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ESSEX INTERNATIONAL INC.

Skillings Mining Review 6/2/73, p. 19  
" " " 12/29/73, p. 21

Mining Congress Journal, February, 1973, p. 36  
" " " February, 1974, p. 105



# SAFFORD ORE BODY WORTH \$10 BILLION

By **RICHARD E. WILBUR**  
Citizen Business Editor

Four major companies are feverishly scouting and doing exploratory drilling toward eventual development of more than one billion tons of copper ore worth at least \$10 billion near Safford.

The Safford area, 124 miles northeast of Tucson, is believed destined to become one of the Western Hemisphere's biggest

copper mining camps because of activity by the four firms and two other substantial companies.

The four are Phelps Dodge Corp., Kennecott Copper Corp., American Metal Climax Inc., and Essex International Inc.

Inspiration Consolidated Copper Co. and Quintana Minerals Co. also are actively interested in the area, which is located in the Lone Star Mining District.

If its potential is fulfilled, Safford will be on a par with several other huge copper centers — the camp comprising Twin Buttes, Sierrita, Esperanza, Pima and Mission mines south of Tucson, San Manuel northeast of here, and Cananea in northern Mexico — each of which has at least one billion tons of copper ore with an average grade of .75 per cent or more.

These are known as "elephants," in exploration lingo. The .75 per cent grade means capability of recovering approximately 15 pounds of copper per ton of rock mined. It may not sound like much, but that's how copper companies make money these days.

Safford's emergence as a copper center is in the works while another longtime center, Bisbee, is dying.

But the giant of the North American continent may prove to be the Morenci-Metcalf ore body further east and north of Safford — so huge that estimates of its size range upward from 3 billion to 5 billion tons, much of it .81 per cent grade.

That's the prize Arizona possession of Phelps Dodge. Morenci-Metcalf, about 150 miles northeast of Tucson, is qualified

by the estimates to surpass the continent's current No. 1, the Bingham Mine operated in Utah by Kennecott Copper. Kennecott has estimated Bingham ore reserves at 1.7 billion tons, with a .71 per cent average grade.

In fact, in potent new Arizona discoveries, Phelps Dodge seems to be leading the pack. At Safford, PD has what geologists of other companies call "the juicy one" among copper ore bodies so far discovered in the area.

PD has publicly estimated its Safford deposit at 250 million tons of .92 per cent copper — relatively high grade. Also, the deposit is known to be low in sulfur. So PD's Safford product won't create as much sulfur dioxide in the smelter.

Geologists of other companies maintain that PD's Safford ore

body will probably total at least one billion tons, much of it nearly the same .92 per cent grade.

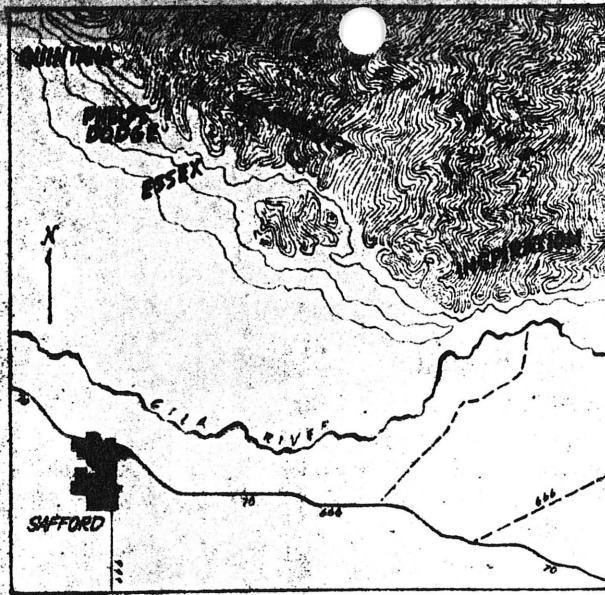
"There seems to be no bottom," said one awed exploration man. "Their deepest drill holes are still in ore."

PD says it will spend nearly \$13 million on its Safford exploration program, started several years ago and now in what the company calls preliminary development stage. Scheduled for completion in mid-1973, the extensive program will include a test this year to determine whether the underground mining method known as block caving, used at San Manuel, would be practical here.

Kennecott, which was first on the Safford scene in the early 1960s, spent about \$4 million for land there, drilled at a cost of

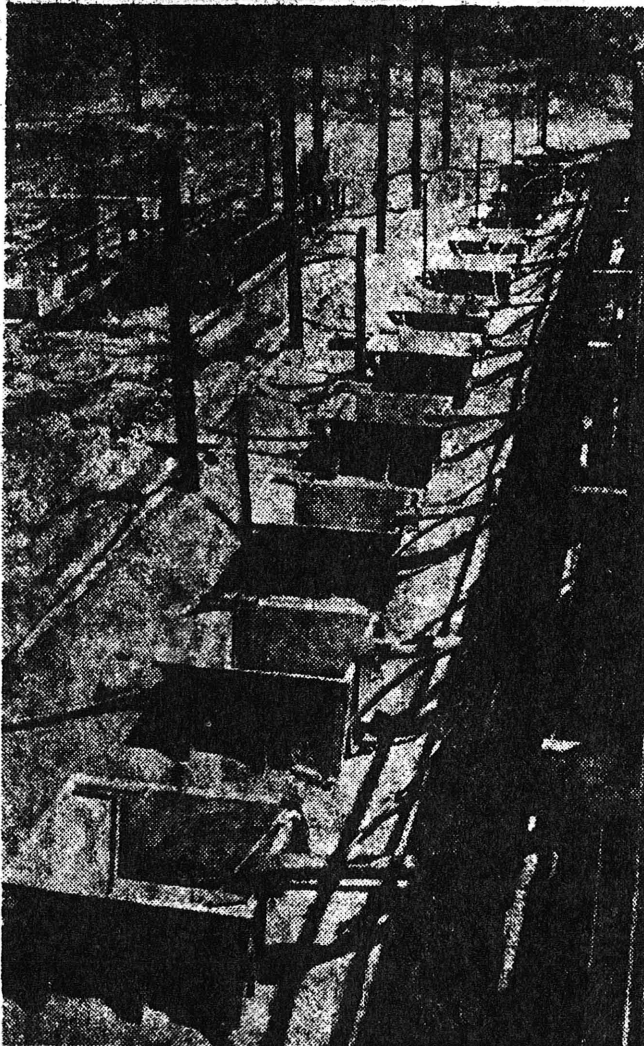
Continued page 4

# Copper find near Safford said valued at \$10



## Future Copper Camp

About 124 miles northeast of Tucson, the Safford area is focus of intense exploration for copper by the big companies indicated above, and by the giant molybdenum producer, American Metal Climax Inc.



Chicago photo by Bruce Hopkins

## Inspiration samples

Test kits are being used by Inspiration Consolidated

about \$2 million more, and discovered an ore body in the Gila mountains estimated as totaling two billion tons of .40 per cent copper.

The company decided conventional mining methods wouldn't be economic because of depth and the low copper content of the ore body. It talked about trying a nuclear device in a \$13.5 million project with the Atomic Energy Commission called Project Sloop, but hasn't actively pursued the idea.

Re-evaluating a few months ago, Kennecott started drilling again, on another part of its Safford property. This second try has discovered ore much deeper, as far down as 5,000 feet.

Now, Kennecott has field tests of leaching (acid treatment) method going full-tilt on its Safford property, as well as at the firm's eastern laboratory, trying to find a new

method to process the copper ore far beneath the earth. This would, if successful, eliminate need for both mill and smelter treatment required now for the sulfide kind of ore concerned. For ore of another kind, oxide, leaching has long been effective and in use.

Essex International, an aggressive newcomer to exploration for copper, obtained a

strategic land position with a group of claims south of the PD and Kennecott deposits several months ago. Based in Fort Wayne, Ind., the firm is one of the nation's leading copper buyers, using the metal in products it manufactures at 97 factories.

In the Safford area, the company also has acquired part ownership in a small operating property, the San Juan Mine, and has drilled on property south of the Phelps Dodge ore body.

Essex is believed to have a deep exploration potential like that of the other two companies, but is keeping mum about its findings.

American Metal Climax (AMAX) isn't talking, either. But others say this huge molybdenum firm, which recently found an important copper deposit in Wyoming, has staked about 400 mining claims in the Safford area. These claims cover about 10 square miles, approximately the same size of territory as PD's claims cover.

Interested in the Safford area also is Quintana Minerals, which has drilled several holes in a claim area a few miles northwest of the PD ore body.

Inspiration Consolidated Copper has discovered a deposit near Safford with a basic proven ore reserve of 79.3 mil-



# Safford \$2 billion

million tons of oxide ore with a copper content of .36 per cent, the company recently told stockholders.

"A much larger tonnage of oxide ore is indicated," Inspiration added, "underlaid by

→  
a mixed oxide-sulfide zone above a low-grade sulfide zone.

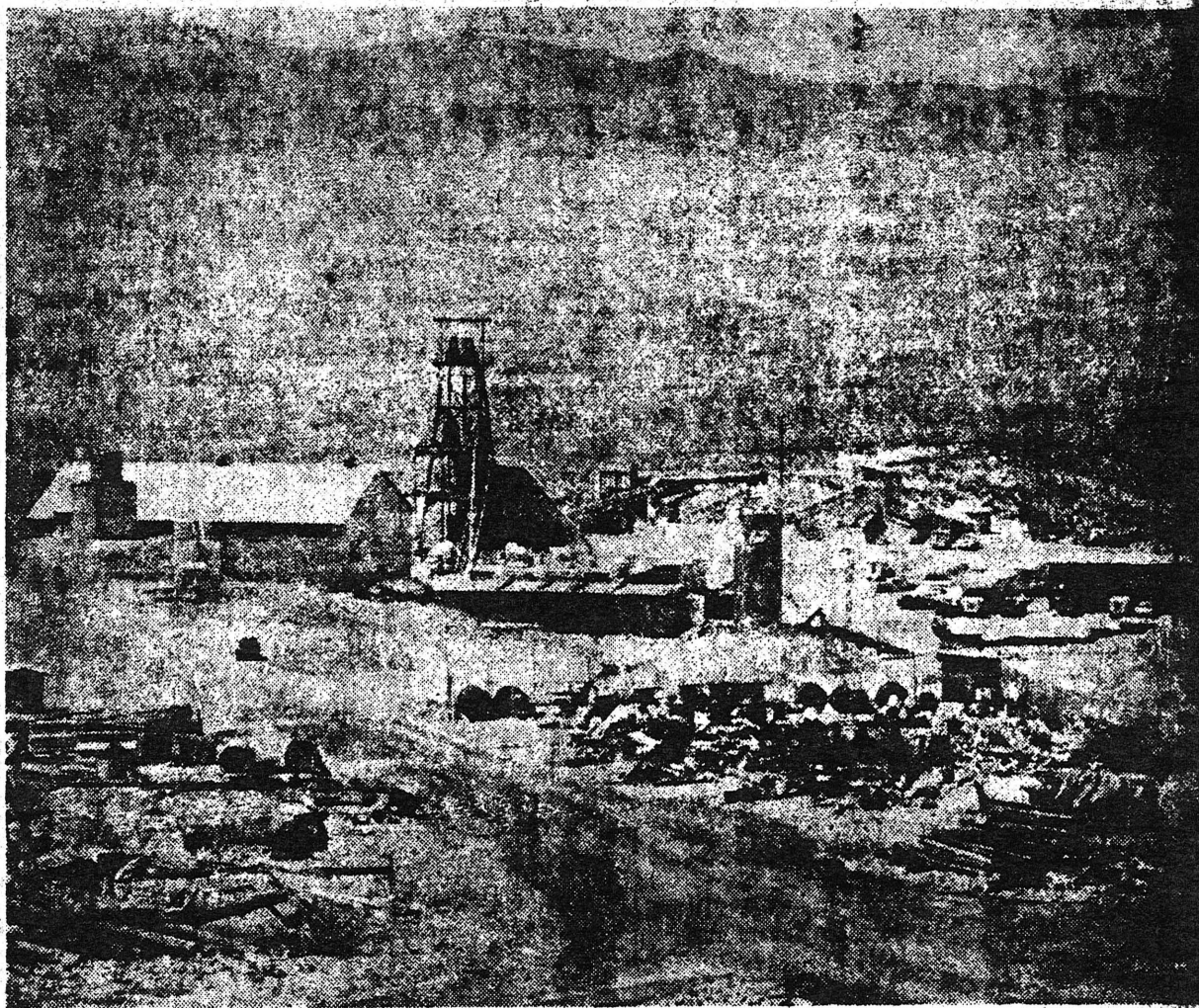
"Operation of the property awaits an increase in demand for copper, and prospects for an advantageous cost-price relationship."

Sulfide ore is the type found at the PD Safford deposit and the biggest copper mining camps in Arizona. Such ore is processed in mills and smelters. Oxide-type ore is treated by leaching, generally with sulfuric acid.

Inspiration's Safford property could soak up some of the huge amounts of sulfuric acid to be made by Arizona smelters, obligated by air pollution regulations to convert much of their customary sulfur dioxide gas emissions to that form.

At 50 cents a pound, which is near the current selling price of copper, the PD Safford deposit's copper content is worth about \$2¼ billion in the ground, not allowing for the cost of extraction.

Kennecott's original deposit is worth about \$8 billion in the same context.



— Citizen photo by Bruce

## Phelps Dodge's Newest Bonanza

Near Safford, preliminary development of its latest copper ore body discovery is under way by Phelps

Dodge Corp. The tall head-frame is entrance shaft that goes down 1,800 feet.

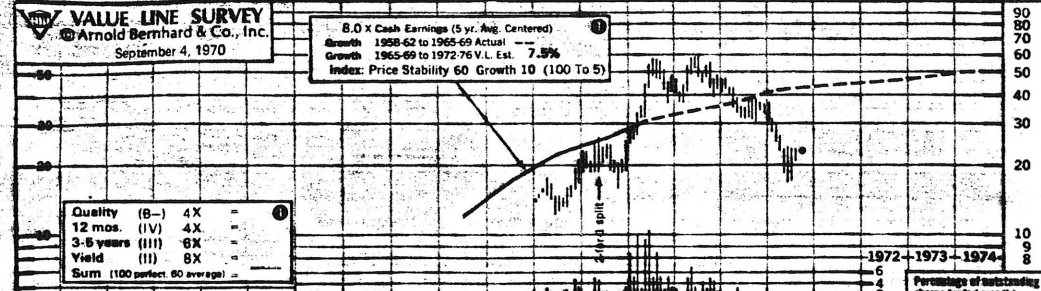
**Essex International, Inc.**, of Fort Wayne, Indiana, has announced the formation of a Natural Resources Office in Tucson. Essex officials stated the new office will be responsible for studying raw material sources for the company's requirements in copper and aluminum. It also will consider the feasibility of new technologies that could effect greater efficiency and economy in the processing of copper and related materials.

Jerome M. Willis, former president of Diversified Industries Development Corporation, Seattle, Washington, has been appointed director of the Essex Natural Resources office. Clyde Osborn has joined the office as director of technology.

Essex is a manufacturer of products used in the production, transmission and control of electric current; plastics, gas controls and metal products.

*PAI Div 9/1969*

**ESSEX INTERNATIONAL NYSE-EXC** Recent Price **23** Estimated Yield **5.2%** Next div'd meeting: about 11/16 goes ex about: 9/23 **993**



Year	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	Estimates in italics 1973-75	
Price						174.6	169.5	173.5	196.5	217.0	248.6	297.9	375.3	356.3	426.0	552.3	600		Sales (\$ mill.)	
Operating Margin							8.5%	9.9%	11.6%	9.0%	9.8%	10.4%	14.3%	19.7%	15.9%	13.1%	12.0%		Operating Margin	
Working Cap							46.3	48.4	54.5	62.2	75.5	90.9	90.5	94.3	128.2	141.8	156		Working Cap' (\$ mill.)	
Net Plant							17.3	18.1	19.1	18.3	21.1	27.8	40.0	60.6	70.1	103.0	123		Net Plant (\$ mill.)	
Depreciation Rate										9.2%	8.3%	8.0%	7.5%	7.6%	5.7%	5.9%	5.8%		Depreciation Rate	
Funded Debt							62.1	66.7	51.5	58.2	66.9	87.7	105.5	130.5	146.0	191.7	200		Funded Debt (\$ mill.)	
Net Worth							8.8	6.2	7.4	9.0	7.4	9.9	13.1	24.5	29.9	27.5	28.0	26.8		Net Worth (\$ mill.)
Income Tax Rate							50.0%	50.4%	50.8%	51.2%	49.4%	48.6%	49.2%	48.7%	49.8%	52.5%	52.7%	50.0%		Income Tax Rate
% Earned Total Cap'l							10.0%	11.1%	17.5%	12.7%	14.8%	14.9%	23.2%	22.9%	18.9%	14.6%	14.5%		% Earned Total Cap'l	
% Earned Net Worth								12.53	9.66	7.18	7.03	8.00	8.00	8.35	8.37	8.80	8.80		% Earned Net Worth	
Comm. Shs. Outst'g								5.32	5.33	8.11	9.51	10.96	13.18	15.63	17.44	18.72	18.85		Comm. Shs. Outst'g	
Book Value per sh.								13.84	20.34	30.23	35.37	46.92	42.67	50.89	59.47	68.20	68.20		Book Value per sh.	
Sales per sh.								0.81	1.33	1.58	1.98	2.23	3.77	4.52	4.11	4.25	4.00		Sales per sh.	
Cash Earn'gs per sh.									0.59	0.93	1.03	1.40	1.64	3.06	3.29	3.10	2.80		Cash Earn'gs per sh.	
Cap'l Spending per sh.											0.98	1.43	2.24	3.04	1.96	3.45	4.25		Cap'l Spending per sh.	
Net Income per sh.										0.02	0.02	0.10	0.13	22%	15%	20%	28%	30%	24%	Net Income per sh.
Div'ds Decl'd per sh.												0.50	0.55	0.90	1.15	1.20	1.20		Div'ds Decl'd per sh.	
Div'd Pay-out Ratio												9.5	6.9	11.5	14.5	8.7			Div'd Pay-out Ratio	
Avg. Ann. P/E Ratio												3.2%	2.6%	2.2%	2.4%	4.4%			Avg. Ann. P/E Ratio	
Avg. Ann. Div. Yield																				Avg. Ann. Div. Yield

PRICE EARNINGS RATIO **8.2** DIVIDEND YIELD **5.2%** QUALITY **B-** PERFORMANCE **IV** APPRECIATION **III** INCOME YIELD **II** NORMAL AVG. PRICE **47**

**CAPITAL STRUCTURE** as of 6/30/70  
 Debt: \$98.0 mill. Interest \$7.0 mill.  
 Pfd Stock \$28.2 mill. Div'd \$1.6 mill.  
 552,887 shs. \$2.84 Series A. cum. pfd. (\$1 p.v.) convertible 1 for 1, redeemable after 1/1/76 at \$60 a sh.  
 Common Stock 8,800,470 shares

Essex International provides an above-average yield. The common stock returns 5.2% on the estimated \$1.20-a-share year-ahead dividend. Even though earnings have declined so far this year, the company's payout ratio and its financial position are adequate to maintain the dividend at current levels. If, as is expected, continuing good business conditions provide fertile ground for revived profits in the years ahead, increases from current levels should ensue.

company has continued to build copper inventories. Like many companies, Essex is a little short of cash and equivalents (in comparison with past years). However, it has a five-year revolving credit agreement on which it may draw. Working capital should be adequate to support the estimated year-ahead level of sales. The estimated dividend pay-out (34%) is high, relative to the company's past experience, but satisfactory for maintenance of the current dividend.

Calendar	1966	1967	1968	1969	1970
Q1	90.2	98.0	84.9	102.2	375.3
Q2	98.7	82.6	75.3	99.7	356.3
Q3	117.7	105.8	96.5	106.0	426.0
Q4	119.8	142.6	144.7	145.2	552.3
Full Year	143.8	155.9	150.0	150.3	600.0

Income accounts will find the convertible preferred of interest. Here, the yield is a liberal 7.5%. Call protection extends to January 1, 1976. The preferred is convertible into one share of common, a feature that should grow attractive as common dividends increase.

Softening in the price of copper would help earnings. Essex buys as much as three-quarters of its supply on world markets. During the first half of 1970, per-share earnings were penalized 31c by the purchase of copper under forward firm contracts at historically high prices. Correspondingly, the recent drop in the world price to below U.S. producer prices will not be felt immediately.

Calendar	1966	1967	1968	1969	1970
Q1	70	81	48	107	306
Q2	87	105	54	112	358
Q3	96	105	53	75	329
Q4	84	81	76	62	303
Full Year	81	50	80	67	280

New outside capital has strengthened the company's financial position. In April, Essex raised \$40 million through the sale of 9 1/2% five-year notes. At June 30th (see table below), the net working capital position was stronger than the average for the five preceding years. Besides paying off bank loans with the proceeds of the notes, the

CASH POSITION		1965-69 Avg	6/30/70
Current Assets to Current Liabilities:		281%	347%
Cash & Equip's to Current Liab.:		47%	23%
Working Cap'l to Sales:		28%	24%
Debt Due Curr. Yr.:	\$3.1 mil.		Cash Flow (Est.) \$36.8 mil.

Calendar	1966	1967	1968	1969	1970
Q1	125	125	125	15	53
Q2	15	15	25	25	80
Q3	25	25	30	30	110
Q4	30	30	30	30	120
Full Year	30	30	30	30	120

**BUSINESS:** Essex International (formerly Essex Wire) produces wire and cable for the construction, appliance, and public utility industries (34% of sales); wire harness assemblies and electrical and electro-mechanical devices for the automotive industry

(30%), electrical controls, plastic and metal fabrications, and electrical materials for the replacement market (19%), and magnet wires for electric motors, generators, and transformers (17%). Operates 17 plants and 28 warehouses in 25 states and Canada though 10

divisions. Since 1959, sales, aided by acquisitions, increased 216% (GNP, 93%). Employs 19,000; has 7,332 shareholders. Chrmn. W.F. Probst owns 13% of outstanding common. Pres.: P.O'Malley Inc.; Mich. Add.: 1601 Wall St., Fort Wayne, Ind. 46804

See Explanation of Terms on p. 1057. Div'd payment dates: Jan. 15, Apr. 15, July 15, Oct. 15. Not publicly owned until 1965. 1964 & 1965 years restated to reflect 80-for-1 split & recapitalization. Incl. residual shares after 1968. Excl. intangible assets: \$4.2 mill. (48c a sh.). NMF-No Fully diluted in 1973-75. meaningful figure.



Essex International is reportedly taking a long look in the Pearce District of Cochise County. The District was originally a precious metals producer but also is known to have considerable copper show. Johnny Pearce discovered the great Commonwealth lode in the 1880s and when pumping of water from the Tombstone mines 40 miles away stopped water rose in the Commonwealth and drove the miners from the lower levels. WPA m 1175

Reliable sources report that Essex International, Inc. has blanketed the Pearce area with lode mining claims.

PAY DIRT for April 28, 1975

Paul I. Eimon has taken a new position as senior staff geologist on the minerals staff of Standard Oil Company of California in San Francisco. Formerly he was manager of exploration and mine development for Essex International in Tucson.

PAY DIRT for July 28, 1975

#### ESSEX WIRE

President Bowman reviewed several important additional transactions already negotiated. He said an option contract agreement with Essex International (wire) had been signed for Banner's two square miles of drilled copper claims in Greenlee county, Ariz., that are reached via the village of Morenci. Essex is a manufacturer of copper wire and plans to protect itself against lower supplies of copper in the future.

Skilling's Mining  
Review - 5-29-71

## Major Firm Plans Copper Probes

1-10-71 Citizen P. 28

Essex International Inc., a manufacturing company, today announced establishment of a copper operations and exploration office here with Paul I. Eimon as manager of exploration.

The company is among the 200 largest industrial corporations in the United States. It is headquartered at Fort Wayne, Ind.

Eimon is a mining geologist who worked for American Smelting & Refining Co. (ASARCO) in this country, Canada, and Central America for 12 years.

He later was a senior research geologist with Kennecott Copper Corp. in Salt Lake City for two years. In 1969-70, he was exploration manager, special projects, for Minerals Exploration Co., a subsidiary of Union Oil Co.

Aim of the new Essex office here is to "stabilize the company's copper supply position," said Howard Lanier, general manager of copper operations for Essex.

Essex operates 96 factories through 10 manufacturing and marketing divisions. Lanier said it is one of the nation's leading copper consumers, using the metal as conductor material in a broad line of electrical wire

and cable products made for the automotive, appliance, electronic, communications, construction and utility industries.

The firm also produces electrical and thermal controls, gas controls, plastic parts, illumination plastic signs, and custom wire machinery.

Lanier said the exploration effort headed by Eimon, with an office in the Grant Road Industrial Center at 1704 W. Grant Rd., doesn't alter the company's position with its current suppliers.

He said the new venture is intended to assure additional sources for the Essex firm's "growing copper requirements."

## Big Suit Filed In Safford

A law suit seeking termination of a mineral lease and damages of \$4,500,000, has been filed with the clerk of the Graham County Superior Court in Safford.

Styled Guy Anderson et al vs. Edwin T. Scruggs et al, the sum asked in damages is believed to be one of the largest ever filed in the county.

Filing of the suit was followed by an answer and counter claim in which the defendants ask \$5,000,000 in damages.

Plaintiffs in the action include Guy Anderson and family, Alf Claridge and family, the L. L. Maloys, the Glen Gherkins and Essex International Inc.

Named as defendants are Edwin T. Scruggs, Scruggs Mining, Chemical Producers and Producers Minerals.

The plaintiffs allege that the defendants failed to live up to the terms of the lease, which permitted leaching and mining on the property, and that notice of termination was issued the defendants in March of 1971.

It is further stated that in June of the same year, Producers Mineral (currently active at the site involved) was notified that further operations would constitute trespass, and that regardless, Producers Minerals had not vacated but has continued its mining operations.

It is further stated that in June of the same year, Producers Mineral (currently active at the site involved) was notified that further operations would constitute trespass, and that regardless, Producers Minerals had not vacated but has continued its mining operations.

The plaintiffs allege that a materialsmen's lien in the amount of \$298,803 was filed against the property in October, 1969, in violation of the lease agreement, and has not been removed, and that use of impure sulphuric acid in the leaching process resulted in incalculable damages to the property and significant loss of recoverable copper or copper concentrates.

In addition to termination of the lease and damages, the plaintiffs also are requesting a court order restraining further operations by Producers Minerals on the property, for proper accounting of all operations, and for costs of suit and other relief as may be "just and proper".

In the counter claim, the defendants deny most of the allegations and seek such actual damages as are proven at the time of trial plus punitive and exemplary damages and trial costs.

Attorneys of record for the plaintiffs are Anderson, Welker & Flake, and Richardson, Mortenson and Greenhalgh, for all except Essex International, represented by Verity & Smith, Tucson.

Snell & Wilmer, Phoenix, are attorneys of record for defendants, Chemical Producers and Producers Mineral, and Moore, Romley, Robbins and Green for E. T. Scruggs and

Scruggs Mining. However, these firms have filed a request that they be allowed to withdraw from the case.

Property involved is located north of Safford, across the Gila River, and in the Gila Mountains in the midst of an area said to have heavy copper deposits. *Pay Dirt 7/4/72*

## *Pay Dirt 12-25-72* Shades Of The Old West!

Shades of the Old West—when horse thieves and claim-jumpers were considered the least desirable of human beings, depending upon whether the setting was in a cowtown or a mining camp.

A hearing has been scheduled for January 8th in Federal District Court in Tucson on a complaint and a request for a restraining order requested by Essex International, Inc. against Phelps Dodge Corporation in a ruckus over mining claims in the Safford area.

Essex, operating out of an exploration office in Tucson, complained to the court that Phelps Dodge employees have been using guns and bulldozers to prevent exploration on claims in the mountains north of Safford.

The complaint says Essex employees have been threatened with firearms and a bulldozer when they attempted to gain access to a claim in the Lone Star District. The action alleges Phelps Dodge employees drove a bulldozer at an Essex-owned drilling rig, pushing it into a wash and another time fired a pistol in the air.

The complaint charges that Bill Brown, a Phelps Dodge geologist, and Elton "Skip" Clark, Phelps Dodge engineer in charge of the company's Safford project, drove a bulldozer at a group of Essex workers, stopping about two feet from them.

A Phelps Dodge representative denied the charges. He explained Essex crews have been drilling for some time along the boundaries of Phelps Dodge holdings but were crossing over onto claims held by Phelps Dodge to do drilling. He said Phelps Dodge employees used a bulldozer to block access, but at no time did they threaten men or equipment with them. The shot was fired in the air, he said, as a signal to other Phelps Dodge employees.

Essex, with headquarters in Ft. Wayne, Indiana, is one of the largest wire manufacturing firms in the country. It has been endeavoring to acquire a major copper property to provide its own supply of copper and in recent months has been active in the area north of Safford.

Dennis C. Temple has been named senior exploration geologist for Essex International Inc. at its Tucson, Ariz., office. John R. Wilson has joined Essex International as a geologist at the Milford mine, Milford, Utah, according to Paul I. Eimon, manager of exploration.

*SMR 101772*

Guerdon E. Jackson, formerly with Essex International Inc. in Tucson, Ariz., has taken a new position as an engineer for Thiess Peabody Mitsui Pty. Ltd., a subsidiary of Peabody Coal Co., in Australia. *SMR 116173*

Clement K. Chase is working as a metallurgist at the Milford, Utah, copper mine for Essex International Inc. from the company's office in Tucson, Ariz. Prior to joining Essex, he served with Pima Mining Co. at Tucson as a research engineer and before that was with American Smelting & Refining Co. as chief metallurgist and earlier as metallurgist at the Silver Bell unit at Silver Bell, Ariz. *SMR 113173*

Essex International is reported still drilling at its copper prospect near Safford despite large reduction in activities.

PAY DIRT for March 24, 1975

# Tucson Men Win Mineral Posts

Essex International Inc., one of the nation's biggest manufacturing companies, which has a copper exploration and development office here, today announced formation of a metallurgical and mining division.

General manager of the new division will be Howard Lanier, who has headed the Tucson-based operation.

The division's headquarters will be at Ft. Wayne, Ind., where Essex is headquartered.

Paul I. Eimon, formerly manager here of Essex metals exploration programs, will join the new division as its manager of exploration and mine development.

From the Tucson office, a company spokesman said, he will supervise the recently announced exploratory mining operations of Essex at Milford, Utah, as well as continue directing the company's basic metals source investigations.

Essex, which operates 98

factories manufacturing such products as wires, cables, and electrical and control systems, is headed by Paul W. O'Malley.

O'Malley said the new division Lanier will head was formed "to combine the company's various exploratory, developmental and primary metals operations into a comprehensive organization capable of investigating potential metal sources as well as related basic processing and production methods."

*1969 Annual Report*

## Corporate Data

### Essex International, Inc.

#### Directors

Walter F. Probst, *Chairman of the Board and Chief Executive Officer*

• Paul W. O'Malley, *President*

Ove W. Jorgensen, *Executive Vice President—Finance*

James H. Carey, *President, Hambro American Bank & Trust Company, New York, New York*

James W. Davant, *Managing Partner, Paine, Webber, Jackson & Curtis, New York, New York*

Walter E. Dennis, *Financial Consultant, New York, New York*

#### Director Emeritus

Edward C. Farmer, *Counsellor at Law, Muskegon, Michigan*

#### Officers

Walter F. Probst, *Chairman of the Board and Chief Executive Officer*

Paul W. O'Malley, *President*

Ove W. Jorgensen, *Executive Vice President—Finance*

Edward D. Downing, *Vice President—Legal and Secretary*

Frank L. Gallucci, *Vice President—Industrial Relations*

A. Frederick Kammer, Jr., *Vice President—Sales*

Richard VanGheluwe, *Treasurer*

Joseph P. Cunningham, *Controller*

#### Executive Offices

1601 Wall Street

Fort Wayne, Indiana 46804



## Essex Slashes Staff

Members of the Arizona mining fraternity, especially those in the Tucson and Safford areas, are wondering what is in store for the copper exploration efforts of Essex International after its president came to Tucson in mid - October after a visit to Utah, using a broad - axe approach on the staff.

By the time he left town, eight members of the staff had been terminated in Tucson, a vice president was fired in Utah and a developing copper property in Utah was closed.

Shaking up the entire operation was Paul O'Malley, president of Essex, which has spent several years seeking a copper property to provide a dependable source of metal for its large wire and cable fabricating operations.

Following attendance of the American Mining Congress confab in Las Vegas in early October, O'Malley went to Milford, Utah, where the company has the developing copper property. There he met Howard Lanier, the company's mining vice president, and fired him on the spot.

O'Malley also immediately shut down the operation and gave instructions to dispose of equipment. (See advertisement elsewhere in this issue.)

Then he went to Tucson where he fired eight of the nine employees, including well - known consulting engineer Robert Holt, who had been hired only a few weeks before as manager of the Tucson office.

O'Malley also hired back geologist Paul Eimon, who had been manager since the office opened in 1971 until he resigned in August, to be manager. The only employee who was not fired was Grover Heinrichs, landman and geophysical technician.

O'Malley "didn't really give much reason" except that for the time being Essex was going out of the exploration business, Holt said.

At Essex headquarters in Ft. Wayne, Indiana, a company spokesman described the action as "reducing the staff," but said the Tucson office was still "operable."

Holt said he was returning to the consulting engineering firm that he and associates formed several years ago.

When Essex opened its Tucson office in 1971, Lanier said its aim was to "stabilize" the company's copper position.

## EQUIPMENT FOR SALE

OFFERED SUBJECT TO PRIOR SALE

### LOADERS & CRAWLER TRACTORS

1971 Hough H-400B, 10 yd. Loaders S/N 1650, & 1686  
1971 Michigan 275-4A, 6 Yd Loader S/N 425A234 CAC  
1969 Cat D9G w/9S Tiltadozer, ROPS Canopy, Ripper S/N 66A7543

### ROCK TRUCKS

1971 International PH 180, 50T, S/N 2677 & 2703  
1967 International PH 180, 45T, w/16V71 Diesel, S/N 610  
1965 Wabco LW 65, 65T, S/N GF6446  
1968 KW Dart D2330, 35T, 1800 x 33 Rubber, S/N 68415

### AIR TRACK DRILLS

(2) I-R ECM 250 Air Tracks w/URD 475 Hammer, S/N CL24054 & 24269  
I-R CM 250 Air Track w/VL 140 Hammer, S/N 34542  
Joy Mustang w/35 Ft. Boom and near new VCR 280 Hammer S/N 26740  
Mission 4220 Down Hole Hammer

### COMPRESSORS

(3) I-R DL900 Portable Diesel, 900 cfm, S/N 55923M, 50684M & 45030M  
Joy RPS 1200 Portable Diesel, 1200 cfm S/N 87990  
Joy WN102E 13" x 13" x 7" Stationary, 1400 cfm @ 50 psi, 150hp motor S/N 509056  
I-R Type 40 Air Cooled Stationary, 850 cfm @ 45psi, 100hp motor S/N 53781  
G-Denver Water Cooled Stationary, 550 cfm @ 100psi, 60hp motor S/N 103857  
Worthington Air Cooled Stationary, 125 cfm @ 100psi, S/N 104935

### CRUSHERS & CONVEYORS (Complete plant)

30" x 42" Cedarapids Jaw, 60hp motor, trailer available, Plant S/N 13844  
4' Standard NORDBERG Cone, 150hp motor, trailer mounted, S/N 40717  
4½' Shortbed NORDBERG Cone, 150hp motor, trailer mounted S/N 41606  
5' x 14' Hewitt-Robbins, 2-deck screen & tower with substructure & U-flow conv.  
S/N UD 8503; Model M-11  
Assorted 24" to 36" conveyors, equipped with substructures, motors, gear boxes, head & tail pulleys. Total: 640 feet of conveyors  
Metal Detector, Outokumpu Oy S/N 106-140 with instruments.

### LEACHING PLANT EQUIPMENT

Thickeners — (2) 45' rubber lined steel tanks, (2) 50' r.l.s.,  
(1) 70' wood stave (1) 14' dia x 10'. All equipped with stainless steel shaft and rakes, superstructure & drive.  
Centrifugal Pumps with motors (Acid Service) (11) Galigher 3 VRG-200 3" x 4";  
(10) Galigher 4 VRG-200 4" x 6"  
Sump Pumps (Acid Service) (2) Galigher 6-SR-100 6" w/40 & 50 hp (1) Galigher 4-SR-300 w/30hp motor (4) Galigher 2½" & 3" w/motors  
Mechanical Agitators (2) DECO, 5' Rubber Props mounted in 16' x 16' wood stave tanks, 25 hp drives. Several 5' x 6' Agitators (Galigher & Denver) Agitators & Conditioners w/motors  
Cyclones — Krebs — (1) D10B, (3) D15B  
Peterson 4' x 4' 316 st.st. Drum Filter complete w/vacuum & filtrate pumps, st.st. receiver, blower & motors  
Sch. 40 PVC Pipe — 12,000 feet 4" and 6" new & used.  
Complete Lab & Assay Equipment — Jaw Crushers, pulverizers, ovens, scales, glassware, etc.  
Complete set of ball mill liners (new) for 8' x 9' Traylor  
Complete set of classifier shoes (new-serrated) 78" Akins

### CRANES

P & H 225A Truck Crane, 20 Ton, 70' Boom, Pierce Carrier S/N 6517  
Grove RT58 Hydraulic Truck Crane, 14 Ton, 60 foot Boom S/N 4540

### MISCELLANEOUS

1972 Ford Lube Truck w/500 Gal Fuel Tank and 5 service reels  
Huber 100 Motor Grader, 12 foot board, side shift S/N 1110742  
40' Trailer Van, w/parts bins, double rear door  
Fuel Storage tanks w/pumps, 10,000 & 8,000 gallon. Also a 6,000 gal. tank  
Mack Water Truck — 3500 Gallon, Tandem Rear  
(2) Portable Light plants - Onan Power, Two Mercury Vapor Globes ea, 4 KW Capacity  
Acid Storage tanks, 25,000 gallon Horiz and 18,000 gallon Vert., Horiz. Reagent Tank 10,000 Gal.  
(43) Electric motors (2hp to 150hp — 440 V) Not connected to equipment.

Most of this equipment is available now. All the equipment will be available during the next month.

## ESSEX INTERNATIONAL, INC.

Milford Mine — Box 888, Milford, Utah 84751

CALL: DAVE BELING (801) 387-2427



ESSEX INTERNATIONAL, INC.

Field interview with Grover Heinrich's in regard to Essex changes. Grover is now in charge, Paul Eimon is geologist and Lyall J. Lichty is metallurgist. GWI WR 10/23/74

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Field interview with Paul Eimon who reports that Essex is still drilling at Safford. GWI WR 12/30/74

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Essex International Inc. exploration office has two exploratory drills in operation in the Pearce area. VBD WR 7/15/75

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Essex International is diamond drilling the Commonwealth group of claims. VBD WR 8/8/75

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ESSEX INTERNATIONAL

It has been reported that the Blue Claims in Bonita Creek have been optioned to Essex International, however official announcement has not been made. GWI Quarterly Report 12-31-71

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Essex International is reported to have acquired the Blue Claims in Bonita Creek. GWI QR 4-1-71

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Essex International has optioned the King Mountain area from the Banner Mining Co., the Mormon Church group and G. Anderson. They have had geologists working in the area. GWI QR 6-30-71

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Essex International has been drilling and evaluating the production possibilities at the Kornkob mine in Buehman Canyon ~~xxx~~ on the east slope of the Catalina Mts. GWI QR 6-30-71

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Adjoining Quintana, Essex International has taken up a large block of claims. GWI QR 9/71

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Essex has acquired a large land holding near PD, especially on the South. GWI QR Oct-Dec '71

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Some exploration work has been continued near Morenci by Essex. GWI QR Oct-Dec '71

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Essex Int. has picked up several claims around PD and are reported to be trying to acquire the San Juan property of Producers Minerals (Peacock). GWI QR Jan.-March '72

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Guy Anderson and Essex International have entered a suit against Producers. Essex Int. has also acquired a land position in the Lone Star district. GWI 4 ½ '72

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Essex is still doing some evaluation work on the King Mountain area. GWI 4 ½ '72

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Walt Statler said that Essex International was drilling in little Copper Creek area; this is the same area Norandex drilled a year or so ago. GW WR 10/4/73

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Essex International Inc. conducted a short drilling campaign in the Little Copper Creek southwest of Prescott. This general area had been drilled a year previously by Sierra Exploration & Mining Company GW AR 73-74

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# Safford copper hunt heats up

One of the nation's biggest oil firms, Cities Service Co., has zeroed in on the Safford area to explore for copper amid operations of half a dozen other mining companies.

Newest entry in the Safford prospecting sweepstakes, Cities Service has filed mining claims to date covering about six square miles in a mineral zone where an estimated three billion tons of copper ore already have been discovered by mining firms.

This area has a potential of becoming as big a copper-producing center as the region south of Tucson encompassing the Sierrita, Twin Buttes, Pima, Mission, and Esperanza mines, says Spencer R. Titley, professor of geosciences at the University of Arizona.

The UA professor said the zone near Safford "appears to be pretty intensively mineralized."

The Safford zone is a copper mineralized belt believed to be about 30 miles long and nine miles wide, a few miles north and east of Safford. The town itself is about 124 miles northeast of Tucson.

Cities Service Minerals Corp., Tucson-based subsidiary, filed the new claims and plans an \$80,000 initial drilling program on its holdings near the southeast end of the 270-square-mile belt, a geologist with the subsidiary said.

The parent oil company also owns copper mining properties near Miami, including a new mine called Pinto Valley.

The six square miles staked by Cities Service Minerals are just north of a group of Phelps Dodge Corp. claims, covering about 11

square miles near U.S. Highway 70 east of Safford.

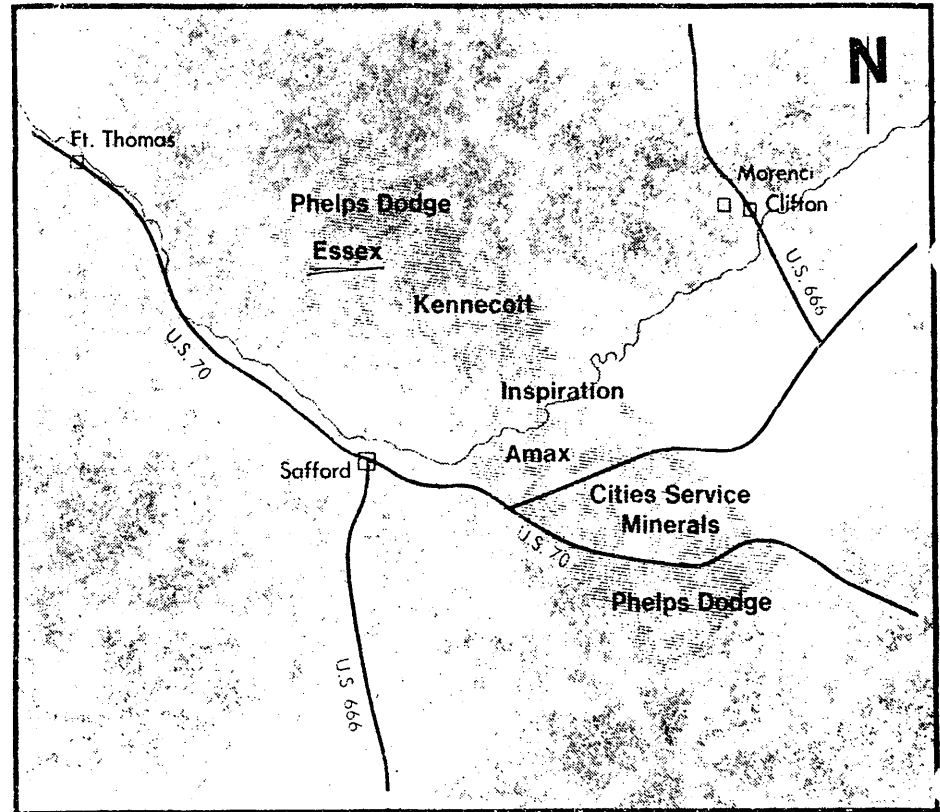
Phelps Dodge has another group of claims, which generally are considered to harbor a bonanza. PD now is developing a \$200 million underground mine within the 15 square miles of those claims, located near the northwest edge of the mineralized belt.

PD's northern ore body is estimated to contain from 400 million to one billion tons of copper ore, much of it relatively high-grade. Near this is Kennecott Copper Corp. property with a copper ore deposit estimated at two billion tons, but at great depth and with low copper content compared with PD's deposit. Kennecott is experimenting with a high-pressure liquid mining technique the firm hopes will prove an economical way to bring its Safford area copper to the surface.

AMAX, Inc., like Kennecott, has mining claims covering about 20 square miles in the Safford area. Part-owner of Twin Buttes Mine, AMAX has kept mum about its Safford holdings, where it has spent more than \$500,000 on exploration.

Essex International Inc. has spent close to \$1 million prospecting within eight square miles covered by mining claims it staked near PD's northern Safford belt property. Essex also is silent about its exploration results.

Inspiration Consolidated Copper Co., which operates a mine, mill and smelter near Miami, plans some additional drilling on its Safford property of about 11 square miles before deciding whether to develop the ore deposit there, according to a company official. The firm estimates the copper ore reserve, called the Sanchez deposit, totals at least 285 million tons.



Citizen Map by Joel Rochon

## Another bonanza?

The search for copper is intensifying in this 270-square-mile area in Graham County. Some geologists believe it has potential to rival the copper area south of Tucson. Seven companies are probing the zone, including Kennecott Copper Corp., which estimates its find at two billion tons of the ore. Cities Service Minerals Corp. is the latest entrant into the sweepstakes.

Tucson Daily Citizen 9-12-75, page 33

own copper deposit to stabilize availability and price of copper for its manufacturing operations—although it has made no public announcements.

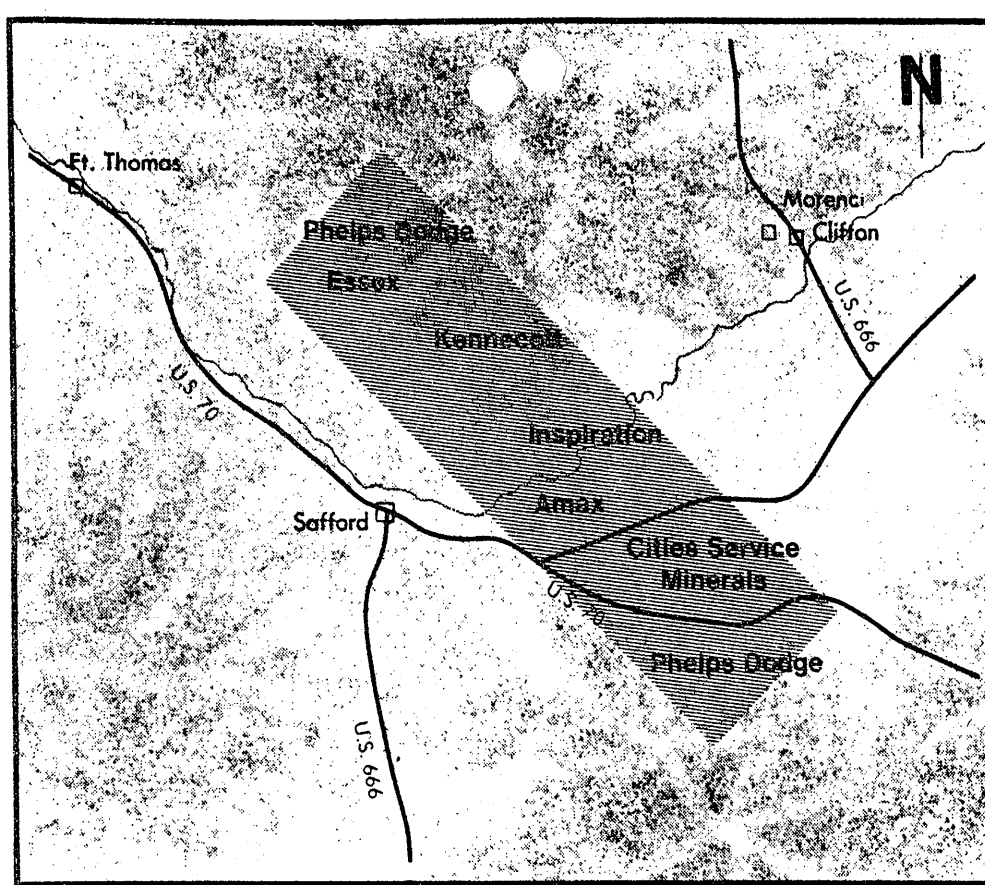
Kennecott has been endeavoring for several years to figure out a way to profitably extract the copper from its huge, but somewhat low-grade, deposit. Currently, it is conducting an experiment in insitu leaching.

Down by the river, Inspiration has pretty well delineated its sizable deposit of low-grade ore, containing about 285 million tons.

Although Inspiration and several other firms have been conducting some test work on what is known as the Sanchez property, it has been pretty much placed on the shelf until copper price and demand improve and the most feasible method of recovery has been determined.

Although it is reported to have spent about a half-million dollars on its Safford property to date, AMAX, Inc. has been keeping pretty quiet about it.

PAY DIRT for September 22, 1975



## Cities Service Joins Hunt For Safford Area Copper

Cities Service Company has joined the ranks of a number of companies interested in locating and developing copper mineralization in what is becoming known as the Safford Mineral Belt to the north and east of Safford.

Cities Service is reported to have filed claims covering about six square miles in an area several miles east of Safford.

The claims were filed by Cities Service Minerals Corporation, a subsidiary of Cities Service, based in Tucson. A company geologist told a Tucson newspaper reporter that his firm plans initially to spend \$80,000 on a drilling program.

Other firms active in the mineral belt area include Phelps Dodge, Essex International, Kennecott Copper Corporation, Inspiration Consolidated Copper Company and AMAX.

Phelps Dodge, one of the first companies to become interested in the area, has two areas staked. One is at the southern end of the mineral belt, the other at the northern end.

It has had pre-development work under way at the Safford project at the northern end for quite some time, work that is continuing. Since the deposit will be mined by block caving, company crews are concentrating on sinking a new shaft, deepening another and getting the large amount of underground work started.

Nearby are claims on which considerable work has been done, at an estimated cost of \$1

million, by Essex International, one of the major copper wire fabricators in the country.

Essex is understood to have recently curtailed and reorganized its efforts to find its

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No dealer, salesman, or other person has been authorized to give any information or to make any representations not contained in this Prospectus in connection with the offering made by this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by Essex or by any Underwriter. This Prospectus does not constitute an offering by Essex or by any Underwriter in any jurisdiction in which such offering may not lawfully be made.

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# ESSEX

## INTERNATIONAL, INC.

\$50,000,000

5<sup>3</sup>/<sub>8</sub>% Convertible Subordinated  
Debentures Due 1996

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PROSPECTUS

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September 15, 1971

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Paine, Webber, Jackson & Curtis  
Incorporated

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PROSPECTUS

**ESSEX**  
**INTERNATIONAL, INC.**

**\$50,000,000**

**5 $\frac{3}{8}$ % Convertible Subordinated Debentures Due 1996**

The Debentures are convertible, unless previously redeemed, into Common Stock at \$47.625 per share, subject to adjustment under certain conditions. On September 14, 1971 the closing price of the Common Stock of Essex on the New York Stock Exchange was \$41.50 per share.

Annual sinking fund payments, commencing in 1982, are calculated to retire, at the principal amount plus accrued interest, not less than 70% of the Debentures prior to maturity. The Debentures may be redeemed at Essex's option, in whole or in part, at any time on at least 30 days' notice at a redemption price of 105.375% plus accrued interest during the first year, and decreasing annually thereafter. Interest on the Debentures is payable on March 1 and September 1.

Essex intends to apply for listing of the Debentures on the New York Stock Exchange.

**THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.**

	Price to Public(1)	Underwriting Discounts and Commissions(2)	Proceeds to Essex(1)(3)
Per Unit .....	100%	1.25%	98.75%
Total .....	\$50,000,000	\$625,000	\$49,375,000

(1) Plus accrued interest from September 1, 1971 to date of delivery.

(2) Essex has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

(3) Before deduction of expenses payable by Essex estimated at \$150,000.

The Debentures are offered by the several Underwriters named herein for delivery on or about September 23, 1971, when, as and if issued by Essex and accepted by the Underwriters and subject to their right to reject orders in whole or in part, and subject to the approval of certain legal matters by Messrs. Kirkland, Ellis, Hodson, Chaffetz & Masters, counsel for Essex, and Messrs. Milbank, Tweed, Hadley & McCloy, counsel for the Underwriters.

**Paine, Webber, Jackson & Curtis**  
**Incorporated**

The date of this Prospectus is September 15, 1971.

## AVAILABLE INFORMATION

Essex has filed with the Securities and Exchange Commission, Washington, D. C., a Registration Statement under the Securities Act of 1933 with respect to the Debentures offered pursuant to this Prospectus. For further information with respect to Essex and the Debentures, reference is made to the Registration Statement and to the exhibits listed in the Registration Statement.

Essex is subject to the informational requirements of the Securities Exchange Act of 1934 and in accordance therewith files reports and other information with the Securities and Exchange Commission. Information as of particular dates concerning its directors and officers, their remuneration, principal holders of securities and any material interest of such persons in transactions with Essex, is set forth in proxy statements distributed to shareholders and filed with the Commission. Such reports, proxy statements and other information can be inspected at the principal office of the Commission at 500 North Capitol Street, N. W., Washington, D. C. and copies of such material can be obtained from the Commission at prescribed rates. Such reports, proxy statements and other information concerning Essex can also be inspected at the offices of the New York Stock Exchange, 11 Wall Street, New York, N. Y.

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IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE DEBENTURES, \$2.84 SERIES A CUMULATIVE CONVERTIBLE PREFERRED STOCK, AND COMMON STOCK OF ESSEX AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

## THE COMPANY

Essex International, Inc. ("Essex"), formerly Essex Wire Corporation, primarily manufactures electric current carrying and controlling devices and related metal and plastic products. Essex is one of the leading producers of insulated building wire, magnet wire, and automotive electrical wire and harnesses and associated electro-mechanical devices. The products manufactured by Essex include a wide range of wire and cable products, switches, electrical systems, wire terminals, relays, thermostats and other controls for the construction, automotive, electric utility, communication, community antenna television, appliance, air conditioning, heating, refrigeration, electronic, business machine, machine tool and other industries. Essex also manufactures gas valves and controls used in furnaces and appliances and a broad line of extruded, molded and vacuum-formed plastic parts and steel, brass and aluminum pressure and hydraulic fittings; and extrudes and fabricates aluminum for the construction and other industries. Essex sells to more than 20,000 customers, primarily throughout the United States. It also manufactures and sells in Canada and the United Kingdom and sells to a minor extent in other foreign countries.

A wholly-owned subsidiary of Essex operates as a common carrier in certain midwestern states.

Essex was incorporated under the laws of Michigan in 1930 and has its principal executive offices at 1601 Wall Street, Fort Wayne, Indiana 46804. Its telephone number is (219) 743-0311. The term "Essex" wherever used in this Prospectus, except where the context otherwise requires, refers to Essex International, Inc. and its consolidated subsidiaries.

## USE OF PROCEEDS

The net proceeds to be received from the sale of the 5 $\frac{3}{8}$ % Convertible Subordinated Debentures Due 1996 (the "Debentures") will be used to repay Essex's entire presently outstanding indebtedness of \$47,000,000 to a group of banks under a \$70,000,000 revolving credit agreement, and the remainder will be added to working capital.

## DIVIDEND POLICY

Essex has paid quarterly cash dividends on Common Stock since prior to the date of its first public offering of securities in 1965. On August 2, 1971 the Board of Directors declared a quarterly dividend of 30¢ per share of Common Stock, payable October 15, 1971 to holders of record on September 30, 1971.

There is no assurance as to the payment of future dividends since the declaration and amount of future cash dividends payable on Essex's Common Stock will be determined in light of all relevant factors. Future dividends will necessarily depend upon future earnings, the financial condition of Essex and other factors. The payment of cash dividends on Essex's Common Stock is subject to certain restrictions summarized under DESCRIPTION OF COMMON STOCK.



## CAPITALIZATION

The table below sets forth the capitalization of Essex outstanding as of June 30, 1971 and as adjusted to reflect the sale of the \$50,000,000 principal amount of the Debentures offered hereby and the application of the proceeds therefrom.

	<u>Outstanding</u>	<u>As Adjusted</u>
Long-term debt:		
9¼% Notes Due 1975 .....	\$ 40,000,000	\$ 40,000,000
5¼% Note (note 1) .....	23,950,000	23,950,000
Notes under revolving credit agreement (note 2) .....	47,000,000	—
Notes under revolving credit agreement (note 3) .....	1,320,000	1,320,000
Notes under revolving credit agreement (note 4) .....	600,000	600,000
Miscellaneous notes with varying rates and maturities to 1981 ..	3,394,881	3,394,881
5¾% Convertible Subordinated Debentures Due 1996 .....	--	50,000,000
Total long-term debt (note 5) .....	116,264,881	119,264,881
Stockholders' equity:		
Capital stock:		
Preferred Stock, 10,000,000 shares, \$1.00 par value, authorized; 552,887 shares of \$2.84 Series A Cumulative Convertible Preferred Stock issued (aggregate liquidation preference of \$28,197,237) .....	552,887	552,887
Common Stock, 25,000,000 shares, \$1.00 par value, authorized; 8,800,470 shares issued (note 6) .....	8,800,470	8,800,470
Additional paid-in capital .....	21,067,704	21,067,704
Retained earnings .....	183,797,390	183,797,390
Total stockholders' equity .....	214,218,451	214,218,451
Total capitalization .....	\$330,483,332	\$333,483,332

(1) Payable in annual installments of \$3,000,000.

(2) Agreement permits revolving credit borrowings of up to \$70,000,000 at any time until January 31, 1972. On that date, Essex has the option to borrow up to \$52,500,000 on a term loan payable in three equal annual installments commencing January 31, 1973. At June 30, 1971, after giving effect to the sale of the Debentures and the application of the proceeds therefrom, under the most restrictive provision of Essex's loan agreements, such option, together with the option referred to in note 3 and the borrowings referred to in note 4, could only be exercised to the extent of \$23,500,000. The annual interest rate until January 31, 1972 is at ½% over the prime rate at the date of borrowing and thereafter at ½% over the prime rate from time to time. At June 30, 1971 the annual interest rates ranged from 5¾% to 6% and the lenders required compensating balances.

(3) Agreement permits revolving credit borrowings of up to £1,000,000 Sterling (approximately \$2,400,000 in equivalent U. S. funds) at any time until January 31, 1972. On that date, Essex has the option to convert such borrowings to a term loan payable in four equal annual installments commencing January 31, 1973. (See note 2 above.) The annual interest rate is a fluctuating rate equal to the higher of 1% over the Bank of England rate or 6% on borrowings up to \$1,560,000 and the

best commercial rate plus  $\frac{1}{2}\%$  on additional borrowings up to \$840,000. At June 30, 1971 the annual interest rate was 7% and compensating balances were not required.

- (4) Agreement permits revolving credit borrowings of up to \$3,000,000 Eurodollars at any time until June 30, 1972, and thereafter at reduced amounts until March 31, 1975. (See note 2 above.) The annual interest rate is the prime Eurodollar commercial rate at the date of borrowing. At June 30, 1971 the annual interest rates ranged from  $8\frac{1}{8}\%$  to  $8\frac{3}{4}\%$  and compensating balances were not required.
- (5) Does not include current maturities of long-term debt in the amount of \$3,979,683.
- (6) Does not include 552,887 shares of Common Stock reserved for conversion of \$2.84 Series A Cumulative Convertible Preferred Stock, 425,000 shares of Common Stock reserved for options which may be granted under Essex's stock option plan, or 1,049,868 shares of Common Stock reserved for conversion of the Debentures.
- (7) Leases in effect at June 30, 1971 provide for annual fixed rentals aggregating \$973,598. These leases expire on various dates through 1988.

At June 30, 1971, Essex had unused short-term bank lines of credit in the aggregate amount of \$75,750,000.

#### PRICE RANGE OF COMMON STOCK

The following table indicates the high and low sale prices of the Common Stock on the New York Stock Exchange, as adjusted to reflect a two-for-one stock split in May 1967, for the periods indicated:

<u>Year</u>	<u>High</u>	<u>Low</u>
1966 .....	26 $\frac{1}{8}$	15 $\frac{7}{8}$
1967 .....	58 $\frac{1}{2}$	24 $\frac{3}{4}$
1968 .....	59	36 $\frac{7}{8}$
1969		
1st quarter .....	46 $\frac{3}{8}$	40 $\frac{1}{8}$
2nd quarter .....	43 $\frac{1}{4}$	31 $\frac{7}{8}$
3rd quarter .....	38 $\frac{1}{2}$	31 $\frac{1}{8}$
4th quarter .....	38 $\frac{3}{8}$	31 $\frac{3}{8}$
1970		
1st quarter .....	36 $\frac{3}{4}$	25 $\frac{3}{8}$
2nd quarter .....	26 $\frac{7}{8}$	17
3rd quarter .....	28 $\frac{3}{4}$	17
4th quarter .....	34 $\frac{1}{8}$	26 $\frac{1}{2}$
1971		
1st quarter .....	44 $\frac{1}{2}$	33 $\frac{1}{8}$
2nd quarter .....	45	37
3rd quarter (through September 14) ....	44	38

On September 14, 1971 the closing price of the Common Stock of Essex on the New York Stock Exchange was \$41.50 per share.

## CONSOLIDATED STATEMENT OF EARNINGS

The following consolidated statement of earnings of Essex and subsidiaries, so far as it relates to the five years ended December 31, 1970, has been examined by Peat, Marwick, Mitchell & Co., independent certified public accountants, as set forth in their report appearing elsewhere in this Prospectus. The opinion of Peat, Marwick Mitchell & Co. is based in part on the report of other independent public accountants. This statement should be read in conjunction with the other consolidated financial statements and related notes of Essex included elsewhere herein. With respect to the unaudited figures for the six months ended June 30, 1970 and the six months ended June 30, 1971, Essex believes that all adjustments (consisting only of normal recurring accruals) necessary to a fair statement of the results of such periods have been included.

	Year ended December 31					Six Months Ended June 30	
	1966	1967	1968	1969	1970	1970 (Unaudited)	1971 (Unaudited)
Net sales and revenues .....	\$446,908,591	\$413,514,288	\$493,261,062	\$566,254,486	\$588,512,889	\$299,676,097	\$287,733,270
Cost of sales (note 2) .....	366,891,006	318,499,149	392,636,838	466,101,624	498,767,566	252,480,432	233,492,269
Gross profit .....	80,017,585	95,015,139	100,624,224	100,152,862	89,745,323	47,195,665	54,241,001
Selling, general and administrative expenses .....	25,785,902	28,984,263	33,680,241	37,118,173	38,408,394	19,778,007	20,235,953
Operating profit .....	54,231,683	66,030,876	66,943,983	63,034,689	51,336,929	27,417,658	34,005,048
Other income:							
Interest and dividends .....	1,871,792	1,407,881	892,632	1,031,613	1,095,617	377,307	262,816
Miscellaneous .....	916,006	942,322	1,287,392	1,819,428	2,654,410	947,297	340,470
Total other income .....	2,787,798	2,350,203	2,180,024	2,851,041	3,750,027	1,324,604	603,286
Other charges:							
Interest:							
Long-term debt .....	2,038,689	2,002,112	3,298,373	4,213,957	7,668,843	3,479,156	4,126,253
Other .....	700,249	3,052,350	1,475,042	1,717,111	1,602,737	1,026,339	565,938
Miscellaneous .....	266,939	180,177	244,619	45,615	103,860	-10,658	31,558
Total other charges .....	3,005,877	5,234,639	5,018,034	5,976,683	9,375,440	4,546,153	4,723,749
Earnings before income taxes .....	54,013,604	63,146,440	64,105,973	59,909,047	45,711,516	24,196,109	29,884,585
Income taxes (note 5):							
United States .....	24,884,763	29,623,637	29,637,323	27,517,654	17,858,278	9,875,562	13,035,695
Canadian .....	962,078	1,578,000	2,515,000	2,038,000	2,454,722	1,431,438	1,073,305
Deferred .....	155,000	50,000	1,171,000	1,994,000	1,777,000	597,000	534,000
Total income taxes .....	26,001,841	31,251,637	33,323,323	31,549,654	22,090,000	11,904,000	14,643,000
Net earnings .....	28,011,763	31,894,803	30,782,650	28,359,393	23,621,516	12,292,109	15,241,585
Dividend requirement of \$2.84 Series A cumulative convertible preferred stock .....	1,281,002	1,279,110	1,279,110	1,452,793	1,570,199	785,100	785,100
Net earnings applicable to common stock .....	\$ 26,730,761	\$ 30,615,693	\$ 29,503,540	\$ 26,906,600	\$ 22,051,317	\$ 11,507,009	\$ 14,456,485
Average number of shares of common stock outstanding (note D) .....	8,720,324	8,764,795	8,790,713	8,795,591	8,800,470	8,800,470	8,800,470
Earnings per common share (note D):							
Assuming no dilution .....	\$ 3.06	\$ 3.49	\$ 3.36	\$ 3.06	\$ 2.51	\$ 1.31	\$ 1.64
Assuming full dilution .....	3.05	3.46	3.33	3.05	2.51	1.31	1.63
Cash dividends per common share .....	\$ .55	\$ .90	\$ 1.15	\$ 1.20	\$ 1.20	\$ .60	\$ .60
Ratio of earnings to fixed charges (note E) .....	17.72	12.09	12.55	10.00	5.42	5.85	6.72

## NOTES TO CONSOLIDATED STATEMENT OF EARNINGS

- (A) Previously reported figures have been restated to include the results of operations of companies acquired in poolings of interests as follows:

	Year Ended December 31			
	1966	1967	1968	1969
Net sales and revenues:				
Previously reported .....	\$375,337,836	\$356,286,649	\$425,969,040	\$552,265,711
Pooled companies .....	71,570,755	57,227,639	67,292,022	13,988,775
Total .....	\$446,908,591	\$413,514,288	\$493,261,062	\$566,254,486
Net earnings:				
Previously reported .....	\$ 24,486,945	\$ 29,889,228	\$ 27,544,801	\$ 27,965,754
Pooled companies .....	3,524,818	2,005,575	3,237,849	393,639
Total .....	\$ 28,011,763	\$ 31,894,803	\$ 30,782,650	\$ 28,359,393

- (B) Effective January 1, 1968, Essex changed from an accelerated method to the straight-line method of computing depreciation on all fixed assets. As a result of this change, net earnings for the year ended December 31, 1968 were increased by \$869,000, or \$.10 per share (after provision for deferred Federal income taxes). Figures for the years 1968 and 1969 include the 10% income tax surcharge.
- (C) Depreciation expense for the five years ended December 31, 1970 and the six month periods ended June 30, 1970 and 1971 was \$8,216,664, \$10,164,653, \$9,320,717, \$10,537,276, \$11,960,866, \$5,583,702 and \$5,849,688, respectively.
- (D) Earnings per common share are based on the average number of shares of common stock outstanding as adjusted for a two-for-one stock split in May, 1967. Fully-diluted earnings per share are calculated on the assumption that the shares of \$2.84 Series A cumulative convertible preferred stock have been converted into shares of common stock.
- (E) Ratio of earnings to fixed charges represents the number of times that interest, debt expense and one-third of rentals were covered by the sum of earnings before income taxes, interest, debt expense and one-third of rentals. On a pro-forma basis the ratio of earnings to fixed charges for the year ended December 31, 1970 is 5.73.
- (F) Numbered notes refer to Notes to Consolidated Financial Statements included elsewhere herein.

Since the cost of copper represents an important portion of cost of sales (approximately one-third), the relation of the cost of copper to selling prices of products has a material bearing on Essex's net earnings. Essex purchases copper from domestic producers at domestic refinery prices for the scheduled month of shipment as quoted by the copper industry's journals. In addition, purchases are made from copper dealers, brokers and others at prices normally equated to the London metal market and from one Canadian producer at prices based upon or fluctuating between U.S. domestic and London metal market prices. Factors such as strikes, floods or expropriation by foreign governments which cause an increase in the price of copper purchased from dealers, if such increase is not recovered in sales prices, could adversely affect Essex's profits. The recent expropriation of copper mines in Chile does not appear to have affected copper prices to date.

The decline in profit margins in 1968, 1969 and 1970 was due largely to rising copper prices and higher interest costs in those years not fully offset by higher selling prices for Essex's products. Such

higher copper prices resulted from a copper shortage caused by Government set-asides of a portion of domestic production and various other factors. In addition, profit margins in 1970 were adversely affected by charges to cost of sales resulting from an inventory build up in anticipation of work disruption in the copper industry in 1971. A decline in copper prices in late 1970 and in 1971, together with improved demand and cost-price relationships for certain wire products, were the principal factors contributing to the improved profit margins in the first half of 1971 compared with the same period in 1970. Essex is unable to predict future copper prices.

Copper purchased by Essex from dealers and from the Canadian producer is not subject to an import duty since by present statute copper in the form purchased by Essex is duty-free unless the market price of copper, as reported by the United States Tariff Commission, is under 36¢ per pound. The lowest quoted price of producer copper on September 13, 1971 was 52¾¢ per pound. Thus the 10% import surcharge imposed on August 16, 1971 by President Nixon has not affected the cost of copper purchased by Essex because the surcharge does not apply to duty-free copper.

The annual interest requirement on the Debentures will be \$2,687,500.

## BUSINESS

### Sources of Sales

Sales by Essex's various product lines, including revenues from its motor carrier operations, and sales to its two largest customers, Ford Motor Company and Chrysler Corporation, as percentages of total sales and revenues, are summarized below for the periods indicated. This summary gives retroactive effect to acquisitions accounted for as poolings of interest prior to the date of this Prospectus.

	Year Ended December 31					Six Months Ended June 30	
	1966	1967	1968	1969	1970	1970	1971
Wire Products .....	66.3%	62.8%	59.1%	57.5%	58.4%	60.2%	56.7%
Electrical Switches and Control Devices ..	14.8	16.8	18.6	18.5	18.5	17.9	20.4
Metal and Plastic Fabricated Parts .....	7.7	7.9	9.8	10.0	10.6	9.7	9.7
Other .....	6.4	7.3	7.6	9.1	7.7	8.2	7.3
Motor Carrier .....	4.8	5.2	4.9	4.9	4.8	4.0	5.9
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Ford Motor Company .....	20.7%	18.5%	19.9%	17.9%	20.2%	16.9%	13.4%
Chrysler Corporation .....	6.7	7.9	8.5	7.2	7.2	7.2	6.6

All business with Ford Motor Company and Chrysler Corporation is transacted on the basis of purchase orders which are subject to periodic releases for specific quantities of the products ordered, there being no firm contract to purchase any specific quantity of such products.

In each of the above five years, the earnings before income taxes of the motor carrier operations were less than 5% of Essex's pre-tax earnings.

### Operations

Essex employs approximately 20,000 people, operates 96 plants and maintains 31 common carrier terminals. Its operations are conducted through ten divisions and its motor carrier subsidiary, which are described below.

### *Wire & Cable Division*

This division manufactures and sells over 5,000 different types, sizes and constructions of copper and aluminum electrical wire and cable, primarily for use in the building industry. The majority of the division's customers are independent electrical wholesalers located throughout the United States. Management believes that Essex is one of the largest producers of building wire and cable in the United States. Several major producers and many small companies manufacture and distribute similar products in competition with Essex.

Automotive wire is also manufactured for use in Essex's Wire Assembly Division, and for sale to other manufacturers of electrical components for the automotive industry, including the replacement market.

### *Power Conductor Division*

This division manufactures and sells aluminum and copper power transmission and distribution cable, both underground and overhead, and a variety of specialty cable such as portable power, control and high voltage cable. Its products are manufactured to approximately 10,000 different specifications of customers.

Transmission and distribution cable is sold to power companies, utilities and municipalities. Essex has a relatively small percentage of this market. In an effort to enlarge its position in this market, this division completed in 1967 facilities for the manufacture of insulated aluminum conductors. At present, sales volume has not reached the capacity of these facilities. In the field of transmission and distribution cable, the principal competitors of Essex are the aluminum producing companies and the major domestic wire and cable manufacturers.

One of Essex's two copper rolling mills for the reduction of copper bar into rod for wire drawing is operated by the division.

### *Communication & CATV Division*

This division manufactures and sells overhead and underground communication wire and cable for use in telephone and electronic carrier systems for the communication industry. Communication wire and cable is sold primarily to independent telephone companies. Essex has a relatively small percentage of this market and competes actively with several major companies for the communication wire and cable business.

This division also manufactures community antenna television (CATV) components and coaxial cable for CATV systems. Several large companies and many small companies compete intensely with Essex in the CATV cable and components field. Present and proposed governmental regulations and legislation dealing with CATV systems may limit future business in this area.

Other types of coaxial cable for use in electronic devices are also manufactured by the division and sold to the business machine and aviation industries.

### *Industrial Wire Products Division*

This division manufactures and sells copper electric power supply cords, terminal cord sets and insulated copper electric wire to manufacturers of appliances, electric tools and other electrically activated

devices and machines. Insulated electric wires are used for internal hook-up purposes or are grouped together into wire assemblies for appliances and air conditioning, heating and refrigeration equipment, and are also made into a number of different cord-set constructions for direct wall outlet usage. As to these products Essex competes with a few major companies and several small producers with limited product lines.

#### *Magnet Wire Division*

A broad line of copper and aluminum magnet wire is produced by this division to more than 22,000 different specifications for use in electric motors, generators, transformers and similar equipment. Sales are made principally to the electric motor industry, to manufacturers of power and distribution transformers, and to the automotive, appliance and television industries. The division furnishes magnet wire to the IWI Division for sale to the latter's customers, and to other divisions for use in the manufacture of their products.

Management believes Essex is one of the leading independent producers of magnet wire, although major wire companies and a few highly specialized companies compete actively with Essex for this business.

The division operates the other of Essex's two copper rolling mills, a copper remelt facility and a continuous casting aluminum billet and rod plant.

Specialized machinery and equipment utilized by Essex is also manufactured by the division. Such machinery and equipment manufactured in recent years includes two copper rolling mills, wire drawing equipment, payoffs and takeups, equipment for two new magnet wire plants, molding machines, presses, test equipment and many other items. Specialized machinery and equipment is also manufactured for sale to others, including some of the foregoing items and electric motor manufacturing equipment.

#### *Wire Assembly Division*

Electrical wire harnesses are designed and manufactured by this division for sale to vehicular manufacturers. Vehicular wire harnesses range from a single wire circuit assembly to a multi-circuit system, including attached devices, connectors and terminals. Nearly all of the components of these harnesses are manufactured by this and other divisions of Essex.

The division's two major customers are Ford Motor Company and Chrysler Corporation, whose purchases of wire harnesses constituted 12.7% and 3.7%, respectively, of Essex's total sales in 1970. In addition, wire harnesses are sold to automotive suppliers and replacement parts organizations, as well as to bus, truck, truck trailer and boat manufacturers.

Management believes that Essex is the largest independent manufacturer of wire harnesses. The other major manufacturer of wire harnesses is owned by, and produces for, a large automotive manufacturer, and there are several smaller producers.

#### *Electro-Mechanical Division*

This division designs, manufactures and sells to automotive original equipment manufacturers a wide range of switches, relays, vacuum controls, lighting assemblies, ignition coils, solenoids and other devices associated with the electrical, ignition and vacuum systems of motor vehicles. Switches, a principal

product of the division, include those for turn signals, headlights, wipers and power windows. Many of the individual products are also sold to general industrial markets.

Many of the above products, as well as automotive water pumps also manufactured by Essex, are sold to the automotive replacement parts markets, along with a broad range of ignition components, some of which are purchased from outside sources.

While there are many companies producing electro-mechanical devices for the automotive industry, management believes that Essex is one of the leading independent manufacturers of such devices.

#### *Controls Division*

This division manufactures electrical, electro-mechanical and hybrid solid state devices, including switches, relays, contactors, thermostats, small transformers and ignition controls which are marketed to original equipment manufacturers in the appliance, heating, air conditioning, refrigeration and business machine industries. The division also manufactures a wide variety of gas valves, regulators, manifolds and controls for use in gas furnaces and appliances as well as mounting devices for the gas utility industry. Essex has many large and small competitors in the controls industry.

#### *IWI Division*

This is primarily a marketing division which distributes to the electrical and electronic industries magnet wire, hook-up wire and special controls produced by other divisions of Essex as well as a wide variety of electrical insulating materials produced by this division and by other companies. The division also sells motors, electrical controls and associated electrical components manufactured by others to wholesalers for the air conditioning, heating and refrigeration replacement markets.

The division also fabricates a wide range of electrical insulating materials into custom designed shapes which are sold principally for electrical and electronic manufacturing requirements.

#### *Metal & Plastic Products Division*

Brass and steel fittings, flexible connectors and supplies used by the gas hook-up, machine tool, transportation and appliance industries are produced and sold by this division, as well as aluminum extrusions and fabrications for construction, general industrial and appliance applications. Essex is not a major factor in the metal products field, which is occupied by many large and small competitors.

Vacuum-formed plastic parts and extruded plastic products, such as waterstop and window moldings, gaskets, vinyl edging and various thermal-formed shapes, are manufactured and sold by the division for a great number of industrial and commercial applications.

The division also manufactures additional specialized plastic products. These include molded plastic parts for automotive interiors, large vacuum-formed illuminated plastic signs for various industrial and commercial applications, and extruded plastic and fabricated artificial leather welts, bindings, fastenings, moldings and trim used primarily by the automotive industry (and also in the mobile home field) in upholstering the interior of vehicles.



Essex encounters substantial competition in the plastic products field from numerous small independently owned plastic extrusion plants located throughout the country.

The division also manufactures and sells electric blankets and heating pads, primarily using components supplied by other divisions of Essex. There are two other major domestic manufacturers of electric blankets.

#### *Motor Carrier Subsidiary*

Transport Motor Express, Inc. ("TMX"), a wholly-owned subsidiary of Essex, is a common carrier authorized by the Interstate Commerce Commission to transport general commodities between points in Illinois, Indiana, Kentucky, Missouri, Ohio, Pennsylvania and West Virginia. TMX operates approximately 2,500 pieces of rolling equipment. Rates governing interstate shipments by TMX are subject to the jurisdiction of the Interstate Commerce Commission, and rates governing its intrastate shipments are subject to the control of various state regulatory commissions.

### DESCRIPTION OF DEBENTURES

The Debentures will be issued under an Indenture to be dated as of September 1, 1971 (the "Indenture"), between Essex and Manufacturers Hanover Trust Company, as Trustee (the "Trustee"). The statements under this caption are brief summaries of certain provisions contained in the Indenture, do not purport to be complete and are qualified in their entirety by reference to the Indenture, a copy of which is filed as an exhibit to the Registration Statement.

The Debentures will be direct, unsecured obligations of Essex, limited in aggregate principal amount to \$50,000,000, will mature September 1, 1996, and will bear interest from September 1, 1971 at the rate per annum shown on the cover page of this Prospectus, payable semi-annually on March 1 and September 1 of each year to holders of record at the close of business on the preceding February 15 and August 15, respectively, subject to certain exceptions. Principal and interest are payable and the Debentures are convertible and transferable at the office or agency of Essex in the Borough of Manhattan, City of New York, maintained for that purpose. Interest may be paid to the registered holders of the Debentures by check mailed to them at their addresses on the Debenture Register.

The Debentures will be issued in fully registered form only, in denominations of \$1,000 and any integral multiple of \$1,000, and may be transferred or exchanged without payment of any charge other than taxes or governmental charges.

#### **Conversion Rights**

The Debentures are convertible into Common Stock of Essex, initially at the conversion price stated on the cover page of this Prospectus, at any time prior to their maturity, or as to any Debenture called for redemption, prior to the close of business on the third business day preceding the date fixed for redemption. The benefits, if any, of conversion may be lost, however, if the holder of the Debenture fails to convert prior to the close of business on the third business day preceding the date fixed for redemption despite the fact that conversion may have been in his best interest. The Indenture contains provisions requiring adjustment of the conversion price in certain cases, including: the subdivision, combination or reclassification of outstanding Common Stock; the distribution of shares of Common

Stock to all holders of Common Stock; the issuance of rights or warrants to all holders of Common Stock entitling them to acquire Common Stock (or securities convertible into Common Stock) at a price per share (or having a conversion price per share) less than the then Current Market Price (as defined) of Common Stock; or the distribution to all holders of Common Stock of certain other shares or evidences of indebtedness or assets (excluding cash dividends or distributions) or rights or warrants (other than those referred to above). The Indenture also provides that Essex is entitled to make such reductions in the conversion price as it shall determine to be advisable in order that certain stock related distributions hereafter made by Essex to its stockholders shall not be taxable. Essex is not required to make adjustments in the conversion price of less than 50¢, but the same will be taken into account in the computation of any subsequent adjustment. Fractional shares of Common Stock are not to be issued upon conversion, but the Indenture provides that the person entitled to a fractional interest may elect either to purchase an additional fractional interest to make up a full share or to sell such fractional interest, or that Essex, at its option, may elect to pay a cash adjustment in respect of such fractional interest. On conversion, no adjustment for interest or dividends is to be made except that interest will be paid in respect of any Debenture converted after the regular record date for any interest payment date and prior to each such interest payment date. (Article Thirteen.)

The Tax Reform Act of 1969 amended Section 305 of the Internal Revenue Code to render taxable certain actual or constructive distributions of stock (including rights) with respect to stock and convertible securities. Proposed regulations under Section 305 were published on March 18, 1971. Because of certain provisions described in the preceding paragraph relating to adjustments of the conversion price of the Debentures, no assurance can be given that a decrease in the conversion price of the Debentures, other than by reason of a stock dividend or stock split, made hereafter may not result in a transaction taxable to holders of the Debentures. These issues may be clarified when final regulations under Section 305 as amended are promulgated.

#### Subordination of Debentures

The Debentures are subordinated to "Superior Indebtedness" which is defined in the Indenture to mean all indebtedness of Essex for borrowed money which is not by its terms subordinated and junior to any other indebtedness of Essex. No payment on account of principal, premium, sinking fund or interest on the Debentures may be made unless full payment of amounts then due for principal, premium, sinking fund and interest on Superior Indebtedness has been made. In addition, no payment on account of principal, premium, sinking fund or interest on the Debentures is permitted if at the time or by reason of such payment, there shall exist an event of default under any Superior Indebtedness or in any instrument relating thereto which permits the holder of such Superior Indebtedness to accelerate the maturity thereof. An event of default under the Superior Indebtedness may occur in the event of non-payment of sums due thereunder or the violation of any of the restrictive covenants set forth in the instruments relating thereto. Upon any acceleration of the principal amount of the Debentures or upon any payment or distribution of assets of Essex to creditors upon any dissolution or winding-up or total or partial liquidation or reorganization, the Debentures will be subordinate and subject in right of payment to the prior payment in full of Superior Indebtedness. By reason of such subordination, in the event of such payment or distribution, holders of the Debentures may receive less, ratably, than other general creditors of Essex. (Article Fourteen.)

## Redemption

The Debentures will be redeemable on not less than 30 nor more than 60 days' notice, in whole or in part, at the election of Essex, at the applicable percentage of the principal amount thereof set forth below during the twelve months' periods beginning September 1 of the years specified:

<u>Year</u>		<u>Year</u>	
1971	105.375%	1982	102.42 %
1972	105.11	1983	102.15
1973	104.84	1984	101.88
1974	104.57	1985	101.61
1975	104.30	1986	101.34
1976	104.03	1987	101.08
1977	103.76	1988	100.81
1978	103.49	1989	100.54
1979	103.23	1990	100.27
1980	102.96	1991 and thereafter	100.00
1981	102.69		

The Debentures may be redeemed, on like notice, through the operation of the sinking fund described below on any September 1, beginning with September 1, 1982, at 100% of the principal amount thereof. The redemption price in each case will include accrued interest to the redemption date, exclusive of interest instalments maturing on or before such date paid to registered holders on interest record dates. (Articles Eleven and Twelve.)

## Sinking Fund

The Indenture will require Essex to retire, at 100% of the principal amount thereof, on September 1 in each of the years 1982 to and including 1995, a principal amount of Debentures equal to 5% (calculated to a multiple of \$1,000) of the principal amount of Debentures outstanding on September 1, 1981, subject to credits for Debentures surrendered for conversion which had not been called for redemption through the operation of the sinking fund, or acquired or redeemed otherwise than through the operation of the sinking fund, and so surrendered, acquired or redeemed at any time after September 1, 1981. (Sections 1201 and 1202.) In addition, Essex may at its option provide cash for the retirement, at 100% of the principal amount thereof, of a principal amount of Debentures not in excess of the required sinking fund deposit (before credits), on September 1 in each of the years 1982 to 1995, both inclusive. Such optional right of redemption is non-cumulative. (Section 1201.)

## Restrictions on Payment of Dividends and Acquisition of Stock.

Essex will not be permitted to pay any dividend on stock of any class, other than in its own stock and dividends on its \$2.84 Series A Cumulative Convertible Preferred Stock outstanding at the date of the Indenture, or acquire stock of any class, if, after giving effect thereto, the aggregate payments for all such purposes subsequent to December 31, 1970 would exceed the sum of (i) Consolidated Net Income (as defined) subsequent to December 31, 1970, (ii) the aggregate of the net proceeds received by Essex from the issuance or sale for cash or other property of its own stock subsequent to December 31, 1970, (iii) the aggregate of the net proceeds received by Essex from the issuance or

sale for cash or other property of any indebtedness of Essex which is converted into its own stock subsequent to December 31, 1970, and (iv) \$25,000,000. The foregoing restrictions, however, shall not prevent the payment of any dividend within 90 days after the date of declaration thereof, if at such date such declaration complied with the provisions of the Indenture. No subsidiary will be permitted to acquire stock of Essex. (Section 1008.)

#### **Defaults and Waiver Thereof**

The Indenture will provide that the happening of one or more of the following events shall constitute an Event of Default: (i) default for 30 days in the payment of interest on any Debenture; (ii) default in the payment of the principal of and premium, if any, on any Debenture; (iii) default in any payment required by the sinking fund; (iv) default in performance, or breach of any covenant or warranty in the Indenture for 60 days after notice; and (v) certain events of insolvency. (Section 501.) In case an Event of Default shall have occurred and be continuing, the Trustee or the holders of at least 25% in principal amount of the Debentures then outstanding may declare the principal of all of the Debentures to be due and payable immediately, but such declaration may be annulled, and certain past defaults waived, by the holders of not less than a majority in aggregate principal amount of the Debentures, upon the conditions provided in the Indenture. (Sections 502 and 513.) Essex is required to file annually with the Trustee a written statement by officers as to the existence or non-existence of defaults. (Section 1009.)

#### **Modification of the Indenture**

The Indenture will provide that, with the consent of the holders of not less than 66 $\frac{2}{3}$ % in principal amount of the outstanding Debentures, modifications and alterations of the Indenture may be made which affect the rights of the holders of the Debentures; but no such modification or alteration may be made without the consent of the holder of each Debenture so affected which would (i) change the maturity of the principal of, or of any instalment of interest on, any Debenture, or reduce the principal amount thereof or the interest or any premium payable upon the redemption thereof; (ii) reduce the above-stated percentage in principal amount of outstanding Debentures required to modify or alter the Indenture; or (iii) adversely affect the right to convert Debentures. (Section 902.)

#### **Relationship with Trustee**

Manufacturers Hanover Trust Company, the Trustee under the Indenture, is one of the lenders under a revolving credit agreement under which Essex had borrowings of \$47,000,000 outstanding at June 30, 1971 (see CAPITALIZATION). Manufacturers Hanover Trust Company also maintains other commercial and fiduciary relationships with Essex.

### **DESCRIPTION OF COMMON STOCK**

The authorized capital of Essex consists of 10,000,000 shares of Preferred Stock, \$1 par value, and 25,000,000 shares of Common Stock, \$1 par value. The Preferred Stock is issuable in series. The Board of Directors is authorized to fix the number of shares of Preferred Stock constituting each series; the dividends payable thereon (which are cumulative and payable quarterly); the sinking fund and redemption rights, if any, thereof; and the conversion rights, if any, thereof. In all other respects all series of the Preferred Stock shall rank equally. As of the date of this Prospectus, 552,887 shares

of an initial series of Preferred Stock, designated as \$2.84 Series A Cumulative Convertible Preferred Stock, and 8,800,470 shares of Common Stock are outstanding.

### **Dividend Rights**

Subject to the dividend rights of the \$2.84 Series A Cumulative Convertible Preferred Stock and of any other Preferred Stock which may at any time be outstanding, and subject to such preferential rights as may be fixed by the Board of Directors for such Preferred Stock, dividends may be paid on the Common Stock as and when declared by the Board of Directors out of assets legally available therefor. There is no retirement or sinking fund requirement with respect to the \$2.84 Series A Cumulative Convertible Preferred Stock. Essex's right to pay dividends is restricted under certain debt instruments of Essex (see note 6 of the NOTES TO CONSOLIDATED FINANCIAL STATEMENTS). At June 30, 1971, under the most restrictive provisions of such instruments, approximately \$47,000,000 of consolidated retained earnings was available for the payment of cash dividends. For dividend restrictions which will be imposed by the Indenture under which the Debentures will be issued, see DESCRIPTION OF DEBENTURES.

### **Voting Rights**

Each share of Preferred and Common Stock is entitled to one vote at all meetings of shareholders. However, if dividends on the Preferred Stock are in arrears in an amount at least equal to six full quarterly dividends, the holders of Preferred Stock shall have the right, voting separately as a class, to elect two additional directors. Such right terminates when all arrearages are paid.

Without the affirmative vote of the holders of at least two-thirds of the Preferred Stock then outstanding, voting as a class, Essex may not create any other class of stock ranking prior to the Preferred Stock or adversely affect the preferences, rights or powers of the Preferred Stock; without the affirmative vote of the holders of at least a majority of the Preferred Stock then outstanding, voting as a class, Essex may not increase the authorized amount of Preferred Stock or authorize any class of stock ranking on a parity with the Preferred Stock; and without the affirmative vote of the holders of two-thirds of Preferred Stock of any series then outstanding, voting separately as a series, Essex may not adversely affect the preferences, rights or powers of any such series.

On all other matters the holders of Preferred Stock have equal voting rights with the holders of Common Stock share for share, voting together and not separately as a class. Holders of Preferred and Common Stock have cumulative voting rights in the election of directors.

### **Other Matters**

In the event of liquidation the holders of the Common Stock are entitled to all assets that remain after satisfaction of creditors and the liquidation preferences of the Preferred Stock. Holders of Common Stock do not have preemptive rights. The shares of Common Stock outstanding are, and the shares of Common Stock issuable upon conversion of the Debentures will be, fully paid and non-assessable, except that under certain circumstances the shareholders of a Michigan corporation may be liable for labor claims against the corporation.

The shares of Common Stock may not be purchased or otherwise acquired by Essex for consideration while any arrears exist with respect to dividends on any series of Preferred Stock. Reference is made to note 6 of NOTES TO CONSOLIDATED FINANCIAL STATEMENTS for information with respect to other limitations on acquisitions by Essex of shares of its capital stock.

### Transfer Agents and Registrars

The Transfer Agents for the Common Stock of Essex are The Chase Manhattan Bank (National Association), One Chase Manhattan Plaza, New York, New York 10015, and Lincoln National Bank and Trust Company, 116 East Berry Street, Fort Wayne, Indiana 46802. The Registrars are Manufacturers Hanover Trust Company, 40 Wall Street, New York, New York 10015, and Fort Wayne National Bank, 110 West Berry Street, Fort Wayne, Indiana 46802.

### Reports to Shareholders

Essex furnishes its shareholders with annual reports containing certified financial statements and publishes unaudited quarterly reports of earnings.

### UNDERWRITING

Subject to the terms and conditions set forth in the Underwriting Agreement, Essex has agreed to sell, and each of the Underwriters, for whom Paine, Webber, Jackson & Curtis Incorporated is acting as Representative, has severally agreed to purchase, the principal amount of Debentures set forth opposite the name of such Underwriter below:

<u>Underwriter</u>	<u>Principal Amount of Debentures</u>
Paine, Webber, Jackson & Curtis Incorporated .....	\$7,975,000
The First Boston Corporation .....	1,000,000
Kuhn, Loeb & Co. ....	1,000,000
Lehman Brothers Incorporated .....	1,000,000
Merrill Lynch, Pierce, Fenner & Smith Incorporated .....	1,000,000
Blyth & Co., Inc. ....	800,000
Drexel Firestone, Incorporated .....	800,000
duPont Glore Forgan Incorporated .....	800,000
Eastman Dillon, Union Securities & Co. Incorporated .....	800,000
Goldman, Sachs & Co. ....	800,000
Halsey, Stuart & Co. Inc. ....	800,000
Hornblower & Weeks-Hemphill, Noyes .....	800,000
Kidder, Peabody & Co. Incorporated .....	800,000
Lazard Freres & Co. ....	800,000
Loeb, Rhoades & Co. ....	800,000
Salomon Brothers .....	800,000
Smith, Barney & Co. Incorporated .....	800,000
Stone & Webster Securities Corporation .....	800,000
Wertheim & Co. ....	800,000
White, Weld & Co. ....	800,000
Dean Witter & Co. Incorporated .....	800,000
Bache & Co. Incorporated .....	800,000
Paribas Corporation .....	800,000
Bear, Stearns & Co. ....	550,000
A. G. Becker & Co. Incorporated .....	550,000
Alex. Brown & Sons .....	550,000
CBWL-Hayden, Stone Inc. ....	550,000

<u>Underwriter</u>	<u>Principal Amount of Debentures</u>
Clark, Dodge & Co. Incorporated .....	\$ 550,000
Dominick & Dominick, Incorporated .....	550,000
Equitable Securities, Morton & Co. Incorporated .....	550,000
E. F. Hutton & Company Inc. ....	550,000
W. E. Hutton & Co. ....	550,000
F. S. Moseley & Co. ....	550,000
Reynolds Securities Inc. ....	550,000
L. F. Rothschild & Co. ....	550,000
Shearson, Hammill & Co. Incorporated .....	550,000
Shields & Company Incorporated .....	550,000
G. H. Walker & Co. Incorporated .....	550,000
Walston & Co., Inc. ....	550,000
American Securities Corporation .....	425,000
Estabrook & Co., Inc. ....	425,000
Piper, Jaffray & Hopwood Incorporated .....	425,000
Thomson & McKinnon Auchincloss Inc. ....	425,000
Spencer Trask & Co. Incorporated .....	425,000
Tucker, Anthony & R. L. Day .....	425,000
C. E. Unterberg, Towbin Co. ....	425,000
Robert W. Baird & Co. Incorporated .....	350,000
William Blair & Company .....	350,000
J. C. Bradford & Co. ....	350,000
Dain, Kalman & Quail, Incorporated .....	350,000
R. S. Dickson, Powell, Kistler & Crawford .....	350,000
Johnston, Lemon & Co. ....	350,000
Loewi & Co. Incorporated .....	350,000
McDonald & Company .....	350,000
Mitchell, Hutchins & Co., Incorporated .....	350,000
Mitchum, Jones & Templeton Incorporated .....	350,000
The Ohio Company .....	350,000
Prescott, Merrill, Turben & Co. ....	350,000
Watling, Lerchen & Co. ....	350,000
Bateman Eichler, Hill Richards, Incorporated .....	300,000
Bosworth, Sullivan & Company, Inc. ....	300,000
The Chicago Corporation .....	300,000
Crowell, Weedon & Co. ....	300,000
Davis, Skaggs & Co., Inc. ....	300,000
Eppler, Guerin & Turner, Inc. ....	300,000
Fahnestock & Co. ....	300,000
First Albany Corporation .....	300,000
First California Company Incorporated .....	300,000
First of Michigan Corporation .....	300,000
Fulton, Reid & Staples, Inc. ....	300,000

<u>Underwriter</u>	<u>Principal Amount of Debentures</u>
Johnson, Lane, Space, Smith & Co., Inc. ....	\$ 300,000
McCourtney-Breckenridge & Company .....	300,000
The Milwaukee Company .....	300,000
Newhard, Cook & Co. ....	300,000
Putnam, Coffin, Doolittle, Newburger Division of Advest Co. ....	300,000
Reinholdt & Gardner .....	300,000
The Robinson-Humphrey Company, Inc. ....	300,000
Shuman, Agnew & Co., Inc. ....	300,000
Singer, Deane & Scribner .....	300,000
Stern Brothers & Co. ....	300,000
Sutro & Co. Incorporated .....	300,000
Weis, Voisin & Co., Inc. ....	200,000
Knight, Carry, Bliss & Co., Incorporated .....	200,000
Seidlitz and Company, Inc. ....	200,000
Total .....	\$50,000,000

The nature of the underwriting obligation is such that all of the \$50,000,000 principal amount of Debentures will be purchased if any are purchased, except that in the event of default by one or more Underwriters, the Underwriting Agreement provides that, in certain circumstances, commitments of non-defaulting Underwriters may be increased or other underwriters may be substituted.

The Underwriters propose to offer the Debentures in part directly to the public at the initial public offering price set forth on the cover page of this Prospectus, and in part to certain securities dealers at such price less a concession not in excess of  $\frac{3}{8}$  of 1% of the principal amount. The Underwriters may allow, and such dealers may reallow, a concession not in excess of  $\frac{1}{4}$  of 1% of the principal amount to certain brokers and dealers. After the Debentures are released for sale to the public, the offering price and other selling terms may from time to time be varied by the Representative.

James W. Davant and Walter E. Dennis, directors of Essex, are the president and chief executive officer and vice-president, respectively, of Paine, Webber, Jackson & Curtis Incorporated.

#### LEGAL OPINIONS

Legal matters in connection with the securities offered by this Prospectus are being passed upon for Essex by Messrs. Kirkland, Ellis, Hodson, Chaffetz & Masters, Chicago, Illinois, and for the Underwriters by Messrs. Milbank, Tweed, Hadley & McCloy, New York, New York. Members of the firm of Kirkland, Ellis, Hodson, Chaffetz & Masters passing upon the foregoing legal matters own 730 shares of Common Stock of Essex.

#### EXPERTS

The audited financial statements contained in this Prospectus have been included in reliance upon the reports of Peat, Marwick, Mitchell & Co. and Arthur Young & Company and upon the authority of such firms as experts in accounting and auditing.



## ACCOUNTANTS' REPORT

The Shareholders and Board of Directors  
Essex International, Inc.:

We have examined the consolidated balance sheet of Essex International, Inc. and subsidiaries as of December 31, 1970 and the related statements of earnings, retained earnings, additional paid-in capital and changes in financial position for the five years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the financial statements of Transport Motor Express, Inc., a wholly-owned subsidiary, for the years prior to 1969; those statements were examined by other independent public accountants whose report has been furnished to us.

In our opinion, based on our examination and the report of other independent public accountants, such financial statements present fairly the consolidated financial position of Essex International, Inc. and subsidiaries at December 31, 1970 and the results of their operations and changes in financial position for the five years then ended, in conformity with generally accepted accounting principles which, except for the change (of which we approve) in method of computing depreciation as described in note B to the Consolidated Statement of Earnings, have been applied on a consistent basis.

PEAT, MARWICK, MITCHELL & CO.

Chicago, Illinois  
February 11, 1971, except as to  
note 5 which is as of  
February 22, 1971

## REPORT OF CERTIFIED PUBLIC ACCOUNTANTS

The Board of Directors  
Transport Motor Express, Inc.

We have examined the consolidated statements of income, stockholders' equity and changes in financial position of Transport Motor Express, Inc. for the three years ended December 31, 1968 (none of which are presented separately herein). Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the consolidated results of operations and changes in consolidated financial position of Transport Motor Express, Inc. for the three years ended December 31, 1968, in conformity with generally accepted accounting principles applied on a consistent basis during the period.

ARTHUR YOUNG & COMPANY

Toledo, Ohio  
February 22, 1969

ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET

December 31, 1970 and June 30, 1971

ASSETS

	<u>December 31, 1970</u>	<u>June 30, 1971 (Unaudited)</u>
Current assets:		
Cash .....	\$ 17,107,250	\$ 21,911,814
Marketable securities, at cost (market value 1970, \$16,319,638; 1971, \$8,835,244) .....	15,056,367	8,061,348
Receivables:		
Notes—trade .....	125,355	132,274
Customer accounts .....	87,544,368	81,364,619
Other .....	1,449,579	519,065
	<u>89,119,302</u>	<u>82,015,958</u>
Less allowance for doubtful accounts .....	790,984	1,055,200
Net receivables .....	<u>88,328,318</u>	<u>80,960,758</u>
Inventories on hand, at the lower of cost (mainly last-in, first-out) or market (note 2) .....	158,478,095	162,338,817
Prepaid expenses .....	2,626,886	3,923,292
Prepaid income taxes (note 5) .....	1,370,620	1,408,315
Total current assets .....	<u>282,967,536</u>	<u>278,604,344</u>
Investments and other assets:		
Excess cost of companies acquired .....	5,146,910	5,141,330
Deferred research and development costs (note 3) .....	1,570,195	1,613,169
Other investments and receivables, at cost .....	5,474,340	4,550,153
Total investments and other assets .....	<u>12,191,445</u>	<u>11,304,652</u>
Property, plant, and equipment, at cost:		
Land .....	5,555,933	5,567,760
Buildings and improvements .....	58,093,770	58,873,128
Machinery, equipment, and fixtures .....	123,643,771	127,234,832
	<u>187,293,474</u>	<u>191,675,720</u>
Less accumulated depreciation and amortization (note 4) .....	80,428,031	84,566,380
Net property, plant, and equipment .....	<u>106,865,443</u>	<u>107,109,340</u>
	<u>\$402,024,424</u>	<u>\$397,018,336</u>

See accompanying Notes to Consolidated Financial Statements.

ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET

December 31, 1970 and June 30, 1971

LIABILITIES AND STOCKHOLDERS' EQUITY

	December 31, 1970	June 30, 1971 (Unaudited)
Current liabilities:		
Notes payable .....	\$ 1,000,000	\$ ---
Dividends payable .....	3,032,691	3,032,691
Current maturities of long-term debt .....	4,415,614	3,979,683
Accounts payable .....	27,273,142	16,680,659
Provision for excess of fixed premium contract prices of unde- livered copper over last-in, first-out inventory value thereof (note 2) .....	10,294,111	6,914,031
Customers' deposits .....	1,621,268	1,245,404
Accrued expenses:		
Salaries and wages .....	6,383,807	7,795,509
Taxes, other than income taxes .....	4,763,451	5,648,302
Interest and other .....	7,711,241	8,331,527
Income taxes (note 5) .....	4,277,360	6,460,085
Total current liabilities .....	<u>70,772,685</u>	<u>60,088,891</u>
Long-term debt less current maturities (note 6) .....	120,121,530	116,264,881
Other liabilities .....	1,297,476	1,084,263
Deferred income taxes (note 5) .....	4,790,487	5,361,850
Commitments and contingencies (notes 5 and 8)		
Stockholders' equity:		
Preferred stock of \$1.00 par value, issuable in series, 10,000,000 authorized; issued 552,887 shares of \$2.84 Series A cumulative convertible preferred stock with aggregate liquidation preference of \$28,197,237 (notes 1 and 7) .....	552,887	552,887
Common stock of \$1.00 par value. Authorized 25,000,000 shares; issued 8,800,470 shares (notes 1 and 7) .....	8,800,470	8,800,470
Additional paid-in capital (note 1) .....	21,067,704	21,067,704
Retained earnings (note 6) .....	174,621,185	183,797,390
Total stockholders' equity .....	<u>205,042,246</u>	<u>214,218,451</u>
	<u>\$402,024,424</u>	<u>\$397,018,336</u>

See accompanying Notes to Consolidated Financial Statements.

ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

STATEMENT OF CONSOLIDATED RETAINED EARNINGS

Five Years and Six Months Ended June 30, 1971

	Year Ended December 31					Six Months Ended June 30, 1971 (Unaudited)
	1966	1967	1968	1969	1970	
Balance at beginning of period (note 1)	\$ 87,451,044	\$107,697,539	\$128,200,542	\$146,931,998	\$163,839,832	\$174,621,185
Add:						
Net earnings .....	28,011,763	31,894,803	30,782,650	28,359,393	23,621,516	15,241,585
Retained earnings of pooled companies, not included retroactively (note 1) .....	284,518	1,621,284	397,035	—	—	—
	<u>115,747,325</u>	<u>141,213,626</u>	<u>159,380,227</u>	<u>175,291,391</u>	<u>187,461,348</u>	<u>189,862,770</u>
Deduct:						
Cash dividends declared:						
Common .....	4,544,630	7,372,341	9,625,947	10,222,643	10,560,563	5,280,280
Preferred .....	—	—	—	699,728	1,513,990	785,100
Pooled companies, prior to combination .....	896,366	667,692	702,282	529,188	56,210	—
Excess of cost over par value of treasury shares retired less amounts (1966—\$68,492; 1967—\$65,802) allocated to additional paid-in capital	1,108,790	580,301	—	—	709,400	—
Provision for lawsuit settlements (net of tax) .....	1,500,000	—	1,500,000	—	—	—
Transfer to common stock account in connection with two-for-one stock split in May, 1967 (4,392,750 shares) .....	—	4,392,750	—	—	—	—
Transfer to common stock account in connection with stock dividend of pooled company, prior to combination .....	—	—	620,000	—	—	—
	<u>8,049,786</u>	<u>13,013,084</u>	<u>12,448,229</u>	<u>11,451,559</u>	<u>12,840,163</u>	<u>6,065,380</u>
Balance at end of period .....	<u>\$107,697,539</u>	<u>\$128,200,542</u>	<u>\$146,931,998</u>	<u>\$163,839,832</u>	<u>\$174,621,185</u>	<u>\$183,797,390</u>

See accompanying Notes to Consolidated Financial Statements.

ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

STATEMENT OF CONSOLIDATED ADDITIONAL PAID-IN CAPITAL

Five Years and Six Months Ended June 30, 1971

	Year Ended December 31					Six Months Ended June 30, 1971 (Unaudited)
	1966	1967	1968	1969	1970	
Balance at beginning of period (note 1)	\$15,715,836	\$15,728,999	\$16,016,177	\$16,016,177	\$21,102,704	\$21,067,704
Portion of cost of treasury shares re- tired (1966—49,130 shares; 1967— 25,000 shares) .....	(68,492)	(65,802)	—	—	—	—
Excess of net assets acquired in poolings of interests over par value of common stock issued and retained earnings of pooled companies not included retro- actively (note 1) .....	81,655	65,802	—	—	—	—
Excess of net proceeds over par value of capital stock sold by pooled company during the year .....	—	287,178	—	—	—	—
Excess of market value over par value of 99,216 shares of preferred stock and 9,757 shares of common stock issued in connection with purchases of net assets of two companies .....	—	—	—	5,334,182	—	—
Costs incurred in connection with pool- ings of interests .....	—	—	—	(308,396)	00)	—
Excess of net proceeds over amount allo- cated to no par value of common stock sold by pooled company, prior to com- bination .....	—	—	—	60,741	—	—
Balance at end of period .....	<u>\$15,728,999</u>	<u>\$16,016,177</u>	<u>\$16,016,177</u>	<u>\$21,102,704</u>	<u>\$21,067,704</u>	<u>\$21,067,704</u>

See accompanying Notes to Consolidated Financial Statements.

ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

STATEMENT OF CONSOLIDATED CHANGES IN FINANCIAL POSITION

Five Years and Six Months Ended June 30, 1971

	Year Ended December 31					Six Months Ended June 30, 1971 (Unaudited)
	1966	1967	1968	1969	1970	
<b>Source:</b>						
<b>Operations:</b>						
Net earnings .....	\$28,011,763	\$31,894,803	\$30,782,650	\$28,359,393	\$23,621,516	\$15,241,585
Depreciation and amortization .....	8,216,664	10,164,653	9,320,717	10,537,276	11,960,866	5,849,688
Increase in deferred federal income taxes .....	155,000	50,000	500,057	1,530,349	1,830,664	571,363
Less dividends .....	36,383,427	42,109,456	40,603,424	40,427,018	37,413,046	21,662,636
	5,440,996	8,040,033	10,328,229	11,451,559	12,130,763	6,065,380
	30,942,431	34,069,423	30,275,195	28,975,459	25,282,283	15,597,256
Issuance of common stock .....	—	1,150,288	—	—	—	—
Issuance of long-term debt .....	1,250,000	1,877,500	27,000,000	5,192,941	61,885,610	—
Disposals of fixed assets .....	645,377	881,246	1,015,829	1,110,435	3,382,517	420,325
Sales of investments .....	—	—	—	—	2,279,737	—
Market value of common and preferred stock exchanged for net assets of companies acquired .....	—	—	—	5,443,155	—	—
	32,837,808	37,978,457	58,291,024	40,721,990	92,830,147	16,017,581
<b>Uses:</b>						
Purchase of treasury shares .....	1,163,042	—	—	—	—	—
Capital expenditures .....	23,488,858	30,736,368	20,726,387	32,272,296	16,517,409	6,003,910
Payments on long-term debt .....	2,674,506	3,018,454	2,883,612	2,418,167	3,552,229	3,856,649
Research and development costs .....	—	—	—	935,384	1,006,011	552,974
Decrease (increase) in other liabilities ..	—	(322,985)	(1,091,674)	(560,096)	795,279	213,213
Costs incurred in connection with poolings of interest .....	—	—	—	308,396	35,000	—
Miscellaneous .....	5,316,282	905,091	(996,389)	345,169	2,079,602	(929,767)
	32,642,688	34,336,928	21,521,936	35,719,316	23,985,530	9,696,979
Increase in working capital ...	\$ 195,120	\$ 3,641,529	\$36,769,088	\$ 5,002,674	\$68,844,617	\$ 6,320,602
<b>Changes in working capital:</b>						
<b>Increase (decrease) in current assets:</b>						
Cash .....	\$ 3,930,618	\$ 504,362	\$ 2,614,877	\$ 3,957,630	\$ 1,021,525	\$ 4,804,564
Marketable securities .....	20,224,760	(42,866,585)	8,553,564	(7,679,210)	5,691,233	(6,995,019)
Accounts receivable .....	9,041,586	5,708,730	1,211,191	24,481,581	1,897,959	(7,367,560)
Inventories .....	9,072,815	18,055,901	11,395,867	18,511,200	32,279,923	3,860,722
Other .....	371,462	2,751,123	(898,983)	108,105	399,702	1,334,101
	42,641,241	(15,846,469)	22,876,516	39,379,306	41,290,342	(4,363,192)
<b>Increase (decrease) in current liabilities:</b>						
Accounts and notes payable .....	6,944,345	(10,881,234)	6,255,329	35,932,076	(29,381,166)	(11,968,347)
Dividends .....	207,274	897,797	514,273	290,499	56,210	—
Provision for excess of fixed premium contract prices of undelivered copper over last-in, first-out inventory value thereof .....	25,040,370	(18,183,221)	(7,368,876)	1,258,155	2,590,811	(3,380,080)
Accrued wages, taxes and other expenses	2,616,086	3,604,600	3,062,651	(1,141,508)	728,552	2,917,839
Income taxes .....	7,180,150	5,793,215	(16,417,496)	(2,353,778)	(2,631,403)	2,182,725
Current maturities of long-term debt ...	457,896	(719,155)	61,547	391,188	1,082,721	(435,931)
	42,446,121	(19,487,998)	(13,892,572)	34,376,632	(27,554,275)	(10,683,794)
Increase in working capital ...	\$ 195,120	\$ 3,641,529	\$36,769,088	\$ 5,002,674	\$68,844,617	\$ 6,320,602

See accompanying Notes to Consolidated Financial Statements.

## ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### (1) Principles of Consolidation and Other Matters

The consolidated financial statements include the accounts of Essex International, Inc. and all majority-owned subsidiaries, except that the statement of consolidated earnings has not been restated to include the results of operations for periods prior to dates of acquisition of three small companies acquired in poolings of interests during the years 1966-1968 whose operations in the aggregate were not material. Inter-company accounts and transactions have been eliminated in consolidation. Financial statements of foreign subsidiaries (principally Canadian) have been translated into United States dollars at appropriate rates of exchange. Exchange gains and losses are charged or credited to current earnings.

The excess of Essex's equity in the net assets of subsidiaries consolidated over its investments in such subsidiaries aggregated \$23,069,888 and \$25,286,460 (unaudited) at December 31, 1970 and June 30, 1971, respectively, and has been credited to consolidated retained earnings.

During the five years and six months ended June 30, 1971 Essex acquired twelve companies in poolings of interests in exchange for 453,671 shares of \$2.84 Series A cumulative convertible preferred stock and 790,713 shares of common stock. Except as noted above, the consolidated statements of earnings, retained earnings, additional paid-in capital and changes in financial position have been restated to include these companies. Essex also acquired two companies in 1969 in exchange for 99,216 shares of \$2.84 Series A cumulative convertible preferred stock and 9,757 shares of common stock and accounted for them as purchases for accounting purposes. Accordingly, their results of operations have been included only from June 1, 1969, their date of acquisition.

#### (2) Inventories

Inventories on hand are stated at the lower of cost (mainly last-in, first-out) or market. A provision has been included in current liabilities for the excess of contract prices over the LIFO value of undelivered copper purchased (net of undelivered copper sold) under firm (non-cancellable) contracts.

At June 30, 1971, inventory on hand was \$13,422,414 (\$24,396,560 at December 31, 1970) less than it would have been on a first-in, first-out cost basis and the provision for undelivered copper commitments amounted to \$6,914,031 (\$10,294,111 at December 31, 1970), a total of \$20,336,445 (\$34,690,671 at December 31, 1970). The \$34,690,671 difference at December 31, 1970 includes \$19,632,258 excess of cost on a first-in, first-out basis over replacement market.

The net charge (credit) to cost of sales resulting from the application of the LIFO method of accounting, including, in 1970, the excess of cost on a first-in, first-out basis over replacement market, is as follows:

	Prior to 1966	Year Ended December 31					Six Months Ended June 30, 1971 (Unaudited)	Total
		1966	1967	1968	1969	1970		
Arising from undelivered copper purchased under firm contracts .....	\$ 6,956,872	\$25,040,370	\$(18,183,220)	\$(7,368,877)	\$ 1,258,155	\$ 2,590,811	\$(3,380,080)	\$ 6,914,031
Arising from inventories on hand .....	6,510,423	(389,431)	4,494,602	(3,625,143)	9,417,399	7,988,710	(10,974,146)	13,422,414
Net charge (credit) to cost of sales ..	<u>\$13,467,295</u>	<u>\$24,650,939</u>	<u>\$(13,688,618)</u>	<u>\$(10,944,020)</u>	<u>\$10,675,554</u>	<u>\$10,579,521</u>	<u>\$(14,354,226)</u>	<u>\$20,336,445</u>



## ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The amounts of inventory on hand, after elimination of inter-company profits, used in the computation of cost of sales were:

December 31:	
1965 .....	\$ 69,162,389
1966 .....	78,235,204
1967 .....	96,291,105
1968 .....	107,686,792
1969 .....	126,198,172
1970 .....	158,478,095
June 30, 1971 (Unaudited) .....	<u>\$162,338,817</u>

The method of accounting followed by Essex and its subsidiaries does not permit classification of inventories as to finished goods, work in process, raw materials, and supplies.

#### (3) Deferred Research and Development Costs

The company has a program of long-range research and development. Costs pertaining to this program are deferred and amortized over a three-year period beginning in the succeeding year. Amortization for 1970 and for the six months ended June 30, 1971 amounted to \$371,200 and \$510,000, respectively.

#### (4) Depreciation, Amortization, etc.

Depreciation through December 31, 1967 generally was provided by the parent company and domestic subsidiaries on new items of plant and equipment acquired after January 1, 1954 using the sum-of-the-years-digits method and for other items using the straight-line method. Effective January 1, 1968, Essex changed to the straight-line method of computing depreciation on all items of plant and equipment. Accelerated methods will be continued where applicable for tax purposes. As a result of this change, net earnings for the year ended December 31, 1968 were increased by \$869,000, or \$.10 per share (after provision for deferred federal income taxes).

The lives used in computing depreciation are as follows:

Buildings .....	15 to 30 years
Machinery and equipment .....	8 to 12 years
Revenue equipment .....	3 to 7 years
Automobiles, trucks and airplanes .....	3 to 6 years
Office furniture and equipment .....	10 years

Depreciation by the foreign subsidiaries has been provided on the declining-balance method using lives approximating those indicated above.

## ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Leasehold improvements are amortized over the life of the improvement or the term of the lease, whichever is shorter.

Expenditures for maintenance and repairs are charged to income; renewals and betterments considered to extend the useful lives of depreciable assets are capitalized.

The cost and accumulated depreciation on properties retired or otherwise disposed of are removed from the respective asset and reserve accounts at times of such disposal; any profit or loss arising therefrom is charged or credited to income.

#### (5) Federal Income Taxes

The Internal Revenue Service is presently examining the returns of Essex and some of its subsidiaries for the years 1963 through 1968. On February 22, 1971 the examining officer issued his report and proposed deficiencies against Essex. It is the opinion of management and Peat, Marwick, Mitchell & Co. that any deficiencies that may finally be determined will not have a material adverse effect on the consolidated financial statements.

The investment tax credit has been applied as a reduction of Federal income tax expense in the years allowable for tax purposes, as follows: 1966, \$673,000; 1967, \$799,000; 1968, \$627,000; 1969, \$739,000; 1970, \$406,000.

Prepaid and deferred income taxes relate to timing differences between financial reporting and tax reporting of certain expenses, principally depreciation, research and development costs and interest.

#### (6) Long-Term Debt

Long-term debt consisted of the following:

	December 31, 1970	June 30, 1971 (Unaudited)
9½% notes payable April 1, 1975 .....	\$ 40,000,000	\$ 40,000,000
Metropolitan Life Insurance Company 5¼% note, payable \$3,000,000 annually .....	23,950,000	23,950,000
Notes payable under revolving credit agreements .....	51,920,000	48,920,000
Miscellaneous notes with varying rates and maturities to 1981 .....	4,251,530	3,394,881
	\$120,121,530	\$116,264,881

Essex has a number of loan agreements which contain restrictions upon the payment of cash dividends and purchases of its own stock. Under the most restrictive of the agreements, approximately \$47,000,000 of retained earnings were available at June 30, 1971 for cash dividends and purchase of its own stock.

Essex has a revolving credit agreement with a group of banks in the United States to borrow up to \$70,000,000 at interest of ½ percent over prime rate to January 31, 1972. At that time, the com-

## ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

pany has the option to borrow up to \$52,500,000 payable in three equal annual installments at interest of ½ percent over prime rate prevailing from time to time. Under the agreement, working capital of at least \$100,000,000 must be maintained at all times.

Essex also has a revolving credit agreement with Chase and Bank of Ireland (International) Ltd. to borrow up to £1,000,000 sterling (approximately \$2,400,000 in equivalent U. S. funds) at any time up to January 31, 1972, at which time the company also has the option to borrow up to the same amount payable in four equal annual installments. Interest is at a fluctuating rate equal to the higher of one percent over Bank of England rate or six percent on \$1,560,000 and the best commercial rate plus ½ percent on \$840,000.

Maturities of long-term debt for the years ending December 31, 1971-1975 are \$4,415,614, \$3,673,753, \$20,202,559, \$20,035,427, and \$59,983,416, respectively.

#### (7) \$2.84 Series A Cumulative Convertible Preferred Stock

Each share is entitled to one vote at all meetings of shareholders, pays a \$2.84 cumulative dividend, and is convertible at any time into common stock on a share for share basis. The stock is callable by Essex on or after January 1, 1976 at a redemption price of \$60 per share, plus accrued unpaid dividends. At December 31, 1970 and June 30, 1971, 552,887 shares of common stock were reserved for issuance upon conversion of the preferred stock. In the opinion of Kirkland, Ellis, Hodson, Chaffetz & Masters, counsel for Essex, the excess of the liquidation value over the par value of the preferred stock, aggregating \$27,644,350, does not constitute a restriction upon the retained earnings of Essex.

#### (8) Commitments and Contingent Liabilities

Leases in effect at June 30, 1971 provide for annual fixed rentals aggregating \$973,598. These leases expire on various dates through 1988.

On May 8, 1969, American Metal Climax, Inc. filed suit against Essex in the United States District Court for the Southern District of New York claiming damages in the amount of \$24.2 million, plus interest and costs, for an alleged breach of an equipment lease agreement and a supply contract. In the opinion of White & Case, special counsel for Essex, the ultimate liability, if any, in respect to this litigation will not be material.

Other contingencies consist of various claims being contested and are not expected to have a material adverse effect on the consolidated financial statements.

#### (9) Pension Plans

Essex has several pension plans in effect, including pension plans of companies acquired, which cover regular salaried employees and certain groups of hourly-paid employees. Contributions by Essex, as specified in the plans, accrued and charged to income for the five years ended December 31, 1970 and the six month periods ended June 30, 1970 and 1971 were \$235,237, \$1,293,812, \$1,655,515, \$1,506,793, \$1,709,642, \$1,156,025 (unaudited) and \$910,648 (unaudited), respectively. Essex's policy is to fund pension costs accrued. The contributions, according to the actuarial reports, are sufficient to provide for normal costs, interest on the unfunded liability, and amortization of past service cost over a period not to exceed 30 years. At December 31, 1970, the unfunded past service cost amounted to approximately \$5,200,000.

ESSEX INTERNATIONAL, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

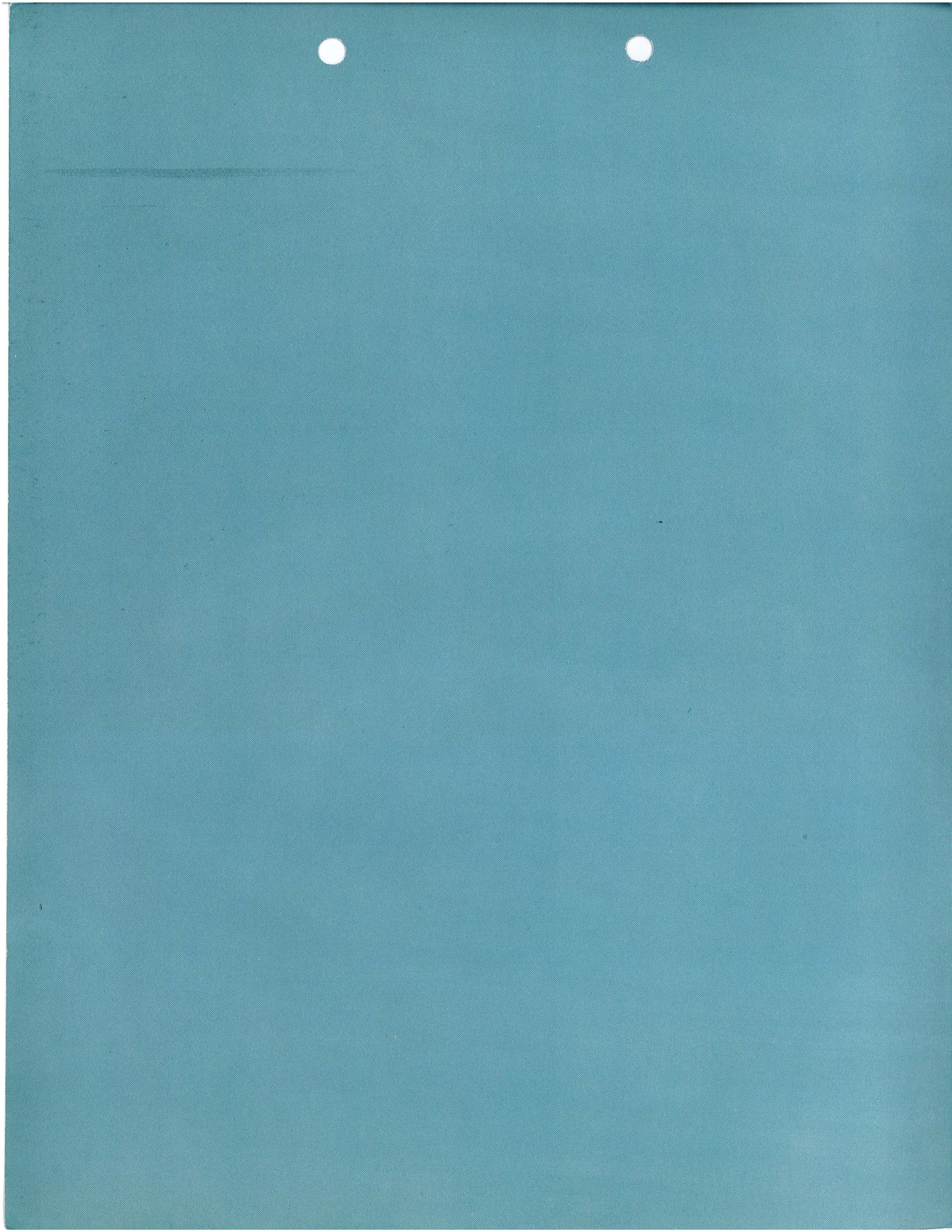
(10) Supplementary Profit and Loss Information

	Charged to Profit and Loss		
	Cost of Sales	Other	Total
<b>Year Ended December 31, 1966:</b>			
Maintenance and Repairs .....	\$10,674,040	\$ 485,174	\$11,159,214
Depreciation and Amortization .....	7,615,981	600,683	8,216,664
Taxes, Other Than Income Taxes:			
Property Taxes .....	1,869,407	504,183	2,373,590
Payroll Taxes .....	3,191,131	463,904	3,655,035
Other .....	823,492	584,046	1,407,538
Rents .....	855,632	617,994	1,473,626
Royalties .....	35,931	78,688	114,619
<b>Year Ended December 31, 1967:</b>			
Maintenance and Repairs .....	\$11,016,516	\$ 491,736	\$11,508,252
Depreciation and Amortization .....	8,565,610	1,599,043	10,164,653
Taxes, Other Than Income Taxes:			
Property Taxes .....	2,335,198	490,048	2,825,246
Payroll Taxes .....	4,363,136	417,582	4,780,718
Other .....	974,255	876,452	1,850,707
Rents .....	1,095,092	817,191	1,912,283
Royalties .....	52,895	121,708	174,603
<b>Year Ended December 31, 1968:</b>			
Maintenance and Repairs .....	\$11,797,468	\$ 631,161	\$12,428,629
Depreciation and Amortization .....	8,349,824	970,893	9,320,717
Taxes, Other Than Income Taxes:			
Property Taxes .....	2,984,779	450,063	3,434,842
Payroll Taxes .....	5,621,576	549,347	6,170,923
Other .....	982,289	1,362,988	2,345,277
Rents .....	1,496,756	840,392	2,337,148
Royalties .....	41,843	119,674	161,517
<b>Year Ended December 31, 1969:</b>			
Maintenance and Repairs .....	\$13,743,858	\$ 623,806	\$14,367,664
Depreciation and Amortization .....	9,777,869	759,407	10,537,276
Taxes, Other Than Income Taxes:			
Property Taxes .....	3,401,434	505,917	3,907,351
Payroll Taxes .....	6,807,059	594,608	7,401,667
Other .....	1,473,435	1,579,269	3,052,704
Rents .....	1,348,210	820,455	2,168,665
Royalties .....	47,723	118,261	165,984
<b>Year Ended December 31, 1970:</b>			
Maintenance and Repairs .....	\$14,790,466	\$ 813,979	\$15,604,445
Depreciation and Amortization .....	11,038,907	921,959	11,960,866
Taxes, Other Than Income Taxes:			
Property Taxes .....	3,987,522	617,501	4,605,023
Payroll Taxes .....	6,830,140	640,309	7,470,449
Other .....	1,879,820	1,635,330	3,515,150
Rents .....	1,577,941	1,480,068	3,058,009
Royalties .....	—	221,271	221,271
<b>Six Months Ended June 30, 1971 (Unaudited):</b>			
Maintenance and Repairs .....	\$ 7,078,407	\$ 274,047	\$ 7,352,454
Depreciation and Amortization .....	4,963,228	886,460	5,849,688
Taxes, Other Than Income Taxes:			
Property Taxes .....	2,095,577	357,028	2,452,605
Payroll Taxes .....	4,117,845	529,144	4,646,989
Other .....	941,768	903,986	1,845,754
Rents .....	555,599	957,196	1,512,795
Royalties .....	—	65,809	65,809









**THIS IS  
ESSEX**  
INTERNATIONAL, INC.

1601 Wall Street,  
Fort Wayne, Indiana 46804

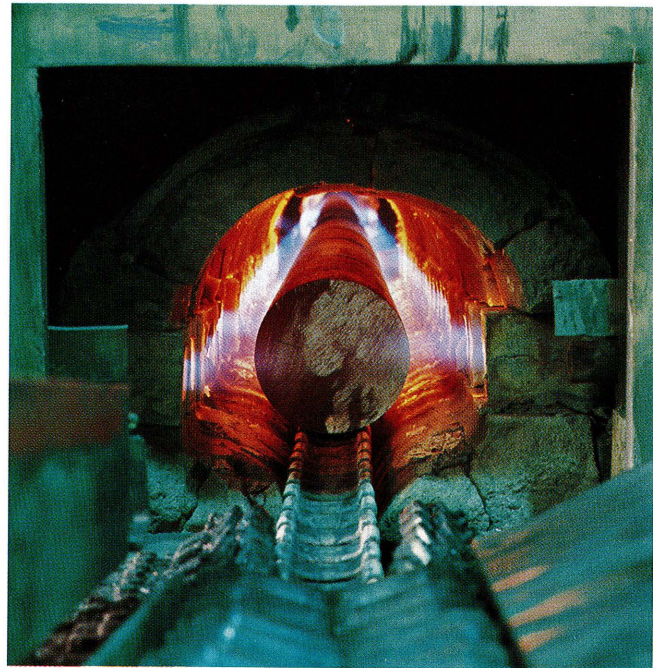


Essex International, Inc., one of the nation's foremost and fastest growing companies, holds a commanding position in the production and sale of electric current carrying devices and systems. The prime thrust of its diversified activities is in the design, engineering, manufacture and marketing of sophisticated non-proprietary products for the "electrical industry"—a term that includes every market using electric current in our highly technical civilization.

Electricity is the most widely utilized form of energy. Its use is approximately doubling every decade. Essex has manufactured and sold electric current carrying devices and systems since 1930 when it started with one small plant. Today, it has 10 divisions and its production facilities number close to 100 and are still increasing.

Numerous other progressive moves undertaken recently reveal that the company is pursuing a sophisticated growth concept with extraordinary vigor. In the last five years, Essex has made numerous acquisitions and invested in the magnitude of \$100 million in capital outlays. From its outset, Essex has experienced rapid growth by placing major emphasis on applied research and intensive product development. The greatest burst of activity has occurred in the years since 1965 when Essex became a publicly owned corporation with its stock listed for trading on the New York Stock Exchange.

A random sampling of Essex principal markets includes automotive, electric utility, construction, communication, electronics, CATV, heating, refrigeration, air-conditioning, mobile home, office machines, appliances, industrial controls, and



*Above, Aluminum billet is fed into gas fired heating oven on 1,675 ton extruder press.*

*Right, Wire stranding equipment produces full lines of aluminum cable for utilities, power companies and construction industry at newest facility of Power Conductor division, Paducah, Kentucky.*

**WHAT WE ARE...  
WHAT WE DO**





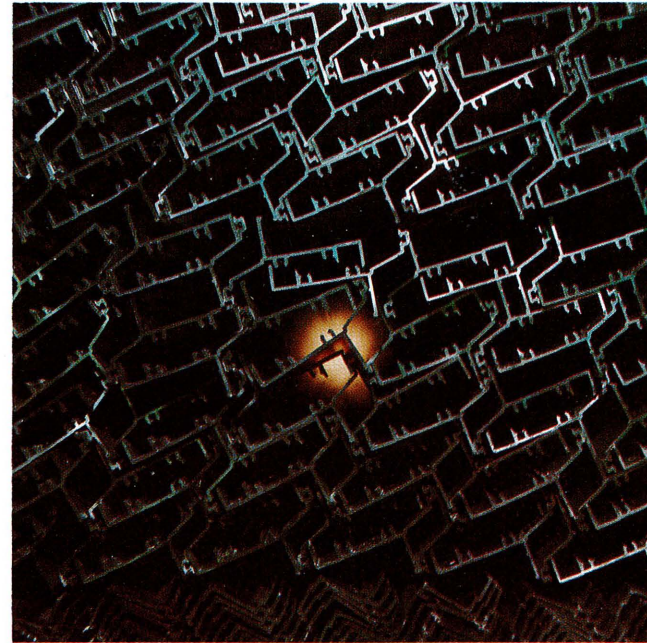
hundreds of others which use electrical energy abundantly.

The increasingly diversified nature of Essex may be seen from the following table which compares a breakdown of 1968 volume according to markets served with that currently projected by the company for 1973.

Market	1968 (\$Mil.)	%	Projected 1973 (\$Mil.)	%
Air Conditioning and Comfort	\$ 29.9	7.0	\$ 67.0	8.9
Appliance	77.5	18.2	147.0	19.5
CATV			9.0	1.2
Business Machines and Electronics	9.6	2.3	29.0	3.8
Construction and Building	108.9	25.6	159.0	21.1
Leisure	10.0	2.3	18.0	2.4
Mobile Homes	2.2	0.5	10.0	1.3
Communications	9.1	2.1	26.0	3.4
Utilities	9.7	2.3	20.0	2.7
Automotive *	162.9	38.2	192.0	25.5
Transport			63.0	8.4
Miscellaneous	6.2	1.5	14.0	1.8
	\$426.0	100.0	\$754.0	100.0

\* Excludes CEDAC, discussed on page 19.

The majority of Essex products are components especially engineered to generate, modify, control or transport electric current. These are used in



Stacked aluminum extrusions produced by Metal and Plastic Products division for construction and general industrial applications.

thousands of products manufactured by American industry, but serve the ultimate consumer unseen.

This applies to the automotive and appliance wire harnesses, switches and controls, building wire, magnet wire and cord sets as well as newer lines for telephone, power cable and CATV equipment. Growth emphasis is strongest in non-cable products which include control systems, metal products and plastic components.

While Essex today is large and increasingly multi-national, a common denominator encompasses all operations—emphasis on technical sophistication. In the electrical world we live in, Essex has virtually unlimited opportunity for growth by applying its reservoir of technology to new needs and demands for devices to put power to work for its present customers and in entirely new marketing areas.

Essex has pioneered in keeping America on the move. The company's contributions to the transportation industry range from complex electrical wire harnesses to safety devices to futuristic new developments.

Today, Essex produces a multitude of components for automobiles, trucks, off-the-road vehicles and marine equipment. The Essex automotive group is the nation's largest independent producer of wire harness assemblies and electrical devices for the transportation industry.

#### Wire Assembly Division

The Wire Assembly division is oriented basically

toward products that distribute and control electrical energy in vehicles. Its primary product is the wire harness which carries information to the dashboard and sends back driver commands. Essex manufactures wire harnesses to more than 7,500 customer specifications. They are structured to contain from one to almost 200 individual wires, with terminals, complex controls and switches attached. Some 98 per cent of the finished components of these harnesses are manufactured by various Essex divisions.

Many of the same basic operating and managerial techniques that propelled Essex into the forefront as domestic supplier to the automotive industry are being applied to its growing international operations, which include four wire harness plants in Canada. Essex has also expanded into Northern Ireland to develop automotive markets in Western Europe which are growing faster than those in the United States.

#### Electro-Mechanical Division

Essex is also recognized as innovator and leader in the miniaturization and integration of electro-mechanical components.

The company's Electro-Mechanical division produces hundreds of devices to activate controls and switches in vehicles. Dual purpose turn indicators, window and door switches, safety and warning units are but a few of the increasing number of operational, safety and convenience items produced for the transportation industry. Products also include coils, relays, starter solenoids, voltage regulators and related devices associated with the



ignition and electrical system as integral extensions of the wire harness assembly.

Today's automobile contains over 120 different electro-mechanical devices. The number is growing, brought about by a dramatic increase in electrical complexity necessitated by such seemingly simple things as automatic windows, adjustable seats, courtesy lights, dash indicators and the like. Each new safety feature installed in the car requires new electrical systems and devices.

Yet this is only the beginning. The age of electronics is about to overtake the automobile and with it a host of other industrial products requiring wire harnesses and controls to perform increasingly complex functions. Computers are being called upon and Essex will be right in the middle of the revolution in automobile design. Essex holds an advanced position in this field, as detailed in the section under research activities. These qualifications will surely be much sought after, insuring penetration into present markets and entry into entirely new industries at a pace far exceeding the company's present rate of expansion.

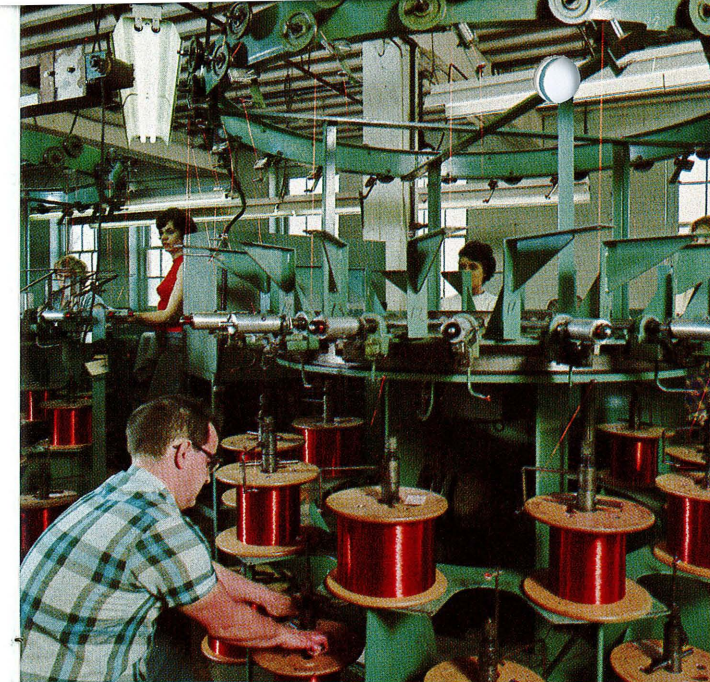
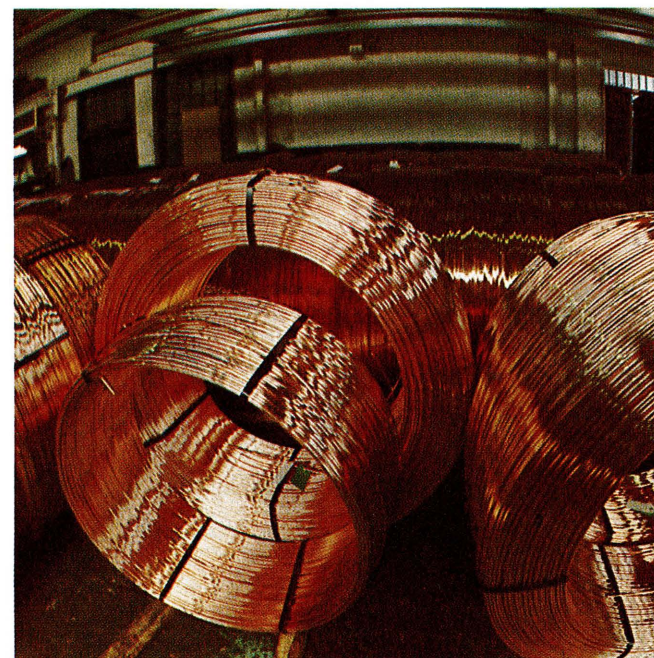
The four divisions of the wire and cable group are among the oldest and most diversified of the company's many manufacturing operations. This group constitutes the nation's largest independent producer of more than 20,000 types and sizes of wire and cable used to accumulate, transport and distribute electricity. Products range from overhead high voltage utility cable, underground telephone cable, building wire, to cord sets connecting everyday household appliances into wall outlets.

**Upper Left,** Fine magnet wire is spooled in production of solenoids, used for start winding of automobiles, trucks and power boats at Electro-Mechanical division plant, Zanesville, Ohio.

**Upper Right,** Newest facility of Industrial Wire Products division, Berrien Springs, Michigan. Total production of this division ranks Essex as country's leading maker of cord sets for consumer and industrial appliances.

**Lower Right,** Fully automated copper rod rolling mill of Magnet Wire division, Three Rivers, Michigan; one of two such mills designed and built by Essex to meet production needs of this essential raw material.

**Below,** Coiled copper rod, the end product of rolling mill (opposite), is further drawn into wire at other Essex plants.





This broad area of manufacture supplies several of the fastest growing segments of the economy including public utilities, the construction industry, independent telephone companies and the numerous producers of household and business electrical products.

#### Power Conductor Division

Essex entered the electrical power utility market to exploit its technical strength in one of the fastest growing segments of the electrical industry. This division of the company now produces and sells some 10,000 items built to industry and customer requirements including underground and overhead aluminum and copper transmission wire and cable and a variety of specialty items such as portable power, control and high voltage cables.

Prime customers are the half billion dollar a year market segment made up of power companies, utilities and municipalities for conducting electrical power from source to distribution centers and substations.

Its manufacturing facilities to penetrate these markets include complete aluminum and copper wire drawing, wire insulating, stranding, special wire shielding and jacketing operations and testing. An aluminum cable plant will use 60 million pounds of metal annually at full capacity. To supply these needs, Essex recently brought on stream a continuous casting aluminum billet and rod plant.

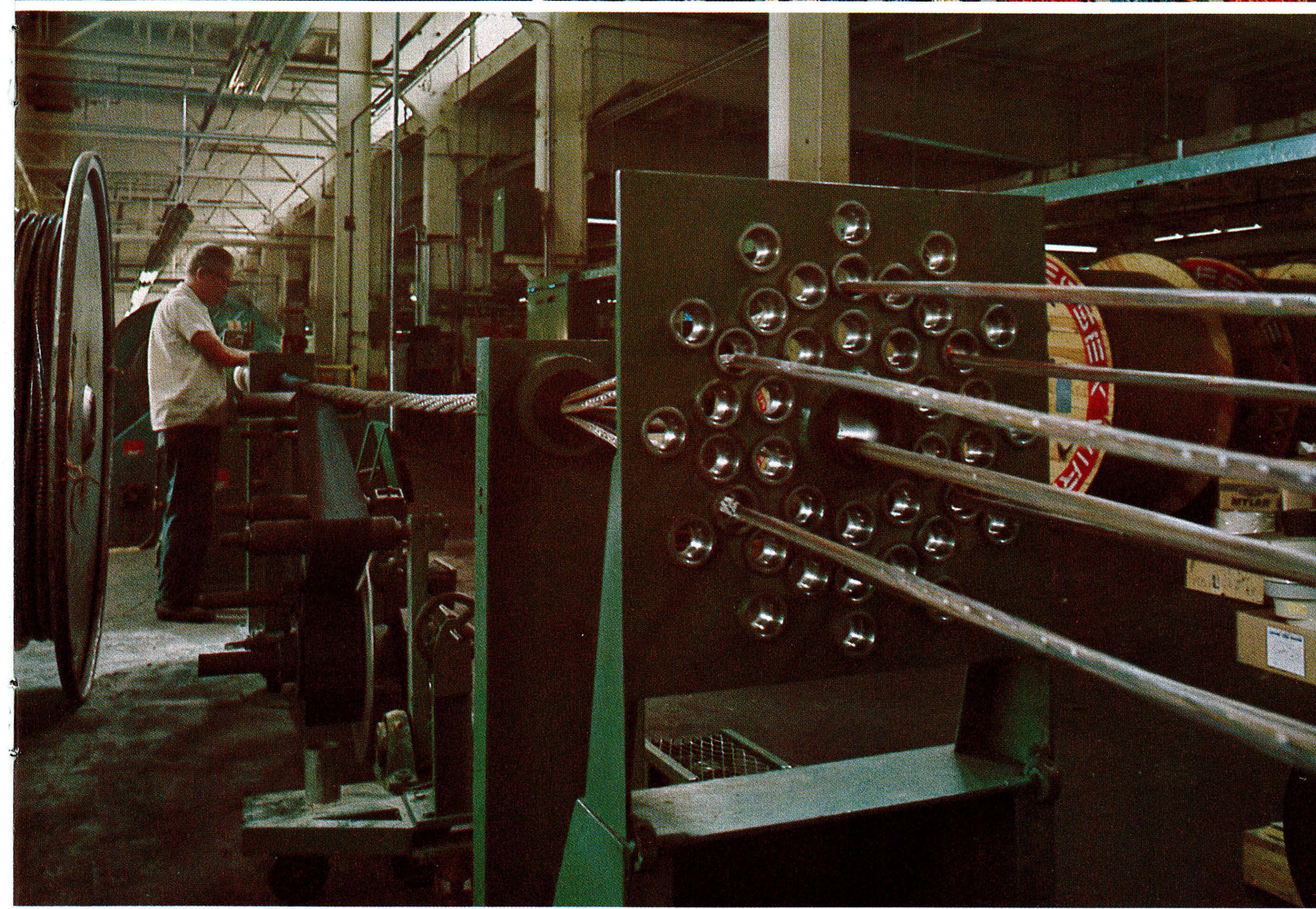
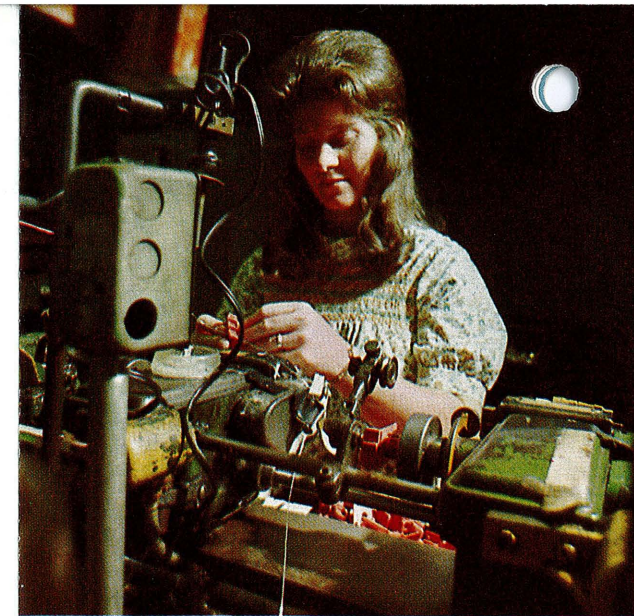
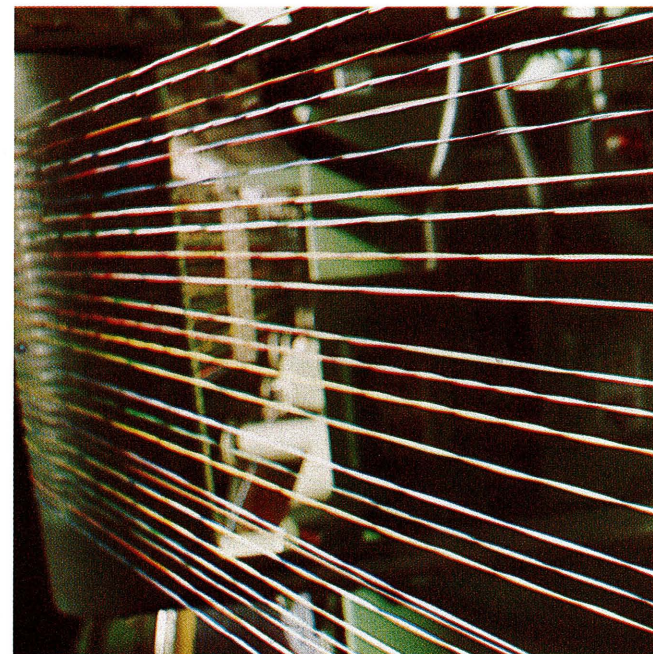
The potential for continued expansion and demand for electrical energy appear undiminished. Power utility construction outlays recently reached a new high of \$7.4 billion, more than 11 per cent of

*Upper Left, Coil winding superfine magnet wire at Controls division, Logansport, Indiana, used in Essex electrical controls for home appliances, heating and air conditioning units, vending equipment, business machines and other electrically activated devices.*

*Upper Right, An automotive electrical system is assembled from up to 200 individual wires plus terminals, controls and switches—one phase of wire harness manufacture at Wire Assembly division, Zanesville, Ohio.*

*Lower Right, Overhead telephone cable to supply a \$1 billion a year market is produced by Communications and CATV division, Decatur, Illinois.*

*Below, Pairs of telephone wire are "payed-out" prior to stranding, shielding and jacketing operations (opposite).*





new construction expenditures for American industry. Thus, a massive potential for growth exists in transmission products and in a growing aftermarket.

#### **Communications and CATV Division**

The Communications and CATV division was organized to provide greater Essex penetration into the telephone, communication and community antenna television systems industries.

Primary products manufactured by this division include all types of aerial and direct burial telephone and communication wire and cable as well as electronic cable carrier devices and systems for telephone companies. Other activity includes the design, development and production of a complete line of programmers, amplifiers, line extenders, directional taps and coaxial wires and cables for CATV installations.

One plant is designed solely for production of telephone wire and cable and is the largest such plant serving the billion dollar a year market segment made up of the nation's 2,400 independent telephone companies.

The company's more recent involvement in community antenna television systems is one of natural extension of technologies. Entry into the budding CATV market is a prime example of Essex ability to adapt its technology to new market requirements in the electrical industry.

#### **Wire and Cable Division**

More than 5,000 different types, sizes and constructions of wire and cable are produced by Essex to bring electric power into individual homes, com-

mercial structures, office buildings and industrial plants. All segments of the construction industry are potential customers of this division. Resolution of the nation's housing problems will create enormous demands for building wire. It is estimated that today's homes require 35 per cent more wiring than ten years ago. Commercial and industrial buildings need over 50 per cent more wire to carry increased loads.

Typical products of this division include underground service entrance drop wire, high voltage and control cables as well as non-metallic sheathed cables to channel outside power to the ultimate wall outlet. These products are also sold to the mining, service and other industries including the fast growing mobile home market.

Building wire products are marketed coast-to-coast under several well-known brand names (including "Paranite") through some 3,000 independent electrical wholesalers.

*Essex ranks first in U.S. production of copper and aluminum magnet wire and also leads the industry in the development of cable-making machinery. Here, high speed winding machines and spools built by company for newest magnet wire plant in Vincennes, Indiana achieve speeds up to 11,000 feet per minute versus 7,000 feet for conventional equipment.*





### Industrial Wire Products Division

Through its Industrial Wire Products division, Essex is an important supplier of finished electric power cords, cord set constructions and insulated electric wire. These components are supplied to leading manufacturers of household and kitchen appliances, hand power tools, business machines and as power leads to makers of heavy industrial equipment.

Industrial Wire Products is also a prime producer of wire harness assemblies used internally in dishwashers, washing machines, air conditioners, heating and refrigeration systems and office copying equipment. Recent diversification efforts have opened entirely new markets in the aircraft, aerospace, electronic and computer industries.

This growing product mix reflects the company's ability to adapt to everchanging requirements of America's industrialized society. To keep abreast of total sales of consumer electronic products and appliances, Industrial Wire Products has steadily increased its cord making capacity, and now operates the country's largest teflon-coated wire facility in which extrusion equipment is electronically controlled and fully instrumented.

### Magnet Wire Division

The breadth of its technical expertise, product lines and production capacity places Essex as the largest independent producer of magnet wire in the United States.

Magnet wires are solid conductors of copper or aluminum with a thin film-like insulation baked



*Terminals used to make electrical connections for consumer and industrial products are produced in huge volume at Chicago plant.*

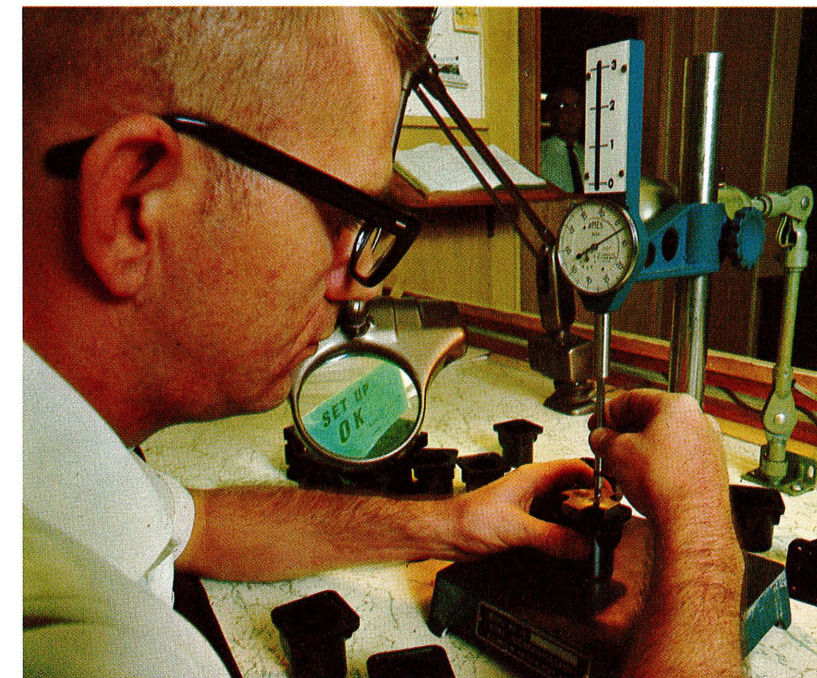
*Above, Manufacturing operations at Logansport, Indiana plant of Controls division are integrated from raw materials to finished products. Some 1,000,000 stamped parts are produced daily in this single plant.*

*Below, Plastic molded components used by other Essex divisions as well as sold to outside markets undergo control check in laboratory of Metal and Plastic Products division, Peru, Indiana.*

on their surfaces and used to create electric energy. Wound into coils with steel cores and energized, these wires create magnetic fields inside electric motors, generators, transformers and similar equipment.

The products of this major division fill some 22,000 different customer specifications in five major industries: electric motor; power and distribution transformers; automotive; appliance; and television. In addition, Essex now produces fine and superfine magnet wire at a new installation for advanced electronic uses. The division furnishes magnet wire to Essex IWI division for sale to the latter's customers and supplies vast quantities to other company operations for use in the manufacture of their products.

Under this division is the Hermann Manufacturing Company, which leads the industry in the development of cable-making machinery. In the past decade, Hermann has built most of Essex impor-





tant proprietary equipment including its two copper rod rolling mills, magnet wire plants, molding machines, presses, test equipment and many other items. In recent years, these operations have expanded and Hermann now produces electrified jigs on which all circuit testing is handled during assembly of Essex automotive wiring harnesses. Hermann also sells equipment and machinery to outside customers.

#### **IWI Division**

Essex provides complete warehousing and distribution centers in more than 30 locations to serve electrical and electronic equipment manufacturers and the motor repair industry.

The IWI division is the nation's largest distributor of magnet wire, insulating materials, appliance cord sets and controls produced by supporting divisions and is a supplier of some 150 electrically oriented products for electrical repair and original equipment manufacturers. More recently, IWI broadened its service capacity to electrical wholesalers to include a line of small motors and components for the air conditioning, heating and refrigeration replacement markets.

IWI is also a manufacturing division. These operations include fabricating facilities for processing and cutting mica and a wide range of electrical and electronic insulating materials into custom designed shapes for customers in diversified industries.

#### **Metal and Plastic Products Division**

A stage of vigorous expansion into new markets characterizes the Metal and Plastic Products

division, which contains the company's only manufacturing operations not directly related to electric current carrying and controlling devices. Several acquisitions and internal growth have markedly increased the product mix, which falls into three distinct groups.

The division is an integral part of the burgeoning aluminum industry and produces extrusions for construction and general industrial applications. A sampling includes doors, windows, store front assemblies and curtain walls. Manufacturing facilities for these operations have been integrated to include metal casting, extrusion and fabrication and most recently a captive metal supply from the company's new aluminum billet and rod plant.

Capacity is also increasing at a rapid pace in other established product lines such as brass and steel fittings, valves, flexible plumbing items and non-metallic hose lines for the appliance, machine tool and plumbing industries. Air conditioning hose lines for automobiles represent one of the newest product entries as do hydraulic brake hose assemblies.

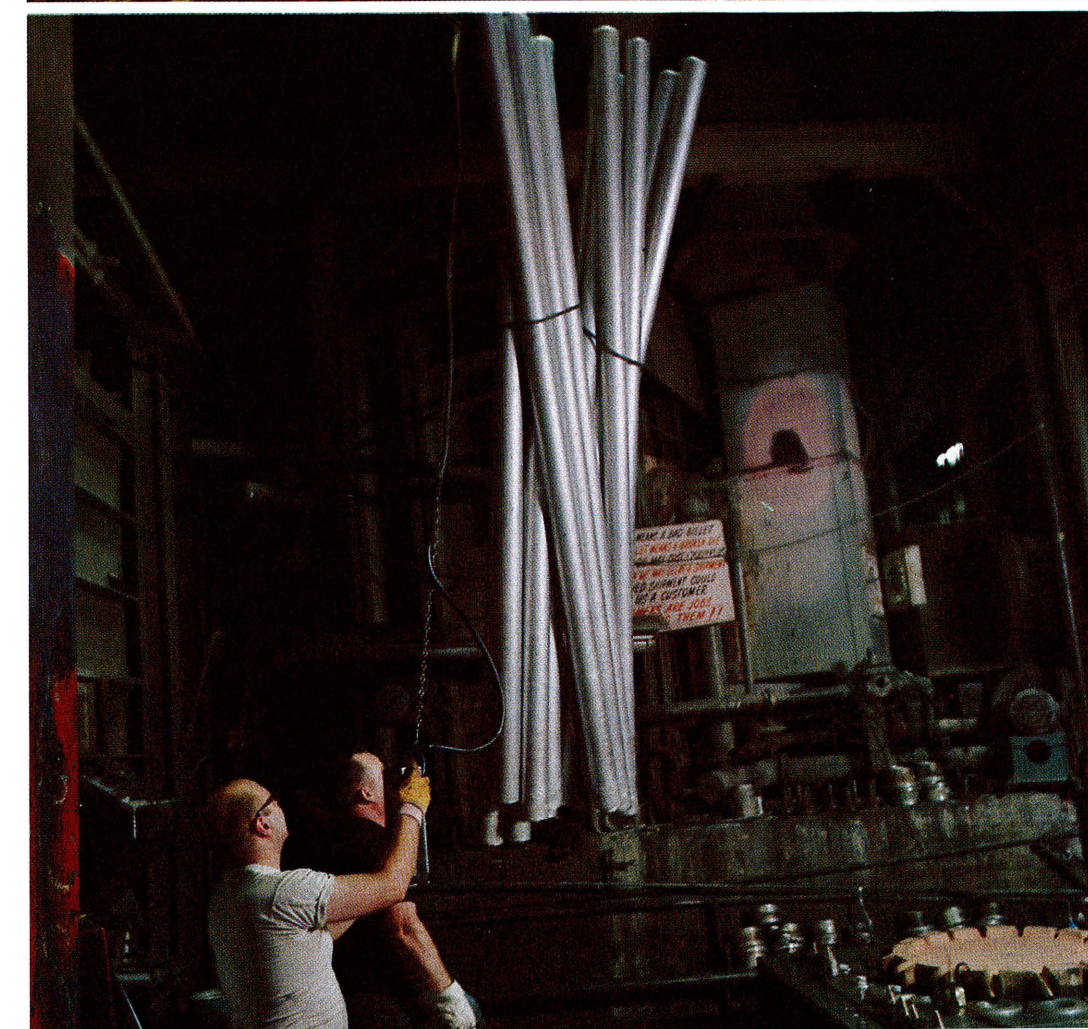
Until recently, Essex plastics operations were used captively to supply component parts for the company's own growing needs. These include rigid and flexible vinyl extrusions and a variety of parts incorporated into electrical wire harnesses manufactured by the Wire Assembly and Controls divisions.

By selective acquisition, this division has moved into production of illuminated signs, molded plastics, and decorative trim for automobiles and household appliances.

Essex is also a custom molder for products that



*Above, Wire drawing equipment, built by Essex, reduces copper rod through a series of dies in first-step production of magnet wire at Vincennes, Indiana plant.*



*Below, More than 200,000 pounds of aluminum are cast into log billets daily at Coldwater, Michigan plant of Metal and Plastic Products division.*



range from television, marine equipment and sporting goods, to textiles and a host of other consumer items.

The Metal and Plastic Products division also makes and sells a leading line of electric blankets and heating pads in the United States and Canada.

#### Controls Division

Two groups of products are manufactured by the Controls division. The first consists of devices for switching, controlling and routing of electrical power and the second group includes gas valves and controls.

The line of electrical, electro-mechanical and hybrid solid state devices extends from switches, relays and contactors to thermostats, transformers and ignition controls for more than 1,600 customers. Electrical and bi-metallic products are sold to the air conditioning, heating and refrigeration industries as well as to manufacturers of vending machines, business machines and data processing equipment.

The division is also a leading producer of valves and controls for gas furnaces, with product concentration ranging from household ranges to industrial heating furnaces.

#### Transportation

Essex has moved on a number of acquisition fronts in recent years, one of which greatly broadened its own distribution system and marked the company's entry into the commercial trucking business. This was the acquisition of Transport Motor Express (TMX), a major midwest trucking line.



*Color-coded aluminum billets identify alloy composition.*

*Right, Much of the company's proprietary fabricating equipment is born in Process and Equipment Research Development laboratory of Wire Assembly division, Detroit. Here, hand-built wire assembly model performs five separate functions. Essex-owned Hermann Manufacturing Company, Lancaster, Ohio, completes design and manufacture.*

TMX is authorized to transport general commodities between points covering the six midwest states of Illinois, Indiana, Kentucky, Ohio, Pennsylvania and West Virginia. The truck fleet is comprised of 315 tractors, 750 trailers and 225 straight trucks and operates through 24 terminals including brand new facilities in Chicago, Pittsburgh, Marion, Indiana and Columbus, Ohio.





The company concentrates on several research programs to maintain and strengthen its position in its many rapidly expanding manufacturing and marketing areas.

Each division, in addition, maintains its own significant engineering and research facilities. For example, in the Wire Assembly division alone, five engineering groups carry out divisional research and development work on new insulating materials, installation techniques, tooling, automation and advanced products.

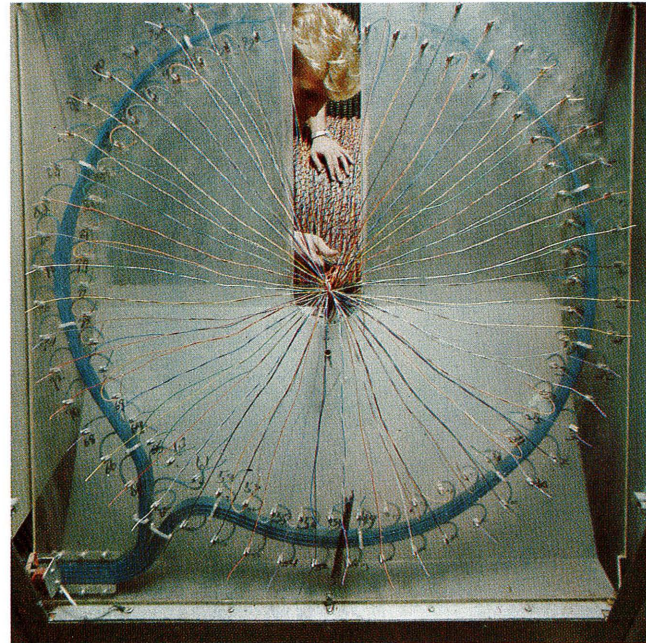
At the corporate level, Essex sponsors a research team at the Mellon Institute of the Carnegie-Mellon University in Pittsburgh. Advanced research and development is conducted here in three basic areas of the industry: metallurgy, vehicular systems and polymer chemistry. Results of this multi-million dollar research effort flow through the advanced product groups of the divisions and into the market place.

The polymer chemistry group actively researches the synthesis and tailoring of insulation materials, including new application processes such as electrocoating and radiation curing.

The metallurgy group conducts research in areas such as metal joining and forming and materials development.

The vehicular systems group is developing entirely new concepts and prototype systems for the control and distribution of electrical energy in vehicles. Two areas of concentration presently receiving primary attention are electronic integrated circuitry and pneumatics.

The electrical systems in present day automobiles are growing increasingly complex as entirely



*Above, Communications cable is rigidly tested and inspected before final delivery to customer.*

*Right, Quality control group of Electro-Mechanical division, Detroit, carries out reliability tests on Essex automotive products.*

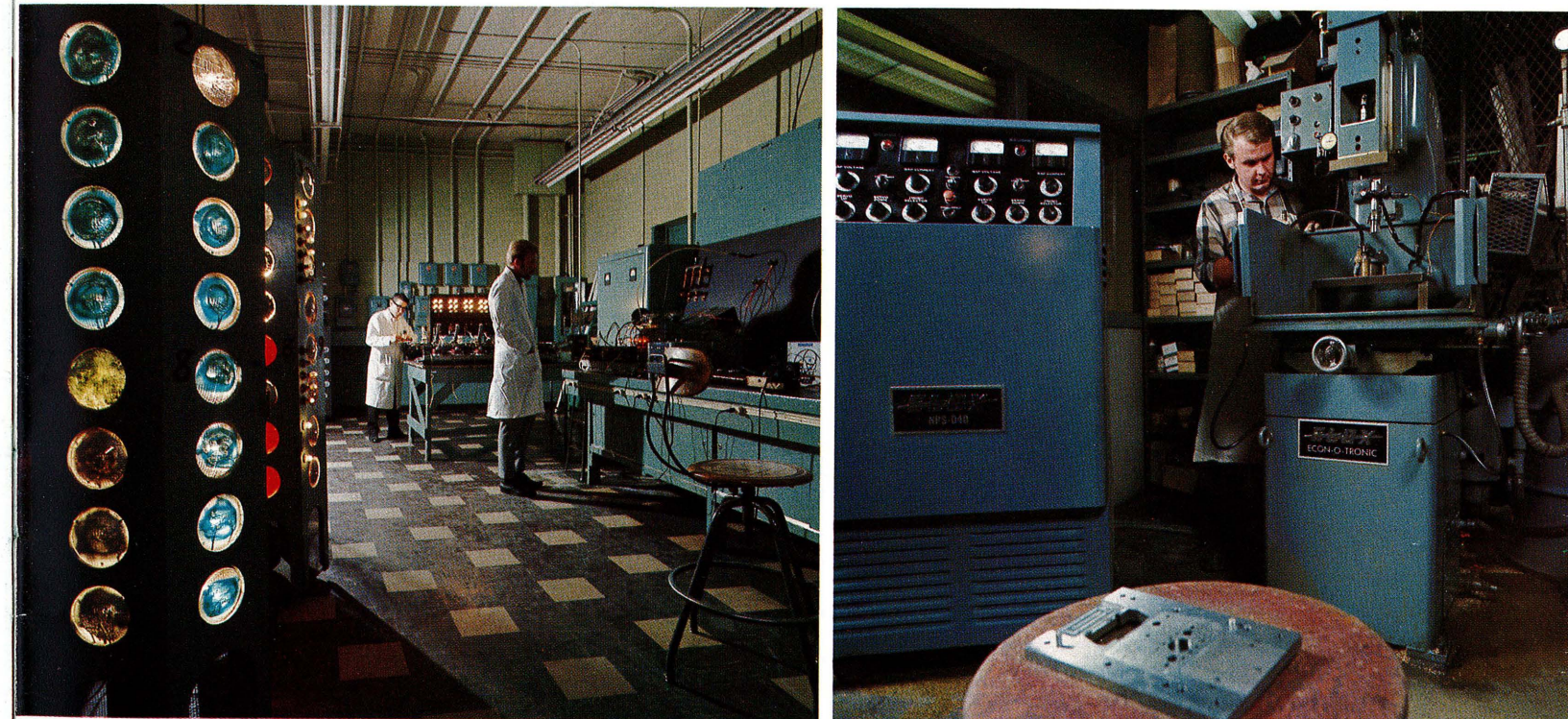
*Far Right, Tool and die facilities of IWI division, Chicago. Newest electronic equipment produces precision dies used to fabricate broad range of non-metallic materials for electrical manufacturers.*

## RESEARCH AND DEVELOPMENT

new families of devices and signals make their debut. The age of electronics is about to overtake the automotive world and with it a host of markets for consumer products which incorporate electrical wiring harnesses and controls to perform increasingly complex functions.

The Essex advanced research program in this area is directed toward simplification of automotive products. The company is working toward miniaturization and simplification of complex controls and circuitry to improve safety and ease maintenance problems for the consumer and to reduce warranty costs for the manufacturer.

One of the most exciting and far ranging projects is the development of a Computerized Energy Distribution and Automated Control System (CEDAC) for automobiles. This system incorporates several advanced technologies, including a central logic system and sending and receiving elements capable of controlling virtually every function on the automobile. The company has also developed a diagnostic computer which interrogates the CEDAC system, isolating maintenance problems in seconds. These developments are expected to lead Essex into volume production of low cost integrated circuits which are mated to the system.





*Silver  
Consumers*

Overhead and underground communication wire and cable and electronic carrier systems for the communication industry. Components and coaxial cable for CATV industry.

Relays, electro-mechanical and hybrid solid state devices, small transformers, heat sensing bi-metallic devices, thermostats, valves and controls for gas furnaces and appliances.

Switches, coils, relays, solenoids and other convenience and safety devices for automotive, farm equipment and marine industries; ignition wires and devices, battery cables and other electrical components for the after-market.

Electrical wiring systems for appliance, refrigeration, air conditioning, aerospace and other original equipment manufacturers; extension cords; terminals and plastic moldings.

Nationwide warehousing and selling organization for electrically oriented product lines to manufacturers, service and repair industries and select wholesalers; manufactures insulation materials for general industry.

Insulated aluminum and copper magnet wire for transformers, motors, controls, coils, generators and similar electrical devices; designs and produces specialized machinery for company operations and customers. Rolls copper bar for further processing.

Brass and steel fittings, hose lines, flexible connectors and supplies for appliance, plumbing, machine tool and other industries; aluminum billet casting and extrusions for construction and general industry. Extruded plastics and molded parts for the appliance, utility, construction, communication and other industries; electric blankets and heating pads.

Insulated aluminum and copper transmission, distribution and high voltage cable for utilities, power companies and municipalities. Rolls copper and casts aluminum rod for further processing.

Insulated electrical cable and wire for construction, mining, mobile home and other industries.

Complete electrical wiring systems for automobiles and for marine and transportation industries in the United States, Canadian and European markets.

**COMMUNICATIONS AND CATV DIVISION**  
*Decatur, Illinois*

**CONTROLS DIVISION**  
*Logansport, Indiana*

**ELECTRO-MECHANICAL DIVISION**  
*Detroit, Michigan*

**INDUSTRIAL WIRE PRODUCTS DIVISION**  
*Sycamore, Illinois*

**IWI DIVISION**  
*Fort Wayne, Indiana*

**MAGNET WIRE DIVISION**  
*Fort Wayne, Indiana*

**METAL AND PLASTIC PRODUCTS DIVISION**  
*Andrews, Indiana*

**POWER CONDUCTOR DIVISION**  
*Marion, Indiana*

**WIRE AND CABLE DIVISION**  
*Fort Wayne, Indiana*

**WIRE ASSEMBLY DIVISION**  
*Detroit, Michigan*

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