

FILE NAME: Phenolic Resins (PHR)

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DOCUMENT DESCRIPTION: Moody's Industrial Manual Entry - Union Carbide Corp.

cash; 1964, 5% after \$1.00 cash; 1965, 6% after \$1.00 cash; 1966, 6% after \$1 cash; 1967, 5% after \$1 cash; 1968, 6% after \$1 cash.

to June 11.
Dividends payable quarterly March 10, etc., to stock of record about Feb. 10, etc.

VOTING RIGHTS—Exclusive voting power.
PREEMPTIVE RIGHTS—To extent provided by law.
LISTED—On New York and Philadelphia-Baltimore-Washington Stock Exchanges.
TRANSFER AGENTS—Chase Manhattan

Bank, New York, and Fidelity Bank, Philadelphia.
REGISTRARS—Bankers Trust Co., New York, and Girard Trust Bank, Philadelphia.
DIVIDEND DISBURSING AGENT—Sun Oil Co.

SUN SHIPBUILDING & DRY DOCK COMPANY

(Controlled by Sun Oil Co.)

History: Incorporated under the laws of Pennsylvania May 23, 1916, as Sun Shipbuilding Co.; name changed as above in Jan., 1923.

Business: Originally engaged in the construction of cargo vessels; charter amended in Jan. 1923 to permit buying, selling, chartering, owning, operating and repairing ships.

In 1965, delivered four cargo vessels and advanced design work on five others for United States Lines, launched two cargo ships and laid keels for four others on order for Grace Line, completed a 50,000-barrel barge for Sun Oil, and further expanded its ship repair work.

Early in 1966, arrangements were completed with American Export Isbrandtsen Lines for a joint venture which will design, finance, build and operate a 26-knot, roll-on, roll-off cargo vessel. The ship will be powered by twin gas turbines similar to those used on jet aircraft. It is scheduled for delivery in late 1967.

When delivered, vessel will enter New York to Puerto Rico trade carrying truck trailers and automobiles.

The first of two 260-inch solid-propellant rocket motor cases built by shipyard was test-fired in 1965. A thrust of 3,500,000 lbs. made it Free World's most powerful single rocket.

Shipyard further diversified operations when it began construction of a submarine

pressure hull for Lockheed Missiles and Space Corp. Vessel will be used for oceanic research. Work is also in progress for Naval Marine Engineering Laboratory on a test chamber that will simulate pressures found at 26,000-foot depths.

Aero/Hydro: Space Division obtained contract in 1966 to build two trisphere pressure hulls for U. S. Navy's deep submergence rescue vehicle.

Properties: Company has 6 concrete and steel shipways, capable of building 750-foot vessels; and two 10,000-ton floating dry docks. Company constructed floating dry dock able to lift 38,000 gross tons and adequate to handle tankers up to 68,000 d.w.t. and up to 800 ft. in length.

The entire wet basin capacity of this plant is 15 vessels. Plant is situated on the Delaware River at Chester, Pa., with engine building plant, boiler building plant and modern shipyard.

Facilities were greatly expanded during the war years and in 1943, the yard contained 28 ways.

Officers: R. G. Dunlop, Chairman, Philadelphia; P. E. Atkinson, Pres.; R. Galloway, Vice-Pres.; C. Zeien, Vice-Pres. and Sec.; G. C. Liacouras, Treas.

Directors: J. H. Pew, J. N. Pew III, R. G.

Dunlop, P. E. Atkinson, R. Galloway, C. Zeien, R. L. Burke, G. C. Liacouras, D. W. Ferguson, D. P. Jones.

General Counsel: Pepper, Hamilton & Scheetz.

Purchasing Agent: C. S. Boettger.

Annual Meeting: Fourth Tuesday in April.

No. of Employees: 1966 (average), 4,804.

Office: Chester, Pa.

Branch Office: Philadelphia.

Backlog: 1966 1965
As of Dec. 31 ----- \$97,000,000 \$106,100,000

Earnings, years ended Dec. 31 (in \$):

	Gross Business	Net Income
1966-----	77,893,535	318,039
1965-----	60,440,932	273,260
1964-----	31,212,523	d 284,041
1963-----	51,813,306	d 348,193
1962-----	35,441,545	d 1,080,681
1961-----	47,476,508	726,901
1960-----	44,863,566	1,757,967
1959-----	38,678,258	1,218,605
1958-----	37,752,183	d 152,231
1957-----	28,176,719	73,723

Capital Stock: 1. Sun Shipbuilding & Dry Dock Co. stock; par \$100:

Authorized, 40,000 shares; outstanding, 35,000 shares; par \$100. All held by Sun Oil Co.

CAPITAL STRUCTURE LONG TERM DEBT

Issue	Rating	Amount Outstanding
1. Sink. fd. deb. 5.30s, 1997-----	Aa	\$250,000,000
2. 3½% notes payable, 1965-84-----	A-	240,000,000
3. 4½% notes payable, ser. to 1996-----	A-	54,658,000
4. 3.625% notes payable, 1971-90-----	A-	50,000,000
5. 4½% notes payable, 1985-94-----	A-	200,000,000
6. 6.80% & 6.60% notes, 1971-----	A-	39,500,000
7. Un. Carb. Intl. Cap. Corp. deb. 4½s, 1982-----		50,000,000
8. International subd. debt-----		48,671,000

CAPITAL STOCK

Issue	Par Value	Amount Outstanding	Earned per Sh. 1968	Earned per Sh. 1967
1. Common-----	\$4	60,465,024 shs.	\$2.60	\$2.82

Ⓜ Subject to change, see text. Ⓜ Privately placed.

Times Charges Earned	1968	1967
7.18		7.95

Interest Dates	Call Price	Price Range 1968	Price Range 1967
M&S 1	105.00	94 - 82	101½ - 86½

Divs. per Sh. 1968	Divs. per Sh. 1967	Call Price	Price Range 1968	Price Range 1967
\$2.00	\$2.00		50½ - 40½	59 - 45½

HISTORY

Incorporated in New York, Nov. 1, 1917, as Union Carbide & Carbon Corp. and acquired stocks of the following four companies and their subsidiaries: (1) Linde Air Products Co., incorporated in Ohio, 1907; (2) National Carbon Co., Inc., incorporated in New York, 1917 to succeed National Carbon Co., incorporated in New Jersey, 1899; (3) Prest-O-Lite Co., Inc., incorporated in New York, 1913, and (4) Union Carbide Co., incorporated in Virginia, 1898. Present name adopted May 1, 1957.

In 1919 acquired all of the common stock of Oxweld Acetylene Co. and in the same year formed the wholly owned subsidiaries, Canadian National Carbon Co., Ltd. and Prest-O-Lite Co. of Canada, Ltd.

In 1919 acquired all of the common stock of Oxweld Railroad Service Co., and in the same year formed the wholly owned subsidiaries Dominion Oxygen Co., Ltd. and Kemet Laboratories Co., Inc.

In July, 1919 issued 43,344 shares of stock to acquire all of the stock of 42nd Street & Madison Avenue Corp. (succeeded by Carbide & Carbon Realty Co., Inc.), owning a 22-story office building at that location in New York City.

In 1920 issued 37,500 shares to acquire Haynes Stellite Co. and formed the wholly owned subsidiary, Carbide & Carbon Chemicals Corp.

In 1922 formed a wholly owned subsidiary, Electro Metallurgical Co. of Canada, Ltd.

In 1924 formed a wholly owned subsidiary, Carbide & Carbon Realty Co., Inc.

In 1925 acquired all of the capital stock of Aktieselskabet Saudafaldene (Sauda Falls Co., Ltd.) which owns water power resources and a hydro-electric power plant in Norway.

In 1926 purchased the mine, mill and reduction plant of U. S. Vanadium Co., of Colorado (succeeded by United States Vanadium Corp.). Ore reserves of this subsidiary were increased in 1929 by the purchase of deposits in Paradox Valley, western Colorado.

In 1926 purchased patents and other assets pertaining only to the dry cell battery business of Manhattan Electrical Supply Co. and the property and other assets of Corliss Carbon Co.

In 1927, Prest-O-Lite Co., Inc., a subsidiary, disposed of its storage battery business to Prest-O-Lite Storage Battery Corp., then controlled by Automotive Battery Corp. of New York.

In 1927 formed wholly-owned subsidiary, American Carbollite Co., Inc., which acquired assets of American Carbollite Co. (Minn.).

In 1928 acquired the common stock of Acheson Graphite Corp., engaged in the production of graphite products, specializing in electrodes for electric furnaces.

In 1928 acquired Michigan Ox-hydric Co. and Memphis Oxygen Co.

In 1929 acquired Aktieselskabet Møllers Smelteverk, a Norwegian company, producing calcium carbide and ferro-alloys.

In 1930 acquired title to the 95-year ground lease and 37-story Carbide and Carbon building in Chicago.

In 1932 formed a wholly owned subsidiary, Carbide & Carbon Chemicals, Ltd., to consolidate chemical operations in Canada.

In 1933 acquired from Dry Ice Corp. of America its dry ice producing plant at Niagara Falls, N. Y.

In Nov., 1939 acquired all the property and assets of Bakelite Corp. (Del.), manufacturer of phenol-formaldehyde and other type plastics, paying therefor 187,500 shares of stock.

On Dec. 31, 1946, The Linde Air Products Co. merged Prest-O-Lite Co., Inc.

During 1949-52, principal U. S. subsidiaries became operating divisions.

Effective Jan. 1, 1954, a new subsidiary, Union Carbide Canada Ltd., took over operation of most Canadian subsidiaries.

In 1955, formed a new division, Union Carbide Nuclear Co., and name of Ore Division was changed to Union Carbide Ore Co.

In 1956, established Silicones Division and Union Carbide Development Co.

On Dec. 31, 1956, acquired Visking Corp., and operated it as a division under the name Visking Co. Under merger agreement corporation issued one share for each 2.5 Visking shares.

In 1957, name of company shortened to Union Carbide Corp. and following division name changes announced: Carbide & Carbon Chemicals Co. to Union Carbide Chemicals Co.; Carbide & Carbon Realty Co. to Union Carbide Realty Co.; and Linde Air Products Co. to Linde Co. Also, in 1957, formed new division, Union Carbide Olefins Co.

In 1958, company announced the following division name changes: Bakelite Co. to Union Carbide Plastics Co.; Electro Metallurgical Co. to Union Carbide Metals Co.

In Aug. 1959, Union Carbide Consumer Products Co. was formed as a division.

In 1962, operations of Kemet Co. were consolidated with electronic activities of Linde Co. Assets and business of Pyrofax Gas were sold to Texas Eastern Transmission Corp.

In 1963, name of Haynes Stellite Co. was changed to Union Carbide Stellite Co. Later in year, the following division name changes were announced: National Carbon Co. to Carbon Products Div.; Union Carbide Chemicals Co. to Chemicals Div.; Union Carbide Consumer Products Co. to Consumer Products Div.; Linde Co. to Linde Div.; Union Carbide Metals Co. to Metals Div.; Union Carbide Nuclear Co. to Nuclear Div.; Union Carbide Olefins Co. to Olefins Div.; Union Carbide Plastics Co. to Plastics Div.; Union Carbide Realty Co. to Realty Div.; Union Carbide Stellite Co. to Stellite Div.; and Visking Co. to Visking Div. Also during year, power facilities and certain other properties of Carbide Power Co. were sold to Edison Sault Electric Company and the company was liquidated. In addition, in 1963, company sold three polyethylene film-making plants acquired from The Visking Corp. in 1956 (for further details see below).

In 1964 merged Globe Mining Co., subsidiary. Also acquired, for cash, Englander Co., Chicago manufacturer of mattresses and bedding products, now operated as subsidiary, and Polyethylene Bag Canada Ltd., subsidiary of Union Carbide Canada, Ltd., purchased operating assets of Haugh-Gordon Ltd., of Toronto.

Visking Division was renamed Food Products Division. A new division, Fibers and Fabrics Division, was formed. Also, during the year, a 25% interest in Union Carbide Canada Ltd., previously a wholly owned subsidiary of Union Carbide Corp., was sold to the Canadian public.

In Jan., 1965, the Metals and Ore Divisions and part of the Nuclear Division—principally mining and processing operations—were consolidated as the Mining and Metals Division.

Also in 1965, acquired Neisler Laboratories, Inc. for stock.

In 1966, established Electronics Division to coordinate interests in electronics field. Also formed five wholly owned United States subsidiaries to manage international activities: Union Carbide Pan America, Inc.; Union Carbide Europe, Inc.; Union Carbide Eastern, Inc.; Union Carbide Middle Africa, Inc.; and Union Carbide Southern Africa, Inc.

In Mar. 1967, formed Materials Systems Division to combine capabilities in the high-

UNION CARBIDE CORPORATION

CAPITAL STRUCTURE

LONG TERM DEBT

Issue	Rating	Amount Outstanding	Times Charges Earned 1983 1982	Interest Dates	Call Price	Price Range 1983 1982
1. S.f. debenture 5.30s, 1997	A1	\$128,000,000		M & S 1	101.80	69 1/2 - 58 5/8
2. S.f. debenture 8 1/8s, 2005	A1	300,000,000		J & J 15	105.44	81 1/4 - 68
3. S.f. debenture 7 1/8s, 2006	A1	200,000,000		J & D 15	104.97	71 - 62 1/2
4. S.f. debenture 9.35s, 2009	A1	200,000,000		F & A 15	105.80	85 - 74
5. 9 1/8s notes, due 1986	A1	100,000,000		F & A 15	100	98 - 93 1/8
6. 14 1/8% notes, due 1991	A1	150,000,000		J & D 1	100	114 1/2 - 106 1/2
7. Conv. subord. debenture 10s, 2006	A2	150,000,000		M & S 15	108.50	120 - 102
8. 3 1/8% notes payable, 1965-84	3	15,000,000				
9. 4 1/8% Promissory notes payable, ser. to 1996	3	26,000,000	1.27 2.56			
10. 3.625% Promissory notes payable, 1971-90	3	18,000,000				
11. 4 1/8% notes payable, 1985-94	3	200,000,000				
12. 10% notes, due 1984-87	3	100,000,000				
13. Cap. Leases & install. purch. oblig.		199,000,000				
14. Other debt		6,000,000				
15. 14 1/8% Un. Carb. Overseas Fin. Corp. N.V. notes, due 1989		150,000,000				
16. International subord. debt		536,000,000				

CAPITAL STOCK

Issue	Par Value	Amount Outstanding	Earned per Sh. 1983 1982	Divs. per Sh. 1983 1982	Call Price	Price Range 1983 1982
1. Common	\$1	270,347,418 shs.	\$1.13 \$4.47	\$3.40 \$3.40		73 1/8 - 51

1983, \$3.11 excl. facilities closing charge. 3 Privately placed. 4 Beginning Aug. 15, 1983. 5 Beginning Dec. 1, 1988.

HISTORY

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For acquisitions, mergers etc., prior to 1963, inclusive, see Moody's 1969 Industrial Manual.

In 1964 merged Globe Mining Co., subsidiary. Also acquired, for cash, Englander Co., Chicago manufacturer of mattresses and bedding products, and Polyethylene Bag Canada Ltd., subsidiary of Union Carbide Canada, Ltd., purchased operating assets of Haugh-Gordon Ltd., of Toronto.

Visking Division was renamed Food Products Division. A new division, Fibers and Fabrics Division, was formed. Also, during the year, a 25% interest in Union Carbide Canada Ltd., previously a wholly owned subsidiary of Union Carbide Corp., was sold to the Canadian public.

In Jan., 1965, the Metals and Ore Divisions and part of the Nuclear Division—principally mining and processing operations—were consolidated as the Mining and Metals Division.

Also in 1965, acquired Neisler Laboratories, Inc. for stock.

In 1966, established Electronics Division to coordinate interests in electronics field. Reorganized Chemicals and Plastics Group, setting up five divisions: Coatings Intermediates Plastic Products, Process Chemicals, Chemicals and Plastics Operations. Also formed five wholly owned United States subsidiaries to manage international activities: Union Carbide Pan America, Inc.; Union Carbide Europe, Inc.; Union Carbide Eastern, Inc.; Union Carbide Middle Africa, Inc.; and Union Carbide Southern Africa, Inc.

In Mar. 1967, formed Materials Systems Division to combine capabilities in the high-performance materials field, including all operations of Stellite Division. In May, formed a new subsidiary, Union Carbide Exploration Corporation, to consolidate and expand worldwide mineral exploration activities.

In Nov. 1967 all operations concerned with supply of hydrocarbon raw materials and fuel were consolidated in a subsidiary, Union Carbide Petroleum Corp.

In 1968, terminated mining operations in Guyana of Northwest Guyana Mining Co. Ltd., a wholly owned subsidiary, supplying manganese ore to Corporation metallurgical plants. Number of divisions in Chemicals and Plastics Group reduced from five to four, with reassignment of responsibilities of Chemicals and Plastics Development Division to other divisions within group.

Early in 1969, sold assets of Neisler Laboratories, Inc., a pharmaceutical subsidiary, to Mallinckrodt Chemical Works. A 50% interest in S.p.A. Celene, Priolo, Sicily, principally a plastics manufacturer, was sold to Montecatini Edison S.p.A., which held remainder of Celene. Also in 1969, a Hydrocarbons Division was formed to manage procurement and production of olefins and other hydrocarbon raw materials and intermediates. The Food Products Division was renamed Films-Packaging Division after it assumed responsibility for plastics films business in addition to its activities in food casings and related products. Formed Ferroalloys Division to take over production and marketing of chromium, manganese, and silicon alloys and related products formerly handled by Mining and Metals Division. Latter retained responsibility for minerals exploration, domestic mining and milling, and production of metals for specialty markets. Electronics and Molecular Sieves busi-

ness became part of Materials Systems Division, also handling Coatings Service business. At the end of 1969, a fourth segment of materials systems business, Stellite Products Department, was sold to Cabot Corporation.

In 1970, Company sold The Englander Company, Inc., a wholly owned subsidiary acquired in 1964, making bedding equipment; and in 1971 also sold its oil and gas interests, held by Union Carbide Petroleum Corporation.

In 1971, acquired General Carbon & Chemical Corp., Robinson, Ill.

During 1973, Company sold its ownership in Ocean Systems, Inc., engaged in research activities in sea and assets of its Korad Dept. which manufactured and sold lasers and laser systems.

In Feb. 1974, acquired Merritt-Holland Co. in exchange for 90,000 common shares; also in Oct. 1974, acquired Linco Welding Supply Co. in exchange for 35,318 common shares.

During 1974, Company withdrew from the DYNEL fiber business and continued realignment of businesses.

On Dec. 1, 1975, acquired Bentley Sales Co., Inc. for 64,975 common shares.

In 1975 sold holdings in joint tin venture.

On May 27, 1976 Co. exchanged 10,150 com. shs. for Smith Exploration Co.

On July 13, 1976, acquired Kirsto Co. in exchange for 37,131 com. shs.

On Oct. 19, 1976, acquired, by merger, Waldo Rohnert Co. in exchange for 67,223 com. shs.

On Nov. 12, 1976, acquired, by merger, Cleon Corp. in exchange for 92,909 com. shs.

On Dec. 28, 1976, Co. exchanged 5,358 com. shs. for substantially all assets of Greenbelt Aviation Co.

In Apr. 1977, acquired Amchem Products, Inc. in exchange for 2,470,107 common shares, for further development of agricultural products business.

In June 1977, acquired K.T.I. Chemicals, Inc. in exchange for 29,539 shares.

During the first half of 1977, U.K. subsidiary, Bakelite Xylonite Limited, acquired 11% position in Beralit Tin and Wolfram Ltd.

In Oct. 1977, acquired assets of Benfield Corp. in exchange for about 71,000 shares.

In 1977 Co.'s divestitures included sale by BXL subsidiary in UK of Thermosetting Division, producer of phenolic resins, to B P Chemical, Ltd., for approx. \$16.6 million in pounds; suspension polyvinyl chloride resin business to Tenneco Chemicals, Inc., for about \$4.0 million in cash plus royalties; and rigid vinyl business to American Hoechst Corp. for about \$12 million plus up to \$2 million for inventories.

In Dec. 1978 Co. completed sale of substantially all of its European petrochemicals operations to BP Chemicals Ltd. for \$175,000,000 in cash plus the assumption of about \$200,000,000 in debt.

Co. said sale also included additional liquid assets for which BP Chemicals paid an additional \$33,000,000. Also, a Co. unit, sold its Hythe Chemicals Ltd. unit to BP Chemicals. Hythe then paid equivalent of \$7,000,000 in debt it owed to Union Carbide U.K.

Excluded from sale were certain assets and businesses of Union Carbide Belgium N.V., including industrial gases, environmental systems, engineering products and processes, welding products, battery products and medical products. These were transferred to a new Co. unit, Union Carbide Benelux N.V.

In 1979, sold Domsea Farms, Inc., a fish farming operation, to Campbell Soup Company and acquired the assets and business of the London Chemical Company (Lonco), a supplier of proprietary materials and processing chemicals used in the manufacture of printed circuits.

In Jan. 1980, Corp. sold Amchem Products, Inc., subsidiary (metalworking chemicals business).

In June 1980, Co. sold its Jacques Seed Co. and in Feb., 1981, Co. sold its Keystone Seed Co., both to Agrigenetics Corp. Combined value was in excess of \$70,000,000.

In Nov., 1980, Co. sold its water/wastewater treatment business to Linde A.G.

In June 1981 Co. sold a portion of its metal business, including ferroalloys operations in Europe and the U.S. for \$181,000,000 plus assumption by the purchaser of \$60 million in long and short term debt. In April 1981 an option to purchase the Canadian ferroalloys business was given.

In 1981 Co. sold the remainder of its medical products business to Richardson-Vicks and Hoffman LaRoche.

In 1982: (1) Co. sold its phenolic resins plant in Elk Grove CA to Georgia Pacific Corp. and its nearby land holdings to C.D.P. Real Estate Inc. resulting in a net gain of \$3.2 million. (2) Co. sold its 25% interest in Oriental Union Chemical Co. and its 50% share in Union Industrial Gas Corp. in Taiwan to Central Investment Holding Co., a local govt. concern, resulting in a net gain after tax of \$1 million. (3) Co. sold all the property rights except for oil and gas in Dexter City, OH to B&N Coal Inc. for \$4.5 million, resulting in a net gain after tax of \$1.7 million. (4) Co. sold its Cardio Services Division to Cardio Dynamics Inc., a subsidiary of Clinical Data Inc., resulting in a cash flow of \$333,000. (5) Co. sold its 50% interest in General Welding to the existing partner, resulting in a net gain of \$130,000. (6) American Chrome Mines Limited and Rhodesia Chrome Mines Limited were dissolved on April 23, 1982 and July 17, 1982, respectively.

In 1982, Co. purchased the remaining 50% interest of Viscora S.A. and Viskase Ltd. from its partner, Chargeurs Reunis, for a total of \$3.8 million.

In June 1982, Union Carbide Deutschland B.J.B.H. merged into UCAR Batterien G.m.b.H. leaving UCAR Batterien the surviving company. On the same date, UCAR Batterien changed its name to Union Carbide Deutschland G.m.b.H.

On April 13, 1984, Co. sold Black Mountain Pipeline Corp. to Houston Natural Gas Corp.

In April, 1984, Co. announced that it completed the sale of Unifex Kemi of Sweden to Neste Oy.

SUBSIDIARIES

As of Dec. 31, 1982, owned directly or indirectly 100% of the voting control except where noted of the following:

Name and place of incorporation:	
Gulf Coast Olefins Co. (Del.)	
Ucar Plastics (Ghana) Ltd. (Ghana) (50%)	
Union Carbide Ghana Ltd. (Ghana) (66.67%)	
Union Carbide Cote d'Ivoire (Ivory Coast)	
Union Carbide Kenya Ltd. (Kenya) (65%)	
Elektrode Maatskappij Van Suid Afrika (Eiendoms) Bepetika Afrika (50%)	
Tubatse Ferrochrome (Proprietary) Ltd. (So. Africa) (49%)	
Ucar Chrome Co. (S.A.) (Pty.) Ltd. (So. Africa)	
Ucar Minerals Corp. (Del.)	
Union Carbide Zimbabwe (Private) Ltd.	
Union Carbide Sudan Ltd. (Sudan) (84%)	
Chemos Industries Pty. Ltd. (Australia) (60.02%)	
Union Carbide Australia Ltd. (Australia) (60.02%)	
Sonca Industries Ltd. (Hong Kong)	
Union Carbide India Ltd. (India) (50.9%)	
P.T. Agrocab Indonesia (80%)	
P.T. Union Carbide Indonesia	
Nippon Ucar Co. Ltd. (Japan) (50%)	
Union Showa K.K. (Japan) (50%)	
Sony-Eveready, Inc. (Japan) (50%)	
Union Carbide Services Eastern Ltd. (Hong Kong)	
Union Gas Co. Ltd. (Korea) (50%)	
Union Carbide Malaysia Sdn. Bhd. (Malaysia) (80%)	
Union Carbide New Zealand Ltd. (60.02%)	
Union Carbide Philippines, Inc.	
Union Carbide Ceylon Ltd. (Sri Lanka) (60%)	
Metals and Ores Pte. Ltd. (Singapore)	
Union Carbide Singapore Pte. Ltd.	
Union Carbide Thailand Ltd. (Thailand)	
Union Carbide Benelux N.V. (Belgium)	

Indugas N.V. (Belgium) (50%)
 La Litorale S.A. (France) (99.96%)
 Union Carbide France S.A. (France)
 Viscora, S.A. (France)
 Union Carbide Deutschland G.m.b.H. (West Germany)
 Union Carbide Hellas Industrial and Commercial S.A. (Greece)
 Elettrografite Meridionale S.p.A. (Italy)
 Unilq S.p.A. (Italy)
 Union Carbide Italia S.p.A. (Italy)
 Argon, S.A. (Spain) (50%)
 Union Carbide Iberica, S.A. (Spain)
 Union Carbide Navarra, S.A. (Spain)
 Union Carbide Norden AB (Sweden)
 Union Carbide Europe S.A. (Switzerland)
 Union Carbide U.K. Ltd. (United Kingdom)
 Viskase Ltd. (United Kingdom)
 Union Carbide Argentina S.A.I.C.S. (Argentina) (99.99%)
 Eletro Manganes Ltda. (Brazil) (55%)
 Tungstenio do Brasil Minerios e Metais Ltda. (Brazil)
 S.A. White Martins (Brazil) (50.14%)
 S.A. White Martins Nordeste (Brazil) (50.14%)
 Union Carbide do Brasil Ltda. (Brazil)
 Union Carbide Colombia, S.A. (Colombia)
 Union Carbide Centro Americana, S.A. (Costa Rica)
 Union Carbide Ecuador C.A. (Ecuador)
 Union Carbide Mexicana, S.A. (Mexico) (45.7%)
 Union Carbide de Venezuela, C.A. (Venezuela)
 Union Carbide Caribe, Inc. (Del.)
 Union Carbide Films-Packaging, Inc. (N.Y.)
 Union Carbide Grafito, Inc. (N.Y.)
 UCAR Capital Corporation (Del.)
 Electric Furnace Products Company Ltd. (Canada)
 Union Carbide Agricultural Products Co., Inc. (Pa.)
 Union Carbide Australia and New Zealand Ltd. (Australia)
 Union Carbide Canada Limited (Canada) (74.73%)
 Union Carbide Eastern, Inc. (Del.)
 Union Carbide International Capital Corporation (NY)
 Union Carbide Puerto Rico Inc. (PR)
 Union Carbide Southern Africa, Inc. (Del.)

Joint Ventures: Company and Showa Denko K.K. formed Union Showa K.K., for production of molecular sieves at plant in Yokkaichi, Japan. Merged into Showa Unox K.K. in 1974, but subsequently name changed back to Union Showa K.K. in 1980.

In Nov., 1971, company joined with Mead Corp. to form a new Co., Acrolone, to develop and market papers made out of plastics. Co. is owned 50% by each. At the end of 1974, Co. and Mead decided to discontinue operations of Acrolone.

In 1974 Co. and Halliburton formed a 50-50 oil well servicing company called Wellnite.

In Apr. 1974, company and General Mining & Finance Corp. (see Moody's Banks & Finance Manual) agreed to form a joint venture to build a ferrochrome plant in Steelpoort, S. Africa to be owned 49% by company.

Union Carbide Canada Limited, a 75%-owned subsidiary, is a 20% participant in Petrosar Limited, incorporated in 1974 to build and operate a world-scale unit near Sarnia, Ontario, to produce petrochemical raw material and fuel products. The subsidiary has entered into an agreement with Petrosar for the purchase of ethylene in an amount increasing to 370 million pounds annually when the complex is in full operation. The ethylene unit went into operation early in 1978.

In late 1974, Company and Sony Corp. agreed to establish an equally owned subsidiary, Sony-Everyday, Inc., to market and possibly make drycell batteries.

In Mar. 1976, Co. and Societe Financiere Europeenne, which is owned by eight banks, formed Gulf Coast Olefins Co. Loans aggregating \$296,000,000 for Gulf Coast were negotiated with 16 U.S. banks and General Electric Credit Corp.

Gulf Coast acquired Co.'s 100%-owned Ucar Pipeline Inc., which completed a 146-mile ethylene pipeline in Louisiana in 1977.

The venture also bought Co.'s Taft, La. olefins plant and expanded the ethylene plant at Taft.

In Oct. 1978, company purchased full ownership of Gulf Coast Olefins Co.

In Oct. 1978, Co. announced a joint venture to produce dry-cell batteries in Nigeria. The new plant was commissioned in 1980 and is 60% owned by Co., 20% by Kano State Investment Co. and 20% by private investors.

In Jan. 1979 Co. announced that it would enter industrial gas business in Saudi Arabia under a partnership agreement with that country's leading producer of industrial gases, Abdullah Hashim Establishments. Co. has since become a 25% equity participant in and general manager of a new joint-venture company, Carbide Hashim Industrial Gases Company, which incorporates holdings and operations of Saudi partner's industrial gas division. New company is headquartered in Dammam, Saudi Arabia. (Co. sold its interest during 1983.)

In Feb. 1979, Co. announced a joint venture dry-cell battery plant to be built near Alexandria, Egypt. Plant would produce dry cell batteries primarily for sale within Egypt. It would be owned and operated by Union Carbide Egypt, an Alexandria concern in which Co. has a 75% interest and private Egyptian investors have a 25% share. Co. said that construction of facility would start in 1979 with completion scheduled for fall 1980.

In Nov. 1980, Co. announced a 50-50 partnership venture with Ingersoll-Rand Co., called Nijcet Services Co., which will offer—under long term contract—large volumes of

high pressure nitrogen for enhanced recovery of natural gas and crude oil.

In 1980, Union Carbide Canada Ltd., together with the Quebec government and Gulf Canada Ltd. formed Petromont Inc. for the production of ethylene feedstocks.

In April 1982, Co. announced it had elected to withdraw from participation in a proposed joint venture with Toray Industries and Elf Aquitaine to manufacture carbon fibers in France.

In October 1982, Co. announced it had terminated discussions with Henkel KGaA, Dusseldorf, West Germany, concerning a joint venture for production of fatty alcohols based on natural oils, citing continuing uncertainty in the economic outlook as the reason.

In 1982, Co. and Montedison, S.p.A. (a leading developer of catalyst technology for polyolefins) signed an agreement whereby the Co. acquired a worldwide license under Montedison's patents relating to catalysts for the manufacture of polyethylene.

In April 1982, Co. and Unimation Inc. announced a joint agreement to market robot systems for automatic arc welding and to collaborate in producing gantry-mounted robot systems.

In Dec. 1982, Co. announced an agreement with Marline Uranium Corporation of Danville, Virginia (a wholly owned subsidiary of Marline Oil Corporation) to evaluate uranium mineralization of properties in Virginia. The two companies will also determine the economic feasibility of extracting and processing uranium ores from those properties. If results of the studies are favorable, Union Carbide has the option to develop this resource with Marline Uranium.

BUSINESS & PRODUCTS

The Corporation is active in five industry segments:

Petrochemicals: As petrochemicals worldwide become increasingly a commodity business, Co. is capitalizing on technology by licensing it, and by selling technical services to new and established producers (See under Engineering and Technology services). Co. is also expanding preeminent world-wide marketing capabilities.

Business include: Polyolefins, Ethylene oxide/glycol, Solvents and coatings materials, International petrochemicals.

Industrial Gases: Through Linde Division, Co. is the principal domestic supplier of gases, and one of the three major suppliers worldwide. Co. is maintaining leading-edge technology in all facets of the business, and continuing to implement strategy of being a low-cost supplier, both to traditional customers such as the steel and metal fabrication industry, and to expanding markets in the high-growth electronics, medical, oil and gas extraction, oil refining, and chemical industries.

Metals & Carbon Products: Co. is world leader in electrode systems for electric arc furnaces. Reduced steel production and increased competition are changing the electrode industry, especially in the U.S. In response, Co. has laid special emphasis on improving products, on making production facilities more efficient, and on working with customers to improve electric arc technology. Other carbon products serve a broad range of industrial needs worldwide. Metals businesses are based on Co.'s own reserves of strategic metals ores.

Consumer Products: Co.'s battery, car-care, and plastic wrap and bag lines constitute a significant value-added component within Co. total portfolio. The leading positions of these products have given Co. a valuable foothold in retail outlets throughout the world, and considerable expertise in consumer marketing. Trade Mark brands Glad and Prestone products are major users of Co.'s polyethylene resins and ethylene glycol output.

Technology, Services & Specialty Products: A number of Co.'s businesses serve industrial customers but, like consumer businesses, enjoy a high value-added component. Among them are technology and service businesses that market Carbide know-how to the process industries which include licensing of UNIPOL polyolefins processes, Ethylene oxide/glycol catalysts and process technology, and other businesses marketing specialty products and services. Many of these businesses are less fixed-asset-intensive than traditional operations.

Business include: Specialty chemicals, Agricultural products, Food processing and packaging materials, Electronic components and materials, Engineering and technology services, Coatings services, Cryogenic products, Medical services.

International Business: Corporation has over 72 consolidated international subsidiaries and approximately 22 other significant affiliated international companies in more than 35 countries outside the United States and Puerto Rico. Such subsidiaries and companies engage in manufacturing and mining operations and conduct selling operations with local and non-local customers. These operations are subject to the normal economic and political risks inherent in international business.

In Canada, principal operations are conducted through Union Carbide Canada Limited and embrace major product lines which closely parallel those in the United States.

Affiliated companies in Latin America produce dry batteries and related products in Argentina, Brazil, Colombia, Costa Rica, Ecuador, Mexico and Venezuela; graphite electrodes, industrial gases and welding apparatus in Brazil and Mexico; metals in Brazil; and chemicals and plastics in Brazil, Ecuador and Mexico.

In Europe, Union Carbide affiliates produce agricultural chemicals in France; molecular sieves in France and Italy; gases and related apparatus in Belgium, Germany, France and Spain; cryogenic products in Germany and England; welding products in Germany; graphite electrodes and anodes in England, France, Italy, Spain, and Sweden; coatings service in Switzerland, England and Germany; films-packaging products in Belgium, England, France and Germany; dry batteries in Germany, Greece and Switzerland; and electronic components and distillation trays in England.

In the Far East, affiliated companies produce chemicals in Australia, India, Japan, Singapore and Thailand; plastics in India, and Japan; carbon products in India; molecular sieves in Japan; coatings service in Japan; dry batteries in Australia, Sri Lanka, India, Indonesia, Malaysia, the Philippines, New Zealand, and Singapore; flashlight cases in Hong Kong and India; household film wrap and bags in Australia, New Zealand and India; and industrial plastic film in Australia and India.

In Africa and the Middle East, the businesses of affiliates include dry battery production in Kenya, Ghana, Ivory Coast, Nigeria, Egypt and Sudan; plastic film extrusion and bag production in Ghana and South Africa; carbon and graphite electrodes in South Africa, and latexes in Ivory Coast. Other affiliates carry on mining, milling and smelting operations, major products of which are ores and alloys of chromium and vanadium.

Sales Breakdown, By Product Groups (in \$ millions):

	1983	1982
Petrochemicals	2,551	2,609
Industrial Gases	1,361	1,405
Metals & Carbon		
Products	1,024	1,107
Consumer Products	1,895	1,933
Technology, Services & Specialty		
Products	2,170	2,007
Total	9,001	9,061

Sales Breakdown, By Geographic Area (in \$ millions)

	1983	1982
United States &		
Puerto Rico	6,189	6,051
Africa & Middle East	106	125
Canada	551	553
Europe	850	856
Far East	748	762
Latin America	557	714
Total	9,001	9,061

PRINCIPAL PLANTS & PROPERTIES

Corporation's world headquarters are located in a building of approx. 1,332,000 gross sq. ft. of office in Danbury, Conn.

Corporation and its affiliated companies operate approximately 700 plants, factories, laboratories, mines and mills around the world.

Principal facilities located as follows:

Chemicals and Plastics	
Torrance, Ca.	Bayamon, P.R.
Tucker, Ga.	Garland, Tex.
Alsip, Ill.	Seadrift, Tex.
Taft, La.	Texas City, Tex.
Bound Brook, N.J.	Institute, W.Va.
Somerset, N.J.	South Charleston, W.Va.
Ponce, P.R.	

Gases
 Over 100 Gas Plants at various locations throughout the U.S.

Engineering Products and Processes	
Ontario, Calif.	Piscataway, N.J.
San Diego, Calif.	Tonawanda, N.Y.
Indianapolis, Ind.	Ashtabula, O.
Niagara Falls, N.Y.	Florence, S.C.
Keasby, N.J.	Houston, Tex.

Metals and Carbons	
Hot Springs, Ark.	Marietta, O.
Bishop, Cal.	Yabucoa, P.R.
King City, Cal.	Greenville, S.C.
Rifle, Colo.	Clarksville, Tenn.
Uravan, Colo.	Columbia, Tenn.
Robinson, Ill.	Lawrenceburg, Tenn.
Templute, Nev.	Clarkburg, W.Va.
Niagara Falls, N.Y.	Riverton, Wyoming
Cleveland, O.	
Fostoria, O.	

Specialty Products	
Osceola, Ark.	Sunnyvale, Cal.
Bensenville, Ill.	Pauls Valley, Okla.
Columbus, Ga.	Cleveland, O.
Woodbine, Ga.	Ambler, Pa.
Chicago, Ill.	Barceloneta, P.R.
Kentland, Ind.	Greenville, S.C.

Record of Earnings, years ended Dec. 31 (in \$):

	Net Sales	Cost and Expenses	Balance	Oth. Inc. & Ded. (Net)	Inc. Bef. Taxes	Income Taxes	Net Income	Common Dividends	Com. Shs. Outstand.	Earn. Per Com. Sh.
1983	4,878,918	1,559,171	319,747	3,118	322,866	133,797	189,069	108,409	30,117,005	6.28
1982	2,063,901	1,691,446	372,456	659	373,115	146,197	226,917	120,661	60,388,484	3.76
1981	2,223,980	1,856,519	367,461	3,597	371,058	140,085	230,973	120,822	60,423,434	3.82
1980	2,545,594	2,251,352	294,242	d30,074	264,168	89,362	170,686	120,878	60,454,484	2.82
1979	2,685,921	2,378,892	307,029	d52,812	254,817	97,850	156,967	120,913	60,465,024	2.60
1978	2,933,015	2,574,167	358,848	d17,685	341,163	154,943	186,220	120,957	60,479,456	3.08
1977	3,026,326	2,677,606	348,720	d51,786	296,934	139,622	157,312	120,959	60,479,456	2.60
1976	3,037,529	2,692,624	344,905	d53,684	291,221	138,248	152,973	121,060	60,567,726	2.53
1975	3,261,322	2,825,659	435,663	d50,454	385,209	177,795	207,414	121,300	60,732,399	3.42
1974	3,938,754	3,340,199	598,555	d50,232	548,323	257,381	290,942	126,100	60,867,910	4.78
1973	5,320,100	4,371,700	948,400	d44,200	904,200	379,100	525,100	132,600	61,016,192	8.61
1972	5,665,000	4,868,000	797,000	d51,500	745,500	363,800	381,700	146,900	61,335,914	6.23
1971	6,345,700	5,536,700	809,000	d82,500	726,500	266,400	441,200	153,800	61,786,654	7.15
1970	7,036,100	6,305,400	730,700	d136,200	594,500	178,800	385,100	178,400	64,533,218	6.05

Includes shares issued under employees stock purchase plan and held by company as collateral. Before extraord. items; after: 1972, \$205,241,000 (\$3.38); 1973, \$157,834,000 (\$2.61).

BALANCE SHEETS

COMPARATIVE CONSOLIDATED BALANCE SHEET, AS OF DEC. 31

(Taken from reports filed with Securities and Exchange Commission)

(in thousands of dollars)

ASSETS	1983	1982	1981	1980	1979	1978	1977
Cash	46,000	34,000	93,000	69,000	115,700	109,100	93,100
Time deposits & mkt. secur.	72,000	120,000	160,000	174,000	333,300	174,600	230,000
Notes & accounts receivable (net)	1,460,000	1,420,000	1,513,000	1,598,000	1,433,300	1,258,600	1,086,600
Raw materials and supplies	473,000	542,000	558,000	588,000	498,800	436,500	425,600
Work in process	421,000	473,000	551,000	464,000	445,600	396,200	380,000
Finished goods	616,000	725,000	793,000	835,000	829,200	708,400	700,200
Other current assets	157,000	187,000	208,000	191,000	155,300	154,300	147,400
Total current assets	3,245,000	3,501,000	3,876,000	3,919,000	3,811,200	3,237,700	3,062,900
Invest. & adv. affiliates (not cons.)	300,000	293,000	307,000	239,000	213,100	178,200	185,800
Other investments	121,000	125,000	104,000	119,000	107,100	113,100	82,600
Property, plant and equipment	10,708,000	10,793,000	10,047,000	9,636,000	8,729,500	8,050,100	7,530,800
Reserve for depreciation	4,426,000	4,437,000	4,253,000	4,429,000	4,271,200	3,931,200	3,690,000
Property account, net	6,282,000	6,356,000	5,794,000	5,207,000	4,458,300	4,118,900	3,840,800
Patents, trade marks and goodwill				59,000	92,600	90,200	94,600
Unpaid insurance, taxes, etc.	347,000	341,000	342,000	61,000	72,700	70,400	86,600
Long-term receivables				55,000	47,600	57,700	69,900
Total	10,295,000	10,616,000	10,423,000	9,659,000	8,802,600	7,866,200	7,423,200
LIABILITIES							
Accounts payable, etc.	492,000	415,000	440,000	432,000	528,000	433,800	377,100
Accrued taxes (incl. income taxes)	114,000	164,000	193,000	275,000	239,400	220,000	219,100
Short-term borrowings	240,000	328,000	217,000	266,000	155,600	338,200	288,100
Other accrued liabilities	825,000	788,000	771,000	771,000	765,900	570,800	486,600
Notes, current installment	91,000	59,000	108,000	51,000	51,900	53,600	46,800
Total current liabilities	1,762,000	1,754,000	1,729,000	1,795,000	1,740,800	1,616,400	1,417,700
Debt income tax & inv. tax cr.	865,000	944,000	1,001,000	673,000	611,700	529,300	481,300
Other deferred credits				226,000	340,800	318,200	255,800
Long term debt	2,387,000	2,428,000	2,101,000	1,859,000	1,773,100	1,482,500	1,600,900
Minority interest in consol. subs.	352,000	331,000	329,000	330,000	293,700	281,300	260,500
Capital stock	755,000	739,000	669,000	607,000	557,100	521,700	503,600
Equity adj., fgn. currency translation	d333,000	d249,000					
Earned surplus	4,509,000	4,670,000	4,595,000	4,170,000	3,486,400	3,117,900	2,905,100
Total stockholders' equity	4,931,000	5,160,000	5,264,000	4,777,000	4,043,500	3,639,600	3,408,700
Treasury shares	2,000	1,000	1,000	1,000	1,000	1,100	1,700
Net stockholders' equity	4,929,000	5,159,000	5,263,000	4,776,000	4,042,500	3,638,500	3,407,000
Total	10,295,000	10,616,000	10,423,000	9,659,000	8,802,600	7,866,200	7,423,200
Net current assets	1,483,000	1,747,000	2,147,000	2,124,000	2,070,400	1,621,300	1,645,200
PROPERTY ACCT.—ANALYSIS							
Additions at cost	761,000	1,179,000	1,186,000	1,129,000	831,300	687,800	805,400
Retirements or sales	750,000	126,000	798,000	223,000	152,300	530,100	181,000
Other additions	5,000	49,000	23,000		400	361,600	70,000
Other reductions	101,000	121,000					
DEPREC. RESERVE—ANALYSIS							
Addition charged to income	477,000	426,000	386,000	326,000	469,300	416,400	358,400
Retire. & renewals charged to res.	454,000	108,000	565,000	170,000	129,400	243,300	150,500
Other changes	3,000	20,000	3,000	2,000	100	68,100	21,300

1983, 70,567,283; 1982, 70,153,489; 1981, 68,581,957; 1980, 67,366,785; 1979, 66,205,559; 1978, 65,065,223; 1977, 64,533,218 common shares.

Shares at cost: 1983, 101,784; 1982-80, 86,888; 1979, 87,090; 1978, 99,846; 1977, 160,420.

1978: Consists principally of a transfer from 20 to 50%-owned companies. Additionally, both years (1978 and 1979) include additions for subsidiaries not previously consolidated and all years presented include certain reclassifications of units of property. Credits to Construction in Progress and Other include charges to Income for depletion of mineral properties of \$0.2 million in 1978, \$0.4 million in 1979, and \$0.3 million in 1980.

After reserves (1981, \$28,000,000; 1980, \$1,000,000; 1979, \$29,200,000).

At lower of cost or market on LIFO method for U.S. companies and beginning in 1974, for certain affiliates operating outside the U.S. Generally the "average cost" method is used by all other subsidiaries and for miscellaneous supplies.

	Book Value	Reserves
Land & impr.	524	184
Buildings	1,196	431
Mach. & equip.	8,093	3,801
Constr. in prog.	895	10
Total	10,708	4,426

Notes to Financial Statements

Principles of consolidation—The consolidated financial statements include the assets, liabilities, revenues, and expenses of all significant subsidiaries except Ucar Capital Corporation, which is carried at equity in net assets. All significant intercompany transactions have been eliminated in consolidation. Investments in significant companies 20% to 50% owned are carried at equity in net assets, and Union Carbide's share of their earnings is in-

cluded in income. Other investments are carried generally at cost or less.

Marketable securities—Marketable securities are carried at the lower of cost or market. Carrying value was substantially the same as market value at December 31, 1983 and 1982.

Inventories—Inventory values, which do not include depreciation, are stated at cost or market, whichever is lower. Cost is determined generally on the "last-in, first-out" (LIFO) method for U.S. companies and for certain subsidiaries operating outside the United States. The "average cost" method is used by most other subsidiaries.

Approximately 66% of inventory amounts before application of the LIFO method at December 31, 1983 (67% at December 31, 1982) have been valued on the LIFO basis. It is estimated that if inventories had been valued at current costs, they would have been approximately \$1,048 million and \$1,176 million higher than reported at December 31, 1983, and December 31, 1982, respectively.

Reductions of inventory quantities in 1983 and 1982 resulted in liquidations of certain LIFO inventory quantities, principally domestic petrochemicals inventories, acquired at lower costs prevailing in prior years. These liquidations reduced cost of sales by \$34 million and \$56 million in 1983 and 1982, respectively, and increased 1983 and 1982 net income by \$21 million, or \$0.30 per share, and \$30 million, or \$0.43 per share, respectively.

Fixed assets and depreciation—Fixed assets are carried at cost. Expenditures for replacements are capitalized and the replaced items are retired. Gains and losses from the sale of property are included in income.

Depreciation is calculated on a straight-line basis. The Corporation and its subsidiaries

generally use accelerated depreciation methods for tax purposes where appropriate.

Patents, trademarks, and goodwill—Amounts paid for purchased patents and for securities of newly acquired subsidiaries in excess of the fair value of the net assets of such subsidiaries have been charged to patents, trademarks, and goodwill. The portion of such amounts determined to be attributable to patents is amortized over their remaining lives and the balance is amortized over the estimated period of benefit, but not more than 40 years.

Research and development—Research and development costs are charged to expense as incurred. Depreciation expense applicable to research and development facilities and equipment is included in Depreciation in the income statement (\$12 million in 1983, \$8 million in 1982, and \$7 million in 1981).

Income taxes—Provision has been made for deferred income taxes where differences exist between the period in which transactions affect taxable income and the period in which they enter into the determination of income in the financial statements.

Benefits from investment tax credits and research and experimentation tax credits are included currently in net income.

Retirement program—The Corporation's contribution to the U.S. retirement program for each year is based on the recommendation of an independent actuarial firm using the entry age normal method. Accrued costs are funded for all employees age 25 and over, with unfunded prior service costs being amortized over periods up to 30 years.

Program costs of consolidated international subsidiaries are accounted for substantially on an accrual basis.

Centerville, Ia.
Clinton, Ia.
St. Joseph, Mo.
St. Louis, Mo.
Shelby, N.C.

Batteries; Home & Automotive Products
Rogers, Ark.
East Hartford, Conn.
Cartersville, Ga.
Alsip, Ill.
Red Oak, Ia.
Maryville, Mo.
Asheboro, N.C.

Greenwood, S.C.
Loudon, Tenn.
Washougal, Wash.
Institute, W.Va.

Freehold, N.J.
Cleveland, O.
Fremont, O.
Southampton, Pa.
Bennington, Vt.
St. Albans, Vt.

International

Argentina
Australia
Belgium
Brazil
Canada
Colombia
Costa Rica
Ecuador
Egypt
France
Germany (West)
Ghana
Greece
Hong Kong
India
Indonesia
Italy
Ivory Coast
Japan
Kenya
Malaysia
Korea
Mexico
New Zealand
Nigeria
Philippines
Singapore
South Africa
Spain
Sri Lanka
Sudan
Sweden
Switzerland
Thailand
United Kingdom
Venezuela

CONSTRUCTION EXPENDITURES

Construction expenditures by company and majority owned subsidiaries totaled approx. \$761,000,000 in 1983 compared to \$1,179,000,000 in 1982.

MANAGEMENT

Officers

W.M. Anderson, Chmn. & Chief Exec. Off.
Alec Flamm, Pres. & Chief Oper. Off.
J.C. Stephenson, Exec. Vice-Pres. & Chief Fin. Off.

INCOME ACCOUNTS

COMPARATIVE CONSOLIDATED INCOME ACCOUNT, YEARS ENDED DEC. 31 (Taken from reports filed with Securities and Exchange Commission)

	1983	1982	1981	1980	1979	1978	1977
Net sales	9,001,000	9,061,000	10,168,000	9,994,000	9,176,500	7,869,700	7,036,000
Plant cost & distribution exp.	6,581,000	6,687,000	7,431,000	7,186,000	6,490,700	5,580,400	4,910,000
Research & development	245,000	240,000	207,000	166,000	160,800	155,900	153,000
Non-recurr. chg.	241,000						
Selling, admin. & other exp.	1,243,000	1,249,000	1,221,000	1,152,000	1,052,600	942,900	860,000
Depreciation & depletion	477,000	426,000	386,000	326,000	469,700	416,600	154,000
Balance	455,000	459,000	923,000	1,164,000	1,002,700	773,900	730,000
Other income, net	120,000	162,000	164,000	41,000	424,100	12,400	12,000
Less interest on l.-t. & s.-t. debt	252,000	236,000	171,000	153,000	161,300	159,300	149,100
Balance	82,000	385,000	916,000	1,052,000	799,300	627,000	594,000
Current income taxes	90,000	92,000	125,000	175,000	147,400	119,800	81,000
Deferred income taxes	cr100,000	cr34,000	133,000	185,000	104,000	85,700	97,000
Minority interest	32,000	36,000	47,000	49,000	25,000	32,500	31,000
Equity in earn. 20-50% owned cos.	19,000	19,000	38,000	30,000	33,300	5,300	1,000
Net income bef. cum. effect of acctg. chge.	79,000	310,000	649,000	673,000	556,200	394,300	385,100
Cum. eff. of chge. in acct. prin. for the invest. tax credit				cr217,000			
Net income	79,000	310,000	649,000	890,000	556,200	394,300	385,100
Retained earnings, beg. of year	4,670,000	4,595,000	4,170,000	3,486,000	2,312,000	2,904,800	2,000,000
Dividend	240,000	235,000	224,000	206,000	190,100	181,200	158,000
Retained earnings, end of year	4,509,000	4,670,000	4,595,000	4,170,000	3,486,400	3,117,900	2,000,000
SUPPLEMENTAL P. & L. DATA							
Maintenance and repairs	524,000	579,000	658,000	634,000	616,300	518,600	454,000
Deprec., depletion & amortization	477,000	426,000	386,000	326,000	469,700	416,600	154,000
Taxes other than income taxes	270,000	271,000	271,000	261,000	233,200	207,100	187,000
Advertising	126,000	130,000	125,000	113,000	85,900	76,500	68,000
Long-term debt							
New borrowings		172	421				
Reductions		(200)	(81)				
Inc. (decr.) in sht.-tm. debt and curr. portion of lg.-tm. debt		(56)	62				
Increase in common stock		15	70				
Total funds from financing		(69)	472				
Decr. (incr.) in inventories		204	142				
Reductions of net fixed ass. Disposals		101	18				
Translation adj.		64	76				
Decr. (incr.) in invest. and other ass.		12	(9)				
Incr. (decr.) in payables and accruals		22	(55)				
Other—net							
Total funds from other sources		450					
Total funds provided		1,089					
Funds used: Dividends		240					
Capital expend.		761					
Incr. (decr.) in notes and accounts rec.		40					
Equity adjs. from fgn. currency translation		84					
Total funds used		1,125					
Net increase (decrease) in funds		(36)					
Cash and time depts. and sht.-tm. mktable, secs. at end of year		118					

[1] Includes related portions of items shown under "Supplementary P. & L. Data" below statement.

[2] Includes an adjustment for a credit of \$2.4 million in 1979 for companies with which business combinations were affected on a pooling of interest basis (\$0.3 million charge in 1978 and 1977).

[3] Non-recurring charge from closing of facilities.

Statement of Changes in Financial Position (in million \$):

	1983	1982
Funds Provided:		
Net income	79	310
Non-cash charges (credits) to net inc.		
Non-recurring charge—closing of facilities	241	
Deprec.	477	426
Def. inc. taxes	(100)	(34)
Other non-cash charges—net	11	13
Total fund from operations	708	715

Executive Vice-Pres.
R.D. Kennedy J.M. Rehfield
J.H. Field E.E. Tarika
H.F. Tomfohrde III
J.B. Reid, Vice-President & Sec.
J.A. Stichnoth, Vice-Pres. & General Counsel
R.S. Wishart, Vice-Pres.—Federal Govt. Rel.
L.G. Peloubet, Vice-Pres. & Contr.
R.H. Towe, Vice-Pres. & Treas.

Vice-Presidents
A.S. Hart R.E. Pyle
A.C. MacLeod

Directors

(Showing Principal Corporate Affiliations)
Warren M. Anderson, Chmn. & Chief Exec. Off., Union Carbide Corp.; Dir. Aetna Life and Casualty Co.; Southern Natural Gas Co.; Sonat Inc.; American Red Cross; National Executive Service Corp.

R. Manning Brown, Jr. Dir., New York Life Insurance Co.; Avon Products, Inc.; Louisiana Land and Exploration Co.; J.P. Morgan & Co. Inc.; Morgan Guaranty Trust Co. of New York; Union Camp Corp.; Associated Dry Goods Corp.; New York Chamber of Commerce; Economic Development Council of City of New York.

Roberto DeJesus Toro, Chmn. & Chief Exec. Off., Banco de Ponce; Dir., Puerto Rico Cement Co., Inc.; Puerto Rican-American Insurance Co., Inc.

James L. Ferguson, Chmn. & Chief Exec. Off., General Foods Corp.; Dir., Chase Manhattan Corp.; Chase Manhattan Bank; Federated Department Stores, Inc.

Alec Flamm, Pres. & Chief Oper. Off., Union Carbide Corp.

Harry J. Gray, Chmn., Pres., Chief Exec. Off. and Chief Oper. Off. of United Technologies Corp.; Dir., Citicorp, Citibank, N.A., Aetna Life & Casualty Co.

James M. Hester, Pres., The New York Botanical Garden.

Jerome H. Holland, Dir., American Telephone and Telegraph Co.; General Foods Corp.; Manufacturers Hanover Corp.; Manufactur-

er's Hanover Trust Co.; The Continental Corp.; The Continental Insurance Companies; Chrysler Corp.; Federated Department Stores, Inc.; Culbro Corp.; The New York Stock Exchange; Pan American Banchshares Inc.; Zale Industries Inc.

Jack B. Jackson, Chmn. of Bd., Citizens Bank, Richardson, Tex.; Dir., Chisholm National Bank; Signal Media Corp.; Tulsa Marketing Corp.

Horace C. Jones, Chmn. Exec.-Fin. Committee & Dir., Burlington Industries, Inc.; Provident Mutual Life Insurance Co. of Philadelphia; Union Camp Corp.; Russell Reynolds Inc.

C. Peter McCollough, Chmn. & Chief Exec. Off., Xerox Corp.; Dir., The New York Stock Exchange; Citicorp; Citibank N.A.; Council on Foreign Relations; U.S./U.S.S.R. Trade and Economic Council, Inc.

William S. Sneath, Retired Chmn. of Bd. & Chief Exec. Off., Union Carbide Corp.; Dir. Metropolitan Life Insurance Co.; Rockwell International; Stratton Corp.

Russell E. Train, Pres., World Wildlife Fund U.S.

Kathryn D. Wriston, Dir., Federated Department Stores, Inc.

General Counsel: J.A. Stichnoth

Dir. of Purchasing: M.M. Rand

Auditors: Main Hurdman.

Shareholder Relations: Robert W. Wesson, Asst. Sec. & Asst. Treas. Director of Investor Relations, Tel.: (203)794-6441.

Director Meeting: Fourth Wednesday of month except for Dec. and Aug.

Annual Meeting: Fourth Wednesday in Apr.

No. of Stockholders: Apr. 28, 1983, 125,000

No. of Employees: Dec. 31, 1983, 99,500.

General Offices: Old Ridgebury Rd., Danbury, CT 06817. Tel.: (203)794-2000.