FORM 10-Q
QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarter ended September 30, 1995 Commission File No. 0-2504

MINE SAFETY APPLIANCES COMPANY
(Exact name of registrant as specified in its charter)

## Pennsylvania

25-0668780
(State or other jurisdiction of (IRS Employer Identification No.) incorporation or organization)

| 121 Gamma Drive |  |
| :--- | ---: |
| RIDC Industrial Park |  |
| O'Hara Township | 15238 |
| Pittsburgh, Pennsylvania | (Zip Code) |
| (Address of principal executive offices) |  |
| strant's telephone number, including area code: 412/967-3000 |  |

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or $15(d)$ of the Securities Exchange Act of 1934 during the preceding 12 months and (2) has been subject to such filing requirements for the past 90 days.

Yes X
No

As of October 31, 1995, there were outstanding $5,783,126$ shares of common stock without par value.

PART I FINANCIAL INFORMATION
MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED CONDENSED BALANCE SHEET
(Thousands of dollars, except shares data)
September 30 December 31
19951994

| ASSETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Current assets |  |  |  |  |
| Cash | \$ | 6,486 | \$ | 10,108 |
| Temporary investments, at cost plus accrued interest 47,686 44,312 Accounts receivable, less allowance (1995 - \$2,560; |  |  |  |  |
|  |  |  |  |  |
| Inventories: |  |  |  |  |
| Finished products |  | 36,862 |  | 33,576 |
| Work in process |  | 17,947 |  | 14,013 |
| Raw materials and supplies |  | 31,093 |  | 29,377 |
| Total inventories |  | 85,902 |  | 76,966 |
| Other current assets |  | 21,950 |  | 17,232 |
| Total current assets |  | 248,186 |  | 237,316 |
| Property, plant and equipment |  | 335,567 |  | 322,109 |
| Accumulated depreciation |  | $(185,200)$ |  | $(170,153)$ |
| Net property |  | 150,367 |  | 151,956 |
| Other assets |  | 28,739 |  | 27,779 |
| TOTALS | \$ | 427,292 | \$ | 417,051 |


| Current liabilities |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Notes and accounts payable | \$ | 27,849 | \$ | 35,607 |
| Federal, foreign, state and local income taxes |  | (170) |  | (1, 090 ) |
| Other current liabilities |  | 41,335 |  | 36,305 |
| Total current liabilities |  | 69,014 |  | 70,822 |
| Long-term debt |  | 15,362 |  | 16,564 |
| Noncurrent liabilities (principally employee/retiree benefits) and deferred credits |  |  |  |  |
|  |  | 65,667 |  | 63,690 |
| Shareholders' equity |  |  |  |  |
| Preferred stock, 4-1/2\% cumulative - authorized 100,000 shares of $\$ 50$ par value; issued 71,373 shares, callable at $\$ 52.50$ per share |  | 3,569 |  | 3,569 |
| Second cumulative preferred voting stock - authorized 1,000,000 shares of $\$ 10$ par value; none issued |  |  |  |  |
| Common stock - authorized $20,000,000$ shares of no par value; issued 6,718,543 and 6,713,503 (outstanding |  |  |  |  |
| $5,783,126$ and 5,815,672) |  | 8,264 |  | 8,048 |
| Cumulative translation adjustments |  | 1,712 |  | (699) |
| Retained earnings |  | 307,533 |  | 296,993 |
| Less treasury shares, at cost: |  |  |  |  |
| Preferred - 47,935 and 47,775 shares |  | $(1,553)$ |  | $(1,548)$ |
| Common - 935,417 and 897,831 shares |  | $(42,276)$ |  | $(40,388)$ |
| Total shareholders' equity |  | 277,249 |  | 265,975 |
| TOTALS | \$ | 427,292 | \$ | 417,051 |

MINE SAFETY APPLIANCES COMPANY
CONSOLIDATED CONDENSED STATEMENT OF INCOME
(Thousands of dollars, except earnings per share and shares outstanding)

|  |  | Three Months Ended <br> September 30 |  |  | Nine Months Ended September 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1995 |  | 1994 |  | 1995 |  | 1994 |
| Net sales | \$ | 119,995 | \$ | 114,889 | \$ | 363,364 | \$ | 339,544 |
| Other income |  | 1,057 |  | 997 |  | 4,141 |  | 4,239 |
|  |  | 121,052 |  | 115,886 |  | 367,505 |  | 343,783 |
| Costs and expenses |  |  |  |  |  |  |  |  |
| Cost of products sold |  | 74,885 |  | 72,140 |  | 223,385 |  | 214,212 |
| Selling, general and administrative |  | 35,035 |  | 30,421 |  | 101,459 |  | 91,875 |
| Depreciation |  | 4,843 |  | 4,382 |  | 15,017 |  | 14,213 |
| Interest |  | 294 |  | 274 |  | 1,298 |  | 1,668 |
| Currency exchange (gains)/losses |  | (304) |  | 918 |  | 832 |  | 3,271 |
|  |  | 114,753 |  | 108,135 |  | 341,991 |  | 325,239 |
| Income from operations |  |  |  |  |  |  |  |  |
| before income taxes |  | 6,299 |  | 7,751 |  | 25,514 |  | 18,544 |
| Income taxes |  | 2,463 |  | 3,158 |  | 10,349 |  | 7,923 |
| Net income | \$ | 3,836 | \$ | 4,593 | \$ | 15,165 | \$ | 10,621 |
| Earnings per common share (1) | \$ | 0.67 | \$ | 0.78 | \$ | 2.61 | \$ | 1.78 |
| Weighted average number of common shares outstanding 5,803,554 5,944,120 5,803,554 5,944,120 |  |  |  |  |  |  |  |  |
| Dividends paid on preferred stock | \$ | 13 | \$ | 13 | \$ | 40 | \$ | 40 |

(1) Computed after dividends paid on preferred stock. Common shares reserved for outstanding options under the stock option and incentive plans would have a negligible dilutive effect on earnings per common share.
mine Safety Appliances company

|  | Nine Months Ended September 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1995 |  | 1994 |  |
| OPERATING ACTIVITIES |  |  |  |  |
| Income from operations | \$ | 15,165 | \$ | 10,621 |
| Depreciation |  | 15,017 |  | 14,213 |
| Deferred taxes,pensions, and other non-cash charges/(credits) |  | $(2,641)$ |  | $(1,235)$ |
| Changes in operating assets and liabilities |  | $(6,071)$ |  | $(1,052)$ |
| Other - principally currency exchange adjustments |  | 3,245 |  | 4,813 |
| Cash flow from operating activities |  | 24,715 |  | 27,360 |
| INVESTING ACTIVITIES |  |  |  |  |
| Property additions |  | $(12,772)$ |  | $(13,154)$ |
| Property disposals |  | 908 |  | 1,036 |
| Acquisitions and other investing |  | $(2,839)$ |  | 5,545 |
| Cash flow from investing activities |  | $(14,703)$ |  | $(6,573)$ |
| FINANCING ACTIVITIES |  |  |  |  |
| Additions to long-term debt |  | 134 |  | 2,319 |
| Reductions of long-term debt |  | $(1,661)$ |  | $(11,546)$ |
| Cash dividends |  | $(4,625)$ |  | $(4,144)$ |
| Stock options and purchases of company's stock |  | $(1,677)$ |  | $(5,394)$ |
| Changes in notes payable and short term debt |  | $(3,209)$ |  | 1,467 |
| Cash flow from financing activities |  | $(11,038)$ |  | $(17,298)$ |
| Effect of exchange rate changes on cash |  | 778 |  | 1,408 |
| Increase/(decrease) in cash and cash equivalents |  | (248) |  | 4,897 |
| Beginning cash and cash equivalents |  | 54,420 |  | 46,434 |
| Ending cash and cash equivalents | \$ | 54,172 | \$ | 51,331 |

The accompanying unaudited consolidated condensed financial statements include all adjustments, consisiting of only normal recurring adjustments, which are, in the opinion of management of the registrant, necessary for a fair statement of the operating results for the three and nine month periods ended September 30, 1995 and 1994. These financial statements have been prepared in accordance with the instructions to Form 10-Q and therefore do not include all information and footnotes necessary for a fair presentation of financial position, results of operations, and changes in cash flows in conformity with generally accepted accounting principles.

Sales have grown in most markets, although at a lesser pace in recent months. Commercial sales from U.S. operations have increased this year compared to 1994, but less so in the third quarter. Shipments of gas masks to the U.S. military have continued below prior-year levels as expected. Instruments (particularly permanently installed equipment), chemical specialty products and exports of most products have shown robust growth. International sales also have continued to grow worldwide.
U.S. commercial safety products sales have shown mixed results. Business to nuclear power plants has been seriously affected by the reduced usage of respirators following interpretations of studies concerning worker productivity. This has particularly impacted the registrant due to a very high historic market share in this industry. A more recent scientific study has cast new light on worker productivity and respirator use, which may eventually reverse the sales trend. Sales to government and civilian environmental remediation projects have been affected by delays in government funding of such activities, although the need continues to be significant. Sales of self-contained breathing apparatus, particularly to the fire service, and of protective helmets have been strong.

The decline in net income in the third quarter compared to the same period of the prior year is due to two factors. The third quarter of 1994 included the LIFO accounting effect of U.S. manufacturing inventory reductions which increased net income by $\$ 1,200,000$ or 20 cents per share. The third quarter of 1995 includes charges to net income of $\$ 575,000$ or 10 cents per share, stemming from the restructuring of a South African affiliate, Boart-MSA. The registrant has a minority position in the ownership and management control of this venture. Boart-MSA had a joint venture, Natfire, which was unsuccessful and was reorganized in 1995. The third-quarter charges relate to prior-period losses and the reorganization of Natfire.

The profitability of U.S. operations has improved due to somewhat higher sales and increased productivity. Brazilian operations have also made a significant contribution to the corporate earnings improvement as a result of local economic reforms. Other areas of strength were Chile, France, China, Southeast Asia and the Middle East. Improvements were also noted in Italy, Spain and Sweden. Efforts continue in the important task of increasing profitability in Europe. Earnings per share have also benefitted from an ongoing share repurchase program.

The decrease in quarterly earnings was disappointing as the abovementioned unusual items could not be overcome by general improvement. The current environment presents a varied mixture of opportunities and challenges. In product innovation, availability of delivery and cost competitiveness, the registrant has made considerable progress. General improvements in the world economy that may come after a recent sluggish period in the U.S. could be of help to the registrant.

The registrant has seen a number of areas of vigorous growth this year, which probably represent an increase in market share. Operating costs in most areas have been well managed. One challenge is that a significant part of this growth has come in product and market areas that have been historically volatile. These areas might not be such overachievers in future months.

A more significant challenge is dealing with negative movements in nuclear power and environmental remediation markets, which can only be overcome by generating increased business elsewhere and improving productivity. The national needs for environmental work and a settling of the Federal budget conflict, hopefully, should generate recovery in funding for customers in the military and civilian remediation markets. Turning around the nuclear power plant sales situation will be a longer-term project.

Comparative foreign currency exchange losses charged to income are as follows:
Transaction (gains)/losses
Translation (gains)/losses

| (321) | 180 | 164 | 728 |
| :---: | :---: | :---: | :---: |
| 17 | 738 | 668 | 2,543 |
| (304) | 918 | 832 | 3,271 |

Brazilian governmental economic reforms in 1994 have had significant impact on the comparative third quarter and year to date currency exchange gains and losses.

Currency exchange adjustments charged directly to the equity cumulative translation adjustments account are shown below. Significant third quarter 1995 losses relate to Germany and Japan; year to date translation gains relate to Germany and Netherlands. Significant third quarter 1994 gains relate to Germany and Britain; year to date translation gains relate to Germany and Australia.


Available credit facilities along with internal cash resources are adequate to provide for ensuing capital requirements. The company's financial position and liquidity continue to be adequate. The current ratio and term debt in relation to capital as of September 30 , 1995 were 3.6 and $6.0 \%$, respectively, as compared to 3.4 and 7.5\% at December 31, 1994.

Item 1. Legal Proceedings
Not Applicable

Item 6. Exhibits and Reports on Form 8-K
(a) Exhibits
(3) (ii) By-laws of the registrant, as amended to August 29,1990.
(b) Reports on Form 8-K

No reports on Form 8-K were filed during the quarter ended September 30, 1995.

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

MINE SAFETY APPLIANCES COMPANY

S/James E. Herald
James E. Herald
Vice President - Finance; Principal Financial and Accounting Officer

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9-MOS
    DEC-31-1995
        SEP-30-1995
                            6,486
            47,686
            88,722
            (2,560)
                85,902
            21,950
                335,567
            (185,200)
            427,292
        69,014
                                    15,362
                                    8,264
            0
                    3,569
                265,416
427,292
                                    363,364
    367,505
                                    223,385
            238,402
                832
                    0
            1,298
            25,514
            10,349
        15,165
                0
            0
                                    0
            15,165
            2.61
            2.61
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## MINE SAFETY APPLIANCES COMPANY

(A PENNSYLVANIA CORPORATION)

By-Laws
As Amended to August 29, 1990*

## ARTICLE I

Meetings of Shareholders
Section 1.01. Annual Meetings. An annual meeting of the shareholders shall be held at each year within five months after the end of the fiscal year of the Company on such day and at such time and place as may be designated by the Board of Directors, or if not do designated on the third Wednesday of April in each year if not a legal holiday, and if a legal holiday then on the next business day following, at 10:00 o'clock A.M., local time, at the principal office of the Company.

* Note: References in the By-Laws to the "Restated Articles" are to the Articles of the Corporation as amended by resolutions adopted at the Annual Meeting of shareholders on May 23, 1986, and as they may be thereafter amended or
supplemented. Section references in brackets are to specific provisions of the Restated Articles, and indicate that the preceding provision is taken substantially verbatim from the Restated Articles; and capitalized terms are used as those terms are defined in the Restated Articles.

Section 1.02. Business at Annual Meetings. The business at an annual meeting of shareholders shall include: (a) a review of the business of the preceding year; (b) the election of directors to succeed those whose terms shall expire; (c) the selection of auditors; and (d) such other business as may properly be brought before the meeting. No business may be transacted at any annual meeting other than with respect to (i) matters referred to in the notice of meeting (or any supplement thereto) and matters which are incidental or germane thereto, (ii) matters otherwise properly brought before the meeting by or at the direction of the Board of Directors, and (iii) matters properly brought before the meeting by a shareholders, but only in accordance and upon compliance with the provisions of the proxy rules of the Securities and Exchange Commission relating to shareholder proposals. If for any reason the annual meeting is not held at the time fixed therefor, the
election of directors may be held at a subsequent meeting called for that purpose.

Section 1.03. Special Meetings. Except as otherwise required by law and subject to the rights of the holders of any class or series of preferred stock with respect to any vote of the holders of such class or series when voting by class, special meetings of shareholders of the Company may be called only by the Board of Directors pursuant to a resolution approved by a majority vote of the Disinterested Directors (as that term is defined in the Restated Articles). [Restated Articles Section 12.03] Special meetings shall be held at such place as may be designated by the Board of Directors, or if not so designated, at the principal office of the Company.

Section 1.04. Business at Special Meetings. No business may be transacted at any special meeting of shareholders other than that the general nature of which has been stated in the notice of meeting, and business which is incidental or germane thereto.

Section 1.05. Notice of Shareholders' Meetings. Written notice specifying the place, date and time of each meeting of the shareholders and the purpose or purposes for which the meeting is called shall be given to all shareholders of record entitled to vote at such meeting at least ten days before the day named for the meeting.

Section 1.06. Quorum; Organization. A shareholders' meeting duly called shall not be organized for the transaction of business unless a quorum is present. At any meeting the presence in person or by proxy of shareholders entitled to cast at least a majority of the votes which all shareholders are entitled to cast on the particular matter shall be necessary and sufficient to constitute a quorum for the purpose of considering such matter. The shareholders present at a duly organized meeting can continue to do business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a majority. If a meeting cannot be organized because a quorum has not attended, those present in person or by proxy may adjourn the meeting to such time and place as they may determine, without notice other than announcement at the meeting, until
a quorum as aforesaid shall be present; and in the case of any meeting called for the election of directors, such meeting may be adjourned only from day to day, or for such longer periods not exceeding fifteen days each, as may be directed by shareholders who are present in person or by proxy, and those who attend the second of such adjourned meetings, although entitled to cast less than a majority of the votes which all outstanding shares are entitled to cast, shall nevertheless constitute a quorum for the purpose of electing directors. The Chairman, or in his absence, the President, shall preside, and the Secretary shall take the minutes, at all meetings of the shareholders. In the absence of the forgoing officers the presiding officer shall be designated by the Board of Directors or if not so designated selected by the shareholders present; and in the absence of the Secretary, the presiding officer shall designate any person to take the minutes of the meeting.

Section 1.07. Vote Required; Meeting Procedure. When a quorum is present at any meeting, the vote of shareholders present, in person or by proxy, entitled to cast at least a majority of the votes which al shareholders present
and voting (excluding abstentions) are entitled to cast on the particular matter shall decide any question brought before such meeting, except that (a) if the question is one upon which, by express provision of statute or of the Restated Articles, a different or additional vote is required, such express provision shall govern, (b) all elections shall be determined by a plurality of the votes cast, and (c) in the case or privileged, subsidiary or incidental motions or questions involving the convenience of the shareholders present, the Chairman may call for a per capita vote, either by voice or by show of hands. Elections for directors need not be by ballot, unless otherwise ordered by the presiding officer at the meeting or unless a demand is made by a shareholder at the meeting and before the voting begins. The chairman of any meeting shall determine the order of business and the procedure at the meeting, including such regulation of the conduct of discussion as seems to him in order. The conduct of meetings shall be governed by accepted corporate practice, the fundamental rule being that all who are entitled to take part shall be treated with fairness and good faith.

Section 1.08. Proxies; Appointment and Revocation. Every shareholder entitled to vote at a meeting of shareholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons, but not more than three, to act for him by proxy. Every proxy shall be appointed by an instrument in writing (including telegram, cable or radiogram, telex or similar transmission), executed by such shareholder or by his authorized attorney, and filed with the Secretary of the Company. A proxy shall not be revoked by the death or incapacity of the maker unless, before the vote is counted or the proxy is exercised, written notice of such death or incapacity is given to the Secretary of the Company.

ARTICLE II

Directors

Section 2.01. Number, Election, etc.
(a) Number. The whole Board of Directors shall consist of such number of persons, not less than 5 nor more
(b) Classes; Election and Terms. Beginning with the Board of Directors to be elected at the annual meeting of shareholders to be held in 1986, the directors shall be classified in respect of the time for which they shall severally hold office by dividing them into three classes, as nearly equal in number as possible. If the classes of directors are not equal, the Board of Directors by a majority vote of the Disinterested Directors then in office shall determine which class shall contain an unequal number of directors. At the annual meeting of shareholders to be held in 1986 , separate elections shall be held for the directors of each class, the term of office of directors of the first class to expire at the first annual meeting after their election; the term of office of the directors of the second class to expire at the second annual meeting after their election; and the term of office of the directors of the third class to expire at the third annual meeting after
their election. At each succeeding annual meeting, the shareholders shall elect directors of the class whose term then expires, to hold office until the third succeeding annual meeting. Each director shall hold office for the term for which elected and until his or her successor shall be elected and shall qualify. [Restated Articles Section 10.1 (b)]
(c) Removal of Directors. Any directors, any class of directors or the entire Board of Directors may be removed from office by shareholder vote at any time, without assigning any cause, but only if shareholders entitled to cast at least $80 \%$ of the votes which all shareholders would be entitled to cast at an annual election of directors or of such class of directors shall vote in favor of such removal; provided, however, that the shareholders shall have such power of removal without cause only if and so long as the general corporate law of the Company's state of incorporation specifically mandates such power. If such power of removal without cause is not mandated by statute, the shareholders may remove a director or directors from office at any time only for cause and only if, in addition to any vote
(d) Vacancies. Vacancies in the Board of Directors, including
vacancies resulting from an increase in the number of directors, shall be filled only by a majority vote of the Disinterested Directors then in office, though less than a quorum, except as otherwise required by law. All directors elected to fill vacancies shall hold office for a term expiring at the annual meeting of shareholders at which the term of the class to which they have been elected expires. No decrease in the number of directors constituting the Board of Directors shall shorten the term of an incumbent director. [Restated Articles Section $10.1(\mathrm{~d})]$
(e) Nomination of Director Candidates. Nominations for the election of directors may be made only by the Board of Directors or a committee appointed by the

| Board of Directors or by any holder of record of stock entitled to vote in the |
| :---: |
| election of the directors to be elected; but a nomination may be made by a |
| shareholder only if written notice of such nomination has been given, either by |
| personal delivery or by United States mail, postage prepaid, to the Secretary |
| of the Company not later than 90 days in advance of the meeting at which the |
| election is to be held. Each such notice shall set forth: (a) the name and |
| address of the shareholder who intends to make the nomination and of the person |
| or persons to be nominated; (b) a representation that the shareholder is a |
| holder of record of stock of the Company entitled to vote at such meeting |
| and intends to appear in person or by proxy at the meeting to nominate the |
| person or persons specified in the notice; (c) a description of all arrangements |
| or understandings between the shareholder and each nominee and any other person |
| or persons (naming such person or persons) pursuant to which the nomination or |
| nominations are to be made by the shareholder; (d) such other information |
| regarding each nominee proposed by such shareholder as would be required to be |
| included in a proxy statement filed pursuant to the proxy | by the Board of Directors; and (e) the consent of each nominee to serve as a director of the Company if so elected. [Restated Articles Section 10.1(e)]

(f) Exception for Directors Elected by Preferred Stock.

Whenever the holders of any class or series of stock having a preference over the Common Stock of the Company as to dividends or assets shall have the right, voting separately as a class, to elect one or more directors of the company, none of the foregoing provisions of this Section 2.01 shall apply with respect to the director or directors elected by such holders of preferred stock. [Restated Articles Section 10.1(f)]
(g) In case of a vacancy in the office of any director elected by the preferred stock, the remaining directors or director elected by the preferred stock may choose a successor who shall hold office for the unexpired term in respect of which such vacancy occurred.
(h) Each director shall hold office from the time of his election, but shall be responsible as a director from such time only if he consents to his election; otherwise from the time he accepts office or attends his first meeting of the Board.

Section 2.02. Organization Meeting; Notice. An organization meeting of the newly elected Board of Directors shall be held each year promptly after the annual meeting of shareholders at a place designated by the Chairman or the President. At such meeting the Board of Directors shall organize itself and elect the executive officers of the Company and members of standing Committees for the ensuing year, and may transact any other business. Notice of the organization meeting of the Board or of the business to be transacted thereat shall not be required to be given, except as otherwise expressly required herein or by law.

Section 2.03. Regular Meetings; Notice. Regular meetings of the Board shall be held at such time and place as shall be designated by the Board of Directors from time to time, or if not so designated, as determined by the

Chairman or the President. Notice of such regular meetings of the Board shall not be required to be given, except as otherwise expressly required herein or by law, except that whenever the time or place of regular meetings shall be initially fixed or changed, notice of such action shall be given promptly by telephone or otherwise to each director not participating in such action. Any business may be transacted at any regular meeting.

Section 2.04. Special Meetings; Notice. Special meetings of the Board may be called at any time by the Board itself by vote at a meeting, or by any three directors, or by the Chairman or the President, to be held at such place and day and hour as shall be specified by the person or persons calling the meeting, or if not so specified by the Secretary. Notice of every special meeting of the Board of Directors, which states the place, day and hour thereof, shall be given to each director either by being mailed on at least the second calendar day prior to the date of the meeting, or by being sent by telex or telegraph or given personally or by telephone prior to the date of the meeting. Neither the call of a special meeting nor the notice thereof
need specify the purpose thereof or the business to be transacted thereat, except as otherwise expressly required herein or by law.

Section 2.05. Quorum. At all meetings of the Board of Directors, the presence or participation by other lawful means of a majority of the directors in office shall be necessary and sufficient to constitute a quorum for the transaction of business. The Directors present at a duly organized meeting shall continue to constitute a quorum until adjournment, notwithstanding the withdrawal of enough Directors to leave less than a majority. If a quorum is not present at any meeting, the meeting may be adjourned from time to time by a majority of directors present, without notice other than announcement at the meeting, until a quorum as aforesaid shall be present.

Section 2.06. Action. Resolutions of the Board shall be adopted, and any action of the Board at a meeting upon any matter shall be taken and be valid, with the affirmative vote of at least a majority of the directors
present at a meeting duly organized, except as otherwise provided herein, in the
Restated Articles or by law. The Chairman, or in his absence the President,
shall preside at all meetings of the Board of Directors. The Secretary shall
take the minutes at all meetings of the Board. In the absence of the forgoing
officers the Directors present shall select a member of the Board to preside;
and in the absence of the Secretary, the presiding officer shall designate any
person to take the minutes of the meeting. The yeas and nays shall be taken and
recorded in the minutes at the request of any director present at a meeting.
the Directors may participate in any regular or special meeting of the Board or
of a committee of the Board by means of conference telephone or similar
communications equipment by means of which all persons participating in the
meeting are able to hear each other, or by any other lawful means in lieu of
attendance, any may act by proxy to the extent at the time permitted by law.
All directors so participating shall be deemed present at the meeting.

Section 2.08. Emergency Provisions. Notwithstanding any other provisions of law, the Articles or these By-Laws, during any emergency period caused by war or any other national catastrophe or local disaster of sufficient severity to prevent the conduct and management of the business and affairs of the Company by its Board of Directors and officers as contemplated by the other provisions of these By-Laws, a majority of the available Directors (or the sole such Director) who have not been rendered incapable of acting because of incapacity or the difficulty of communication or transportation to the place of meeting shall constitute a quorum for the sole purpose of electing Directors to fill such vacancies or to reduce the size of the full Board or both; and a majority of the directors (or the sole survivor) present at such a meeting may take such action. Directors so elected shall serve until the absent Directors are able to attend meetings or until the shareholders act to elect Directors to succeed them. During such an emergency period, if both the Board and the Executive Committee are unable or fail to meet, any action appropriate to the circumstances may be taken by such officers of the Company as may be present and able. the number of surviving members capable of acting shall be conclusively determined at the time by the Directors or the officers so acting.

Section 2.09. Presumption of Assent. Minutes of each meeting of the Board shall be made available to each director at or before the next succeeding regular meeting. Every director shall be presumed to have assented to such minutes unless his objection thereto shall be made to the Secretary within two days after such next regular meeting.

Section 2.10. Resignations. Any director may resign by submitting to the Chairman of the Board or the President his resignation, which (unless otherwise specified therein) need not be accepted to make it effective and shall be effective immediately upon its receipt by such officer.

Section 2.11. Committees.
(a) Appointments; Powers. Except as otherwise provided in
subsection (b) pertaining to the Executive
Committee, standing or temporary committees shall consist of one or more
Directors of the Company and such other members, who need not be directors, as
the Board may direct and may be appointed from time to time by a majority of the
Directors present or participating at any regular or special meeting. The Board
may from time to time invest committees with such power and authority, subject
to such conditions as it may see fit, except that no committee shall have any
power or authority to adopt, amend or repeal any By-Law.
(b) Executive Committee. An Executive Committee of three or more directors may be appointed by resolution adopted by a majority of the directors in office; it shall have all the powers and exercise all of the authority of the Board during intervals between meetings, except as specially limited by the Board. Meetings of the Executive Committee may be called at any time by any member, to be held at such place and day and hour as shall be specified by the person or persons calling the meeting, or if not so specified by the Secretary. Notice of every meeting of the Executive Committee, which states the place, day and hour thereof, but need not state the purposes thereof, shall be given to each date of the meeting, or by being sent by telegraph or given personally or by telephone prior to the date of the meeting. The presence or particiation by other lawful means of a majority of the members of the Committee shall be necessary and sufficient to constitute a quorum for the transaction of business, and any action of the Committee upon any matter shall be taken and be valid with the affirmative vote of at least a majority of the members of the Committee. The Executive Committee shall keep a record of all action taken and report such action to the Board of Directors at its next meeting thereafter.
(c) Term; Vacancies; Absence or Disqualification. All committee members appointed by the Board shall serve during the pleasure of the Board, which may fill vacancies and may designate one or more Directors as alternate members of any committee, to take the place of any absent or disqualified member at any meeting. In the absence or disqualification of any member or alternate member of any committee or committees, the member or members thereof participating at any meeting and not disqualified from or disqualified member or alternate member.
(d) Organization; Finality of Action. All committees shall keep such record of the transactions of their meetings as the Board or these By-Laws shall direct. All committees shall determine their own organization, procedures and times and places of meeting, unless otherwise directed by the Board and except as otherwise provided in these By-Laws. Any action taken by any committee shall be subject to alteration or revocation by the Board; provided, however, that third parties shall not be prejudiced by such alteration or revocation.

Section 2.12. Compensation. By resolution of the Board, Directors may be paid a fixed sum and expenses, if any, of attendance for any regular or special meeting of the Board or any committee, and may in addition be paid an annual retainer fee or a retirement allowance, or both. Directors shall also be entitled to receive such

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compensation for services rendered to the Company as officers, committee
members, or in any capacity other than as directors, as may be provided from
time to time by resolution of the Board. [Amended by Board of Directors
12-17-87.]
                                    ARTICLE III
                                    Officers and Employees
Section 3.01. Executive Officers. The executive officers of the
Company shall be the Chairman of the Board, the President, one or more Vice
Presidents (as may be determined by the Board of Directors), the Secretary and
the Treasurer. The executive officers shall be elected by the Board of
Directors. Any two or more offices may be held by the same person, except that
the same person shall not be President and Secretary. Each executive officer
shall hold office at the discretion of the Board until the next succeeding
annual meeting of the Board of Directors and thereafter until his or her succes-
sor is duly elected and qualifies, or until his or her earlier death,
resignation or removal. The Board may authorize the Company to enter into
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employment contracts and/or consulting agreements with any executive officer for such periods as may be deemed appropriate including periods longer than one year and the provision herein for annual election shall be without prejudice to the contract rights, if any, of executive officers under such contracts.

Section 3.02. Additional and Assistant Officers, Agents and Employees. The Board of Directors, the Chairman and the President each may from time to time appoint or hire one or more other officers, assistant officers, agents, employees and independent contractors as are deemed advisable; and the Board of Directors, the Chairman or the President may prescribe their duties, conditions of employment and compensation and may dismiss them without prejudice to their contract rights, if any. [Amended by Board of Directors 8-29-90.]

Section 3.03. The Chairman of the Board. The Chairman of the Board, who shall be elected from among the Directors, shall be the Chief Executive Officer of the Company and shall preside at all meetings of the Board of

Directors and of the Shareholders. He shall exercise the powers and perform duties usual to the Chief Executive officer and, subject to the control and direction of the Board of Directors, shall have management and supervision over and exercise general executive powers concerning all the property, business and affairs of the Company. He shall see that all policies, programs, orders and resolutions of the Board of Directors are carried into effect, and shall have such other powers and duties as from time to time may be assigned to him by the Board of Directors or these By-Laws. He shall have the power to execute deeds, bonds, mortgages, and other contracts, agreements and instruments of the Company. He shall be, ex officio, a member of all standing committees of the Board except the committee on officers' compensation. [Amended by Board of Directors 6-27-90.]

Section 3.04. The President. The President shall be subject to the control and direction of the Chairman of the Board and shall direct and supervise those affairs of the Company assigned to him by the Chairman, the Board of Directors, or the By-Laws. In the absence of or disability
of the Chairman of the Board, the President shall be the Chief Executive Officer. He shall have the power to execute deeds, bonds, mortgages, and other contracts, agreements and instruments of the Company. [Amended by Board of Directors 6-27-90.]

Section 3.05. The Vice Presidents. The Vice Presidents, one or more of whom may be designated executive, senior, group or administrative vice president, or given other descriptive title, shall have such powers and perform such duties in such capacities as may be assigned by the Board of Directors or the Chairman of the Board. [Amended by Board of Directors 6-27-90.]

Section 3.06. The Secretary. The Secretary shall: (a) be custodian of the Company's contracts, policies, leases, deeds and other indicia of title, and all other business records; (b) keep or cause to be kept at the registered office or the principal place of business of the Company an original or duplicate record of the proceedings of the shareholders and the Board of Directors, and a copy of the Articles of the Company and of these By-Laws; (c)
attend to the giving of notices of the Company as may be required by law or these By-Laws; (d) be custodian of the corporate records and of the seal of the Company and see that the seal is affixed to such documents as may be necessary or advisable; (e) have charge of and keep at the registered office or the principal place of business of the Company, or cause to be kept at the office of a transfer agent or registrar an original or duplicate share register, giving the names of the shareholders in alphabetical order, and showing their respective addresses, the number and classes of shares held by each, the number and date of certificates issued for the shares, and the date of cancellation of every certificate surrendered for cancellation; and (f) have such powers and duties as may from time to time be prescribed by the Board of Directors or the Chairman. [Amended by Board of Directors 8-29-90.]

Section 3.07. The Vice President - Finance. If a Vice President Finance is elected by the Board of Directors, he or she (a) shall serve as the Company's Chief Financial Officer; (b) shall, subject to the approval of the Chairman, recommend financing, investing, borrowing, tax,
insurance and internal audit policies for the Company; (c) shall be responsible
for the preparation of consolidated financial statements required by the Board
of Directors of the Chairman; (d) shall see that the lists, books, reports,
statements, tax returns, certificates and other documents and records required
by law are properly prepared, completed and filed; and (e) shall have such other
powers and duties in such capacities as may from time to time be prescribed by
the Board of Directors or the Chairman. If the Board does not elect a Vice
President - Finance, the powers and duties herein set forth shall be exercised
by the Treasurer. [Amended by Board of Directors 8-29-90.]
perform such duties in such capacities as may be assigned by the Board of
Directors or the Vice President - Finance in the development of financing,
investing and borrowing policies, and shall administer these policies; (b) shall
have charge and custody of and be responsible for the corporate funds, securi-
ties and investments; (c) shall receive, endorse for collection, and give
receipts for checks notes, obligations, funds and

Section 3.9. Delegation of Duties. In case of the absence of any officer of the Company, or for any other reason that the Board may deem sufficient, the Board of Directors may delegate for the time being the powers and duties, or any of them, of any officer to any other officer or director or other person whom it may select.

Shares of Capital Stock
Section 4.01. Share Certificate. Every holder of fully-paid stock in
the Company shall be entitled to a certificate or certificates, consecutively
numbered, to be in such form as the Board of Directors may from time to time
prescribe, and signed (in facsimile or otherwise, as permitted by law) by the
Chairman, the President or a Vice President and by the Secretary or the
Treasurer which shall represent and certify the number of shares of stock owned
by such holder. The Board may authorize the issuance of certificates for
fractional shares or, in lieu thereof, scrip or other evidence of ownership,
which may (or may not) as determined by the Board entitle the holder thereof to
voting, dividend or other rights of shareholders.
the Company shall be made on the books of the Company only upon surrender to
the Company for cancellation of the certificate or certificates for such shares
properly endorsed, by the registered shareholder or by his assignee, agent or
legal representative, who shall

Section 4.03. Replacement of Certificates. New certificates for shares of stock may be issued to replace certificates alleged to have been lost, stolen, destroyed or mutilated upon such terms and conditions, including an affidavit of loss or destruction and the giving of a satisfactory bond of indemnity, as the Board of Directors from time to time may determine.

Section 4.04. Regulations Relating to Shares. The Board of Directors shall have power and authority to make all such rules and regulations not inconsistent with these By-Laws as it may deem expedient concerning the issue, transfer and registration of certificates representing shares of the company.

Section 4.05. Record Date. The Board of Directors may fix a record date for the determination of shareholders for any purpose, including the right to notice of or to vote at meetings, payment of dividends or distributions, allotment of rights, or change, reclassification, conversion or exchange of shares, up to 110 days prior to the action for which the record date is fixed. The Company shall be entitled to treat the holder of record of any share or shares of stock of the Company as the holder and owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or right, title or interest in any share on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise expressly provided by the laws of Pennsylvania. ARTICLE V

Miscellaneous Corporate Transactions and Documents
Section 5.01. Borrowing. No officer, agent or employee of the Company shall have any power or authority to pledge any of its real or personal property, except within the scope and to the extent of the authority delegated by the Board of Directors. Authority may be granted by the Board for any of the above purposes and may be general or limited to specific instances.

Section 5.02. Execution of Instruments Generally. All properly authorized notes, bonds, drafts, acceptances, checks, endorsements (other than for deposit), guarantees, and all evidences of indebtedness of the Company whatsoever, and all properly authorized deeds, mortgages, contracts and other instruments requiring execution by the Company may be executed and delivered by the Chairman, the President or any Vice President or the Treasurer of the Company; and authority to sign any such contracts or instruments, which may be general or confined to specific instances, may be conferred by the Board of Directors upon any other person or persons, subject to such requirements as to countersignature or other conditions, as the Board of Directors from time to time may determine. Facsimile signature on checks, notes, bonds and other instruments may be used if authorized by the part of such authority to any person or persons if authorized so to do by the Board of Directors.

Section 5.03. Voting and Acting with Respect to Securities Owned by Company. The Chairman of the Board of Directors, the President or any Vice President each shall have the power and authority to vote and act with respect to all stock and other securities in any other corporation held by this Company, unless the Board confers such authority, which may be general or specific, upon some other person. Any person so authorized to vote securities shall have the power to appoint an attorney or attorneys, with general power of substitution, as proxies for the Company, with full power to vote and act in behalf of the company with respect to such stock and other securities.

Section 6.01. Offices. The principal office and place of business of the Company shall be at 121 Gamma Drive, Pittsburgh, Allegheny County, Pennsylvania. The Company may also have offices at such other places within or without the Commonwealth of Pennsylvania as the business of the Company may require.

Section 6.02. Corporate Seal. The Board of Directors shall prescribe the form of a suitable corporate seal, which shall contain the full name of the Company and the year and state of incorporation.

Section 6.03. Fiscal Year. The fiscal year of the Company shall begin the first day of January and terminate on the last day of December in each year.

Section 6.04 Financial Reports to Shareholders. The Board of Directors shall have discretion to determine whether financial statements shall be sent to shareholders, what such reports shall contain, and whether they shall be audited or accompanied by the report of an independent or certified public accountant.

ARTICLE VII

## Indemnification

[Approved by Shareholders 4/24/87.]
Section 7.01. Indemnification of Directors, Officers and Others.
(a) Right to Indemnification. Except as prohibited by law, every Director and officer of the Company shall be entitled as of right to be indemnified by the Company against expenses and any liability paid or incurred by such person in connection with any actual or threatened claim, action, suit or proceeding, civil, criminal, administrative, investigative or other, whether brought by or in the right of the Company or otherwise, in which he or she may be involved, as a party or otherwise, by reason of such person being or having been a Director or officer of the Company or by reason of the fact that such person is or was serving at the request of the Company as a director, officer, employee, fiduciary or other representative of another corporation, partnership, joint venture, trust,
employee benefit plan or other entity (such claim, action, suit or proceeding
hereinafter being referred to as "Action"); provided that no such right or
indemnification shall exist with respect to an Action brought by an indemnitee
(as hereinafter defined) against the company except as provided in the last
sentence of this Subsection (a). Persons who are not directors or officers of
the Company may be similarly indemnified in respect of service to the Company
or to another such entity at the request of the Company to the extent the Board
of Directors at any time denominates any of such persons as entitled to the
benefits of this Section. As used in this Section 7.01, indemnitee" shall
include each Director and officer of the Company and each other person
denominated by the Board of Directors as entitled to the benefits of this
Section, "expenses" shall include fees and expenses of counsel selected by any
such indemnitee and "liability" shall include amounts of judgments, excise
taxes, fines, penalties and amounts paid in settlement. An indemnitee shall be
entitled to be indemnified pursuant to this Subsection (a) for expenses
incurred in connection with any Action brought by an indemnitee against the
Company only (i) as provided under
(b) Right to Advancement of Expenses. Every indemnitee shall be entitled as of right to have his or her expenses in defending any Action or in any Action under Subsection (c) paid in advance by the Company prior to final disposition of such Action, subject to any obligation which may be imposed by law or by provision in the Articles, By-Laws, agreement or otherwise to reimburse the Company in certain events.
(c) Right of Indemnitee to Initiate Action. If a written claim under Subsection (a) or Subsection (b) of this Section is not paid in full by the Company within thirty days after such claim has been received by the Company, the indemnitee may at any time thereafter initiate an Action against the Company to recover the unpaid amount of the claim and, if successful in whole or in part, the indemnitee only defense to any Action to recover a claim under Subsection (a) of this Section shall be that the indemnitee's conduct was such that under Pennsylvania law the Company is prohibited from indemnifying the indemnitee for the amount claimed, but the burden of proving such defense shall be on the company. Neither the failure of the Company (including its Board of Directors, independent legal counsel and its shareholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances, nor an actual determination by the Company (including its Board of Directors, independent legal counsel or its shareholders) that the indemnitee's conduct was such that indemnification is prohibited by law, shall be a defense to such Action or create a presumption that the indemnitee's conduct was such that indemnification is prohibited by law. The only defense to any such Action to receive payment of expenses in advance under Subsection (b) of this Section shall be failure to make an undertaking to reimburse if such an undertaking is required by law or by provision in the Articles, By-Laws, agreement or otherwise.
(d) Insurance and Funding. The Company may purchase and maintain insurance to protect itself and any person eligible to be indemnified hereunder against any liability or expense asserted or incurred by such person in connection with any Action, whether or not the Company would have the power to indemnify such person against such liability or expense by law or under the provisions of this Section. The Company may create a trust fund, grant a security interest, cause a letter of credit to be issued or use other means (whether or not similar to the foregoing) to ensure the payment of such sums as may become necessary to effect indemnification a provided herein.
(e) Non-Exclusivity; Nature and Extent of Rights. The right of indemnification and advancement of expenses provided for in this Section (i) shall not be deemed exclusive of any other rights, whether now existing or hereafter created, to which any indemnitee may be entitled under any agreement or by-law, charter provision, vote of shareholders or directors or otherwise (ii) shall be deemed to create contractual rights in favor of each indemnitee, (iii) shall continue as to each person who has ceased to have the

Section 7.02 Personal Liability of Directors.
(a) To the fullest extent that the laws of the Commonwealth of Pennsylvania, as in effect on January 27, 1987 or as thereafter amended, permit elimination or limitation of the liability of directors, no Director of the Company shall be personally liable for monetary damages as such for any action taken, or any failure to take any action, as a Director.
(b) This Section 7.02 shall not apply to any actions filed prior to January 27, 1987, nor to any breach of performance of duty or any failure of performance of duty by any Director of the Company occurring prior to January 27, 1987. The provisions of this Section shall be deemed to be a contract with each Director of the Company who serves as such at any time while this Section is in effect and each such Director shall be deemed to be doing so in reliance on the provisions of this Section. Any amendment or repeal of Company which has the effect of increasing Director liability shall operate prospectively only and shall not affect any action taken, or any failure to act, prior to the adoption of such amendment, repeal, other By-Law or provision. [Approved by Shareholders 4/24/87.] [Restated Articles, Article 14th.]

## ARTICLE VIII

Amendments

Section 8.01. Amendments to By-Laws. The Board of Directors, by vote of a majority of the Disinterested Directors, may adopt, amend and repeal the By-Laws with respect to those matters which are not, by statute, reserved exclusively to the shareholders. No By-Law may be adopted, amended or repealed by the shareholders unless, in addition to any vote required by any other provision of law, the Articles or the By-Laws of the Company, such action is approved by the holders of a majority of the Voting Power of the Voting Stock of the Company which is not Beneficially Owned by an Acquiring Person, unless such action has been

