazil. The alumina refinery has an annual capacity of 1,000,000 metric tons, and is owned 54% by Aluminio, 36% by a Billiton affiliate of Shell and 10% by an affiliate of Alcan Aluminium Limited (Alcan). A majority of the alumina production is consumed at the smelter.

The sale of Shell's Billiton affiliates in Brazil and Suriname to Gencor of South Africa is pending.

Aluminio holds a 13.2% interest in Mineracao Rio Do Norte S.A. (MRN), a mining company which is jointly owned by affiliates of Alcan, Billiton, Companhia Brasileira de Aluminio, Companhia Vale do Rio Doce, Norsk Hydro and Reynolds Metals Company. Aluminio purchases bauxite from MRN under a long-term supply contract.

At Pocos de Caldas, Minas Gerais, Brazil, Aluminio mines bauxite and operates a refinery which produces alumina, primarily for its Pocos de Caldas smelter.

Industrial Chemicals

Alcoa sells industrial chemicals to customers in a broad spectrum of markets for use in refractories, ceramics, abrasive chemicals processing and other specialty applications.

A variety of industrial chemicals, principally alumina-based chemicals, are produced or processed at plants in Bauxite, Arkansas; Ft. Meade, Florida; Dalton, Georgia; Lake Charles and Vidalia, Louisiana; Nashville, Tennessee; Point Comfort, Texas; Kwinana, Australia; Pocos de Caldas, Brazil; Ludwigshafen, Germany; Iwakuni and Naoetsu, Japan; and Moerdijk and Rotterdam, in The Netherlands. Aluminum fluoride, used in aluminum smelting, is produced from fluorspar or fluosilicic acid at Point Comfort and Ft. Meade.

An expansion of facilities for drying alumina trihydrate at Point Comfort was completed in 1993. Alumina trihydrate is used extensively in petrochemical processing, water treatment and a variety of other applications.

The Company and AofA are cooperating to market alumina-based and other chemicals in Asia and other regional chemical markets. The Company purchased a minority equity interest in Australian Fused Materials, Ltd. (AFM) in 1993. AFM manufactures and markets fused alumina as well as other chemicals for Australian, Asian and other regional markets. Fused alumina is used in the manufacture of refractories.

In 1993 the Company and The Associated Cement Companies Ltd. of Bombay, India formed a joint venture to import, process and market tabular alumina and alumina-based chemicals for the refractory and ceramic industries in India. The venture plans to build a processing plant in Falta, West Bengal which is scheduled for completion in 1994.

Aluminum Processing Segment

Revenues and shipments for the principal classes of products in the aluminum processing segment are as follows:

	(dollars in millions)			
	1993	1992	1991	
Revenues:				
Aluminum ingot	\$1,042	\$1,336	\$1,742	
Flat-rolled products	2,974	3,189	3,107	
Engineered products	1,528	1,527	1,612	
Other aluminum products	430	465	500	
·				
Total	\$5,974	\$6,517	\$6,961	
	=====	=====	=====	
	(metric	tons in	thousands)	
Shipments:			,	
Aluminum ingot	841	1,023	1,179	
Flat-rolled products	1,271	,	,	
Engineered products	379	353	,	
Other aluminum products	89	98	132	
, p				
Total	2,580	2,797	2,836	
	=====	=====	=====	

Aluminum Ingot

Primary aluminum ingot is a traded commodity and prices are established by market forces of demand and supply, including available levels of inventories. The Company's sales of primary aluminum to third parties are generally made at prices determined by reference to published trading prices adjusted for availability of the product.

Alcoa has a metal trading operation responsible for hedging programs that are designed to minimize the effects of price volatility on the Company and its customers for primary aluminum in the international commodity markets as well as price exposure to aluminum scrap, including used beverage cans.

The Company smelts primary aluminum from alumina obtained principally from the alumina refineries discussed earlier. Smelters are located at Warrick, Indiana; Massena, New York; Badin, North Carolina; Alcoa, Tennessee; Rockdale, Texas; Wenatchee, Washington; Point Henry and Portland, Australia; Pocos de Caldas and Sao Luis, Brazil; and Paranam, Suriname. Alcoa's consolidated annual rated primary aluminum capacity at these smelters is approximately 1.9 million metric tons. When operating at capacity, the Company's smelters more than satisfy the primary aluminum requirements of the

Company's fabricating operations. Purchases of aluminum scrap (principally used beverage cans), supplemented by purchases of ingot when necessary, satisfy any additional aluminum requirements. Most of the Company's primary aluminum production in 1993 was delivered to other Alcoa operations for alloying and/or further fabricating.

The joint venture smelter at Portland, Victoria, with an annual rated capacity of 320,000 metric tons, is owned 45% by AofA, 25% by the State of Victoria, 10% by the First National Resource Trust, 10% by the China International Trust and Investment Corporation, and 10% by Marubeni Aluminium Australia Pty., Ltd. (Portland Smelter Participants). A subsidiary of AofA operates the smelter. Each participant is required to contribute to the cost of operations and construction in proportion to its interests in the venture and is entitled to its proportionate share of the output. Alumina is supplied by AofA. The Portland site can accommodate additional smelting capacity.

The Alumar Consortium aluminum smelter at Sao Luis, Brazil has an annual rated capacity of 328,000 metric tons. Aluminio receives about 54% of the primary aluminum production.

During 1993 and early 1994, Alcoa indefinitely idled approximately 410,000 metric tons of annual rated primary aluminum capacity in the U.S. Smelters located in Indiana, North Carolina, Tennessee, Texas and Washington were affected. AofA separately announced a 25,000 metric tons capacity reduction at its Point Henry smelter. The joint venture smelter at Portland, in which AofA owns a 45% interest, announced a 26,000 metric tons production reduction. Suralco reduced annual primary aluminum production by 3,000 metric tons. See "Competition" above.

The Company utilizes electric power, natural gas and other forms of energy in its refining, smelting and processing operations. Aluminum is produced from alumina by an electrolytic process requiring large amounts of electric power. Electric power accounts over time for approximately 30% of the Company's primary aluminum costs. The Company generates approximately 40% of the power used at its smelters worldwide. Most firm power purchase contracts tie prices to aluminum prices or to prices based on various indices.

Over 40% of the power for the Point Henry smelter is generated by AofA using its extensive brown coal deposits. The balance of the power, and power for the Portland, Victoria smelter, is available under contracts with the State Electricity Commission of Victoria. Power prices are tied by formula to aluminum prices. The State Government of Victoria has announced its desire to renegotiate the power contract for the Portland smelter. AofA and the Portland Smelter Participants have informed the State that they are willing to discuss ways to improve the operational aspects of the power contract.

Electric power for Alumar's Sao Luis smelter is purchased from the government-controlled power grid in Brazil at a small discount from the applicable industrial tariff price and is protected by a cap based on the London Metal Exchange price of aluminum. Aluminio's Pocos de Caldas smelter purchases firm and interruptible power from the government-controlled electric utility. Aluminio has prepaid all of the Pocos de Caldas facility's electricity requirements through January 1, 1996.

Over 50% of the power requirements for Alcoa's U.S. smelters is generated by the Company and the remainder is purchased from others under long-term contracts. More than 10% of the self-generated power results from the Company's entitlement to a fixed percentage of the output from a hydroelectric power facility located in the northwestern United States.

The Company generates substantially all of the power used at its Warrick smelter using coal reserves near the smelter that should satisfy requirements through the late 1990s. Lignite is used to generate power for the Rockdale, Texas smelter. Company-owned generating units supply about half of the total requirements and the balance is purchased from a dedicated power plant under a contract which expires not earlier than 2011. See "Environmental" below.

In connection with the electric power generated for the aluminum smelters at Alcoa, Tennessee and Badin, North Carolina, two subsidiaries of the Company own and operate hydroelectric facilities subject to Federal Energy Regulatory Commission licenses effective until 2005 and 2008, respectively. For the Tennessee plant, the Company also purchases firm and interruptible power from the Tennessee Valley Authority under a contract which expires in 2000. For the Badin plant, the Company purchases additional power under an evergreen contract providing for specified periods of notice before termination by either party.

The purchased power contract for the Massena smelter expires not earlier than 2003 but may be terminated by the Company with one year's notice

Alcoa has two principal power contracts for its Wenatchee smelter. The contract from the power output entitlement referred to above expires in 2011. The contract with Bonneville Power Administration (BPA) expires in 2001 and includes 25% interruptible power. Power restrictions may occur when precipitation is below normal. A BPA power restriction resulted in the indefinite closure of one potline at Wenatchee in early 1993. Alcoa chose not to restart the potline after the restriction was lifted due to low ingot prices. Beginning in 1995,

a portion of the power supplied under the entitlement contract will be replaced by power purchased from the local public utility district. Additional power also may be purchased from the district.

Although not included in the revenues by market or revenues and shipments tables above or in the rated primary aluminum capacity figure above, the Company reports equity earnings from its interest in two primary aluminum smelters in Norway. Elkem Aluminium ANS, 50% owned by Norsk Alcoa A/S, a subsidiary, is a partnership that owns and operates the smelters.

Flat-Rolled Products

The Company's flat-rolled products serve three principal markets: light gauge sheet products serve principally the packaging market, and sheet and plate products serve principally the transportation and building and construction markets.

Alcoa employs its own sales force for most products sold in the packaging market. Most of the packaging revenues in 1993 were derived from rigid container sheet (RCS) sold to can companies to make beverage and food cans, and can ends. The number of RCS customers in the U.S. is relatively small, in part because the number of can companies has been shrinking. Use of aluminum beverage cans continues to increase, particularly in Asia, Europe and South America where per capita consumption remains relatively low. Aluminum foil and non-RCS packaging sheet are sold principally in the packaging markets.

Aluminum's diverse characteristics, particularly its light weight and recyclability, are significant factors in packaging markets where alternatives such as steel, plastic and glass are competitive materials. Leadership in the packaging markets is maintained by improving processes and facilities, as well as by providing research and technical support to customers.

Light gauge aluminum sheet and foil products are manufactured at several locations. RCS is produced at Warrick, Indiana; Alcoa, Tennessee; Point Henry, Australia; Moka, Japan (a joint venture facility); and Swansea, Wales. Light gauge sheet and foil are produced at Lebanon, Pennsylvania and foil also is produced at Davenport, Iowa. Light gauge sheet and foil products are manufactured by Aluminio at Recife, Brazil. Can recycling or remelt facilities are located at or near the Indiana, Tennessee and Wales plants.

In 1993 the Company recycled approximately 268,000 metric tons of used aluminum beverage cans, which are an important source of metal for RCS. The cost of used beverage cans declined in 1992 and 1993 as primary aluminum prices dropped. Recycling aluminum conserves raw materials, reduces litter and saves energy - about 95% of the energy needed to produce aluminum from bauxite. Also, recycling capacity costs much less than new primary aluminum capacity.

The Company has a joint venture with Kobe Steel, Ltd. (Kobe) in Japan. The venture, KSL Alcoa Aluminum Company, Ltd. (KAAL), completed construction of a cold rolling mill at Moka, Japan and began commercial operations in 1993. It manufactures and sells RCS in Japan and other Asian countries. AIHC holds a 50% interest in KAAL. Alcoa supplies aluminum to the joint venture.

Sheet and plate products principally serve aerospace, automotive, lithographic, railroad, ship building, building and construction, defense and other industrial and consumer markets. The Company maintains its own sales forces for most of these products. Differentiation of material properties, price and service are significant competitive factors. Aluminum's diverse characteristics are important in these markets, where competitive materials include steel and plastics for automotive and building applications; magnesium, titanium, composites and plastics for aerospace and defense applications; and wood and vinyl in building and construction applications.

The Company's largest sheet and plate plant is located at Davenport, Iowa. It produces products requiring special alloying, heat treating and other processing, some of which are unique or proprietary. A distribution center was opened in Paal, Belgium during late 1993 to serve European sheet and plate markets.

Alcoa continues to develop alloys and products for aerospace applications, such as new aluminum alloys for application in the Boeing 777 aircraft. A research and development effort also has resulted in the commercial development of a series of aluminum and aluminum-lithium alloys which offer significant weight savings over traditional materials for aerospace and defense applications.

The Company participates in a joint venture with an affiliate of Akzo N.V., a chemical company based in The Netherlands, to perform research and development and to produce fiber-metal laminates made of aluminum and resins reinforced with advanced fibers for the aircraft industry.

The Company and Kobe also have established two additional joint venture companies, one in the United States and one in Japan, to serve the transportation industry. The initial emphasis of the new companies is on expanding the use of aluminum sheet products in passenger cars and light trucks.

In late 1992 AIHC acquired a 50.1% interest in Kofem Kft., a subsidiary of the government-owned Hungarian Aluminium Industrial

Corporation (Hungalu). The new venture, Alcoa-Kofem Kft. (A-K), produces common alloy flat and coiled sheet, soft alloy extrusions and end products for the building, construction, food and agricultural markets in central and western Europe. A-K will invest up to \$146 million, including part of AIHC's initial investment, over the next five years for product quality and environmental and safety upgrades at the A-K facility. Alcoa is providing technological and operational expertise to A-K.

Engineered Products

Engineered products principally include extrusion and tube, wire, rod and bar, forgings, aluminum building products, aluminum memory disk blanks and other products which are sold in a wide range of markets, but principally in the transportation market.

Aluminum extrusions and tube are produced principally at six U.S. locations. The Chandler, Arizona plant produces hard alloy extrusions and tube; the Vernon, California plant produces hard alloy extrusions and tube; the Lafayette, Indiana plant produces a broad range of common and hard alloy extrusions and tube; the Baltimore, Maryland plant produces large press extrusions; and plants at Tifton, Georgia and Delhi, Louisiana produce common alloy extrusions.

In late 1993 Alcoa and VAW Aluminium AG (VAW) formed a joint venture to produce and market high strength aluminum extrusions, tube and rod to principally serve European transportation and defense markets. An Alcoa subsidiary owns 60% and VAW owns 40% of the venture which is called Alcoa VAW Hannover Presswerk GmbH & Co. KG and is located in Hannover, Germany.

Alcoa's Delhi facility will supply Toyota Motor Company (Toyota) with extruded aluminum front and rear bumpers for the 1995 Toyota Avalon to be assembled at Georgetown, Kentucky. The bumpers were jointly designed by Alcoa and Toyota.

A 50-50 limited partnership formed with Kobe in 1991 to manufacture and market aluminum tube for photoreceptors for North American markets will cease manufacturing operations in early 1994 and is expected to be dissolved later in the year.

Alcoa Construction Products produces and markets residential aluminum siding and other aluminum building products. These products are sold principally to distributors and jobbers.

Aluminum forgings are produced at Cleveland, Ohio; Vernon, California; and Bologne, France. Forgings are sold principally in the aerospace, defense and transportation markets. Forged aluminum wheels for truck, bus and automotive markets are produced at Cleveland, Ohio.

Mechanical-grade redraw rod, wire and cold-finished rod and bar are produced at Massena and are sold to distributors and customers for a variety of applications in the building and transportation markets.

Aluminum extruded products are manufactured by a subsidiary of Aluminio in Argentina and at several Aluminio locations in Brazil.

Other Aluminum Products

Alcoa Automotive Structures GmbH was formed in 1991 to produce aluminum components and sub-assemblies for aluminum automotive spaceframes. Aluminum spaceframes represent a significant departure from the traditional method and material used to manufacture primary auto body structures. In 1993 Alcoa completed construction and began operating a unique multi-million dollar plant in Soest, Germany to supply aluminum spaceframe products to its first customer, Audi AG. In 1994 Audi will market its new A8 luxury sedan, the first automobile to utilize a complete aluminum spaceframe body structure. The A8 is a result of a 10 year development effort between Alcoa and Audi and is constructed with spaceframes, components and sub-assemblies produced by Alcoa. Alcoa continues to cooperate with several automobile manufacturers in Europe, North America and Japan to develop new aluminum products for automotive market applications.

Alcoa produces aluminum closures for bottles at Richmond, Indiana; Worms, Germany; Tokyo, Japan; and near Barcelona, Spain.

The Company sells aluminum scrap and produces and markets aluminum paste, particles, flakes and atomized powder.

Subsidiaries of Alcoa Nederland Holding B.V. (ANH) produce extrusions, common alloy sheet products and certain finished products such as automated greenhouse systems, as well as fabricated products such as aluminum windows and aluminum ceiling systems. In early 1993 ANH acquired a 100% interest in Compri-Aluminium B.V. (Compri). Comprimanufactures, sells and installs aluminum and steel building products in Belgium and The Netherlands.

Alutodo, S.A. de C.V., a subsidiary, buys and sells aluminum and aluminum products through distribution centers at several locations in ${\tt Mexico.}$

Non-Aluminum Products Segment

Alcoa produces plastic closures for bottles at Crawfordsville, Indiana; Olive Branch, Mississippi; Buenos Aires, Argentina; Sao Paulo, Brazil; Santiago, Chile; Bogota, Colombia; Tellig, Germany; Tokyo, Japan; Saltillo, Mexico; and near Barcelona, Spain. Alcoa participates in a joint venture with Al Zayani Investments W.L.L. of Bahrain, known as Gulf Closures W.L.L., to manufacture plastic beverage container closures for markets in the Middle East. Production at Manama, Bahrain began in 1993. Alcoa's worldwide closure businesses are coordinated from Indianapolis, Indiana. The use of plastic closures has surpassed that of aluminum closures for beverage containers in the U.S. and is gaining momentum in other countries.

The Company manufactures packaging equipment and machinery, principally for producing and decorating metal cans and can ends. In addition, the Company manufactures a line of equipment for applying plastic or aluminum closures to beverage containers. Alcoa also owns a minority interest in a company which sells food packaging machinery that fills and seals metal and multi-layered polymer and paper containers.

Alcoa Fujikura Ltd. (AFL), owned 51% by Alcoa and 49% by Fujikura Ltd. of Japan, produces and markets automotive electrical distribution systems, as well as fiber optic products and systems for selected electric utilities and telecommunications markets. AFL continues to be a Q-1 supplier to Ford Motor Company and is now supplying electrical distribution systems to Subaru (in the U.S.), Auto Alliance, Inc. (Mazda-Ford joint venture) and PACCAR Inc. In 1993 AFL acquired the remaining interest in the Stribel group of companies, which are European manufacturers of electromechanical and electronic components for the European automotive market.

Alcoa Construction Product's principal product for building and construction markets is vinyl siding. Other non-aluminum building products include vinyl windows, window lineal systems, shutters and building accessories and wood windows and patio doors.

Norcold and Stolle Products Division manufactures recreational vehicle refrigerators, and auto parts and appliance control panels.

A subsidiary, Alcoa Electronic Packaging, Inc. (AEP), produces ceramic packages used to hold integrated circuits for electronic equipment. During 1993 AEP increased shipments of several parts to a key customer. AEP currently is working with several potential customers to broaden its market base in 1994. Production capacity is being increased to respond to these opportunities.

Alcoa Composites, Inc., a subsidiary, principally designs and manufactures composite parts and structures for aerospace and transportation applications.

Facilities to recover gold from AofA's mining leases in Western Australia were constructed, and mined gold was first poured, in 1988. Production has been declining since 1990, and the gold deposit is expected to be depleted by 1997.

Magnesium is produced by the Company in Addy, Washington, from minerals in the area owned by the Company. Alcoa uses magnesium for certain aluminum alloys. Recycling is also a source of aluminum-magnesium alloys. Due to world magnesium market conditions the Company reduced magnesium production during 1993. Third party sales of magnesium are continuing.

Titanium and steel forgings are produced at Cleveland, Ohio and Bologne, France and are sold principally in aerospace markets.

Aluminio owns and operates a chain of retail construction materials outlets in Brazil.

Alcoa's wholly owned subsidiaries own and develop luxury residential/resort communities in South Carolina and Florida; the remaining properties are being actively marketed.

Research and Development

The Company, a technological leader in the aluminum industry, engages in research and development (R&D) programs which include basic and applied research and process and product development. The research activities are principally conducted at Alcoa Technical Center (ATC), near Pittsburgh, Pennsylvania. Several subsidiaries and divisions conduct their own R&D programs as do many plants. Expenditures for such activities were \$130 million in 1993, \$212 million in 1992 and \$252 million in 1991. Most of the 1993 decrease was related to Alcoa Electronic Packaging which moved to production status in 1993, and to program reductions at ATC. Substantially all R&D activities are funded by the Company and its various units. The Company's strategy has been to focus its R&D expenditures on specific programs related to existing businesses, and this will lead to lower R&D expenditures in 1994.

Environmental

Alcoa's Environmental Policy confirms its commitment to operate worldwide in a manner which protects the environment and the health of employees and of the citizens of the communities where the Company has an impact.

The Company engages in a continuing effort to develop and implement modern technology and policies to meet environmental objectives. Approximately \$76 million was spent during 1993 for new or expanded facilities for environmental control. Capital expenditures for such facilities will approximate \$56 million in 1994. The costs of operating these facilities are not included in these figures. Remediation expenses being incurred by the Company at many of its

facilities and at certain sites involved in proceedings under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA or Superfund) and other sites are increasing. See Environmental Matters on page 17 in the Annual Report to Shareholders, and Item 3 - "Legal Proceedings" below.

Alcoa's operations, like those of others in manufacturing industries, have in recent years become subject to increasingly stringent legislation and regulations to protect human health and the environment. This trend is expected to continue. Compliance with new laws, regulations or policies could require substantial expenditures by the Company in addition to those referenced above.

Environmental requirements also may affect the marketing of certain products manufactured by the Company. For example, legislation imposing deposits on beverage containers including aluminum cans has been passed in a number of states and is being considered elsewhere. Federal and state regulations, such as U.S. Food and Drug Administration regulations and California Proposition 65 affect the manufacture of materials to be used in food and beverage containers. The Coalition of Northeastern Governors (CONEG) model law (as enacted by several states) governing the use or presence of certain materials may impact the manufacture of certain packages or packaging components for foods and beverages. A proposed directive similar to the CONEG legislation is under consideration by the Commission of the European Union.

Environmental laws and regulations are important both to the Company and to the communities where it operates. The Company supports the use of sound scientific research and realistic risk criteria to analyze environmental and human health effects and to develop effective laws and regulations in all countries where it operates. Alcoa recognizes that recycling and waste reduction offer real solutions to the solid waste problem and it continues vigorously to pursue efforts in these areas.

Employees

During 1993 the Company employed an average of approximately 63,400 people worldwide. New three-year labor agreements covering the majority of the Company's U.S. production workers were ratified in mid-1993. Major provisions included: an increase in base wages effective in 1993 and an additional base wage increase in 1995; a managed health care program; a pay for performance plan that aligns the variable pay component with the location's goals and overall corporate financial performance; and changes in the factor used to calculate pension benefits. Also, agreement was reached on principles to guide joint labor-management development of a location-specific, business-based outsourcing process.

Wages for both hourly and salaried employees in Brazil are negotiated annually in compliance with government guidelines. Each Aluminio location, however, has established a separate compensation package for its employees which includes real wage increases and certain employee welfare plans.

Item 2. Properties.

See "Item 1 - Business." Alcoa believes that its facilities, substantially all of which are owned, are suitable and adequate for its operations.

Item 3. Legal Proceedings.

In the ordinary course of its business, Alcoa is involved in a number of lawsuits and claims, both actual and potential, including some which it has asserted against others. While the amounts claimed may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. It is possible that results of operations or liquidity in a particular period could be materially affected by certain contingencies. Management believes, however, that the disposition of matters that are pending or asserted will not have a materially adverse effect on the financial position of the Company

Environmental Matters

Alcoa is involved in proceedings under the Superfund or analogous state provisions regarding the usage, disposal, storage or treatment of hazardous substances at a number of sites in the U.S. The Company has committed to participate, or is engaged in negotiations with Federal or state authorities relative to its alleged liability for participation, in clean-up efforts at several such sites.

In response to a unilateral order issued under Section 106 of CERCLA by the U.S. Environmental Protection Agency (EPA) Region II regarding releases of hazardous substances, including polychlorinated biphenyls (PCBs) into the Grasse River near its Massena, New York facility, Alcoa proposed during 1993 to EPA that it engage in certain remedial activities in the Grasse River for the removal and appropriate disposal of certain river sediments. EPA has accepted the proposal in principle; however, it is deciding certain critical details, such as how removed sediments will be managed.

Representatives of various Federal and state agencies and a Native American tribe, acting in their capacities as trustees for natural resources, have asserted that Alcoa may be liable for loss or damage to such resources under Federal and state law based on Alcoa's operations at its Massena, New York facility. While formal proceedings have not been instituted, the Company is actively investigating these claims.

In June 1993 EPA published notice of its intent to include portions of Lavaca Bay and Alcoa's Point Comfort Operations on the Superfund National Priorities List (NPL). Alcoa provided comments to that proposal in August 1993 as part of the administrative record. December 1993, Alcoa and EPA Region VI agreed to commence negotiations for an administrative consent order under which Alcoa would implement a comprehensive remedial investigation and feasibility study for the proposed NPL site. These negotiations, which include Alcoa, EPA, the State of Texas and certain Federal and state natural resources trustees, are now ongoing. These Federal and state natural resources trustees have served Alcoa with notice of their intent to file suit to recover damages for alleged loss, injury or destruction of natural resources in Lavaca Bay, adjacent to the Point Comfort Operations, and to recover the costs for performing the assessment of such alleged damages. Alcoa and representatives of the trustees have entered into a series of agreements that provide for implementation of various studies of Lavaca Bay and its resources. These same parties have entered into several tolling agreements that suspend any applicable statute of limitations period.

The Stolle Corporation (Stolle), a subsidiary, disclosed to the Ohio Environmental Protection Agency that it had previously managed hazardous waste at its Sidney, Ohio diversified products plant in a manner which may not meet regulatory requirements then applicable. In December 1993, the Ohio Attorney General contacted Stolle to discuss potential resolution of alleged violations. Discussions are expected to begin in late March or early April 1994.

In September 1993 EPA Region V issued an administrative complaint to Alcoa's Cleveland, Ohio Works alleging improper use and disposal of PCBs and failure to obtain an EPA identification number for PCB disposal activities. The complaint cites the applicable maximum statutory penalties for these alleged violations and assesses a fine of \$197,000. Settlement negotiations are ongoing.

Other Matters

Alcoa was named as one of several defendants in a number of lawsuits filed as a result of the Sioux City, Iowa DC-10 plane crash in 1989. The plaintiffs claim that Alcoa fabricated the titanium fan disk involved in the alleged engine failure of the plane from a titanium forging supplied by a third party. Twenty-two of the 117 cases are still pending; the other 95 have been settled without participation by Alcoa. While Alcoa is covered by the releases given by the plaintiffs in the settled cases, Alcoa remains subject to claims for contribution from the defendants who have actually paid the settlements. In some of the cases, punitive damages of \$5 million are sought from each defendant.

Alcoa and a subsidiary were notified in September 1991 by the Department of Justice (DOJ) of its investigation regarding criminal violations of antitrust laws in the small press, hard alloy extrusion industry. On March 5, 1993, Alcoa and the subsidiary received an antitrust grand jury Investigation subpoena requiring production of documents relating to pricing of small press, hard alloy extrusions. Alcoa and its subsidiary have provided the documentation requested. Employees of Alcoa and the subsidiary have been called to testify before the grand jury.

In February 1992 Alcoa received a Civil Investigative Demand (CID) from the DOJ to determine whether there might be a violation of the Sherman Act or the Clayton Act as a result of Alcoa's acquisition from Halethorpe Extrusions, Inc. of assets relating to the production of extruded aluminum products. The DOJ also advised Alcoa that it intended to issue a CID to Pimalco, Inc., a wholly owned subsidiary, in connection with the same acquisition. The investigation was concluded in early 1993, and no charges were brought against the Company.

Aura Systems, Inc. has filed suit against Alcoa and Alcoa Packaging Machinery, Inc. and various other defendants alleging violations of the federal antitrust laws. The suit, which seeks an unspecified amount of damages, was transferred to the U.S. District Court for the District of Colorado in the third quarter. The suit was dismissed in December 1993.

In October 1992 Alcoa Composites, Inc. was served with a subpoena requiring the production of certain documentary material to the U.S. government in connection with an investigation to determine whether criminal violations of federal defense procurement laws or regulations occurred with respect to the subsidiary's subcontract to manufacture helicopter blades for the U.S. Army. The subsidiary is responding to the subpoena. The Company does not have sufficient information at this time to ascertain whether any violations may have taken place or whether any grounds exist for naming the subsidiary in any proceeding which may be initiated as a result of the investigation. The Company continues to provide information to the U.S. government.

In December 1992 Alcoa initiated a lawsuit against nearly one-hundred different insurance carriers that provided Alcoa with insurance coverage for various periods between the years 1956 and 1985. The suit asks the court to declare that these insurance companies are required, under the terms of the policies issued, to reimburse monies spent by

Alcoa in the past or future for environmental liabilities that have arisen in recent years.

On December 21, 1992, Alcoa was named as a defendant in KML Leasing v. Rockwell Standard Corporation filed in the U.S. District Court for the District of Oklahoma on behalf of 7,317 Aero Commander, Rockwell Commander and Gulfstream Commander aircraft owners. The complaint alleges defects in certain wingspars manufactured by Alcoa. Alcoa's aircraft builders products liability insurance carrier has assumed defense of the matter. In May 1993, Alcoa received a reservation of rights letter from its insurance carrier which purports to reserve its rights with respect to a majority of the types of damages claimed. Alcoa is challenging the reservation.

In December 1993 Alcoa was served with a subpoena from the Antitrust Division of the DOJ to produce documents to a Federal grand jury sitting in Philadelphia. The grand jury is investigating pricing practices in the used beverage container and aluminum scrap markets. The Company is cooperating with the DOJ.

Alcoa and Alcoa Specialty Chemicals, Inc., a subsidiary, are defendants in a case filed by Aluminum Chemicals, Inc., et al. in the District Court of Harris County, Texas. In an Eighth Amended Petition filed in December 1993, the plaintiffs allege claims for breach of fiduciary duty, fraud, interference with contractual and business relations, breach of contract, conversion, misappropriation of trade secrets, deceptive trade practices and civil conspiracy in connection with a former partnership, Alcoa-Coastal Chemicals. The plaintiffs are seeking lost profits and other compensatory damages in excess of \$100 million, and punitive damages. The court already has granted several motions, including motions for partial summary judgment in favor of defendants. Additional motions are pending or contemplated. Alcoa and its subsidiary intend to file a counterclaim seeking damages. The case is currently scheduled for trial in July 1994.

In late 1993, Alcoa Fujikura, Ltd. (AFL), a subsidiary, was notified by the U.S. Customs Service (USCS) that it is the subject of an investigation regarding the proper marking of country of origin on wire harnesses produced in Mexico from 1986 to 1989. The USCS investigation focuses on AFL's administration of an approved waiver process pertaining to parts for production as well as importation of wire harnesses for sale as repair parts through 1993. AFL is cooperating with USCS.

In December 1993, the European Union Competition Office and German Cartel Office began an investigation of the competitive practices of Alcoa Chemie, GmbH., a subsidiary, in the tabular alumina business in Germany. The subsidiary is cooperating with the investigation.

Item 4. Submission of Matters to a Vote of Security Holders.

No matters were submitted to a vote of the Company's security holders during the fourth quarter of 1993.

Item 4A. Executive Officers of the Registrant.

The names, ages, positions and areas of responsibility of the executive officers of the Registrant as of March 1, 1994 are listed below.

Paul H. O'Neill, 58, Chairman of the Board and Chief Executive Officer. Mr. O'Neill became a director of Alcoa in 1986 and was elected Chairman of the Board and Chief Executive Officer effective in June 1987. Before joining Alcoa, Mr. O'Neill had been an officer since 1977 and President and a director since 1985 of International Paper Company.

Alain J. P. Belda, 50, Executive Vice President (effective March 15, 1994). Mr. Belda was President of Alcoa Aluminio S.A. in Brazil from 1979 to March 1994. He was elected Vice President of Alcoa in 1982 and, in 1989, was given responsibility for all of Latin America (other than Suriname). In August 1991 he was named President - Latin America for the Company. In his new assignment Mr. Belda will work with 10 Alcoa business unit presidents.

George E. Bergeron, 52, Vice President and President - Rigid Packaging Division. Mr. Bergeron was named President - Alcoa Closure Systems International in 1982 and was elected Vice President and General Manager - Rigid Packaging Division in July 1990. He assumed his current responsibilities in August 1991.

Peter R. Bridenbaugh, 53, Executive Vice President - Science, Technology, Engineering, Environment, Safety and Health. Dr. Bridenbaugh became Director, Alcoa Laboratories in 1983. He was elected Vice President Research and Development in 1984. He assumed his current responsibilities in 1991.

John L. Diederich, 57, Executive Vice President - Chairman's Counsel. Mr. Diederich was elected Managing Director of Alcoa of Australia Limited and Vice President of Alcoa in 1982. He was named Vice President - Metals and Chemicals in July 1986 and was elected a Group Vice President in October 1986. He assumed his current responsibilities in 1991.

Richard L. Fischer, 57, Executive Vice President - Chairman's Counsel. Mr. Fischer was elected Vice President and General Counsel in 1983 and became a Senior Vice President in 1984. From 1985 through 1989 he also had responsibility for Government and Public Affairs. He

was given additional responsibilities in 1986 for Corporate Development and in 1989 for the Company's expansion activities in Europe and Asia. He assumed his current responsibilities in 1991.

Ronald R. Hoffman, 59, Executive Vice President - Human Resources, Quality, and Communications. Mr. Hoffman, an officer since 1975, was named Vice President - Flat Rolled Products in 1979. He was elected a Group Vice President in 1984 and was given responsibility for the Company's Packaging Systems group in 1986. He assumed his current responsibilities in 1991.

- R. Lee Holz, 58, Vice President and General Counsel. Mr. Holz, an attorney with the Company since 1960, was named Assistant General Counsel in 1974 and Senior Assistant General Counsel in 1983. He was elected to his current position in 1991.
- Jan H. M. Hommen, 50, Executive Vice President and Chief Financial Officer. Mr. Hommen was Financial Director of Alcoa Nederland until 1979 when he was elected Assistant Treasurer Corporate Finance of Alcoa. He was elected Treasurer in August 1986 and Vice President and Treasurer in December 1986. He was elected to his current position in 1991.
- Robert F. Slagle, 53, Vice President and Managing Director Alcoa of Australia Limited. Mr. Slagle was elected Treasurer in 1982 and Vice President in 1984. In 1986, he was named Vice President Industrial Chemicals and, in 1987, was named Vice President Industrial Chemicals and U.S. Alumina Operations. Mr. Slagle was named Vice President Raw Materials, Alumina and Industrial Chemicals in 1989 and Managing Director Alcoa of Australia Limited in 1991.
- G. Keith Turnbull, 58, Executive Vice President Strategic Analysis/Planning and Information. Dr. Turnbull was appointed Assistant Director of Alcoa Laboratories in 1980. He was named Director Technology Planning in 1982 and Vice President Technology Planning in 1986. In 1991 he was elected to his current position.

PART II

Item 5. Market for the Registrant's Common Equity and Related Stockholder Matters.

Dividend per share data, high and low prices per share and the principal exchanges on which the Company's common stock is traded are set forth on page 34 of the 1993 Annual Report to Shareholders (the Annual Report) and are incorporated herein by reference.

At February 7, 1994 (the record date for the Company's 1994 annual shareholders meeting) there were approximately 55,000 Alcoa shareholders, including both record holders and an estimate of the number of individual participants in security position listings.

Item 6. Selected Financial Data.

The comparative columnar table showing selected financial data for the Company is set forth on page 15 of the Annual Report and is incorporated herein by reference.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Management's review and comments on the consolidated financial statements are set forth on pages 14 through 17 of the Annual Report and are incorporated herein by reference.

Item 8. Financial Statements and Supplementary Data.

The Company's consolidated financial statements, the notes thereto and the report of the independent public accountants are set forth on pages 18 through 27 of the Annual Report and are incorporated herein by reference.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

PART III

Item 10. Directors and Executive Officers of the Registrant.

The information regarding Directors is contained under the caption "Board of Directors" on pages 4 through 6 of the Registrant's definitive Proxy Statement dated March 4, 1994 (the Proxy Statement) and is incorporated herein by reference.

The information regarding executive officers is set forth in Part I, Item 4A under "Executive Officers of the Registrant."

The information with respect to this item required by Item 405 of Regulation S-K is incorporated by reference from the Company's 1994 Proxy Statement.

Item 11. Executive Compensation.

This information is contained under the caption "Compensation of executive officers" on pages 8 through 12 of the Proxy Statement. The

performance graph and Compensation Committee Report shall not be deemed

Item 12. Security Ownership of Certain Beneficial Owners and

This information is contained under the caption "Security ownership" on page 8 of the Proxy Statement and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions.

This information is contained under the caption "Certain relationships and related transactions" on page 7 of the Proxy Statement and is incorporated herein by reference.

PART IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form

The Company's consolidated financial statements, the notes thereto and the report of the independent public accountants are set forth on pages 18 through 27 of the Annual Report and are incorporated herein by reference.

With the exception of the aforementioned information and the information incorporated by reference in Part II hereof, the Annual Report is not to be deemed filed as part of this report.

The following report and additional financial data should be read in conjunction with the Company's consolidated financial statements in the Annual Report:

Independent Accountant's Report of Coopers & Lybrand dated January 11, 1994, except for Note U for which the date is February 7, 1994, on the Company's consolidated financial statement schedules filed as a part hereof for the fiscal years ended December 31, 1993, 1992 and 1991 and related consent dated March 9, 1994.

Schedules V, VI, VIII, IX and X for the fiscal years ended December 31, 1993, 1992 and 1991 and Schedule VII as of December 31, 1993:

Schedule No. Schedule Title

Properties, Plants and Equipment

VT Accumulated Depreciation, Depletion and Amortization

of Properties, Plants and Equipment Guarantees of Securities of Other Issuers

VII VIII

Valuation and Qualifying Accounts IX

Short-Term Borrowings

Supplementary Income Statement Information Χ

Schedules other than those referred to above are omitted because they are not required or the information is included in the notes to financial statements.

- (b) Reports filed on Form 8-K. None was filed in the fourth quarter of 1993.
 - Exhibits. (c)

Exhibit Number

Description*

- 3(i). Articles of the Registrant as amended, incorporated by reference to exhibit 3(a) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 1993.
- By-Laws of the Registrant, incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended $\,$ 3(ii). September 30, 1991.
- 10(a). Amended Long Term Stock Incentive Plan, effective January 1, 1992, incorporated by reference to exhibit 10(a) to the Company's Annual Report on Form 10-K for the year ended December 31, 1991.
- Employees' Excess Benefit Plan, Plan A, incorporated by 10(b). reference to exhibit 10(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 1980.
- 10(c). Incentive Compensation Plan, as amended effective January 1, 1993, incorporated by reference to exhibit 10(c) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- Employees' Excess Benefit Plan, Plan C, as amended and 10(d). restated effective January 1, 1989, incorporated by reference to exhibit 10(d) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- Employees' Excess Benefit Plan, Plan D, as amended effective October 30, 1992, incorporated by reference to exhibit 10(e) to the Company's Annual Report on Form 10-K for the year 10(e). ended December 31, 1992.

- 10(f). Employment Agreement of Paul H. O'Neill, as amended through February 25, 1993, incorporated by reference to exhibit 10(h) to the Company's Annual Report on Form 10-K for the year ended December 31, 1987 and exhibit 10(g) to the Company's Annual Report on Form 10-K for the year ended December 31, 1990, and exhibit 10(f)(2) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- 10(g). Deferred Fee Plan for Directors, as amended effective November 1, 1992, incorporated by reference to exhibit 10(h) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- 10(h). Stock Plan for Non-Employee Directors, as amended effective July 17, 1992, incorporated by reference to exhibit 10(i) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- 10(i). Fee Continuation Plan for Non-Employee Directors, incorporated by reference to exhibit 10(k) to the Company's Annual Report on Form 10-K for the year ended December 31, 1989.
- 10(j). Deferred Compensation Plan, as amended effective October 30, 1992, incorporated by reference to exhibit 10(k) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- 10(k). Summary of the Executive Split Dollar Life Insurance Plan, dated November 1990, incorporated by reference to exhibit 10(m) to the Company's Annual Report on Form 10-K for the year ended December 31, 1990.
- 10(1). Form of Indemnity Agreement between the Company and individual directors or officers, incorporated by reference to exhibit 10(j) to the Company's Annual Report on Form 10-K for the year ended December 31, 1987.
- 11. Computation of Earnings per Common Share.
- 12. Computation of Ratio of Earnings to Fixed Charges.
- 13. Portions of Alcoa's 1993 Annual Report to Shareholders.
- 21. Subsidiaries and Equity Entities of the Registrant.
- 23. Consent of Independent Certified Public Accountants.
- 24. Power of Attorney for certain directors.

*Exhibit Nos. 10(a) through 10(d) are management contracts or compensatory plans required to be filed as Exhibits to this Form 10-K.

Amendments and modifications to other Exhibits previously filed have been omitted when in the opinion of the Registrant such Exhibits as amended or modified are no longer material or, in certain instances, are no longer required to be filed as Exhibits.

No other instruments defining the rights of holders of long-term debt of the Registrant or its subsidiaries have been filed as exhibits because no such instruments met the threshold materiality requirements under Regulation S-K. The Registrant agrees, however, to furnish a copy of any such instruments to the Commission upon request.

(d) Financial Statement Schedules.

To the Shareholders and Board of Directors Aluminum Company of America

Our report on the consolidated financial statements of Aluminum Company of America has been incorporated by reference in this Form 10-K from page 18 of the 1993 Annual Report to Shareholders of Aluminum Company of America. In connection with our audits of such financial statements, we have also audited the related financial statement schedules listed under Item 14 of this Form 10-K.

In our opinion, the financial statement schedules referred to above, when considered in relation to the basic financial statements taken as a whole, present fairly, in all material respects, the information required to be included therein.

/s/Coopers & Lybrand COOPERS & LYBRAND

600 Grant Street Pittsburgh, Pennsylvania January 11, 1994, except for Note U for which the date is February 7, 1994

Col. A	Col. B	Col. C	Col. D	Col. E	Col. F
Classification	Balance at beginning of period	Additions at cost	Retirements	Other changes add(deduct)	Balance at end of period
Year 1993: Land and land rights,					
including mines	\$ 228.8	\$ 2.2	\$ 5.2	\$ 2.1 (C) 1.1 (D)	\$ 229.0
Structures	3,476.5	119.2	25.5	50.7 (C) (17.5)(D)	3,603.4
Machinery and equipment	8,990.9	526.9	217.0	78.5 (C) (61.6)(D)	9,317.7
Construction work in	201 2	00 2 (D)	7	1 2 (0)	450.6
progress	391.2	98.3 (B)	.7	1.3 (C) (39.5)(D)	450.6
	\$13,087.4	\$746.6	\$248.4	\$ 15.1	\$13,600.7
	=======	=====	=====	======	=======
Year 1992:					
Land and land rights, including mines	\$ 226.2	\$ 4.5	\$.3	\$ (1.6)(D)	\$ 228.8
Structures	3,448.4	128.7	14.5	(18.7)(C) (67.4)(D)	3,476.5
Machinery and equipment	8,689.0	719.4	248.5	(22.9)(C) (146.1)(D)	8,990.9
Construction work in		4 4		, , , ,	
progress	541.4	(72.1)(B)	1.2	(.8)(C) (75.9)(D) (.2)(E)	391.2
	\$12,905.0	\$780.5	\$264.5	\$(333.6)	\$13,087.4
	=======	=====	=====	======	=======
Year 1991: Land and land rights,					
including mines	\$ 235.6	\$ 3.2	\$ 1.1	\$ (1.0)(C) (10.5)(D)	\$ 226.2
Structures	3,537.9	110.6	12.2	(8.4)(C)	3,448.4
Machinery and equipment	8,676.8	568.4	215.6	(179.5)(D) (24.4)(C)	8,689.0
				(316.8)(D) .6 (E)	
Construction work in progress	469.1	159.0(B)	17.2	.4 (C) (68.0)(D) (1.9)(E)	541.4
	\$12,919.4	\$841.2	\$246.1	\$(609.5)	\$12,905.0
	=======	=====	=====	======	=======

NOTES:

Col. A

- (A) Depreciation is recorded principally on the straight-line method at rates ranging from 1% to 33%
 (B) Net increase (decrease) during the period
 (C) Sales or acquisition of subsidiaries
 (D) Transfers and foreign currency translation adjustments
 (E) Adjustments to net realizable value

Col. B

SCHEDULE VI - ACCUMULATED DEPRECIATION, DEPLETION AND AMORTIZATION OF PROPERTIES, PLANTS AND EQUIPMENT FOR THE YEAR ENDED DECEMBER 31 (In millions)

		Additions			
	Balance at beginning	charged to		Other changes	Balance at end
Classification				add(deduct)	
Year 1993: Land and land rights,					
including mines	\$ 31.4	\$ 2.2	\$ -	\$ -	\$ 33.6
Structures	1,775.4	121.6	22.0	2.9 (A) (6.0)(B) (5.9)(C)	1,866.0
Machinery and equipment	4,864.8	546.1	205.2	13.9 (A) 3.2 (B) (28.5)(C)	5,194.3
	\$6,671.6	\$669.9(D)	\$227.2	\$ (20.4)	\$7,093.9
	======	=====	=====	======	======
Year 1992: Land and land rights,					
including mines	\$ 29.3	\$ 2.2	\$ -	\$.5 (B)	\$ 31.4
Structures	1,688.6	121.7	13.8	(.6)(C) (4.8)(A)	1,775.4

Col. C Col. D

Col. E Col. F

	======	=====	=====	======	=======
	\$6,172.4	\$697.1 (D)	\$212.4	\$(338.2)	\$6,318.9
				(1.6)(B)	
				(224.3)(C)	
Machinery and equipment	4,466.7	570.0	202.4	(7.4)(A)	4,601.0
				(6.8)(B)	
	_,			(92.6)(C)	_, 500.0
Structures	1,676.8	124.7	9.9	(3.6)(A)	
Year 1991: Land and land rights, including mines	\$ 28.9	\$ 2.4	\$.1	\$ (1.9)(C)	\$ 29.3
	======	=====	=====	======	======
	\$6,318.9	\$680.2 (D)	\$248.8	\$ (78.7)	\$6,671.6
Machinery and equipment	4,601.0	556.3	235.0	(6.0)(A) 27.0 (B) (78.5)(C)	4,864.8
Machinery and equipment	4 601 0	EEG 2	235.0	(34.2)(C)	4 964 9
				17.9 (B)	

NOTES:

- (A) Sale or acquisition of subsidiaries
 (B) Adjustment to net realizable value
 (C) Transfers and foreign currency translation adjustments
 (D) A reconciliation to depreciation expense in the Income

Statement follows

	1993	1992	1991
Schedule VI depreciation expense Amortization of intangibles Depreciation included in research and	\$669.9 35.0	\$680.2 25.2	\$697.1 22.8
development expense Income Statement depreciation expense	(12.2) \$692.7	(23.0) \$682.4	(22.0) \$697.9

SCHEDULE VII - GUARANTEES OF SECURITIES OF OTHER ISSUERS DECEMBER 31, 1993 (In millions)

Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G
Name of issuer of securities guaranteed by person for which statement is filed	Title of issue of each class of securities guaranteed	Total amount guaranteed and outstanding	statement	Amount in treasury of issuer of securities guaranteed	Nature of guarantee	Nature of any default by issuer of securities guaranteed in principal, interest, sinking fund or redemption provisions, or payment of dividends
Various employees	Mortgages payable	\$2.7	None	None	Principal and interest	None
Entities previously owned	Loans and notes	1.9	None	None	Principal and interest	None
Others	Loans and notes	1.6 \$6.2 ====	None	None	Principal and interest	None

NOTE: (A) The amount of interest guaranteed does not exceed \$1 per year.

SCHEDULE VIII - VALUATION AND QUALIFYING ACCOUNTS FOR THE YEAR ENDED DECEMBER 31 (In millions)

Col. A	Col. B	Col.	С	Col. D	Col. E			
		Additio	ons					
	_				_			
	Balance at	Charged to	Charged		Balance			
	beginning	costs and	to other		at end			
Description	of period	expenses	accounts	Deductions	of period			
Allowance for	Allowance for doubtful accounts:							
1993	\$ 17.7	\$ 19.2	\$ (0.2)(A)	\$ 3.5(B)	\$ 33.2			
1992	\$ 17.3	\$ 6.8	\$ (3.1)(A)	\$ 3.3(B)	\$ 17.7			
1991	\$ 14.9	\$ 13.3	\$ 1.5 (A)	\$ 12.4(B)	\$ 17.3			

Deferred income tax valuation allowance:

1993 \$ 157.3 \$ 52.7 \$ 38.6(D) \$ 171.4 1992 \$ 156.1(C) \$ 1.2 \$ 157.3

NOTES: (A) Collections on accounts previously written off, acquisition of subsidiaries and foreign currency translation adjustment

Uncollectible accounts written off

- Represents the implementation of SFAS 109 effective (C) January 1, 1992
- (D) Related primarily to utilization of tax loss carry forwards.

SCHEDULE X - SUPPLEMENTARY INCOME STATEMENT INFORMATION FOR THE YEAR ENDED DECEMBER 31 (In millions)

Col. A		Co	1. B
			to costs
Item		and e	xpenses
Maintenance and repairs:			
1993		\$	908.2
1992		\$	913.8
1991		\$	925.1
Taxes, other than payroll and income t	axes:		
	1993	1992	1991
Real estate and personal property taxe	s \$ 52 A	\$ 51.3	\$ 52.4
Other taxes	45.0	61.0	Ψ 52.4 58.8
Other taxes	45.0	01.0	30.0
	\$ 97.0	\$112.3	\$111.2
	======	======	======

SCHEDULE IX - SHORT-TERM BORROWINGS FOR THE YEAR ENDED DECEMBER 31 (In millions)

Col C

Col D

Col F

Col F

Col B

Col 4

CO1. A	COI. B	CO1. C	COI. D	CO1. E	CO1. F	
Category of aggregate short-term borrowings (A)	Balance at end of period		during the	Average amount outstanding	rate during	
Year 1993: Payable to banks Commercial paper (D)		(F) 3.4%	\$286.6 365.2	\$178.9 198.4	(F) 3.2%	
Year 1992: Payable to banks Commercial paper (D)			\$190.3 381.0	\$162.6 114.5	(G) 3.6%	
Year 1991: Payable to banks Commercial paper (E)			\$209.7 64.7	\$132.2 22.9	(H) 9.6%	

Terms range from demand to 270 days NOTES: (A)

- Computed by calculating an arithmetical average of month-end borrowings during the year (B)
- (C) Computed by dividing interest expense applicable to the
- debt by average borrowings outstanding Aluminum Company of America and Alcoa of Australia (D) short-term borrowings
- (E) Alcoa of Australia short-term borrowings
- Individual rates ranged from 3.7% to 23.5%, with a weighted average of 5.5% for the period and 5.8% at (F) year-end
- (G) Individual rates ranged from 3.9% to 10.9%, with a

- weighted average of 6.6% for the period and 5.7% at
- Individual rates ranged from less than 1% to 12.3%, with a weighted average of 7.8% for the period and 7.4% at

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ALUMINUM COMPANY OF AMERICA

March 11, 1994

By /s/Earnest J. Edwards Earnest J. Edwards Vice President and Controller (Also signing as Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/Paul H. O'Neill Paul H. O'Neill	Chairman of the Board and Chief Executive Officer (Principal Executive Officer and Director)	March 11, 1994
/s/Jan H. M. Hommen Jan H. M. Hommen	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	March 11,1994

Kenneth W. Dam, John P. Diesel, Joseph T. Gorman, Judith M. Gueron, John P. Mulroney, Sir Arvi Parbo, Forrest N. Shumway and Franklin A. Thomas, each as a Director, on March 11, 1994, by Barbara S. Jeremiah, their Attorney-in-Fact.*

*By /s/Barbara S. Jeremiah Barbara S. Jeremiah Attorney-in-Fact

EXHIBIT INDEX

Exhibit

Number

Description

- 3(i). Articles of the Registrant as amended, incorporated by reference to exhibit 3(a) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 1993.
- 3(ii). By-Laws of the Registrant, incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 1991.
- 10(a). Amended Long Term Stock Incentive Plan, effective January 1, 1992, incorporated by reference to exhibit 10(a) to the Company's Annual Report on Form 10-K for the year ended December 31, 1991.
- Employees' Excess Benefit Plan, Plan A, incorporated by 10(b). reference to exhibit 10(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 1980.
- 10(c). Incentive Compensation Plan, as amended effective January 1, 1993, incorporated by reference to exhibit 10(c) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- Employees' Excess Benefit Plan, Plan C, as amended and 10(d). restated effective January 1, 1989, incorporated by reference to exhibit 10(d) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- Employees' Excess Benefit Plan, Plan D, as amended effective October 30, 1992, incorporated by reference to exhibit 10(e)10(e). to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- 10(f). Employment Agreement of Paul H. O'Neill, as amended through February 25, 1993, incorporated by reference to exhibit 10(h) to the Company's Annual Report on Form 10-K for the year ended December 31, 1987 and exhibit 10(g) to the Company's Annual

- Report on Form 10-K for the year ended December 31, 1990, and exhibit 10(f)(2) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- 10(g). Deferred Fee Plan for Directors, as amended effective
 November 1, 1992, incorporated by reference to exhibit 10(h)
 to the Company's Annual Report on Form 10-K for the year
 ended December 31, 1992.
- 10(h). Stock Plan for Non-Employee Directors, as amended effective July 17, 1992, incorporated by reference to exhibit 10(i) to the Company's Annual Report on Form 10-K for the year ended December 31, 1992.
- 10(i). Fee Continuation Plan for Non-Employee Directors, incorporated by reference to exhibit 10(k) to the Company's Annual Report on Form 10-K for the year ended December 31, 1989
- 10(j). Deferred Compensation Plan, as amended effective October 30,
 1992, incorporated by reference to exhibit 10(k) to the
 Company's Annual Report on Form 10-K for the year ended
 December 31, 1992.
- 10(k). Summary of the Executive Split Dollar Life Insurance Plan, dated November 1990, incorporated by reference to exhibit 10(m) to the Company's Annual Report on Form 10-K for the year ended December 31, 1990.
- 10(1). Form of Indemnity Agreement between the Company and individual directors or officers, incorporated by reference to exhibit 10(j) to the Company's Annual Report on Form 10-K for the year ended December 31, 1987.
- 11. Computation of Earnings per Common Share.
- 12. Computation of Ratio of Earnings to Fixed Charges.
- 13. Portions of Alcoa's 1993 Annual Report to Shareholders.
- 21. Subsidiaries and Equity Entities of the Registrant.
- 23. Consent of Independent Certified Public Accountants.
- 24. Power of Attorney for certain directors.

Exhibit 11

COMPUTATION OF EARNINGS PER COMMON SHARE FOR THE YEAR ENDED DECEMBER 31 (In millions, except share and per share amounts)

			1993		1992	1991
1.	Income applicable to common stock before extraordinary loss and accounting changes*	\$	2.7	\$	20.3	\$60.6
2.	Net income (loss) applicable to common stock*	\$	2.7	(\$1	,141.3)	\$60.6
3.	Average number of common shares outstandingat the beginning of the year and the end of each month during the year	87,673	3,141	85,4	74,089	84,983,749
4.	Primary earnings per common share before extraordinary loss and accounting changes (1 divided by 3)	\$. 03	\$. 24	\$.71
5.	Primary earnings (loss) per common share (shares for accounting changes calculations = 85,082,319)	\$. 03	(\$	13.41)	\$.71
6.	Interest on 6-1/4% convertible subordinated amortization of related debt discount and expenses, net of applicable taxes on income		-	\$	6.3	\$ 6.3
7.	Fully diluted earnings before extraordinary loss and accounting changes (1 + 6)	\$	2.7	\$	26.6	\$66.9
8.	Fully diluted earnings (loss)(2 + 6)	\$	2.7	(\$1	,135.0)	\$66.9
9.	Shares issuable upon full conversion of convertible subordinated debentures		-	2,4	03,226	2,419,354
10.	Shares issuable under stock incentive plans (treasury stock method)	8	3,675		41,441	93,745
11.	Shares issuable upon exercise of dilutive outstanding stock options (treasury stock method)	202	2,531	3	63,266	496,825
12.	Fully diluted shares $(3 + 9 + 10 + 11)$	87,884	1,347	88,2	82,022	87,993,673
13.	Fully diluted earnings per common share before extraordinary loss and accounting changes (7 divided by 12)	\$. 03	\$. 30	\$.76
14.	Fully diluted earnings (loss) per common share (shares for accounting change calculations = 88,092,243)	\$. 03	(\$	12.88)	\$.76

^{*}After preferred dividend requirement

COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES FOR THE YEAR ENDED DECEMBER 31 (In millions, except ratios)

	1993	1992	1991	1990	1989
Earnings: Income before taxes on income and before extraordinary loss and					
accounting changes Minority interests' share of earnings of majority-owned subsidiaries	\$191.1	\$298.6	\$411.5	\$1,057.4	\$2,197.1
without fixed charges	(5.9)	(5.7)	(7.7)	-	-
Less equity (earnings) losses Fixed charges added to net income	13.0 110.1	12.2 133.5	5.2	3.0	(30.8)
Proportionate share of income (loss)	110.1	133.5	193.1	217.8	211.5
of 50% owned persons	(11.5)	(11.2)	(.5)	(7.4)	25.6
Distributed income of less than 50%	(==:-)	()	(1-)	()	
owned persons	-	-	4.6	-	2.1
Amortization of capitalized interest:					
Consolidated	20.6	20.0	19.6	18.5	17.0
Proportionate share of 50% owned persons	0	1.0	4	.9	_
owned persons	.8	1.0	. 4	.9	.5
Total earnings	\$318.2	\$448.4	\$626.2	\$1,290.2	\$2,423.0
Fixed charges:					
Interest expense:					
Consolidated	\$ 87.8	\$105.4	\$153.2	\$ 184.7	\$ 178.3
Proportionate share of 50%		7.0	47.0	0.7	45.4
owned persons	5.5 93.3	112.4	17.8 171.0	9.7 194.4	15.1 193.4
	93.3	112.4	171.0	194.4	193.4
Amount representative of the interest factor in rent:					
Consolidated Proportionate share of 50%	16.4	20.7	21.3	23.1	17.7
owned persons	. 4	. 4	.8	.3	. 4
	16.8	21.1	22.1	23.4	18.1
Fixed charges added to net income	110.1	133.5	193.1	217.8	211.5
Interest capitalized:					
Consolidated	3.5	11.1	12.7	20.5	18.5
Proportionate share of 50%					
owned persons	-	-	-	-	-
	3.5	11.1	12.7	20.5	18.5
Preferred stock dividend requirements of majority-owned subsidiaries	29.6	62.4	69.0	65.1	64.1
or majority-owned substitutines	29.0	02.4	09.0	05.1	04.1
Total fixed charges	\$143.2	\$207.0	\$274.8	\$ 303.4	\$ 294.1
Ratio	2.22	2.17	2.28	4.25	8.24

SELECT PORTIONS OF 1993 ANNUAL REPORT TO SHAREHOLDERS ALUMINUM COMPANY OF AMERICA

FINANCIAL REVIEW

(dollars in millions, except share amounts and ingot prices)

Results of Operations

The Global Oversupply of Aluminum In 1993 Alcoa took 310,000 metric tons (mt) of annual primary

aluminum capacity out of production indefinitely. The cutbacks were partly due to a lack of any mechanism to deal with the economic consequences of the dissolution of the former Soviet Union. Prior to 1991 the Russian aluminum industry was largely self-contained and metal produced in the country was consumed by internal market needs. Since its collapse, Russia's internal market has weakened substantially. To help generate hard currencies, it began selling significant quantities of metal on world markets. It is estimated that nearly 1.5 million mt were sold in Western markets in 1993.

Consequently, world aluminum inventories reached a high 109day supply at the end of 1993 compared with a 42-day supply in the 1988-90 timeframe. As a result, metal prices fell to an eightyear low of 47 cents per pound on the London Metal Exchange (LME) in November 1993.

In late 1993, discussions began among the governments of six major aluminum-producing nations to solve the oversupply situation. A multigovernment accord was reached in January 1994 which recognized an annual surplus of 1.5 to 2 million mt. Moscow committed to curb its annual output by 500,000 mt, while the U.S. and the European Union (EU) agreed not to take trade actions against Russian producers. Several nations, including Australia, Canada, the U.S. and the EU, promised to aid in the restructuring of the Russian aluminum industry.

Summary of Earnings

Against this backdrop of oversupply and low prices, Alcoa has taken actions within its control to remain profitable by cutting costs at every level. The following table summarizes Alcoa's results, adjusted for special charges, accounting changes and extraordinary items.

	1993	1992	1991
Reported net income (loss) Adjusted for:	\$ 4.8	\$(1,139.2)	\$ 62.7
Special charges	74.5	173.9	217.0
Accounting changes	-	1,111.4	-
Extraordinary loss	-	50.2	-
Adjusted net income	\$79.3	\$ 196.3	\$279.7

Operations by Geographic Area Operating profit for 1993 was \$351 compared with \$533 in 1992 and \$797 in 1991. Operating profit consists of all revenues less operating expenses, excluding interest expense, non-operating income, income taxes and minority interests. The year-to-year comparisons in this discussion also exclude special items. See Note K to the financial statements for additional information.

USA - Revenues from U.S. operations were down 7% from 1992. Lower revenues from ingot sales accounted for just over 50% of the decline. Although Alcoa's average unit price for ingot fell two cents per pound, most of the revenue decline was due to lower shipments and reflects production cutbacks mentioned earlier. Rigid container sheet (RCS) accounted for about 40% of the decrease in revenues with both lower shipments and prices. These factors had a significant effect on results in the U.S. as evidenced by a \$193 operating loss in 1993. In 1992 and 1991 there were operating profits of \$55 and \$98, respectively. The 1992 period also reflected deteriorating prices for most aluminum products.

Total exports from the U.S. in 1993 were \$896 compared with \$993 in 1992 and \$967 in 1991.

Pacific - The Pacific area principally reflects the activities of Alcoa of Australia (AofA). Revenues from the Pacific were up 2% from 1992 with higher shipments of alumina, aluminum ingot and rolled products, partially offset by lower prices. Operating profit from the Pacific was \$399 compared with \$298 in 1992 and \$479 in 1991. The higher profit in 1993 was partly due to lower costs at AofA and greater efficiencies from its Wagerup refinery expansion. The profit decline in 1992 compared with 1991 primarily reflects the drop in prices for both alumina and ingot.

Other Americas - Revenues from this region fell 10% from a year ago, mostly because of lower shipments by the Jamaica, Suriname and selling subsidiaries which were partially offset with higher shipments by Alcoa Aluminio (Aluminio) in Brazil. Operating profit in 1993 was \$139 compared with \$91 in 1992 and \$125 in 1991. The higher profit in 1993 was primarily due to lower costs at Aluminio, favorable exchange adjustments in Suriname that provided lower U.S. dollar costs, and better performance by closures operations in Mexico.

Europe - Virtually all markets served by the European companies experienced unfavorable economic conditions in the region during 1993. Slightly higher revenues than in 1992 were mainly due to the 50.1% acquisition of Alcoa-Kofem, an Alcoa subsidiary in Hungary. Operating profit in 1993 was \$6 compared with \$90 in 1992 and \$96 in 1991. The decline in 1993 reflects start-up losses at Alcoa-Kofem and an Alcoa Fujikura subsidiary in Germany. Lower prices and shipments for RCS at Alcoa Manufacturing in Great Britain, and for closures and alumina-based chemicals, also contributed to the lower profit.

Operations by Segment

Alcoa's integrated operations consist of three segments: Alumina and Chemicals, Aluminum Processing, and Non-Aluminum Products.

I. Alumina and Chemicals Segment

This segment generated 16% of Alcoa's total revenues in 1993.

	1993	1992	1991		
Revenues	\$1,437	\$1,422	\$1,496		

Of the total revenues from this segment, two-thirds are from the sale of alumina. Alumina shipments in 1993, most of which were by AofA, rose 8% from 1992, following a 12% rise in 1992 from 1991. An imbalance of alumina supply and demand during 1992 continued into 1993. Average unit prices for alumina fell 16% in 1992 but declined only slightly from 1992 to 1993. Revenues in 1993 were up 8% from 1992; the increase was volume-driven. The oversupply of alumina is expected to continue well into 1995, and there is little expectation of improvement in alumina prices for the near term.

Revenues from alumina-based chemical products fell 10% from 1992. This followed a 3% decline from 1991 to 1992. Lower demand and prices in the U.S., and increased pressure on prices in European markets were the principal reasons for the declines.

Operating profit for this segment was \$373 in 1993 compared with \$278 in 1992 and \$566 in 1991. The increase from 1992 was mostly related to alumina and driven by higher volume.

II. Aluminum Processing Segment

Revenues from this segment were 66% of Alcoa's total revenues in 1993.

Product classes	1993	1992	1991
Shipments (000 metric tons) Flat-rolled products Engineered products Aluminum ingot	1,271 379 841	1,323 353 1,023	1,172 353 1,179
Other aluminum products	89 	98	132
Total	2,580	2,797	2,836
Revenues			
Flat-rolled products Engineered products Aluminum ingot Other aluminum products	\$2,974 1,528 1,042 430	\$3,189 1,527 1,336 465	\$3,107 1,612 1,742 500
Total	\$5,974	\$6,517	\$6,961

Total shipments of aluminum products were 8% lower than in 1992. Most of the decline was from aluminum ingot, which fell 18%, reflecting the shutdown of 25% of the company's U.S. smelting capacity in mid-1993. Flat-rolled products, which represented 49% of total shipments in 1993, fell 4% from the 1992 level.

Total revenues from this segment dropped \$543, or 8%, from 1992. The decline was mostly due to low prices that began falling in 1991 and continued into 1993. This segment had an operating loss in 1993 of \$21 compared with operating profits of \$289 and \$355 for 1992 and 1991, respectively. The decline in 1993, which was mainly in the packaging and aerospace markets and from aluminum ingot operations, is more fully discussed in the product classes below.

Market circumstances in 1993 were such that Alcoa entered into considerably more long-term aluminum products contracts with certain of its customers and has hedged certain costs on those contracts.

Flat-Rolled Products - A substantial portion of flat-rolled

products shipments and revenues is derived from sales of RCS. Shipments of RCS in 1993 were down 10% from 1992, reflecting weaker demand and slower growth in the U.S. market. Severe competition for market share brought RCS prices down 9% in 1993.

Shipments of RCS in 1992 rose 13% from 1991, but revenues were only 3% higher due to pressure on prices. The higher shipments were mostly in the U.S. as the company gained back market share it had lost.

Sheet and plate shipments were down slightly from 1992, but revenues fell 11%. Low demand for products in the weak aerospace market was offset by higher commercial products shipments. However, the latter products carried lower unit prices, which accounted for part of the decline in revenues.

Engineered Products - These products include extrusions used in the transportation and construction markets; aluminum forgings and wheels; wire, rod and bar; and automobile bumpers. Total shipments in 1993 were up 7% from 1992, but most of the increase was due to the addition of Alcoa-Kofem. Revenues for engineered products were even with the prior year, reflecting lower prices on all products in this category, except forged aluminum wheels. Revenues in 1992 were 5% lower than in 1991 due to the weakened aerospace market.

Shipments of extrusions were down 12% and revenues fell 19%, reflecting conditions in the aerospace market and declining prices. Shipments of building products in the Netherlands were 5%lower than the year earlier, and due to severe competition, prices fell 18%. Shipments of wheels were up 27% from 1992 and revenues climbed 31% due to higher demand.

Aluminum Ingot - Shipments of ingot fell 18% from 1992, partly because of the smelting capacity that was temporarily idled. Total revenues were 22% lower than a year ago, reflecting both lower shipments and prices due to excess metal in LME warehouses and excess capacity in the industry. Alcoa's average realized price for ingot was 56 cents per pound in 1993 compared with 59 cents in 1992 and 67 cents in 1991.

Other Aluminum Products $_$ Shipments of other aluminum products were 9% lower than those in 1992; revenues declined 8%. Shipments of aluminum closures were down 15% and revenues fell 12%. Aluminum closures have been steadily losing market share to plastic closures, which Alcoa also produces. Scrap shipments were off 3%, but due to the oversupply of metal and its negative effect on prices, revenues dropped 12%.

III. Non-Aluminum Products Segment

This segment's revenues represented 18% of Alcoa's total revenues in 1993.

1993 1992 1991

Revenues \$1,646 \$1,553 \$1,427

Revenues from this segment rose 6% from the year earlier. Alcoa Fujikura, which manufactures wire harnesses and electrical components for the automotive industry, had a 7% increase in its sales. Sales of vinyl windows, siding and other products to the construction industry were up 12% from 1992. Revenues from plastic closures jumped 47% from the year-ago period with strong sales in Brazilian and other Latin American markets. Revenues in 1993 also included those generated by Alcoa Electronic Packaging (AEP), which moved from research and development to manufacturing status

This segment's operating profit for 1993 was \$5 compared with operating losses of \$31 in 1992 and \$134 in 1991. The improvement is principally from a significant reduction of losses by AEP and better results from closures, building products and magnesium products.

Unusual and Extraordinary Items

Special Charges - Included in 1993 after-tax earnings was a net charge of \$74.5 consisting of:

- a charge of \$87.2 for severance costs associated with permanent reductions of hourly and salaried employees, mainly in U.S. aluminum operations;
- a charge of \$10.8 associated with closing certain activities at several plants, including the manufacture of aluminum rod at Alcoa's Rockdale, Texas plant;
- a charge of \$11.9 related to new three-year labor agreements with three unions covering employees at Alcoa's U.S. operations; a credit of \$26.3 in June due to a change in Australia's income tax rate from 39% to 33%; and
- a credit of \$9.1 in July due to a change in the U.S. tax rate related to Alcoa's deferred tax assets in the U.S.

After-tax special charges in 1992 consisted of \$70.5 for permanent employment reductions and \$103.4 for disposition of assets. Special charges in 1991 of \$217 consisted of \$160 for environmental matters and \$57 for restructuring costs in several husinesses.

Accounting Changes - There were two accounting changes

implemented in 1992 consisting of:

- * a one-time charge of \$1,166.4 due to a new accounting rule for postretirement benefits other than pensions. The rule requires accruing benefits over the period an employee provides services to the company; and
- * a credit of \$55 related to the new rule on accounting for income taxes. This one-time credit was principally due to adjusting deferred taxes that were accrued at various rates in previous years to the current tax rates in the countries where Alcoa operates.

Cash flows were not affected by these changes.

Extraordinary Loss - The extraordinary loss of \$50.2 in 1992 resulted from early payment of 7% discount debentures that carried an effective interest rate through maturity in 1996 of 14.7%. The loss was the unamortized portion of the original discount that would have been paid at maturity. The early payment substantially reduces Alcoa's future interest costs.

Costs and Other Income

Cost of Goods Sold - These expenses were \$152 lower than in 1992. The major elements contributing to the lower costs in 1993 were:

* lower volume \$275

* better operating performance and efficiencies 110

* lower purchased metal costs 57

Partially offset by:

* the addition of new subsidiaries in 1993 181 * LIFO inventory profits in 1992 76

Cost of goods sold in 1992 were \$106 lower than in 1991, due partly to lower purchased metal costs, better plant utilization and performance, and the inventory profits. The 1992 costs also included \$78 of additional health care costs accrued under the new accounting rule for postretirement benefits.

Selling and General Administrative Expenses _ These expenses rose 3% from 1992 despite staff reductions at corporate headquarters and other locations. Most of the increase was due to the addition of subsidiaries in 1993, particularly Alcoa-Kofem. Selling and general administrative expenses in 1992 were slightly higher than those in 1991 and included \$7 of additional health care costs.

Research and Development Expenses - These expenses declined \$82 from 1992 principally because of AEP's move to production status in 1993 and program reductions at Alcoa Technical Center (ATC). The \$40 million decline in 1992 from 1991 was mostly from employee reductions at AEP and ATC.

Interest Expense - Despite higher debt levels in 1993, interest expense was reduced by \$18 from 1992 - after a \$48 reduction in 1992. These declines reflect lower interest rates and the early payment of the high-cost debentures in 1992.

Taxes - The accrual for income taxes in 1993 resulted in a tax credit of \$10 compared with a tax cost of \$132 in 1992. Besides a lower level of pretax income, the difference included the effects of a change in Australia's tax rate from 39% to 33% in 1993. This resulted in a \$65 reduction to AofA's taxes and primarily related to adjusting future taxes initially recorded at the higher rate. Taxes on income from outside the U.S. were also lower than in 1992 by \$47. In addition, the U.S. tax rate increased from 34% to 35% in 1993. Although the rate increased, Alcoa benefited by a one-time credit of \$10 because of its net deferred tax assets in the U.S.

Total income, payroll, property and other taxes were \$224 in 1993, \$392 in 1992 and \$448 in 1991.

Other Income - Other income was down only \$4 from a year ago, but there were significant offsetting items. Interest income fell \$31 primarily because of less cash to invest in short-term investments. Translation and exchange adjustments were favorable by \$41. There was also a favorable insurance settlement at AofA in 1992.

Foreign Currency - The translation and exchange gains (losses), after tax and minority interests, were \$9.0 in 1993, \$(11.1) in 1992 and \$1.6 in 1991. The favorable change from 1992 was mainly at AofA, where the exchange rate moved from 78 cents in 1992 to 68 cents, and at Suralco, which had a significant devaluation of the Suriname guilder in 1993.

Environmental Matters

Alcoa continues to participate in environmental assessments and cleanups at a number of locations, including operating facilities and adjoining property, at previously owned or operated facilities and at Superfund and other waste sites. Alcoa records a liability for environmental remediation costs or damages when a cleanup program becomes probable and the costs or damages can be reasonably estimated. (See footnote A, page 23.)

As assessments and cleanups proceed, the liability is adjusted based on progress in determining the extent of remedial actions and related costs and damages. The liability can change substantially due to factors such as the nature and extent of

contamination, changes in remedial requirements and technological changes.

For example, there are certain matters, including several related to alleged natural resource damage or alleged off-site contaminated sediments, where investigations are ongoing. It is not possible to determine the outcomes or to estimate with any degree of certainty the ranges of potential costs for these matters.

Alcoa's remediation reserve balance at the end of 1993 was \$414 and reflects the most probable costs to remediate identified environmental conditions for which costs can be reasonably estimated. About 38% of this balance relates to Alcoa's Massena, N.Y. plant site. Remediation expenditures charged to the reserve were \$71 in 1993, \$102 in 1992 and \$57 in 1991. They include expenditures currently mandated as well as those not required by any regulatory authority or third parties.

Included in ongoing operating expenses are the recurring costs of managing hazardous substances and pollution. These costs are estimated to be about 1.5% of cost of goods sold in each of the last three years and are expected to be the same in 1994.

Liquidity and Capital Resources

Cash From Operations

Cash generated from operations in 1993 was \$535 compared with \$1,208 in 1992. The major items causing the difference include:

- * a lower level of income in 1993, after excluding non-cash items in both years;
- * increases in inventories and other current assets due to changing business conditions;
- * a decrease in customer receivables due to lower sales volume; and
- * a deferred interest payment in 1992 related to the discount debentures that were retired early.

Cash outlays for the 1993 and 1992 special charges related to severance costs consist of salary continuation payments for up to two years, and pension and medical costs to be paid over the lives of the employees. The latter represents about 45% of the total charges.

Financing Activities

Financing activities in 1993 provided a cash inflow of \$372. In 1992 there was a cash outflow from these activities of \$367. The \$739 variance was mostly due to changes in long-term debt. In 1993 there was a net addition to long-term debt of \$611 compared with a net reduction of \$349 in 1992. There was also a \$176 reduction in short-term borrowings.

Borrowings in 1993 included issuance by Alcoa of \$175 of 4-5/8% Notes due 1996 and \$180 by Aluminio of floating rate Secured Export Notes due 1994-1998. The proceeds from both notes were used to repay short-term borrowings and for general corporate purposes. In addition, Alcoa issued commercial paper of which \$337 was outstanding at the end of the year.

In July Alcoa entered into two Revolving Credit Agreements of \$375 each with a group of international banks. One of the agreements may be renewed for one year after July 1994. The other agreement matures in July 1997. The agreements stipulate that while advances are outstanding, debt cannot exceed 150% of consolidated net worth and that secured borrowings are generally limited to 10% of consolidated net tangible assets.

The Revolving Credit Agreements are used to back up the commercial paper, and therefore up to \$375 of such paper will be classified as long-term debt.

In a non-cash transaction early in 1993, \$149 of Alcoa's 6-1/4% Convertible Subordinated Debentures due 2002 were converted to common stock with the issuance of 2.3 million shares of treasury stock.

In 1992 payments on debt exceeded borrowings by \$349 and included the early payment of the 7% debentures. Alcoa also paid off its remaining three sinking fund debentures that totaled \$110.

Debt as a percent of invested capital was 22% at the end of 1993 and 15% at the end of 1992 and 1991.

Dividends paid to shareholders were \$142 in 1993 compared with \$139 in 1992 and \$153 in 1991. The 1991 dividends included \$14 of profit-sharing dividends based on 1990 profits in excess of \$6.00 per share, as provided for under Alcoa's dividend policy.

Dividends paid to minority interests of \$159 in 1993 included \$126 paid by AofA and \$18 paid by Aluminio. In 1992 dividends of \$141 to minority interests included \$93 paid by AofA and \$18 by Aluminio.

Investing Activities

Capital expenditures of \$757 were down \$32 from 1992. Approximately 75% of the 1993 expenditures were for sustaining projects primarily in the aluminum processing segment. Alcoa continues to focus on improving its manufacturing processes with a minimum of capital spending. Geographically, expenditures were 54% of the total in the U.S., 21% in the Pacific, 14% in the Other Americas and 11% in Europe.

Capital expenditures for new or expanded facilities for environmental control in ongoing operations were \$76 in 1993, \$75 in 1992 and \$85 in 1991.

Acquisitions in 1993 included a joint venture in Germany to manufacture and sell aluminum extrusions and tube for the aircraft, automotive and defense industries in Europe, and an

Alcoa Nederland subsidiary, with operations in Belgium and the Netherlands, that produces aluminum and steel products for the building and construction markets.

Alcoa's off-shore subsidiaries, particularly AofA, had investments of \$244 in short-term securities with maturities greater than 90 days at the end of 1993.

Cash investments and acquisitions in 1992 of \$135 included an interest in a bauxite mine in Brazil and capital funding for Alcoa-Kofem and the Alcoa-Kobe packaging and engineered products joint ventures. Alcoa also sold its 44% interest in a Mexican affiliate and its investments in Venezuela.

Subsequent Events

In February 1994, Alcoa issued \$250 of 5-3/4% Notes due 2001. The proceeds were used to redeem \$225 of its 7% debentures due 2011, which carried an effective yield of 14.7%. The early payment will result in an extraordinary loss in the 1994 first quarter of \$67.9

In February 1994, Alcoa announced that it would reduce primary aluminum production in its U.S. operations by 100,000 mt per year. Alcoa of Australia separately announced reductions of 25,000 mt at its Point Henry smelter in Geelong, Australia and 26,000 mt at the Portland, Australia smelter. Alcoa of Australia has a 45% interest in the Portland smelter.

Five-Year Selected Financial Data

	1993	1992	1991	1990	1989
(dollars in millions, except share amounts and ingot prices)					
Sales and operating revenues Income before extraordinary loss and	\$ 9,055.9	\$ 9,491.5	\$ 9,884.1	\$10,710.2	\$10,910.0
accounting changes*	4.8	22.4	62.7	295.2	944.9
Extraordinary loss and accounting changes	-	(1,161.6)	-	-	-
Net income (loss)* Per common share Before extraordinary loss and	4.8	(1,139.2)	62.7	295.2	944.9
accounting changes	.03	.24	.71	3.40	10.67
Net income	.03	(13.41)	.71	3.40	10.67
Alcoa's average realized price per pound for aluminum ingot Average U.S. market price per pound	.56	.59	. 67	. 75	.92
for aluminum ingot (Metals Week)	.53	.58	. 59	.74	.88
Cash dividends declared per common share Total assets Long-term debt (noncurrent)		1.60 1,023.1 855.3	11,178.4	11,413.2	11,540.6

*After special charges of \$74.5, or 85 cents per common share, in 1993, \$173.9, or \$2.03 per share, in 1992, \$217.0, or \$2.56 per share, in 1991 and \$275.0, or \$3.19 per share, in 1990

(Graph 1 omitted)

(Graph 2 omitted)

(Graph 3 omitted)

(Graph 4 omitted)

Financial Reports

Management's Report to Alcoa Shareholders

The accompanying financial statements of Alcoa and consolidated subsidiaries were prepared by management, which is responsible for their integrity and objectivity. The statements were prepared in accordance with generally accepted accounting principles and include amounts that are based on management's best judgments and estimates. The other financial information included in this annual report is consistent with that in the financial statements.

The company maintains a system of internal controls, including accounting controls, and a strong program of internal auditing. The system of controls provides for appropriate procedures that are consistent with high standards of accounting and administration. The company believes that its system of internal controls provides reasonable assurance that assets are safeguarded against losses from unauthorized use or disposition and that financial records are reliable for use in preparing financial statements.

Management also recognizes its responsibility for conducting the company's affairs according to the highest standards of personal and corporate conduct. This responsibility is characterized and reflected in key policy statements issued from time to time regarding, among other things, conduct of its business activities within the laws of the host countries in which the company operates and potentially conflicting outside business interests of its employees. The company maintains a systematic program to assess compliance with these policies.

/s/Paul H. O'Neill Paul H. O'Neill Chairman of the Board and Chief Executive Officer

/s/Jan H. M. Hommen Jan H. M. Hommen

Executive Vice President and Chief Financial Officer

Audit Committee Report

The Audit Committee of the Board of Directors, which is composed of four independent directors, met six times in 1993.

The Audit Committee oversees Alcoa's financial reporting process on behalf of the Board of Directors. In fulfilling its responsibility, the committee recommended to the board the reappointment of Coopers & Lybrand as the company's independent public accountants. The Audit Committee reviewed with the Director-Internal Audit and the independent accountants the overall scope and specific plans for their respective audits. The committee reviewed with management Alcoa's annual and quarterly reporting process, and the adequacy of the company's internal controls. Without management present, the committee met separately with the Director-Internal Audit and the independent accountants to review the results of their examinations, their evaluations of the company's internal controls, and the overall quality of Alcoa's financial reporting.

/s/Franklin A. Thomas Franklin A. Thomas Chairman, Audit Committee

Independent Auditor's Report

To the Shareholders and Board of Directors Aluminum Company of America (Alcoa)

We have audited the accompanying consolidated balance sheet of Alcoa as of December 31, 1993 and 1992, and the related statements of consolidated income, shareholders' equity and consolidated cash flows for each of the three years in the period ended December 31, 1993. These financial statements are the responsibility of Alcoa's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Alcoa at December 31, 1993 and 1992, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1993 in conformity with generally accepted accounting principles.

As discussed in Notes A, P and S to the consolidated financial statements, Alcoa changed its methods of accounting for income taxes and postretirement benefits other than pensions in 1992.

/s/Coopers & Lybrand 600 Grant St., Pittsburgh, Pa. January 11, 1994, except for Note U, for which the date is February 7, 1994

Statement of Consolidated Income

For the year ended December 31

(in millions, except share amounts)			
Revenues Sales and operating revenues (K and U) Other income, principally interest	\$ 9,055.9 93.0	\$ 9,491.5 96.9	\$9,884.1 97.1
	9,148.9	9,588.4	9,981.2
Costs and Expenses Cost of goods sold and operating expenses Selling, general administrative and other expenses Research and development expenses Provision for depreciation, depletion and amortization	7,187.0 603.6 130.4 692.6	7,339.1 586.8 212.2 682.4	7,444.8 579.8 251.9 697.9

1993

1992

1991

Interest expense (N) Taxes other than payroll and severance taxes Special items (B)	10		105.4 112.3 251.6		
	8,95	57.8	9,289.8		9,569.7
Earnings Income before taxes on income Provision (credit) for taxes on income (P)		91.1 L0.3)	298.6 132.3		411.5 192.8
Income from operations Minority interests (H)			166.3 (143.9		
Income before extraordinary loss and accounting chal Extraordinary loss on debt prepayments, net of \$25.8 tax benefit Cumulative effect of accounting changes for:	nges	4.8	22.4		62.7
Postretirement benefits, net of \$667.2 tax benefit (A and S) Income taxes (A and P)		-	(1,166.4 55.0	•	- -
Net Income (Loss)		4.8	\$(1,139.2) \$	62.7
Earnings (Loss) per Common Share: (I) Before extraordinary loss and accounting changes Extraordinary loss Accounting changes: Postretirement benefits	\$.03	(.59	.)	.71 - -
Income taxes	\$.03	. 65 (13 . 41		- .71

The accompanying notes are an integral part of the financial statements.

Consolidated Balance Sheet

Other receivables Inventories (C) Prepaid expenses and other current assets Total current assets Properties, plants and equipment (D) Other assets (E) Total Assets Liabilities Current liabilities: Short-term borrowings Accounts payable, trade Accrued compensation and retirement costs Taxes, including taxes on income Provision for layoffs and impairments (B) Other current liabilities Long-term debt due within one year		\$ 71.8 476.4 1,250.1 160.1 1,040.4 249.5 3,248.3 6,415.8 1,359.0
Current assets: Cash	597.3 1,218.7 211.3 1,227.2 390.0 	476.4 1,250.1 160.1 1,040.4 249.5
Total current assets Properties, plants and equipment (D) Other assets (E) Total Assets Liabilities Current liabilities: Short-term borrowings Accounts payable, trade Accrued compensation and retirement costs Taxes, including taxes on income Provision for layoffs and impairments (B) Other current liabilities Long-term debt due within one year	6,506.8 1,387.6 1,596.9	6,415.8 1,359.0
Total Assets \$1 Liabilities Current liabilities: Short-term borrowings \$ Accounts payable, trade Accrued compensation and retirement costs Taxes, including taxes on income Provision for layoffs and impairments (B) Other current liabilities Long-term debt due within one year		\$11,023.1
Liabilities Current liabilities: Short-term borrowings Accounts payable, trade Accrued compensation and retirement costs Taxes, including taxes on income Provision for layoffs and impairments (B) Other current liabilities Long-term debt due within one year	202 5	
	362.5 596.3 288.0 364.3 128.8 302.2 50.8	\$ 414.2 617.3 343.2 371.5 93.1 282.1 43.9
Long-term debt, less amount due within one year (F and U) Accrued postretirement benefits (S) Other noncurrent liabilities and deferred credits (G) Deferred income taxes	2,092.9 1,432.5 1,845.2 1,022.2 231.1	855.3 1,820.6
Total liabilities	6,623.9	6,113.2
Minority Interests (A and H)	1,389.2	
Unfunded pension obligation Treasury stock, at cost	55.8 88.8 715.9 (188.5) 2,946.1 (7.0) (27.3) 3,583.8	55.8 88.8 715.0 (148.0) 3,089.3 - (196.6) 3,604.3
	1,596.9	\$11,023.1

For the year ended December 31		1993		1992	1991
(in millions)					
Cash from Operations					
Net income (loss)	\$	4.8	\$(1,1	39.2)	\$ 62.7
Adjustments to reconcile net income (loss) to cash from operations: Depreciation, depletion and amortization		711.1	7	10.1	731.6
Reduction of assets to net realizable value		16.7		44.3	31.2
Increase (reduction) in deferred income taxes		(124.5)	(88.0)	13.8
Equity earnings before additional taxes, net of dividends		11.7		14.8	8.0
Provision for special items		134.		07.4	302.6
(Gains) losses from financing and investing activities Book value of asset disposals		(1.3) 20.8		(7.2) 15.3	3.1 30.5
Accounting changes		20.0		11.4	30.5
Extraordinary loss		-		50.2	-
Minority intérests		196.6	1	43.9	156.0
Other		(11.4)		53.9	6.0
Reduction in receivables		15.6		84.5	93.1
(Increase) reduction in inventories (Increase) reduction in prepaid expenses and other current assets		(130.2)		66.7 70.8	143.3 14.6
Reduction in accounts payable and accrued expenses		(152.2) (202.8)		48.7)	(42.5)
Reduction in taxes, including taxes on income		(6.0)	`	(.6)	(194.5)
Payment of amortized interest on deep discount debt		-		63.8)	-
Net change in noncurrent assets and liabilities		52.0		82.3	66.8
Cash from operations		535.0			1 426 2
			۷,۷	 	 1,426.3
Financing Activities					
Net additions to short-term borrowings		67.5		44.0	37.7
Common stock issued and treasury stock sold		17.7	,	36.2	13.4
Reductions in minority interests Dividends paid to shareholders		(14.2) (142.3)	(1	18.4) 38.9)	(126.3) (153.3)
Dividends paid to shareholders Dividends paid to minority interests		(159.3)	(1	40.9)	(205.8)
Additions to long-term debt		748.0		38.4	630.6
Payments on long-term debt		(145.8)	(6	87.1)	(704.3)
Cash from (used for) financing activities		371.6	(3	66.7)	(508.0)
Toyonting Activition					
Investing Activities Capital expenditures		(757.0)	(7	88.8)	(849.7)
Acquisitions of subsidiaries, net of cash acquired		(16.3)		(7.7)	(31.4)
Sales of subsidiaries		-		ì2.6	1.0
Additions to investments		(5.9)		27.1)	(30.8)
Sales of investments		.3		50.5	-
Short-term investments, excluding cash equivalents		(243.6)		7.6	-
Other receipts Other payments		5.8 (19.5)	(21.4)	3.6 (11.7)
Cash (used for) investing activities	(1	.,036.2)	8)	74.3) 	 (919.0)
Effect of exchange rate changes on cash		(6.9)		44.7)	
Changes in Cash					
Net change in cash and cash equivalents		(136.5)	(77.6)	(10.3)
Cash and cash equivalents at beginning of year		548.2	6	25.8 [°]	636.1
Cash and cash equivalents at year-end	\$	411.7	\$ 5	 48.2	\$ 625.8
The community was a single control of the firm of the					

The accompanying notes are an integral part of the financial statements.

Statement of Shareholders' Equity

December 31	Preferred stock	Common stock	Additional capital	Translation adjustment	Retained earnings	Unfunded pension obligation	Treasury stock	Shareholders equity	
(in millions, except share amounts)									
Balance at end of 1990 Net income-1991 Cash dividends:	\$ 55.8	\$88.8	\$713.5	\$ 92.9	\$ 4,473.1 62.7	-	\$(260.8)	\$ 5,163.3 62.7	
Preferred @ \$3.75 per share Common @ \$1.78 per share					(2.1) (151.2)			(2.1 (151.2	
Stock issued: compensation plans Translation adjustments			.3	(4.4) (148.7)			17.5	13.4 (148.7	
Balance at end of 1991 Net loss-1992 Cash dividends:	55.8	88.8	713.8	(55.8)	4,378.1 (1,139.2)	-	(243.3)	4,937.4 (1,139.2	
Preferred @ \$3.75 per share Common @ \$1.60 per share					(2.1) (136.8)			(2.1 (136.8	
Stock issued: compensation plans Stock issued: debt conversions Translation adjustments			1.2	(92.2)	(10.7)		45.7 1.0	36.2 1.0 (92.2	2 9
Balance at end of 1992 Net income-1993 Cash dividends:	55.8	88.8	715.0	(148.0)	3,089.3 4.8	-	(196.6)	3,604.3 4.8	
Preferred @ \$3.75 per share					(2.1)			(2.1	L)

Stock issued: debt conversions Stock issued: compensation plans Minimum pension liability adjustments Translation adjustments			. 9	(40.5)	(2.7) (3.0)	(7.0)	149.5 19.8	146.8 17.7 (7.0) (40.5)
Balance at end of 1993	\$55.8	\$88.8	\$715.9	\$(188.5) \$	2,946.1	\$(7.0)	\$ (27.3)	\$ 3,583.8
Share Activity							C	ommon stock
		Preferre	d stock	Issued		Treasury	Net	outstanding
Balance at end of 1990 Stock issued: compensation plans Shares retired			557,769 239,969 (120)	88,804,220 239,969		(3,961,870)		84,842,350
Balance at end of 1991 Stock issued: compensation plans Stock issued: debt conversions		ţ	557,649	88,804,220		(3,721,901) 631,137 16,128		85,082,319 631,137 16,128
Balance at end of 1992 Stock issued: compensation plans Stock issued: debt conversions			557,649	88,804,220		(3,074,636) 305,226 2,326,468		85,729,584 305,226 2,326,468
Balance at end of 1993			557,649	88,804,220		(442,942)		88,361,278

(140 2)

(140 2)

The accompanying notes are an integral part of the financial statements.

Notes to Consolidated Financial Statements (dollars in millions, except share amounts)

Common @ \$1 60 ner share

A. Summary of Significant Accounting Policies

Principles of Consolidation. The consolidated financial statements include the accounts of Alcoa and companies more than 50% owned. Also included are joint ventures in which Alcoa has an undivided interest. Investments in other entities are accounted for principally on an equity basis.

Inventory Valuation. Inventories are carried at the lower of cost or market, with cost for a substantial portion of U.S. inventories determined under the last-in, first-out (LIFO) method. The cost of other inventories is principally determined under the average cost method.

Depreciation, Depletion and Amortization. Depreciation is recorded principally on the straight-line method at rates based on the estimated useful lives of the assets. The book value of obsolete assets is charged to depreciation expense when they are scrapped. Profits or losses from the sale of assets are included in other income. Repairs and maintenance are charged to expense as incurred.

Depletion is taken over the periods the estimated mineral reserves are extracted. Intangibles, such as goodwill and patents, are amortized over their estimated lives.

Environmental Expenditures. Expenditures that relate to current operations are expensed or capitalized, as appropriate. Expenditures that relate to an existing condition caused by past operations, and which do not contribute to future revenues, are expensed. Liabilities are recorded when remedial efforts are probable and the costs can be reasonably estimated. The liability for remediation expenditures may include, as appropriate, elements of costs such as site investigations, consultants' fees, feasibility studies, outside contractor expenses and monitoring expenses. Estimates are not discounted, nor are claims for recovery recognized. The estimates also include costs apportioned to other potentially responsible parties to the extent that Alcoa has reason to believe such parties will not fully pay their proportionate share. The liability is periodically reviewed and adjusted to reflect current remediation progress, prospective estimates of required activity, and other factors that may be relevant, including changes in technology or regulations.

Interest Costs. Interest related to construction of qualifying assets is capitalized as part of construction costs.

Futures Contracts. Alcoa enters into forward and futures contracts for foreign exchange, interest rate and commodities that are primarily accounted for as hedges of its committed and, in some cases, anticipated revenues and costs. The gains and losses on these contracts are reflected in earnings concurrently with the hedged revenues or costs. The cash flows from these contracts are classified in a manner consistent with the underlying nature of the transactions.

Income Taxes. Effective January 1992 Alcoa adopted SFAS 109 on accounting for income taxes. A tax credit of \$55.0, or \$.65 per share, was recorded as a cumulative effect of an accounting change for the net decrease to the deferred tax liability. See Note P.

Postretirement Benefit Plans Other Than Pensions. Effective January 1992 Alcoa adopted accounting for these benefits as prescribed by SFAS 106. An after-tax charge of \$1,166.4, or

\$13.71 per share, was recorded as a cumulative effect of an accounting change. Net income was also reduced by \$59.0, or 69 cents per share, for additional 1992 expenses resulting from the change. See Note S.

Foreign Currency. The local currency is the functional currency for Alcoa's significant operations outside the U.S., except in Brazil. As of January 1, 1991, Alcoa adopted the Australian dollar as the functional currency for translating financial statements of Alcoa of Australia. The change had the effect of reducing Alcoa's consolidated shareholders' equity at January 1 by \$133 and minority interests by \$128.

Reclassification. Certain amounts in previously issued financial statements were reclassified to conform to 1993 presentations.

B. Special Items

Special items of \$150.8 in 1993 (\$98.0 after tax and minority interests) include \$134.1 for severance costs associated with permanent reductions of hourly paid and salaried employees, mainly in the company's U.S. aluminum operations. The remaining \$16.7 is associated with closing certain businesses at several plants, including the manufacture of aluminum rod at the Rockdale, Texas plant.

Special items in 1992 totaling \$251.6 (\$173.9 after tax and minority interests) consisted of \$95.7 for redundancies and \$155.9 for asset dispositions. The dispositions included the shutdown of a facility in South Bend, Ind. and impairment of Alcoa Composites. Inc.

Alcoa Composites, Inc.

The 1991 special items of \$333.8 (\$217.0 after tax and minority interests) included \$257.9 for costs associated with environmental matters at several operating locations worldwide. The largest single provision was for the smelting and fabricating plant in Massena, N.Y. The remaining \$75.9 was for restructuring costs in several business units. Of this amount, \$2.9 relates to an equity entity and is reported in Other Income.

C. Inventories

December 31		1993		1992
Finished goods	\$	317.3	\$	262.6
Work in process		415.7		350.4
Bauxite and alumina		165.9		160.1
Purchased raw materials		188.2		153.7
Operating supplies		140.1		113.6
	\$1	, 227 . 2	\$1	,040.4

Approximately 58% of total inventories at December 31, 1993 were valued on a LIFO basis. If valued on an average cost basis, total inventories would have been \$623.9 and \$660.2 higher at the end of 1993 and 1992, respectively. During 1992 certain LIFO inventory quantities were reduced and flowed through cost of goods sold at prior years' lower costs rather than at current costs. The effect of these reductions increased income from operations by \$49.9.

D. Properties, Plants and Equipment, at Cost

1993	1992
\$ 229.0	\$ 228.8
3,603.4	3,476.5
9,317.7	8,990.9
13,150.1	12,696.2
7,093.9	6,671.6
6,056.2	6,024.6
450.6	391.2
\$ 6,506.8	\$ 6,415.8
	3,603.4 9,317.7 13,150.1 7,093.9 6,056.2 450.6

E. Other Assets

D - - - - - - - - - 04

December 31	 1993	 1992	-
Investments Intangibles, net of accumulated amortization	\$ 322.2	\$ 368.9	
of \$189.8 in 1993 and \$173.5 in 1992	179.2	183.6	
Noncurrent receivables	218.9	151.5	
Deferred income taxes	431.5	351.3	
Deferred charges and other	235.8	303.7	

F. Long-Term Debt

December 31	1993	1992
U.S.		
	175.0	-
Convertible subordinated debentures		
6-1/4%, due 2002, convertible @ \$62/share	-	\$149.0
Discount debentures (see Note U)		
7%, \$225 face amount, due 2011 (14.7% effective yield)	117.3	116.0
Commercial paper (3.6% average rate)	337.3	-
Tax-exempt revenue bonds ranging		
from 5-3/4% to 7. 5%, due 2000-2012	133.5	134.0
Alcoa Aluminio		
Variable rate note due 1994-1997 (5.8% and 6.2% average rates)	328.7	150.2
Alcoa of Australia		
Euro-commercial paper, variable rates, due		
1996-1997 (3.4% and 3.7% average rates)	302.0	304.0
0ther	89.5	46.0
	1,483.3	899.2
Less, amount due within one year	50.8	43.9
	\$1,432.5	\$855.3

The amount of long-term debt maturing in each of the next five years is \$50.8 in 1994, \$107.0 in 1995, \$375.6 in 1996, \$603.7 in 1997 and \$55.1 in 1998.

Alcoa has two Revolving Credit Agreements of \$375 each with a group of international banks. One agreement may be renewed for one year after July 1994 and the other matures in July 1997. While commercial paper balances are outstanding, certain levels of consolidated net worth and working capital must be maintained.

Up to \$375 of commercial paper issued by Alcoa and the Euro-commercial paper issued by Alcoa of Australia are classified as long-term debt since they are backed by long-term revolving credit agreements.

In 1992 outstanding commercial paper was classified as shortterm borrowings because the multiple-option loan facility that backed the commercial paper expired in September 1993. The commercial paper outstanding at December 31, 1992 was \$209.6.

G. Other Noncurrent Liabilities and Deferred Credits

December 31	1993	1992
On-site environmental remediation Other noncurrent liabilities Deferred credits	\$ 348.0 437.1 237.1	\$444.5 321.6 224.5
	\$1,022.2	\$990.6

H. Minority Interests

The following table summarizes the minority shareholders' interests in the equity of subsidiaries that are more than 50% owned by Alcoa.

December 31	1993	1992
Alcoa of Australia Alcoa International Holdings Company (AIHC) Alcoa Aluminio Alcoa Brazil Holdings Company Other majority-owned companies	\$ 616.1 250.0 164.9 102.1 256.1	\$ 599.8 250.0 159.5 95.8 200.5
	\$1,389.2	\$1,305.6

AIHC's minority interests consist of four series of preferred stock with a weighted average annual dividend rate of 5.1% for 1993, 6.7% for 1992 and 7.7% for 1991.

Alcoa Aluminio's minority interests include \$214.7 of convertible preferred stock with an annual dividend of \$18.4.

I. Earnings per Common Share

Primary earnings per common share are computed by subtracting annual preferred dividend requirements from net income, and dividing that amount by the weighted average number of common shares outstanding during each year. The average number of shares used to compute primary earnings per common share was 87,673,141 in 1993, 85,474,089 in 1992 and 84,983,749 in 1991. Fully diluted

earnings per common share are not stated since the dilution is

J. Preferred and Common Stock

Preferred Stock. Alcoa has two classes of preferred stock. Serial preferred stock has 557,740 shares authorized, with a par value per share of \$100 and an annual \$3.75 cumulative dividend preference per share. Class B serial preferred stock has 10 million shares authorized (none issued) and a par value of \$1 per share.

Common Stock. There are 300 million shares authorized at a par value of \$1 per share. As of December 31, 1993, shares of common stock reserved for issuance were:

																					N	u	ml)(e r	_	0	f	:	sl	ha	ar	e	S		
-	 -	-	 	-	 	-	-	-	-	 -	-	-	-	 	 	-	-	-	-	 	-	-	-				-	-	-				-	-	-	-

Long-term stock incentive plan	6,519,522
Employees' savings plans	2,048,766
Incentive compensation plan	84,614
	8,652,902

Stock options under the long-term stock incentive plan have been and may be granted, generally at not less than market prices on the dates of grant, except for the \$1 per share options issued as a payout of earned performance share awards. At December 31,1993, options for 2,164,857 shares were exercisable.

The transactions for shares under option were:

	1993	1992	1991
Outstanding, beginning of year:			
Number	3,286,052	3,014,031	2,470,548
Price	\$1.00-80.13	\$1.00-76.88	\$1.00-76.88
Granted:			
Number	1,481,729	1,584,002	934,485
Price	\$1.00-77.13	\$1.00-80.13	\$1.00-72.38
Exercised:			
Number	(676,546)	(1,300,081)	(371,702)
Price	\$1.00-73.13	\$1.00-80.13	\$1.00-64.63
Expired or canceled	(74,809)	(11,900)	(19,300)
Outstanding, end of year:			
Number	4,016,426	3,286,052	3,014,031
Price	\$1.00-80.13	\$1.00-80.13	\$1.00-76.88
Shares reserved for future options			
at end of year	2,503,096	3,679,620	896,025
,	_,,	-, - : - , - = -	,

K. Segment and Geographic Area Information

Alcoa is primarily an integrated producer of aluminum products. Alcoa's operations consist of three segments: Alumina and Chemicals, Aluminum Processing, and Non-Aluminum Products.

The Alumina and Chemicals segment includes the production and sale of bauxite, alumina, alumina chemicals and transportation services.

The Aluminum Processing segment comprises the production and sale of molten metal, ingot, and aluminum products that are flat-rolled, engineered or finished. Also included are power, transportation and other services.

The Non-Aluminum Products segment includes the production and sale of electrical, ceramic, plastic and composite materials products, manufacturing equipment, gold, magnesium products, and steel and titanium forgings.

Segment information	1993	1992	1991
Sales to customers: Alumina and chemicals	\$ 1,436.5	\$ 1,421.6	\$ 1,496.3
Aluminum processing	5,973.6	6,516.9	6,960.7
Non-aluminum products	1,645.8	1,553.0	1,427.1
Intersegment sales: (1)			
Alumina and chemicals	649.3	671.8	912.4
Aluminum processing	13.6	22.0	3.1
Non-aluminum products	72.9	61.5	78.8
Eliminations	(735.8)	(755.3)	(994.3)
Total sales and operating revenues	\$ 9,055.9	\$ 9,491.5	\$ 9,884.1
Operating profit (loss) before special items:	\$ 372.7	\$ 278.2	\$ 566.3

Aluminum processing Non-aluminum products		(21	.2)		(:	88. 31.	5 0)		(1	354 133	.5 .6)
Unallocated '		(5	.1)		`	(2.	5)		•	10	. 0 ´
Total	\$	351	4	\$	5	33.	2	\$	7	97	. 2
Operating profit (loss) after special items:											
Alumina and chemicals	\$. 6		2	73.	5	\$	5	34	. 7
Aluminum processing Non-aluminum products		(155	.0)		1	81.	3 / 9		/1	84	.4
Unallocated		(5	.9) .1)		(1	(2.	5)		(1	10	.0
Total approxima profit											:
other income		78	.3		1	81. 22.	o 4		4	98	. 3 . 4
Total operating profit Other income Interest expense		87	.8		1	05.	4		1	153	. 2
Income before taxes on income	\$	191	.1	\$	2:	 98.	6	\$		111	.5
Identifiable assets: Alumina and chemicals	\$ 2	, 854	.3	\$	2,6	85.	5	\$	2.6	889	. 8
Aluminum processing	6	, 929	.1		6,6	40.	1		6,8	38	. 6
Aluminum processing Non-aluminum products	1 	, 483	. 7 		1,3	13. 	6 		1,2	298	. 0
Total identifiable assets	11	, 267	.1 .2	1	0,6	39.	2	1	.0,8	326	. 4
Investments Corporate assets		322	. 2 . 6		3	68. 15.	9 0		2 1	240 L12	. 0 . 0
Total assets	\$11 	, 596	.9	\$1 	1,0	23.: 	1 	\$1 	.1,1	.78	. 4
Depreciation and depletion:											
Alumina and chemicals Aluminum processing	\$.5				6 0		1		
Non-aluminum products		85	.1			84.	8			92	.0
Total depreciation and depletion (2)											
Total depreciation and depletion (2)							· 				
apital expenditures: Alumina and chemicals	\$	222	. 6	¢	2	34	5		,	285	3
Aluminum processing		423	.7	Ψ	4	62.	1	Ψ	4	180	. 4
Non-aluminum products		100	.7		!	92.	2			84	. 0
Total capital expenditures	\$	757	.0	\$	7	88.	8	\$	8	349	.7
Notes to this table follow geographic area											
Geographic area information			1993	}		:	1992	2			199
eographic area information			1993	} ·		:	1992	2 			199
Geographic area information Gales to customers:											
		5,2	79.4	 l o	\$	5,6	58.6	 6	\$	5,	705
ales to customers: USA Other Americas Pacific		5,2 1,7	79.4 48.2 52.5	 	\$	5,6	58.6	 6	\$	5,	705
vales to customers: USA Other Americas Pacific Europe		5,2 9 1,7 1,6	79.4 48.2 52.5 75.8	 1 2 5 3	\$!	5,6 1,0 1,7	58.6 55.9 10.2 66.8	6 9 2 8	\$	5, 1,: 1,:	705 112 954 112
Gales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA		5,2 9 1,7 1,6	79.4 48.2 52.5 75.8	1 2 5 3 3	\$:	5,6 1,0 1,7 1,0	58.6 55.9 10.2 66.8	6 9 2 8	\$	5, 1, 1, 1,	705 112 954 112
Gales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1)		5,2 1,7 1,6	79.4 48.2 52.5 75.8	1	\$	5,69 1,09 1,7 1,09	58.6 55.9 10.2 66.8	6 9 2 8 6	\$	5, 1, 1, 1, 1, 1, 1	705 112 954 112 948 287
vales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA Other Americas Pacific Europe Europe	\$	5,2 1,7 1,6	79.4 48.2 52.5 75.8 32.9 42.6 36.1	1 2 3 3	\$	5,6 1,0 1,7 1,0 1,0	58.6 55.9 10.2 66.8 01.6 53.6	6 9 2 8 6 6 3	\$	5, 1,: 1,:	705 112 954 112 948 287 121
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe	\$	5,2 1,7 1,6	79.4 48.2 52.5 75.8 32.9 42.6 36.1 28.3	1 2 3 3 3 9 1 1	\$:	5,6; 1,0; 1,7; 1,0; 1,0;	58.6 55.9 10.2 66.8 01.6 53.6 54.3 65.1	66 99 22 88 66 63 31 11	\$	5, 1, 1, 1,	705 112 954 112 948 287 121 52 410
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues	\$	5,2 1,7 1,6 3 (1,2	79.4 48.2 52.5 75.8 32.9 42.6 36.1 28.3 39.9	1 2 5 3 3 3 3 9)	\$::	5,6; 1,0; 1,7; 1,0; 1,3; 1,3;	58.6 55.9 10.2 66.8 01.6 53.6 54.3 65.1 74.6	66 99 22 88 66 63 11 60)	\$ (5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues	\$	5,2	79.4 48.2 52.5 75.8 32.9 442.6 36.1 28.3 39.9	1 2 5 3 3 9)	\$!	5,6 1,0 1,7 1,0 1,0 2 1,3	58.6 55.9 10.2 66.8 01.6 53.6 54.3 65.1 74.6	66 99 22 88 66 63 31 11 66)	\$	5, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues USA USA	\$	5,2	79.4 48.2 52.5 75.8 32.9 442.6 36.1 28.3 39.9	1 2 5 3 3 9)	\$!	5,6 1,0 1,7 1,0 1,0 2 1,3	58.6 55.9 10.2 66.8 01.6 53.6 54.3 65.1 74.6	66 99 22 88 66 63 31 11 66)	\$	5, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues	\$	5,2	79.4 48.2 52.5 75.8 32.9 442.6 36.1 28.3 39.9	1 2 5 3 3 9)	\$!	5,6 1,0 1,7 1,0 1,0 2 1,3	58.6 55.9 10.2 66.8 01.6 53.6 54.3 65.1 74.6	66 99 22 88 66 63 31 11 66)	\$	5, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe	\$ \$:: \$	5,2 9,6 (1,2 9,6 (1,3	79.448.252.552.575.8 32.942.6 36.1 28.3 39.9 555.9 93.1 39.5 59.2 55.8	1 2 2 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$!:	5,6; 1,0; 1,7; 1,0; 2; 1,3; 1,3; 1,3; 2; 2;	58.65 55.9 10.2 66.8 01.6 653.6 65.1 74.6 91.5 55.9 99.9 89.7	6 9 2 8 6 6 3 1 6 6 5 9 6 7	\$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 884 97 125 478 95
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe USA Other Americas Pacific Europe Total	\$ \$: \$	5,2 9,7 1,7 1,6 8 3 (1,2 9,6 1 1 3	79.4 52.5 75.8 32.9 42.6 36.1 28.3 39.9 55.9 93.1 5.8 55.8	1 2 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$ (((5,6; 1,0; 1,7; 1,0; 2; 1,3; 9,4; 2; 2; 5;	58.6 55.9 10.2 66.8 01.6 653.6 65.1 74.6 91.5 55.0 997.6 89.7	66 99 22 88 66 33 11 66) 55 99 66 77 2	\$ \$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 125 478 95
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues USA Other Americas Pacific Europe Liminations Total sales and operating revenues USA Other Americas Pacific Europe Total	\$ \$ 	5,2 9,7 1,7 1,6 8 3 (1,2 9,6 1 1 3	79.4 52.5 75.8 32.9 42.6 36.1 28.3 39.9 55.9 93.1 5.8 55.8	1 2 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$ (((5,6; 1,0; 1,7; 1,0; 2; 1,3; 9,4; 2; 2; 5;	58.6 55.9 10.2 66.8 01.6 653.6 65.1 74.6 91.5 55.0 997.6 89.7	66 99 22 88 66 33 11 66) 55 99 66 77 2	\$ \$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 125 478 95
Total sales and operating revenues perating profit (loss) after special items: USA Other Americas Pacific Europe Climinations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total	\$ \$\$	5,2 1,7 1,6 8 3 (1,2 9,6 (1,2 3 3	79.4 48.2 52.5 75.8 32.9 42.6 36.1 39.5 93.1 39.5 93.1 40.7	1 2 3 3 3 3 3 3 3 3 3 3 3 3 1 1 1 1 1 1	\$::	5,6 1,0 1,7 1,0 1,0 2 1,3 2 2 5 5	58.6 55.5 10.2 66.8 01.6 65.3 65.3 64.3 64.3 64.3 74.6 91.5 55.6 997.6 89.7	66 99 22 88 66 63 33 11 66) 99 66 77	\$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 478 95 797
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total Total Total Total Total Total Total	\$ \$\$	5,2 1,7 1,6 8 3 (1,2 9,6 (1,2 3 3	79.4 48.2 52.5 75.8 32.9 42.6 36.1 39.5 93.1 39.5 93.1 40.7	1 2 3 3 3 3 3 3 3 3 3 3 3 3 1 1 1 1 1 1	\$::	5,6 1,0 1,7 1,0 1,0 2 1,3 2 2 5 5	58.6 55.5 10.2 66.8 01.6 65.3 65.3 64.3 64.3 64.3 74.6 91.5 55.6 997.6 89.7	66 99 22 88 66 63 33 11 66) 99 66 77	\$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 478 95 797
Cales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA Other Americas Pacific Europe Eliminations Total sales and operating revenues Operating profit (loss) before special items USA Other Americas Pacific Europe Total Total Total Total Total Total Total Total	\$ \$\$	5,2 1,7 1,6 8 3 (1,2 9,6 (1,2 3 3	79.4 48.2 52.5 75.8 32.9 42.6 36.1 39.5 93.1 39.5 93.1 40.7	1 2 3 3 3 3 3 3 3 3 3 3 3 3 1 1 1 1 1 1	\$::	5,6 1,0 1,7 1,0 1,0 2 1,3 2 2 5 5	58.6 55.5 10.2 66.8 01.6 65.3 65.3 64.3 64.3 64.3 74.6 91.5 55.6 997.6 89.7	66 99 22 88 66 63 33 11 66) 99 66 77	\$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 478 95 797
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total Other Americas Pacific Europe Total Derating profit (loss) after special items: USA Other Americas Pacific Europe	\$: : \$	5,2 1,7 1,6 8 3 (1,2 9,6 1,3 3 1,3 1,3 1,3 1,3 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4	79.448.2 52.5 75.8 32.9 42.6 36.1 28.3 36.1 55.9 93.1 51.4 40.7 39.5 99.2 2.6	1 2 2 5 5 3 3 9 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5	\$:	5,6; 1,0; 1,7; 1,0; 2; 2; 2; 5; (1; 2;	58.6 55.9 10.2 66.8 01.6 65.1 76.5 91.5 55.6 997.6 76.5 87.6 97.6 76.5	69 22 86 66 31 66) 55 50 66 55 	\$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 125 478 95 797 179 104 450 90
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total Total Total Total Total Total operating profit	\$ \$\$	1,77 1,6 8 3 (1,2 9,6 (1,2 1,2 1,7 1,6 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7	79.4 448.2 52.5 75.8 32.6 32.6 339.9 55.9 93.1 140.7 399.2 40.7 399.2 2.6	1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$::	5,6; 1,0; 1,7; 1,0; 2; 1,3; 	58.65 55.95 10.25 10.26	6928 66316) 5 967 7 5)	\$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 152 410 884 95 179 797 179 104 450 90 -466
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total Total operating profit dentifiable assets:	***************************************	1,7 1,6 8 3 (1,2 9,6 (1) 3 3 3 (3) 3 3 3	79.4 48.2 52.5 75.8 32.6 32.6 339.9 93.1 55.9 93.1 40.7 399.2 2.6 40.7 399.2	1 2 2 5 5 3 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	\$:: \$: \$: \$	5,6; 1,0; 1,7; 1,0; 1,3; 5; (1; 2; 2;	58.65 55.65 55.66 55.65	6928 663116) 55 9967 7 5065 65 66	\$	5, 1, 1, 11, 11, 11, 11, 11, 11, 11, 11,	705 112 954 112 948 287 121 52 410 125 478 97 125 478 97 125 478 97 125 478 99 104 466
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total Total operating profit	***************************************	1,77 1,6 8 3 (1,2 9,6 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	79.448.252.5575.8 32.96.339.555.9 93.1139.555.9 93.1255.1440.7739.559.266.00.6670.9	1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$::	5,6;1,0;1,7;1,0;1,0;1,0;1,0;1,0;1,0;1,0;1,0;1,0;1,0	58.6 58.6 55.6	6928 66316) 5 9667 50665 	\$ \$	5,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	705 112 954 112 948 287 121 52 410 125 478 95 797 179 4450 90 466
ales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total operating profit dentifiable assets: USA Other Americas Pacific	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,2 1,7 1,6 8 3 (1,2 9,6 (1,2 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6	79.448.252.5575.8 32.9 42.66.1339.5 55.9 93.1139.5 51.4 40.7 399.2 2.66 60.66 70.9 984.2	14 22 55 33 33 39 30 10 55 52 22 53 33 34 44 22	\$ \$ \$	5,6,6,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0	58.65 55.66 65.10 65.10 65.10 65.10 74 91.5 55.66 91.66 87.66 87.66 87.66 87.66 88.66 91.66 92.33 94.56	 69228 6631 16) 9667 5065 6 3966	\$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 884 125 478 95 179 104 450 90 466 044 3371
Sales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA Other Americas Pacific Europe Eliminations Total sales and operating revenues Operating profit (loss) before special items USA Other Americas Pacific Europe Total Operating profit (loss) after special items: USA Other Americas Pacific Europe Total Other Americas Pacific Europe Total operating profit Cdentifiable assets: USA Other Americas Pacific Europe	\$:: \$:: \$	1,77 1,6 8 3 (1,2 9,6 (1,2 1,6 3 3 1,7 1,7 1,6 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7	79.448.252.5575.8 322.66.1139.555.9 93.1149.7 399.2 2.6	1 2 2 5 3 3 9)	\$ \$ \$	5,6; 1,0; 1,7; 1,0; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3	58.6 58.6 55.6	692866316)	\$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 47 884 125 478 95 797 179 4450 90 466 60 40 40 40 40 40 40 40 40 40 40 40 40 40
Sales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA Other Americas Pacific Europe Eliminations Total sales and operating revenues Operating profit (loss) before special items USA Other Americas Pacific Europe Total Operating profit (loss) after special items: USA Other Americas Pacific Europe Total Other Americas Pacific Europe Total operating profit Cdentifiable assets: USA Other Americas Pacific Europe	\$:: \$:: \$	1,77 1,6 8 3 (1,2 9,6 (1,2 1,6 3 3 1,7 1,7 1,6 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7	79.448.252.5575.8 322.66.1139.555.9 93.1149.7 399.2 2.6	1 2 2 5 3 3 9)	\$ \$ \$	5,6; 1,0; 1,7; 1,0; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3	58.6 58.6 55.6	692866316)	\$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 47 884 125 478 95 797 179 4450 90 466 60 40 40 40 40 40 40 40 40 40 40 40 40 40
Cales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA Other Americas Pacific Europe Eliminations Total sales and operating revenues Operating profit (loss) before special items USA Other Americas Pacific Europe Total Operating profit (loss) after special items: USA Other Americas Pacific Europe Total Other Americas Pacific Europe Total operating profit Cdentifiable assets: USA Other Americas Pacific Europe Total operating profit Cdentifiable assets: USA Other Americas Pacific Europe	\$:: \$:: \$	1,77 1,6 8 3 (1,2 9,6 (1,2 1,6 3 3 1,7 1,7 1,6 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7	79.448.252.5575.8 322.66.1139.555.9 93.1149.7 399.2 2.6	1 2 2 5 3 3 9)	\$ \$ \$	5,6; 1,0; 1,7; 1,0; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3; 1,3	58.6 58.6 55.6	692866316)	\$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 47 884 125 478 95 797 179 4450 90 466 60 40 40 40 40 40 40 40 40 40 40 40 40 40
Cales to customers: USA Other Americas Pacific Europe Transfers between geographic areas: (1) USA Other Americas Pacific Europe Eliminations Total sales and operating revenues Other Americas Pacific Europe Total Total Other Americas Pacific Europe Total Total Other Americas Pacific Europe Total Other Americas Pacific Europe Total Total Other Americas Pacific Europe Total operating profit Contact of the	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,2 1,7 1,6 8 3 (1,2 9,6 (1,2 1,6 2,3 1,6 2,3 1,7 1,2 3	79.44 48.252.5 75.8 32.25 75.8 32.6 339.5 55.9 93.11 399.5 95.8 40.7 399.2 2.6 67.11 22.22 7.6	1 2 2 5 5 3 3 9 9 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$:	5,6; 11,0; 11,0; 11,0; 11,3; 11,3; 11,3; 12; 11,3; 12; 11,3; 12; 13; 14; 15; 16; 16; 16; 16; 16; 16; 16; 16; 16; 16	58.65 58.65 58.65 59.25 59.25 59.25 59.25 68.66 92.36 68.66 92.36 68.66 92.36 93.66 941.56 941.	6928 6631166 5967 59665 59644	\$ \$ \$ \$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 884 97 1478 95 179 450 90 444 391 158 188 188 188 188 188 188 188 188 18
ales to customers: USA Other Americas Pacific Europe ransfers between geographic areas: (1) USA Other Americas Pacific Europe liminations Total sales and operating revenues perating profit (loss) before special items USA Other Americas Pacific Europe Total perating profit (loss) after special items: USA Other Americas Pacific Europe Total dentifiable assets: USA Other Americas Pacific Europe Total operating profit dentifiable assets: USA Other Americas Pacific Europe Total operating profit	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,2 1,7 1,6 8 3 (1,2 9,6 (1,2 1,6 2,3 1,6 2,3 1,7 1,2 3	79.44 48.252.5 75.8 32.25 75.8 32.6 339.5 55.9 93.11 399.5 95.8 40.7 399.2 2.6 67.11 22.22 7.6	1 2 2 5 5 3 3 9 9 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$:	5,6; 11,0; 11,0; 11,0; 11,3; 11,3; 11,3; 12; 11,3; 12; 11,3; 12; 13; 14; 15; 16; 16; 16; 16; 16; 16; 16; 16; 16; 16	58.65 58.65 58.65 59.25 59.25 59.25 59.25 68.66 92.36 68.66 92.36 68.66 92.36 93.66 941.56 941.	6928 6631166 5967 59665 59644	\$ \$ \$ \$ \$	5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	705 112 954 112 948 287 121 52 410 884 97 1478 95 179 450 90 444 391 158 188 188 188 188 188 188 188 188 18
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Europe 84.3 71.6 51.3 e \$ 788.8 \$ 849.7 Total capital expenditures \$ 757.0

- (1) Transfers between segments and geographic areas are based on
- generally prevailing market prices.
 (2) Includes depreciation of \$12.3 in 1993, \$23 in 1992 and \$22 in 1991 reported as research and development expenses in the income statement.

Total exports from the U.S. in 1993 were \$896 compared with \$993 in 1992 and \$967 in 1991.

L. Majority-Owned Subsidiaries

The condensed financial statements of Alcoa's principal majorityowned subsidiaries follow.

Alcoa Aluminio S.A.-a 59%-owned Brazilian subsidiary:

December 31	 1993		1992	_
				-
Cash and short-term investments Other current assets Properties, plants and equipment, net Other assets	\$ 160.2 283.7 870.8 207.8	•	54.5 214.7 846.6 156.7	
Total assets	L,522.5		1,272.5	-
Current liabilities Long-term debt* Other liabilities	372.7 322.5 35.9		337.4 137.6 36.9	-
Total liabilities	 731.1		511.9	_
Net assets	\$ 791.4	\$	760.6	-

^{*}Held by Alcoa Brazil Holdings Company-\$22.5

	1993	1992	1991
Revenues	\$	\$ 659.0	\$
Costs and expenses* Translation and exchange adjustments Income tax expense	(625.3) (10.7) (.6)	(634.8) (9.2) 5.6	(699.0) (8.7) (2.4)
Net income*	\$ 49.2	\$ 20.6	\$ (62.1)

^{*}Includes a special charge of \$18.8 in 1991 for environmental and restructuring charges

Alcoa of Australia Limited-a 51%-owned subsidiary of Alcoa International Holdings Company:

December 31	1993	1992
Cash and short-term investments Other current assets Properties, plants and equipment, net Other assets	\$ 350.3 425.7 1,430.1 85.7	\$ 354.4 429.5 1,381.4 80.4
Total assets	2,291.8	2,245.7
Current liabilities Long-term debt Other liabilities	399.7 302.0 332.7	383.4 304.0 334.3
Total liabilities	1,034.4	1,021.7
Net assets	\$1,257.4	\$1,224.0

	1993	1992	1991
Revenues* Costs and expenses** Translation and exchange adjustments	\$ 1,660.9 (1,264.6) 5.2	(1,297.7) (13.8)	(1,500.4) (2.6)
Income tax expense** Accounting changes***	(88.1)	(132.0) 33.6	(183.0) -

Net income** \$ 313.4 \$ 251.8 \$ 315.5

- * Revenues from Alcoa were \$50.3 in 1993, \$60.6 in 1992 and \$142.3 in 1991. The terms of the transactions were established by negotiation between the parties.
- ** Includes a special charge of \$11.8 (\$7.2 after tax) in 1991 for environmental charges
- *** Consists of \$37 for income taxes and \$(3.4) for postretirement benefits

M. Financial Instruments

Under a power contract that expires no earlier than 2011, Alcoa is entitled to a fixed percentage of the annual output from a Northwest U.S. hydroelectric facility. Alcoa makes minimum annual payments of \$8 whether or not it receives power. Alcoa could be required to increase its participation if other parties to the contract default. If all other parties had defaulted as of December 31, 1993, Alcoa's maximum liability would have been about \$190. There is no reason to believe the other parties will default or that power will not be provided.

At December 31, 1993, Alcoa had open currency exchange commitments consisting of purchase contracts of \$516 and sell contracts of \$1,089. These contracts are part of a worldwide program to minimize volatility in foreign exchange operating income and balance sheet exposure. The contracts generally mature within 12 months and are principally unsecured forward exchange contracts with selected banks.

The methods used to estimate the fair value of certain financial instruments follow.

Cash and Short-Term Investments. The carrying amount approximates fair value because of the short maturity of the instruments. Investments and Noncurrent Receivables. The majority of Alcoa's investments represent equity interests in various companies and joint ventures for which there is no quoted market price. To estimate the fair value of these investments, Alcoa would have had to incur excessive costs. The fair value of noncurrent receivables is based on anticipated cash flows.

Long-Term Debt. The fair value of long-term debt is based on interest rates that are currently available to Alcoa for issuance of debt with similar terms and remaining maturities.

The fair value of recorded financial instruments, excluding investments, does not materially differ from the values reflected on the books.

N. Interest Cost Components

	1993	1992	1991
Amount charged to expense Amount capitalized	\$87.8 3.5	\$105.4 11.1	\$153.2 12.6
	\$91.3	\$116.5	\$165.8

O. Contingent Liabilities

Various lawsuits and claims and proceedings have been or may be instituted or asserted against Alcoa, including those pertaining to environmental, product liability, and safety and health matters. While the amounts claimed may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. Therefore, it is possible that results of operations or liquidity in a particular period could be materially affected by certain contingencies. Management believes, however, that the disposition of matters that are pending or asserted will not have a materially adverse effect on the financial position of the company.

P. Income Taxes

As discussed in Note A, Alcoa implemented SFAS 109 as of January 1, 1992 and the cumulative effect of this change is reported in 1992 earnings. Prior years' financial statements have not been restated. The components of income before taxes on income were:

	1993	1992	1991
U.S. Foreign	\$(359.4) 550.5	\$(241.5) 540.1	\$(230.4) 641.9
	\$ 191.1	\$ 298.6	\$ 411.5

	1993	1992	1991
Current:	A (FO O)		* (50.0)
U.S. federal* Foreign	\$ (53.6)	\$ 46.9 174.1	
State and local		(.7)	
	114.2	220.3	179.0
Deferred:			
U.S. federal*	(80.2)	(71.2)	(11.3)
Foreign	` ,	(11.7)	25.1
State and local	2.9	(5.1)	-
	(124.5)	(88.0)	13.8
Total	\$ (10.3)	\$132.3	\$192.8

^{*}Includes U.S. taxes related to foreign income

Deferred taxes in 1993 included credits of \$130.4 for a U.S. tax loss carryforward and statutory tax rate change adjustments of \$9.9 in the U.S. and \$41.6 in Australia.

Reconciliation of the effective tax rate to the U.S. $\,$ statutory rate follows.

	1993	1992	1991
U.S. federal statutory rate (%) Taxes on foreign income State taxes net of federal benefit Tax rate changes Adjustments to prior years' accruals Other	35.0 (9.2) 2.1 (26.9) (3.0) (3.4)	34.0 10.0 (1.3) - (1.5) 3.1	34.0 12.4 1.8 - 1.3 (2.6)
Effective tax rate (%)	(5.4)	44.3	46.9

The components of net deferred tax assets and liabilities follow.

	19	1993		92
December 31	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Depreciation		\$864.4		\$ 929.9
Employee benefits	\$ 781.5	Ф004.4	\$ 755.5	Ф 929.9
	264.9	-	φ 755.5 255.7	-
Loss provisions		04.4		75.0
Deferred income	38.4	84.1	70.2	75.8
Tax loss carryforwards	291.2	-	158.5	-
Tax credit carryforwards	20.1	-	85.7	-
0ther	41.0	21.2	31.0	33.3
	1,437.1	969.7	1,356.6	1,039.0
Valuation allowance	(171.4)	-	(157.3)	-
	\$1,265.7	\$969.7	\$1,199.3	\$1,039.0

Of the total tax loss carryforwards, \$32.0 expires over the next two years, \$51.2 expires over the next 10 years, \$130.4 expires over the next 15 years and \$77.6 is unlimited. A substantial portion of the valuation allowance is for these carryforwards because the ability to utilize a portion of them is uncertain.

There is no limit on utilization of the tax credit carryforwards.

Deferred income taxes provided for timing differences in the recognition of revenue and expense for tax and financial

statement purposes prior to the new accounting rules follow.

	1991
Depreciation Employee benefits Loss provisions not currently deductible Deferred income Other	\$57.1 9.3 (57.9) 3.8 1.5
	\$13.8

for which no deferred taxes have been provided was \$1,499.8 at December 31, 1993. Management has no plans to distribute such earnings in the foreseeable future. It is not practicable to determine the deferred tax liability on these earnings.

Q. Lease Expense

Certain equipment, warehousing and office space, and oceangoing vessels are under operating lease agreements. Total expense for all leases was \$73.7 in 1993, \$74.8 in 1992 and \$77.7 in 1991. Under long-term leases, minimum annual rentals are \$35.7 in 1994, \$27.9 in 1995, \$21.8 in 1996, \$15.5 in 1997, \$12.5 in 1998 and a total of \$25.4 for 1999 and thereafter.

R. Pension Plans

Alcoa maintains pension plans covering most U.S. employees and certain other employees. Pension benefits generally depend upon length of service, job grade and remuneration. Substantially all benefits are paid through pension trusts that are sufficiently funded to ensure that all plans can pay benefits to retirees as they become due.

Pension costs include the following components that were calculated as of January 1 of each year.

	1993	1992	1991
Benefits earned Interest accrued on projected	\$102.4	\$ 92.2	\$ 82.6
benefit obligation	253.9	250.7	240.9
Net amortization	59.8	29.7	21.2
	416.1	372.6	344.7
Less: expected return on plan assets*	268.1 \$148.0	259.2 \$ 113.4	249.0 \$ 95.7

*The actual returns were higher than the expected returns by \$324.2 in 1993, \$82.4 in 1992 and \$253.9 in 1991 and were deferred as actuarial gains.

The status of the pension plans follows.

	accumulated benefit obligation		obligation exceeds assets	
December 31 	1993	1992	1993	1992
Plan assets, primarily stocks and bonds at market	\$3,688.4	\$1,702.1	\$ 90.6	\$1,662.1
Present value of obligation: Vested Non-vested	310.9	147.8	197.1 17.3	161.2
Accumulated benefit obligation Effect of assumed salary increases	3,465.7	1,597.8	214.4	1,858.9
Projected benefit obligation	\$3,793.8	\$1,658.1	\$ 234.4	\$2,095.6
Plan assets greater (less than) projected benefit obligation Unrecognized: Transition (assets) obligation Prior service costs Actuarial (gains) losses, net Minimum liability adjustment	\$ (105.4) on 7.7 138.6 (113.3)	(49.3) 27.0 56.0	10.8 53.8 (4.1)	67.2 43.6 200.8
 Prepaid (accrued) pension cost	\$ (72.4)	\$ 77.7	\$ (126.7)	\$ (200.4)

Assets exceed

Accumulated benefit

Assumptions used to determine plan liabilities and expenses follow.

December 31	1993	1992	1991
Settlement discount rate	6.75%	6.75%	7.25%
Long-term rate for compensation increases	5.5	5.5	5.5
Long-term rate of return on plan assets	9.0	9.0	9.0

Supplemental information related only to Alcoa's U.S. pension plans partially insured by the Pension Benefit Guarantee Corporation follow.

	Assets exceed accumulated benefit obligation			ated benefit obligation ceeds assets
December 31	1993	1992	1993	1992
Plan assets at fair market value Accumulated benefit obligation	\$ 3,270.5 (3,115.6)	\$ 1,359.5 (1,284.0)	\$ 21.7 (23.9)	\$ 1,601.3 (1,691.8)
	\$ 154.9	\$ 75.5	\$ (2.2)	\$ (90.5)

Alcoa also sponsors a number of defined contribution pension plans. Expenses were \$34.5 in 1993, \$23.9 in 1992 and \$22.1 in 1991.

S. Postretirement Benefits

Alcoa maintains health care and life insurance benefit plans covering most eligible U.S. retired employees and certain other retirees. Generally, the medical plans pay a stated percentage of medical expenses reduced by deductibles and other coverages. These plans are generally unfunded, except for certain benefits funded through a trust. Life benefits are generally provided by insurance contracts. Alcoa retains the right, subject to existing agreements, to change or eliminate these benefits.

In 1993 changes made to certain medical plans may require contributions by future retirees to help offset medical cost increases. The changes reduced Alcoa's benefit expense and prior service costs.

Alcoa implemented the new accounting rule on postretirement benefits effective January 1, 1992. These benefits are now accrued over the period the employee provides services to the company. Prior to the change, costs were charged to expense when paid. The accounting change resulted in a one-time charge to earnings of \$1,166.4, net of taxes of \$667.2.

The components of postretirement benefit expense follow.

	1993	1992
Service cost of benefits earned	\$ 29.9	\$ 42.9
Interest cost on liability	110.2	135.9
Net amortization	(32.4)	-
Return on plan assets	(5.2)	(3.7)
Accrued postretirement benefit costs	\$102.5	\$175.1

The status of the postretirement benefit plans was:

December 31	1993	1992	
Retirees Fully eligible active plan participants Other active participants		\$1,023.6 224.9 757.1	
Accumulated postretirement benefit obligation (APBO) Plan assets, primarily stocks and bonds at market	1,591.9 53.4	2,005.6 57.6	
APBO in excess of plan assets Unrecognized net: Reduction in prior service costs	1,538.5	1,948.0 35.7	
Actuarial losses		(87.9)	
Accrued postretirement benefit liability	\$1,929.1	\$1,895.8	

For measuring the liability and expense, a 10.5% annual rate of increase in the per capita claims cost was assumed for 1994, declining gradually to 4.75% by the year 2001 and thereafter. For both years the discount rate was 6.75%, and the rates for compensation increases and return on plan assets were 5.5% and 9%, respectively. For 1993 a 1% increase in the trend rate for health care costs would have increased the APBO by 10% and service and interest costs by 12%.

Cash payments for postretirement benefits were \$80.4 in 1993, \$76.6 in 1992 and \$71.1 in 1991.

T. Cash Flow Information

Alcoa considers all investments purchased with a maturity of three months or less to be cash equivalents.

1993 1992 1991

Interest \$101.2 \$193.9* \$154.9 Income taxes 193.6 264.4 426.1

*Includes \$63.8 of amortized interest on the 7% debentures retired early.

In a non-cash transaction early in 1993, \$149 of 6-1/4 Convertible Subordinated Debentures due 2002 were converted to common stock by issuing 2.3 million shares of treasury stock. Cash flows in 1992 were not affected by the accounting changes for postretirement benefits and income taxes.

U. Subsequent Events

In February 1994, Alcoa issued \$250 of 5-3/4% Notes due 2001. The net proceeds were used to redeem \$225 of Alcoa's 7% Debentures due 2011. These debentures carried an effective yield of 14.7%.

The early payment of the debentures will result in an extraordinary loss in the 1994 first quarter of \$67.9.

In February 1994, Alcoa announced that it would reduce primary aluminum production in its U.S. operations by 100,000 metric tons (mt) per year. Alcoa of Australia separately announced reductions of 25,000 mt at its Point Henry smelter in Geelong, Australia and 26,000 mt at the Portland, Australia smelter. Alcoa of Australia has a 45% interest in the Portland smelter.

Supplemental Financial Information

Quarterly Data (unaudited) (dollars in millions, except share amounts)

1993	First	Second	Third	Fourth	Year
Sales and operating revenues	\$2,109.6	\$2,405.3	\$2,230.2	\$2,310.8	\$9,055.9
Income from operations	64.5	109.6	73.4	(46.1)	201.4
Net income (loss) *#	27.6	35.3	28.8	(86.9)	4.8
Per common share	.31	. 40	.32	(1.00)	.03

*After special items of \$23.8, or 27 cents per share, in the second quarter, \$4.0, or five cents per share, in the third quarter and \$70.2, or 85 cents per share, in the fourth quarter #Net income for the second quarter includes a credit of \$26.3 from a reduction in Australia's corporate tax rate from 39% to 33% and a \$9.1 credit in the third quarter from the change in the U.S. tax rate.

First	Second	Third	Fourth	Year
\$ 2,251.4	\$2,406.1	\$2,381.7	\$2,452.3	\$ 9,491.5
95.7	45.7	82.2	(57.3)	166.3
-	(50.2)	-		(50.2)
(1, 111.4)	· - ·	-	-	(1,111.4)
(1,056.3)	(48.2)	45.3	(80.0)	(1,139.2)
-	(.59)	-	-	(.59)
(13.06)		-	-	(13.06)
(12.42)	(.57)	. 52	(.94)	(13.41)
	\$ 2,251.4 95.7 (1,111.4) (1,056.3)	\$ 2,251.4 \$2,406.1 95.7 45.7 - (50.2) (1,111.4) - (1,056.3) (48.2) - (.59) (13.06) -	\$ 2,251.4 \$2,406.1 \$2,381.7 95.7 45.7 82.2 (50.2) - (1,111.4) - (1,056.3) (48.2) 45.3	\$ 2,251.4 \$2,406.1 \$2,381.7 \$2,452.3 95.7 45.7 82.2 (57.3) - (50.2) (1,111.4) (1,056.3) (48.2) 45.3 (80.0) - (.59) (13.06)

*After special items of \$44.9, or 52 cents per share, in the second quarter and \$129.0, or \$1.51 per share, in the fourth quarter #The net loss for the year includes \$49.9 LIFO inventory profits of which \$37.2 were recorded in the fourth quarter.

Average Number of Employees (unaudited)

1993 1992 1991

 Other Americas
 16,600
 17,000
 16,800

 Pacific
 6,700
 6,200
 6,400

 Europe
 8,400
 6,200
 6,100

 63,400
 63,600
 65,600

GRAPHICS APPENDIX LIST

The following graphs, together with the accompanying text set forth below, appear on the same pages as the Financial Review (Management's Discussion and Analysis) Section in the Annual Report but are not part of the Financial Review.

Page Where Graphic Appears

Description of Graphic or Cross-Reference

page 14 Graph 1 Graph 1, a line graph, depicts percentage improvement change per annum from the base year 1989 (1989=0) in the life of smelting cells. The graph shows improvement changes of approximately 30% in 1990; 70% in 1991; 85% in 1992; and 93% in 1993.

The following text accompanies Graph 1:

Quantum Leap:

Improvements in the life of smelting cells

The smelting cells in which primary aluminum is made have carbon linings that may last up to eight years. The number of cells with linings reaching full life expectancy is an indicator of the quality of relining materials and methods and the proficiency of cell operation. For Alcoa's six U.S. smelting locations, which together have 3,632 cells, the number of cell linings reaching full life expectancy has increased 93% since 1989. Overall improvements in cell life are expected to yield annual savings of more than \$22 million.

page 15 Graph 2 Graph 2, a bar chart, depicts percentage decrease per annum from the base year 1990 (1990=100%) in aluminum can sheet inventory. The bar chart shows that inventory of can sheet decreased to approximately 75% of 1990 levels in 1991; 40% of such levels in 1992; and 37% of such levels in 1993.

The following text accompanies Graph 2:

Quantum Leap:

Reduction in can sheet inventory

Alcoa's largest single category of product is aluminum sheet for beverage cans. The competitive demands of this high-volume product require stringent controls to limit working capital, which includes inventories, while still meeting exacting customer delivery requirements. Since 1990 Alcoa has reduced its total can sheet inventories 64%. During the same time, working capital was slashed 56% and on-time delivery performance to customers has never been better.

page 16 Graph 3 Graph 3, a bar chart, depicts the reduction in number of workdays to calculate corporate earnings at four points in time (October 1991, May 1992, October 1992 and February 1993). The bar chart shows that the number of workdays required to calculate such earnings was 8 in October 1991; 5 in May 1992; 4 in October 1992; and 3 in February 1993.

The following text accompanies Graph 3:

Quantum Leap: Workdays to calculate corporate earnings

Alcoa operates at 164 plants in 24 countries. Each location's financial performance is calculated monthly to determine corporate earnings which are reported publicly every three months. The entire process involves hundreds of Alcoa accounting employees around the world and previously took eight days to complete. In 1991 a goal was set to complete the process in three days. The goal was achieved in 1993 and has resulted in more timely financial information and annual cost savings of about \$7 million.

page 17 Graph 4 Graph 4, a line graph, depicts the "material throughput" ratio calculated by Alcoa Fujikura Ltd., a subsidiary, for the years 1991, 1992 and 1993. The ratio measures material costs reimbursed by customers to payments made to material suppliers. The graph shows that in 1991, 92% of payments made to material suppliers were reimbursed by customers; in 1992, this ratio improved to approximately 93%; and in 1993, the ratio was 95.9%.

The following text accompanies Graph 4:

Quantum Leap: Recovery of material costs

Alcoa Fujikura Ltd. (AFL) makes wiring harnesses for cars and trucks. They are made of wire, connectors, terminals and coverings. To improve material usage and reduce costs, AFL began to measure "material throughput," which compares material costs reimbursed by customers to payments made to materials suppliers. This enabled AFL to reduce material costs associated with obsolescence, freight and handling losses, overproduction and scrap. Throughput increased to 95.9% for savings of \$6.6 million.

SUBSIDIARIES AND EQUITY ENTITIES OF THE COMPANY (As of December 31, 1993)

State or country of Name organization Alcoa Brazil Holdings Company Delaware Alcoa Aluminio S.A. Brazil Alcoa Composites, Inc.* Delaware Alcoa Generating Corporation Indiana

Alcoa International Holdings Company Delaware Alcoa Inter-America, Inc. Delaware Alcoa International Finance Company Delaware Alcoa International, S.A. Alcoa Japan Limited Japan Alcoa-Kofem Kft. Alcoa Nederland Holding B.V.

Alcoa Nederland B.V. Alcoa of Australia Limited Australia A.F.P. Pty. Limited Hedges Gold Pty. Ltd. Australia Australia Alcoa of Australia (Asia) Limited

Alutodo, S.A. de C.V. Mexico Kobe Alcoa Transportation Products, Ltd. Japan Norsk Alcoa A/S

Alcoa Manufacturing (G.B.) Limited Alcoa Minerals of Jamaica, Inc. Alcoa Nederland Finance B.V.

Alcoa Automotive Structures GmbH Alcoa Chemie Nederland B.V. Alcoa Properties, Inc.

Alcoa South Carolina, Inc. Jonathan's Landing, Inc. Alcoa Recycling Company, Inc. Alcoa Securities Corporation Alcoa Brite Products, Inc. Alcoa Chemie GmbH

Alcoa Kasei Limited

Alcoa Deutschland GmbH Alcoa Electronic Packaging, Inc.

Alcoa Fujikura Ltd.

Alcoa Kobe Transportation Products, Inc. Alcoa Packaging Machinery, Inc. Alcoa Steamship Company, Inc. B & C Research, Inc. Forges de Bologne S.A.

Lib-Ore Steamship Company, Inc. H-C Industries de Mexico, S.A. de C.V. Halco (Mining) Inc.

Compagnie des Bauxites de Guinee Northwest Alloys, Inc.

Pimalco, Inc.
Three Rivers Insurance Company Tifton Aluminum Company, Inc. Capsulas Metalicas, S.A. Gulf Closures W.L.L. H-C Industries, Inc. Moralco Limited Shibazaki Seisakusho Limited

The Stolle Corporation* Suriname Aluminum Company

Tapoco, Inc. Yadkin, Inc.

Switzerland Hungary

The Netherlands The Netherlands Hong Kong

Norway Japan England Delaware The Netherlands

Germany The Netherlands

Delaware Delaware Delaware Delaware Delaware Delaware Germany Germany Delaware Delaware Delaware Delaware

New York 0hio France Liberia Mexico Delaware Delaware Delaware Arizona Vermont Delaware Spain Bahrain Delaware Japan Japan Ohio

Delaware

Tennessee North Carolina

The names of certain subsidiaries and equity entities which, considered in the aggregate, would not constitute a significant subsidiary, have been omitted from the above list.

- Registered to do business in Utah under the names of Fiber Technology and Fibertek.
- ** Registered to do business in Nevada under the name of Alcoa Building Products, Inc. Also registered to do business in California under the name of Stolle-Norcold Company.

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

We consent to the incorporation by reference in the registration statements of Aluminum Company of America on Form S-8 (Registration Nos. 33-22346, 33-24846 and 33-49109) and Form S-3 (Registration Nos. 33-877 and 33-49997) of our reports dated January 11, 1994 on our audits of the consolidated financial statements and financial statement schedules of Aluminum Company of America and consolidated subsidiaries as of December 31, 1993 and 1992 and for each of the three years in the period ended December 31, 1993, which reports are incorporated by reference or included in this Form 10-K.

/s/Coopers & Lybrand COOPERS & LYBRAND

600 Grant Street Pittsburgh, Pennsylvania March 9, 1994

KNOW ALL PERSONS BY THESE PRESENTS, that the undersigned Directors of Aluminum Company of America (the "Company") hereby constitute and appoint JAN H. M. HOMMEN, MARY L. AMBROSE, EARNEST J. EDWARDS and BARBARA S. JEREMIAH, or any of them, their true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which said attorneys and agents, or any of them, may deem necessary or advisable or may be required to enable the Company to comply with the Securities Act of 1934, as amended, and any rules, regulations or requirements of the Securities and Exchange Commission in respect thereof, in connection with the registration under said Act of the Company's Annual Report on Form 10-K for 1993, including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of the undersigned Directors of the Company to the Company's Annual Report on Form 10-K for 1993 to be filed with the Securities and Exchange Commission and to any instruments or documents filed as part of or in connection with any such Form 10-K; and the undersigned hereby ratify and confirm all that said attorneys and agents, or any of them, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned have subscribed these presents on the date set opposite their names below.

January 14, 1994

/s/KENNETH W. DAM

Franklin A. Thomas

Kenneth W. Dam

Kemicen W. Dam	
/s/JOHN P. DIESEL John P. Diesel	January 14, 1994
/s/JUDITH M. GUERON Judith M. Gueron	January 14, 1994
/s/JOSEPH T. GORMAN Joseph T. Gorman	March 11, 1994
/s/JOHN P. MULRONEY John P. Mulroney	January 14, 1994
/s/SIR ARVI PARBO Sir Arvi Parbo	January 14, 1994
/s/FORREST N. SHUMWAY Forrest N. Shumway	January 14, 1994
/s/FRANKLIN A. THOMAS	January 14, 1994