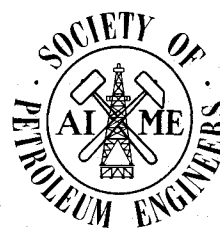
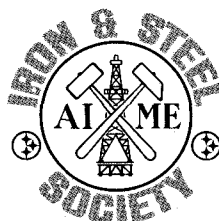
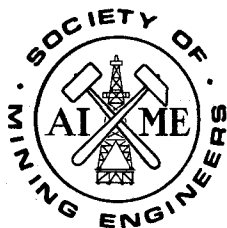
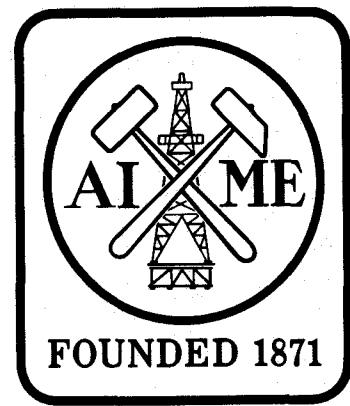


AIME Official Annual Review/1982



AMERICAN INSTITUTE OF MINING, METALLURGICAL,
AND PETROLEUM ENGINEERS, INC.

AIME
OFFICIAL ANNUAL REVIEW
1982

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AMERICAN INSTITUTE OF MINING, METALLURGICAL,
AND PETROLEUM ENGINEERS, INC.

REPORT OF THE
AIME EXECUTIVE DIRECTOR

Every year in the history of AIME is unique. Each annual cycle brings new leadership, staff changes, some novel plans and programs, along with the inevitable revisions in the vital statistics by which the Institute's progress is often measured. Yet few years can lay claim to being time periods in which a truly monumental event occurred which reshaped the fundamental structure of AIME. 1982 was such a milestone year.

Although a number of important activities took place in the course of our 111th year, the most significant was the decision of the AIME Board of Directors to adopt most of the recommendations contained in the Report of the Ad Hoc Transition Committee. By this decision the Board has brought about a profound change in the relationship between the Institute and its Constituent Societies. In effect, the Institute's leadership has formally adopted the federated structure that has marked AIME's method of governance over the past decade.

The thrust towards decentralized management has been underway for several decades. It was first formalized in the Johnson Committee Report of 1948. The formation of the Constituent Societies in 1957, followed by the report of the Ten Year Look Committee in 1969 and the adoption of the Mode IV method of operation in 1972, were important events that helped to provide additional details for the blueprint of decentralized management. By 1980 it became evident that the relationship between the Institute Headquarters and the Societies would have to be clarified once again. This led to the appointment of the Ad Hoc Transition Committee and ultimately to the Board's critical decision of October 20, 1982. Perhaps of equal importance is the implicit recognition by the Board that the relationship between the Institute Headquarters and the Constituent Societies is not a product but rather a process--a dynamic process that will mandate periodic review and revision in the coming years.

In addition to the October action of the AIME Board of Directors, the Institute's overall growth in 1982 is deserving of special attention. In spite of the extremely negative economic climate in the minerals extractive industries that persisted through 1982, the balance sheet assets increased by 5.5%, ending the year at over \$19,000,000. Membership increased by 6,604 for a year end total of 92,833, or a gain of 7.7%.

The Institute is deeply indebted to President Harold W. Paxton for his positive leadership in a year marked by major decisions and substantial change. AIME can also take special pride in the leadership provided by the Institute and Constituent Society Boards of Directors and the many thousands of committee members for a job well done during a very demanding period in the Institute's history. Last but not least, the Institute is particularly grateful to Chairman Robert Merrill and the members of his Ad Hoc Transition Committee for their completion of a very difficult assignment on which they labored long and hard over the past two years.

Respectfully submitted,

Ed Buckley

Edward A. Buckley
AIME Executive Director

AMERICAN INSTITUTE OF MINING, METALLURGICAL,
AND PETROLEUM ENGINEERS, INC.

RECORD OF HONORS AND AWARDS PRESENTED BY AIME IN 1982

The following Honors and Awards were presented by AIME in 1982, in addition to those presented by the Constituent Societies and described elsewhere in this Annual Review:

HONORARY MEMBERSHIP was conferred upon

Henry T. Mudd, "For a lifetime of exemplary leadership of an outstanding international Corporation, and in deep appreciation for his contributions to the advancement of humanity through the dissemination of knowledge and his generous philanthropic gifts and activities."

H. Arthur Nedom, "For his distinguished business accomplishments; outstanding service as President of SPE and of AIME; and for his achievements in guiding the formation of the American Association of Engineering Societies to represent the U.S. engineering profession."

The JAMES DOUGLAS GOLD MEDAL to Morris E. Fine, "For fundamental contributions to understanding of various aspects of nonferrous metallurgy including precipitation hardening and microstructure-property relationships and for unselfish dedication to the education of young engineers."

The BENJAMIN F. FAIRLESS AWARD to George A. Stinson, "For his outstanding leadership in the national and international affairs of the steel industry and his foresight in modernization of steelmaking through new technology."

The HAL WILLIAMS HARDINGE AWARD to John F. Havard, "For pioneering work in the gypsum industry of the western United States, innovative leadership in many areas of mineral development, and dedicated service to AIME."

The ANTHONY F. LUCAS GOLD MEDAL to Paul B. Crawford, "In recognition of his contribution to the knowledge of reservoir performance and enhanced recovery and teaching of their practical applications."

The ROBERT EARLL McCONNELL AWARD to Richard G. Miller, Jr., "For his key responsibility for the introduction to the waste treatment industry of the heavy medium cyclone process which provides an energy efficient means of recycling aluminum, one of our most important natural resources."

The ERSKINE RAMSAY MEDAL to Woods G. Talman, "In recognition of his outstanding leadership in the coal industry, and particularly for his concern and contributions in the area of improving safety and health in the Coal Mining Industry."

The CHARLES F. RAND MEMORIAL GOLD MEDAL to Edward S. Frohling, "For inspirational leadership and management skills brought to the minerals and construction industries resulting in the founding and successful administration of Mountain States Mineral Enterprises."

The ROBERT H. RICHARDS AWARD to A. R. MacPherson, "In recognition of a lifetime of pioneering in the field of mineral processing particularly in engineering design, development, and construction of circuits for comminution of ores by autogenous and semi-autogenous grinding."

The WILLIAM LAWRENCE SAUNDERS GOLD MEDAL to John Towers, "For his engineering foresight and creative leadership in the development of one of the largest and most diversified resource companies in the world."

The ENVIRONMENTAL CONSERVATION DISTINGUISHED SERVICE AWARD to Edward W. Mertens, "In appreciation of his long service in environmental protection for the petroleum industry and, in particular, recognition of his efforts to studies of the fate and effect of petroleum in the marine environment."

The MINERAL INDUSTRY EDUCATION AWARD to Oscar K. Kimbler, "In recognition of his inspiring teaching and painstaking development of courses and laboratories, his productive research in many aspects of petroleum engineering, and his guidance of his students into scholarly writing for the diffusion of new knowledge to the profession."

The MINERAL ECONOMICS AWARD to Simon D. Strauss, "In recognition of the immense contribution he has made as an industrialist, government official and educator, toward increasing public understanding of the role of minerals and the economic factors requisite for their production, not only in peacetime, but also in World War II, and subsequent national emergencies."

The ROSSITER W. RAYMOND MEMORIAL AWARD to Tommy M. Warren, for his paper, "Drilling Model for Soft-Formation Bits."

LEGION OF HONOR FIFTY-YEAR MEMBER INSIGNIA were conferred upon the following forty members: Julian M. Avery, Fred W. Bailey, Robert W. Baltosser, John A. Bowsher, Henry L. Brunjes, John Daesen, John R. C. Dinsdale, Eldon N. Dunlap, Herman R. Eberle, Lawson P. Entwistle, Herbert A. Franke, E. A. Hammermeister, Milton A. Lagergren, Robert C. Madden, Oscar T. Marzke, Gilbert J. Matthews, Richard O. McCurdy, Andrew Meyer, Richard Miller, Domingo Moreno, George H. Musson, George W. Pawel, Robert F. Playter, Joseph Pursglove, Jr., Albert V. Quine, Allan R. Reiser, Reginald L. Rickett, Bertrand G. W. Robinson, Richard L. Sayrs, Reinhardt Schuhmann, Jr., Arch L. Slaughter, James R. Sweet, J. U. Teague, L. Newton Thomas, R. L. Tobie, Myles A. Walsh, Benjamin N. Webber, Hanley Weiser, Sheldon P. Wimpfen, Robert J. Woody.

Board of Directors,

American Institute of Mining, Metallurgical,
and Petroleum Engineers, Inc.:

We have examined the balance sheets of AMERICAN INSTITUTE of MINING, METALLURGICAL, and PETROLEUM ENGINEERS, INC. as of November 30, 1982 and 1981, and the related statements of revenue and expenses (including the individual statements of revenue and expenses of the Institute's Headquarters and the four constituent societies for 1982) and surplus, and changes in endowment, quasi-endowment and custodian funds for the years then ended. Our examinations were 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 financial statements referred to above present fairly the financial position of American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. at November 30, 1982 and 1981, and the results of its operations and the changes in its endowment, quasi-endowment and custodian funds for the years then ended, and the individual revenue and expenses of the Institute's Headquarters and the four constituent societies for the year ended November 30, 1982, all in conformity with generally accepted accounting principles applied on a consistent basis.

Coopers + Lybrand

New York, New York
January 31, 1983.

BALANCE SHEETS, November 30, 1982 and 1981

The accompanying notes are an integral part of the financial statements

STATEMENTS of REVENUE and EXPENSES and SURPLUS
for the years ended November 30, 1982 and 1981

	Headquarters and All-Institute	Society of Mining Engineers of AIME	The Metallurgical Society of AIME	Iron & Steel Society of AIME	Society of Petroleum Engineers of AIME	Eliminations	Total 1982	Total 1981
Revenue:								
Members' dues and entrance fees	\$314,854	\$ 903,611	\$ 299,862	\$ 217,194	\$1,178,282	(\$314,854)(1)	\$ 2,598,949	\$ 2,374,591
Advertising and publication sales		1,560,471	1,225,508	615,222	3,126,940		6,528,141	5,573,417
Appropriations from endowment funds	182,300						182,300	182,300
Offshore Technology Conference:								
Attendance and membership distribution	73,136	110,113	28,217	17,199	970,649		1,199,314	1,411,080
Management fees					355,574		355,574	299,100
Exhibit space commission					69,521		69,521	63,610
Meetings		250,785	231,007	257,914	3,551,577		4,291,283	2,156,132
Interest and dividends	5,224	82,902	33,589	56,332	451,010		629,057	706,180
Net realized loss on sales of investments					(129,320)		(129,320)	(349,872)
Miscellaneous	8,878	69,834	18,048	47,450	173,210	(5,000)(2)	312,420	379,954
	584,392	2,977,716	1,836,231	1,211,311	9,747,443	(319,854)	16,037,239	12,796,492
Expenses:								
Publications		2,001,478	1,222,000	671,552	3,415,535		7,310,565	5,780,704
Meetings		354,731	234,896	160,396	3,678,035		4,428,058	2,369,384
Society direct expenses		285,591	321,484	329,477	1,704,348		2,640,900	2,220,167
AIME Headquarters	636,751	99,769	26,915	23,642	164,529	(319,854)	631,752	562,536
	636,751	2,741,569	1,805,295	1,185,067	8,962,447	(319,854)	15,011,275	10,932,791
Excess (deficiency) of revenue over expenses	(\$ 52,359)	\$ 236,147	\$ 30,936	\$ 26,244	\$ 784,996	-	1,025,964	1,863,701
Surplus (unrestricted):								
Balance, beginning of year (Note 4)							7,929,627	6,065,926
Balance, end of year							\$ 8,955,591	\$ 7,929,627

- (1) Elimination of dues allocated to Headquarters from societies.
(2) Elimination of appropriation from AIME Headquarters to Society of Mining Engineers.

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

for the years ended November 30, 1982 and 1981

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

NOTES to FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

a. General:

The financial statements include the accounts of Headquarters and All-Institute (AIME Headquarters) and the Society of Mining Engineers (SME), the Society of Petroleum Engineers (SPE), The Metallurgical Society (TMS), and the Iron & Steel Society (ISS), the four societies being referred to as the constituent societies.

Custodian funds are either set aside for or generated by the conduct of specific activities within AIME and its constituent societies. While the Institute retains ownership and AIME directors remain responsible for proper use, the operating control has generally been delegated to the AIME body that manages the related activity.

Quasi-endowment funds of \$4,480,912 and \$4,247,355 at November 30, 1982 and 1981, respectively, represent amounts which have been restricted by the Institute's Board of Directors. The Board of Directors has also determined that such funds be retained and invested.

The financial statements do not include assets, liabilities, revenue or expenses of Local Sections, Divisions or Special Committees except for the Institute's share of the net income of the Offshore Technology Conference (OTC). Advances to the OTC which approximate the Institute's equity in the net assets of the OTC (at November 30, 1982 and 1981, the OTC's net assets were comprised principally of cash and temporary cash investments) are included in endowment and custodian fund cash and temporary cash investments on the balance sheets.

The Institute's Board of Directors periodically makes appropriations from interest and dividend income of endowment funds to AIME Headquarters and the individual constituent societies based on their respective operating requirements.

b. Inventories:

Salable publications and books are carried at the lower of cost (first-in, first-out) or net realizable value.

c. Property, Buildings and Equipment:

Land and buildings comprise the headquarters for SME in Denver, Colorado and TMS and ISS in Warrendale, Pennsylvania. The land and buildings are recorded at

Continued

NOTES to FINANCIAL STATEMENTS, Continued

cost and the buildings are depreciated on the straight-line method over their estimated useful lives. Depreciation expense which is charged to Society direct expenses amounted to \$34,500 and \$33,200 for 1982 and 1981, respectively.

In connection with the construction of the SME headquarters, SME has, since 1978, recorded contributions, net of fund-raising expenses, for the restrictive purpose of defraying the cost of the headquarters. Contributions that are not expended for the headquarters may be used to repay the \$467,000 floating interest loan from the endowment funds (see Note 2) or for future building improvements. In connection with the aforementioned contributions, pledges of \$11,640 and \$31,050 have been included in accounts receivable at November 30, 1982 and 1981, respectively.

Equipment, furniture and fixtures are recorded at cost and are depreciated on the straight-line method over their estimated useful lives. Depreciation expenses for 1982 and 1981 were as follows:

	<u>1982</u>	<u>1981</u>
Charged to publications	\$ 75,300	\$ 46,800
Charged to society direct expenses	161,400	121,000
Charged to AIME Headquarters	<u>3,700</u>	<u>4,000</u>
	<u>\$240,400</u>	<u>\$171,800</u>

d. Investments:

Investments are carried at cost with regard to those purchased or at market value on date of gift with regard to those received as contributions, plus accrued interest where applicable. Purchases and sales of securities are reflected on a trade-date basis. An adjustment to the carrying value of the investment is recorded whenever market value is significantly below the carrying value (see Note 4).

e. Gains or Losses on Sale of Investments:

Gains or losses on sale of investments are determined on the basis of average cost. Such gains or losses relating to investments which are part of the endowment and custodian commingled pool of investments are allocated to the individual funds based on their relative book values at the end of each quarter.

Continued

NOTES to FINANCIAL STATEMENTS, Continued

f. Interest and Dividend Income:

Interest from investments is recorded on the accrual basis. Dividends are recorded on the cash basis; however, such basis of accounting does not differ significantly from the generally accepted method of accruing dividends on the record date.

g. Membership Dues:

Membership dues are recorded as income in the accounting period to which they relate.

h. Pensions:

The Institute's pension plan was revised and amended as of December 1, 1980. The revised plan covers substantially all full-time employees, and is noncontributory with regard to the first \$10,000 of salary. Contributions are required from eligible employees for salaries in excess of \$10,000. Actuarially computed pension costs, including amortization of prior service costs over a thirty-year period are funded and charged to expense each year. Pension expense amounted to \$95,900 and \$92,500 in fiscal 1982 and 1981, respectively.

Accumulated plan benefits and plan net assets as of the most recent actuarial valuation date, December 1, 1981, are as follows:

Actuarial present value of accumulated plan benefits:	
Vested	\$ 888,300
Nonvested	<u>32,800</u>
	<u>\$ 921,100</u>
Net assets available for benefits	<u>\$1,540,887</u>

The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 7.0%.

i. Reclassification:

Certain 1981 amounts have been reclassified to conform with the 1982 presentation (see Note 7).

Continued

NOTES to FINANCIAL STATEMENTS, Continued

2. Financing of TMS/ISS and SME Headquarters Facilities

TMS/ISS Headquarters:

During 1978, the operating fund obtained a \$300,055 loan from the endowment fund, payable over twenty years at a floating interest rate based on the endowment fund's prior year's net earnings after management fees. At November 30, 1982 and 1981, the balance of the loan plus accrued interest at 8.1% (1982) and 6.3% (1981) per annum was \$266,728 and \$275,461, respectively.

On December 8, 1978, the Institute obtained a mortgage loan of \$206,400 from the Pennsylvania Industrial Development Authority to finance the remaining portion of the construction costs. The loan, collateralized by a mortgage on the building, bears interest at the rate of 4% per annum and is payable in 240 equal monthly instalments which began May 1, 1979. At November 30, 1982 and 1981, the balance of the loan plus accrued interest was \$180,427 and \$188,052, respectively.

SME Headquarters:

On February 28, 1978, the Institute's Board of Directors approved an investment of \$100,000 from the endowment fund (Rocky Mountain Fund) for the facility and stipulated that the Fund shall hold a proportional share of the facility and receive a proportional share of any proceeds from its sale or disposition.

During fiscal 1979, the operating fund obtained a \$467,000 loan from the endowment fund, payable over twenty years at a floating interest rate based on the endowment fund's prior year's net earnings after management fees. At November 30, 1982 and 1981, the balance of the loan plus accrued interest at 8.1% (1982) and 6.3% (1981) was \$440,774 and \$451,006, respectively.

3. Note Receivable

On November 20, 1981, a non-interest-bearing loan of \$1,300,000, evidenced by a note was made by SPE to the SPE Foundation. The SPE Foundation was formed for the purpose of furthering the interests of SPE and its members.

The loan was made to the Foundation for the construction of a building, and is secured by land owned by the SPE Foundation. The note is repayable on November 20, 1983.

Continued

NOTES to FINANCIAL STATEMENTS, Continued

4. Changes in Investments

	<u>1982</u>	<u>1981</u>
a. Operating fund:		
Investments at cost, beginning of year	\$2,335,889	\$3,391,041*
Purchases of securities	<u>1,402,942</u>	<u>316,897</u>
	3,738,831	3,707,938
Sales of securities	<u>(402,862)</u>	<u>(1,022,177)</u>
	3,335,969	2,685,761
Net realized loss on sales of securities	<u>(129,320)</u>	<u>(349,872)</u>
Investments at cost, end of year	<u>\$3,206,649</u>	<u>\$2,335,889</u>

*In prior years, the evaluation of the carrying value of the operating fund investment portfolio was performed on a consolidated basis. In 1982, the evaluation was determined to be more appropriate on an individual society basis because of the autonomy of the societies and the separate and distinct nature of their assets. As a result, with regard to an operating fund investment of ISS, the investment and corresponding fund balance at December 1, 1980 have been adjusted by \$44,000 to reflect the estimated permanent decline in market value applicable to prior years. There have not been any additional changes to the adjusted carrying value in 1982 and 1981.

	<u>1982</u>	<u>1981</u>
b. Endowment, quasi-endowment and custodian funds:		
Investments at cost plus accrued interest, beginning of year	\$4,850,742	\$4,096,413
Purchases of securities	<u>2,768,597</u>	<u>3,483,564</u>
	7,619,339	7,579,977
Sales of securities	<u>(2,814,981)</u>	<u>(3,014,628)</u>
	4,804,358	4,565,349
Net gain on sales of securities*	117,111	273,361
Net change in accrued interest	<u>(413)</u>	<u>12,032</u>
Investments at cost plus accrued interest, end of year	<u>\$4,921,056</u>	<u>\$4,850,742</u>

*Amounts shown represent realized gains (losses) based on the original cost of the investments sold.

Continued

NOTES to FINANCIAL STATEMENTS, Continued

5. Advances to United Engineering Trustees, Inc.

In accordance with an agreement between the Institute and the United Engineering Trustees, Inc. (UET), the Institute has agreed to maintain permanently its principal offices in the United Engineering Center Building and to pay a pro rata portion of the operating costs of the building. The Institute's share of these costs during 1982 and 1981 was \$52,000 and \$46,000, respectively. The advance to UET, made in connection with the erection of the United Engineering Center Building, is repayable only out of available reserve funds on dissolution of UET and earns interest at an annual rate of 4%.

6. Commitments

Rental commitments under leases for office space and computer equipment approximate \$209,000 in 1983, \$131,000 in 1984 and \$99,000 in 1985. Rental expense was approximately \$229,000 and \$222,000 during 1982 and 1981, respectively.

See Note 5 with respect to the Institute's commitment related to the United Engineering Center.

7. Publication of Metallurgical Transactions

TMS participates in a joint publication arrangement with the American Society for Metals (ASM), an unaffiliated society, for purposes of publishing a monthly and quarterly scientific journal entitled "Metallurgical Transactions." Under the terms of the agreement, all expenses, income and liabilities are shared equally by the two Societies and overall management is generally directed by a joint commission of the two Societies. In previous years, the operational and administrative function of the publication were the responsibility of ASM. TMS collected subscription revenues and remitted them to ASM, net of a prearranged administrative cost. At the end of the year, settlement was made between the Societies and TMS recorded their share of the net income from the publication as revenues. During 1982, through mutual agreement, TMS assumed the responsibility for operations and administration of the publication. As a result, TMS believes that disclosure of the combined financial activity of the joint publication is more appropriate because of the extent of control now exercised by them. Accordingly, the accompanying financial statements reflect the total revenues and expenses of the joint publication arrangement. Additionally, the expenses have been increased or decreased for the ASM share of the net income or loss. In this connection, publications expense was increased by \$16,818 in 1982 and decreased by \$10,435 in 1981. The 1981 financial statements have been reclassified to conform to the presentation adopted in 1982.

Continued

NOTES to FINANCIAL STATEMENTS, Continued

8. Tax Status

AIME Headquarters and its constituent societies comprise a non-profit organization exempt from Federal income taxes under Section 501(c)(3) of the Internal Revenue Code.

TOTAL FINANCIAL RESOURCES OF AIME

AS AT NOVEMBER 30, 1982

AIME ENDOWMENT FUNDS

Medal and Plaque Award Funds	\$ 234,795
Scholarship Funds	199,291
Specific Use Funds	2,144,543
General Purpose Funds	3,129,054
TOTAL ENDOWMENT FUNDS	\$5,707,683

FUNDS UNDER ASSIGNMENT TO CONSTITUTENT UNITS

Custodian Funds:

AIME Corporate Headquarters	\$ 111,719
SME-AIME	309,135
TMS-AIME	27,495
ISS-AIME	108,541
SPE-AIME	-0-
Equity in Undistributed OTC Surplus	41,509*
TOTAL CUSTODIAN FUNDS:	\$ 598,399

*Represents surplus distributable to AIME and Constituent Societies

OPERATING SURPLUS FUNDS

AIME Corporate Headquarters	\$130,853
Operating Reserve	
All-Institute Deficit from Prior Years	(38,495)
Net Headquarters Reserve	\$ 92,358

SME-AIME	1,992,116
TMS-AIME	343,749
ISS-AIME	410,077
SPE-AIME	6,117,484
TOTAL OPERATING SURPLUS FUNDS	\$8,955,784

FUNDS HELD BY LOCAL SECTIONS

Approximate value based on 1981 Section Treasurers' Reports	\$1,445,000
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SUMMARY

ENDOWMENT FUNDS	\$ 5,707,683
CUSTODIAN FUNDS	598,399
OPERATING SURPLUS FUNDS	8,955,784
SUBTOTAL	\$15,261,866
ADVANCE TO UNITED ENGINEERING TRUSTEES, INC.	265,000
RESOURCES SET ASIDE TO MEET LIABILITIES	3,487,264*
TOTAL RESOURCES EXCLUDING SECTIONS	19,014,130
LOCAL SECTION FUNDS	1,445,000
TOTAL FINANCIAL RESOURCES OF AIME	\$20,459,130

*Includes Endowment Fund Loan and Investments as follows:

Loan for Society Buildings	\$707,502
Investment in SME Building	100,000
TOTAL	\$807,502

**AMERICAN INSTITUTE OF MINING, METALLURGICAL,
AND PETROLEUM ENGINEERS, INC.**

MEMBERSHIP DATA

Year	Member Total	Year	Member Total	Year	Member Total	Year	Member Total	Year	Member Total
1870	22	1880	832	1890	2,000	1900	2,450	1910	4,210
1871	157	1881	1,031	1891	2,134	1901	2,897	1911	4,169
1872	254	1882	1,213	1892	2,258	1902	3,262	1912	4,290
1873	273	1883	1,345	1893	2,392	1903	3,741	1913	4,284
1874	345	1884	1,467	1894	2,391	1904	3,530	1914	4,150
1875	554	1885	1,439	1895	2,437	1905	3,886	1915	4,650
1876	628	1886	1,504	1896	2,390	1906	4,048	1916	5,880
1877	732	1887	1,615	1897	2,455	1907	4,191	1917	6,597
1878	734	1888	1,714	1898	2,562	1908	4,241	1918	7,856
1879	788	1889	1,857	1899	2,564	1909	4,284	1919	8,426

Year	Corporate Members	Student Members	Grand Total	Year	Corporate Members	Student Members	Grand Total
1920	8,388	1,920	10,308	1940	10,828	4,171	14,999
1921	8,879	1,326	10,205	1941	11,334	4,179	15,513
1922	8,805	1,328	9,413	1942	11,675	3,489	15,164
1923	7,813	1,315	9,128	1943	12,081	2,707	14,788
1924	7,555	1,263	8,818	1944	12,334	1,497	13,831
1925	7,569	1,157	8,726	1945	12,910	1,088	13,998
1926	7,385	1,131	8,516	1946	14,119	1,737	15,856
1927	7,434	1,004	8,438	1947	15,000	3,117	18,117
1928	7,488	1,000	8,488	1948	15,580	4,069	19,649
1929	7,823	1,033	8,856	1949	16,315	4,952	21,267
1930	7,831	1,162	8,993	1950	17,082	4,534	21,616
1931	7,843	1,131	8,974	1951	17,482	2,229	19,711
1932	7,685	975	8,660	1952	18,643	1,964	20,607
1933	7,155	672	7,827	1953	19,718	2,195	21,913
1934	6,887	628	7,515	1954	21,816	2,179	23,995
1935	6,916	1,006	7,922	1955	23,723	2,825	26,548
1936	7,326	1,620	8,946	1956	26,298	3,415	29,713
1937	8,279	2,147	10,426	1957	28,823	3,974	32,797
1938	9,005	2,898	11,903	1958	30,553	3,757	34,310
1939	9,614	3,760	13,374	1959	33,378	2,332	35,710

Year	Corporate Members	Student Members	Grand Total	Year	Corporate Members	Student Members	Grand Total
1960	34,852	1,893	36,745	1975	50,085	6,663	*56,152
1961	34,368	1,633	36,001	1976	52,642	7,131	59,773
1962	34,437	1,857	36,294	1977	56,008	8,802	64,810
1963	34,838	2,289	37,127	1978	59,385	9,285	68,670
1964	35,740	2,370	38,110	1979	63,712	9,289	73,001
1965	36,878	2,561	39,439	1980	70,791	10,942	81,733
1966	38,912	2,706	41,618	1981	76,600	9,679	86,279
1967	40,278	3,183	43,461	1982	82,387	10,496	92,883
1968	42,015	3,437	45,488				
1969	43,300	3,438	46,738				
1970	43,095	3,863	46,958				
1971	44,627	3,962	48,589				
1972	45,742	3,652	49,394				
1973	45,154	4,572	49,726				
1974	46,702	4,988	51,690				

*Actual Grand Total; 596 TMS-AIME/ISS-AIME Joint Corporate Members included once.

AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC.
MEMBERSHIP STATISTICS January 1, 1983

NO.	SECTION	SOCIETY OF MINING ENGINEERS OF AIME										THE METALLURGICAL SOCIETY OF AIME							IRON & STEEL SOCIETY OF AIME			SOCIETY OF PETROLEUM ENGINEERS OF AIME													GRAND TOTAL
		Min & Explor. A	M.P.D. B	Coal F	Ind. Mn. H	Educ. J	Econ. K	Un-class	Total	Extr. & Proc. Met. D	App. of Met. Sci. E	Educ. J	Econ. K	Un-class	Total	Division MNOPO	Econ. K	Total	Drilling & Well Comp. N	Educ. & Prof. O	Econ. & Eval. P	Form Eval. R	Gas Tech. S	Geol. Eng. T	Management U	Prod. Oper. V	Reser. & Exp. W	Fl. Mech. X	OP & TECH. Y	Emer. Equip. Tech. E	Well Compl. C	Press Trans. Test. L	Un-class	Total	
P63	ABERDEEN PETROLEUM	4	12	1	15	2	1	1	9	23	1			1	33	4		4	255	13	15	59	1	16	24	129	89	31	85		23	4	15	759	
M50	ADIRONDACK	31	28	217	17				31	30				5	67			5	3	57	3	3	2	1	2	6	5	1						27	
M35	ALABAMA	107	4	6					31					3	1			3	108	7	11	20	10	8	29	149	53	13	26		7	13	455		
M1	ALASKA PETROLEUM	51													2																				
P50	AMARILLO PETROLEUM	2	1	1					15						1	16			57	3	19	10	6	25	15	30	24	3					16	208	
P22	ANDARKO BASIN	17	13	1														25	34	2	4	14	4	7	6	15	15	3					3	104	
P38	APPALACHIAN PETROLEUM	17	13	5	2	1			8									58	1	1	11	13	10	4	13	53	16	21	3				27	104	
P72	ARGENTINE PETROLEUM	32	12		6										14			23	4	1	1		2										1	219	
M58	ARKANSAS																																		
P81	AUSTRALIAN	55	12	2	6				2						3			54	1	8	23	8	8	18	28	53	4	19						5	228
P35	BAKERSFIELD	105	17	43	5	4				1					1			102	16	3	36	12	30	32	80	45	20	6						33	466
P44	BIG HORN BASIN	19	19	14	7				40	172					235	1		14	7	82	2	17	29	4	12	97	34	16	40				4	50	
T-1	BILLINGS PETROLEUM	74																																	
M3	BLACK HILLS																																		
M143	BOISE	55	12	2	6				4	7					1			2	9	1	5	4	8	1	6	5	6	1						2	187
P60	BOLIVIAN PETROLEUM	105	17	43	5	4			40	172					235	1		1	7	82	2	17	29	4	12	97	34	16	40					4	50
T-1	BOSTON	74																																	
P32	CALIFORNIA COASTAL																																		
P31	CARACAS PETROLEUM	15	17	1	3	1			1	1					3			17	17	3	7	12	3	4	22	14	65	18	4				11	178	
M5	CARLSBAD POTASH	37	44	21	15	2			33	43					87			14	9																
M92	CARLSBAD POTASH	107	38	776	38	6			9	19					31			23	1																
M6	CENTRAL APPALACHIAN	11	34		19				1,037																										
M146	CENTRAL ARIZONA	22	7																																
T-2	CENTRAL NEW MEXICO	3	27	4	1				3	12					17			1	18	3	6	3	1	1	1	3	5	10							
M60	CHICAGO METALLURGICAL	28	56	109	33	10			70	217					318			1	13	3	16	3	11	2	16	15	10	20							
T-3	CHICAGO PETROLEUM	98							45	129																									
P48	CLEVELAND IRON & STEEL																																		
T-4	CLEVELAND IRON & STEEL																																		
I-3	COASTAL BEND																																		
P41	COCHISE	42	7	4	2	1																													
M147	COCHISE	115	19																																
M163	COEUR D'ALENE																																		
P55	COLOMBIAN	21	357	6	2				71	48					131			15	2	1	2	4		2	2	8	13								
M9	COLORADO	1,514	30	348	98	5			2,467	233					9																				
M57	COLORADO PLATEAU	297	18	86	7	1			1	16					32																				
M10	COLUMBIA	169	14	1	1				20	140					194																				
T-5	CONNECTICUT	19							34																										
P16	DALLAS	32	11	5	6				9	22					36				339	20	273	108	39	96	164	268	348	121	79						
P18	DENVER PETROLEUM	45	15	12	11	2			30	11					44				557	30	158	98	27	46	99	350	224	137	138						
T-6	DETROIT								31	201					246				607	40	198	123	61	131	201	408	323	112	120						
I-5	Detroit Iron & Steel																																		
P46	EAST KENTUCKY	139	24	70	15	3			30	55					96				30	2	1	4	2	8	4	11	1	2							
M95	EAST TENNESSEE	9	5	7	1	1			2						3				225	14	30	36	16	17	52	202	44	19	5						
P3	EAST TEXAS	39																																	
I-7	EASTERN IRON & STEEL																																		
M121	EASTERN NEVADA																																		
P68	EGYPTIAN	2	15	1	4	1			35	15					55				48	7	5	11	7	6	7	44	12	11	26						
M15	EL PASO	56	2	2	6	5			26	1					2				597	24	40	78	19	31	79	302	128	26	111						
P28	EVANGELINE	15	4	119	2	2			1	1					3																				
M161	FLORIDA	278	161	41	145	4			17	48					71				10	1	13	1	1	5	11	8	2	6	4						
P13	FORT WORTH	1	39	16	82				3	2					6				100	4	44	47	4	15	35	56	32	24	11						
M10	FOUR CORNERS	69							15	11					31				55	3	1	1	1	4	1	42	4	1	2						
I-9	GEORGIA																																		
P53	GLOBETROTTERS																																		
P53	GOLDEN GATE PETROLEUM																																		
M152	GRAND CANYON	75	19		2				2						2				23	92	522	6	162	263	676	24	7	363	1						
P29	GREAT BEND	2	1						2	2					4				1,960	1	3	404	9	3	12	1,161	902	11	405						
P2	GULF COAST	3	6																																
P23	HOBBS PETROLEUM	19		4	7	1			16	97					126				54	1	1	2	1	1	1	96	17	1							
T-7	HUDSON-MOHAWK																																		
P24	ILLINOIS BASIN PETROLEUM																																		
M114	INTERMOUNTAIN	56	18	3	1				55	54					117				73	5	11	23	9	18	15	70	30	23	4						
P96	JAPAN	12	10	3																															
P96	KANTAN																																		
M18	LEHIGH VALLEY	51	38	32	9	1			41	61					108				85																

**AMERICAN INSTITUTE OF MINING, METALLURGICAL,
AND PETROLEUM ENGINEERS, INC.**

CLASSIFICATION OF AIME MEMBERS

THREE-YEAR TALLY - 1980, 1981, 1982

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1982 Breakdown</u>			
				<u>SME</u>	<u>TMS</u>	<u>ISS</u>	<u>SPE</u>
HONORARY MEMBERS	48	49	49	16	12	4	17
MEMBERS	40,989	43,315	44,980	14,531	4,600	4,546	2,303
ASSOCIATE MEMBERS	12,655	13,774	15,229	4,462	1,150	1,447	8,170
JUNIORS	15,938	18,152	20,490	5,926	1,507	414	12,643
ASSOCIATE JUNIORS	1,161	1,310	1,639	320	-	17	1,302
 TOTAL	 70,791	 76,600	 82,387	 25,255	 7,269	 6,428	 43,435
 STUDENTS	 10,942	 9,679	 10,496	 3,479	 2,896	 86	 4,035
 GRAND TOTAL	 81,733	 86,279	 92,883	 28,734	 10,165	 6,514	 47,470

1982 NET MEMBERSHIP GAINS

SME-AIME	330	+1.2%
TMS-AIME	875	+9.4%
ISS-AIME	104	+1.6%
SPE-AIME	<u>5,295</u>	+12.6%
 AIME	 6,604	 +7.7%

APPROXIMATE MEMBERSHIP RATIO BY SOCIETY FOR LAST 21 YEARS

<u>DECEMBER</u>	<u>SME-AIME</u>	<u>TMS-AIME</u>	<u>ISS-AIME</u>	<u>SPE-AIME</u>
1961	35.3%	25.4%		39.3%
1962	34.5	26.7		38.8
1963	33.6	28.0		38.4
1964	33.0	29.1		37.9
1965	32.2	29.5		38.3
1966	32.9	29.6		37.5
1967	33.7	29.2		37.1
1968	33.7	29.1		37.2
1969	33.7	29.1		37.2
1970	34.0	29.0		37.0
1971	35.4	26.9		37.7
1972	36.7	25.6		37.7
1973	36.9	22.3		40.8
1974	36.8	20.5		42.7
1975	36.9	14.2	6.4%	42.5
1976	37.6	13.1	6.5	42.8
1977	37.4	12.4	6.6	43.6
1978	36.8	12.0	6.5	44.7
1979	35.5	11.0	7.1	46.4
1980	32.8	10.6	7.1	49.5
1981	32.9	10.8	7.4	48.9
1982	30.9	11.0	7.0	51.1

**AMERICAN INSTITUTE OF MINING, METALLURGICAL,
AND PETROLEUM ENGINEERS, INC.**

REPORT ON THE

111th AIME ANNUAL MEETING

The 111th AIME Annual Meeting was held in Dallas, Texas, February 14-18, 1982. AIME Headquarters and the Woman's Auxiliary to AIME (WAAIME) were located at the Fairmont; The Society of Mining Engineers of AIME was headquartered at the Hyatt Regency; The Metallurgical Society of AIME and the Iron and Steel Society of AIME had their headquarters at the Dallas Hilton; and the Society Petroleum Engineers of AIME was located at the Adolphus. Technical sessions were conducted at the Dallas Convention Center and the Hilton. The Trinity Section, under Chairman J. R. Stratton, hosted the meeting.

REGISTRATION DATA

	<u>ESTIMATED</u>	<u>ACTUAL</u>
AIME MEMBERS	2,750	2,328
Non-Members	700	546
Non-Member Authors	350	363
SEG, CIM, AIMMG, Founder Societies		77
Student Members	325	237
Student Non-Members	75	50
WAAIME	<u>300</u>	<u>307</u>
 TOTAL REGISTRATION	 4,500	 3,908

PERCENTAGE OF MEMBER ATTENDANCE

Society of Mining Engineers of AIME.....	49%
The Metallurgical Society of AIME.....	46%
Iron and Steel Society of AIME.....	3%
Society of Petroleum Engineers of AIME.....	2%

REGISTRATION REVENUE AND EXPENSE

	<u>BUDGETED</u>	<u>ACTUAL</u>
Registration Revenue	\$295,125.00	\$246,025.00
Total Expenses Charged to Registration Revenue	 288,651.00	 289,058.00
	<hr/>	<hr/>
REVENUE OVER EXPENSE	\$ 6,474.00	\$(43,033.00)

DISTRIBUTION OF REVENUE SURPLUS

Society of Mining Engineers of AIME	\$(29,817.00)
The Metallurgical Society of AIME	166.00
Iron and Steel Society of AIME	(1,006.00)
Society of Petroleum Engineers of AIME	(274.00)
Annual Meeting Surplus Fund	<u>(12,102.00)</u>
 TOTAL DISTRIBUTION	 <u>\$(43,033.00)</u>

SOCIETY OF MINING ENGINEERS OF AIME

REPORT

OF THE

EXECUTIVE DIRECTOR

SME-AIME had a better year in 1982 than could reasonably be expected given the worldwide economic problems of the minerals industry. Early momentum from a strong 1981 and cost-cutting actions provided good financial results. Overall membership grew slightly although there was a small decrease in student membership. Services were sustained, improved, and expanded even though hours of work for part-time employees were reduced. The First International Fall Meeting, which has been singularly cited for program excellence, did much to rid the Society of its perceived isolationist mode and to bring it into the international community of kindred associations. Surveys indicated that editorially MINING ENGINEERING was doing a good job for most members but also pointed out the requirement for extra efforts to meet the needs of some interest groups. The Technical Paper backlog remained at an acceptable level. Book sales, although short of the high goals set, were at a record level. Thirteen new titles were published. For the second straight year, Preprints contributed to surplus. Revenue was down 6.5% and expense was down 8.5%. These combined to provide a surplus of \$236,147 which is \$47,647 greater than the \$188,500 surplus anticipated in the budget.

Corporate membership increased 415 (1.7%) and student membership decreased by 85 (2.4%). These rates compare with increases of 6.3% and 4.1% in 1981. Fewer new applications were received in 1982 for both membership categories. Extra efforts at retention contributed significantly to these results.

It was a difficult year for the Meetings Program as both the Annual and Fall Meetings lost money for the first time since 1973. Experience continues to prove that attendance at SME-AIME meetings is highly location sensitive. As predicted, Dallas proved to be a poor draw. This, coupled with the problemed economy, resulted in the lowest Annual Meeting attendance in at least the past six meetings (since records have been kept by Society). The Technical Program was good. Dallas, with hotels almost two miles apart, provided an acid test for the new Annual Meeting management procedures; however, the AIME Transition Committee reported that the procedures worked extremely well. Usually an effort is made to offset a poor Annual Meeting site by a strong location for the Fall Meeting; however, each fourth year the American Mining Congress Show is held in Las Vegas -- an event which competitively forces a special no exhibit format and location for the Fall Meeting. In 1982, the First International Fall Meeting was held in Hawaii with attendance about half that anticipated five years earlier when the meeting was planned but near the attendance forecast when the economic trends became apparent. In all other measures, the Fall Meeting was exceptional. The net surplus from the Offshore Technology Conference offset the other meeting losses. Overall, Meetings provided 12.1% (\$360,898) of the revenue and 12.9% (\$354,731) of the expense and contributed 2.6% (\$6,167) of the surplus for 1982 -- these compare to 20.4% (\$607,432) of the revenue; 17.2% (\$421,099) of the expense and 35.2% (\$186,333) of the surplus for 1981.

Publications provided more than 52% of the revenue and 73% of the expense for 1982 -- compared to 46% and 67% in 1981. MINING ENGINEERING advertising

slipped from its historic 50% of publications revenue to about 41% as advertising sales worsened throughout the year. Overall, the Publications Program lost \$441,007 in 1982 compared to a loss of \$279,981 in 1981. MINING ENGINEERING lost \$494,741; however, when a portion of dues is allocated as subscription income (as required by the IRS to determine possible income tax liability) the loss is reduced to \$122,317. These compare to a loss of \$379,694 reduced to \$5,184 in 1981.

A goal of 24,000 books sold was set before economic circumstances got so bad. Sales fell short of the goal by 3,580 books; however the 20,420 books sold set a new record -- exceeding the previous record of 18,428 sold in 1981. Thirteen new titles were published and 22 approved projects were in various stages of development at year-end. Books provided 24.4% (\$727,059) of the revenue; 24.6% (\$673,501) of the expense including a special reserve of \$50,000 against slow moving inventory; and, 22.6% (\$54,558) of the surplus for 1982. These compare to 17.1% (\$510,441) of the revenue; 17.0% (\$416,658) of the expense with no reserve commitment; and, a contribution of 17.7% (\$93,783) of the surplus for 1981.

The Preprint Program is viewed as a special interest service not used equally by all members. Therefore, the financing goal of the program is to break-even and prices were increased in 1981 toward sustaining that goal. The Preprint Program produced a surplus of \$176 in 1982 compared to \$5,930 in 1981.

Two new Sections and four new Student Chapters were established. SME-AIME now has 70 Local Sections of which 3 are in other countries (Lima, Peru; Mexico; and, the Philippines). There are 61 Student Chapters of which 3 are in other countries (Australia; Philippines; and, Venezuela). SME-AIME also has student members in 6 Student Chapters administered by TMS-AIME.

Personnel turnover was acceptable and active staff positions retained at 30 full-time and 8 part-time. To reduce costs, some replacements were delayed for full-time position losses and hours for part-time employees were reduced.

Probably the most important actions taken by the AIME Board during 1982 were approval of the recommendations of the AIME Ad Hoc Transition Committee and the establishment of separate incorporation as an individual Society option. The Transition Committee recommendations make SME-AIME responsible for its own activities, including outside representation, unless in consort with the other Societies, it wishes to delegate some of these activities to the AIME Headquarters Office. Working Party #69 is developing a recommendation to the SME-AIME Board concerning whether or not the Society should seek separate incorporation. During 1982, Working Party #61 recommended the Society not change its name, but recognize the growing need for professional recognition and identification of members in a number of disciplines and technologies. The staff was charged with developing means to recognize these disciplines and technologies as an ongoing project. In 1982, the Society letterhead was redesigned to include division identification and description. The year ended with several issues under study and with SME-AIME about to undertake one of its most important and comprehensive activities ever; the development of a Long-Range Plan under the chairmanship of Past President John F. Havard. Many signs indicate 1983 may be a difficult year as the effects of the economy continue to be felt. The Society entered 1982 with strong momentum. It enters 1983 with no such benefit.

ADMINISTRATIVE SERVICES

The open office landscaping concept, which was prohibited by cost upon moving into the SME-AIME headquarters building, became a reality this summer. The Board approval of this project and the extension of the lease of the tenant, Association of Surgical Technologists (AST), made the improvements possible.

The project called for a floor plan that would increase the available work stations, and improvement of the computer room facilities, as well as increased air flow to the Xerox room. The floor plan developed increased the work stations from 14 to 29 and took advantage of the existing power supply, telephone connections, and walkways.

Bids for the furniture and fixtures were accepted from three manufacturers specializing in open office landscaping systems. On the basis of lowest price and equal or better quality, Kobi, a Kansas City based company, was awarded the contract to supply and install the partitions, furniture, and fixtures. A local firm was contracted to build a new computer room on the garden level within an existing space which previously housed a stock of SME-AIME publications. Electrical and air conditioning work was handled by contractors used in the building's original construction.

The SME-AIME in-house publications stock of over 2,000 books was moved to a nearby mailing house for storage and order fulfillment. The mail room, which occupied space adjacent to the book storage, was moved to another area of the garden level making space for the new computer room and a work area for the Data Processing personnel. The computer room was completed with the addition of two prefabricated walls, a backup air conditioner, a Halon fire extinguisher system and an emergency shutdown mechanism. Air flow improvements to the new computer room as well as to the Xerox room offset the heavy heat load created by the equipment. The open office landscaping system was completed over a weekend and was a joint venture of the staff of the office supply company that sold the system, a Kobi technician, and some SME-AIME staff members.

Functional and personnel changes were made in conjunction with the project. Two full time and one part time employee were transferred from the Data Processing Department to the Membership Department along with the function of membership data maintenance. A computer operator/programmer was hired to supervise the computer room and data processing operations. Two department heads were able to move into larger offices and the CPT word processing equipment was relocated from the general work area to a small vacated office. The entire project was completed on schedule.

Extension of the tenant's lease for three years will provide the revenue for the project. AST has also rented 10 desks previously used by SME-AIME, for the term of the extended lease, thus providing additional income and avoiding the need for storage of the desks.

Because of the state of the economy, SME-AIME instituted an improved system for collection of receivables. Using a mailgram program available through the Western Union Telex system and contracting with a collection agency, the accounts receivable have been followed-up on a regular and timely basis.

On August 1, 1982, the Society, acting on Board approval, converted the Xerox 9400 copier rental from a one to a three-year contract. This conversion in rental terms included a special one-time credit of \$1,250, and will keep costs more manageable.

Handling book order activities on the in-house computer started October 1, in time to handle the record volume of book sales (4,654 volumes whose sales totaled \$126,783) for the remainder of fiscal year 1982. Sales (including books of the Seeley W. Mudd Fund and other funds) for 1982 were 20,420 volumes totaling \$518,237 which compared with 18,428 volumes for \$451,940 for 1981 -- increases of 10.8% and 14.7%, respectively. Invoices, entries to record sales, receivables, inventory, and cost of sales are now activated through the new book order system. Book orders are processed weekly to provide shipping labels and shipping instructions to each of the eight book order fulfillment locations.

FULFILLMENT CENTER

BookCrafters, Inc.
Cummings Printing Company
Edwards Brothers, Inc.
Kingsport Press
Lucas-Guinn
Port City Press
Fred B. Rothman
Concept Enterprises

LOCATION

Detroit, Michigan
Manchester, New Hampshire
Ann Arbor, Michigan
Kingsport, Tennessee
Hoboken, New Jersey
Baltimore, Maryland
Ken-Caryl Ranch, Colorado
Redwood City, California

Total book inventory under SME-AIME control, on November 30, 1982 was 81,139 copies with a cost of \$1,266,817 (after reserving \$50,000 for slow moving items), this includes property of the Mudd Fund, and other funds with an inventory of 8,425 copies bearing a cost of \$108,993. Physical inventories were taken at all locations as of September 30, and book inventories adjusted if necessary.

The lock box collection system continued to enable the Society to maximize its temporary cash investment to take advantage of the high interest rates in 1982. A comparison between 1982 and 1981 follows:

	<u>1982</u>	<u>1981</u>
Average amount invested	\$784,194	\$ 534,200
Average earning rate	13.6%	16.1%
Total earnings	115,960	86,000
Allocated to various funds	34,781	23,407
Total investments at year-end	982,973	1,108,033

FINANCES

The following shows the Operating Surplus (Deficit) for the Society since it was started in 1957 (000's omitted):

<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
\$11.4	\$.7	\$ (.8)	\$4.5	\$1.0	\$ (1.7)	\$ (14.8)
<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
\$20.1	\$1.2	\$52.6	\$30.1	-0-	\$ (10.5)	\$ (17.6)
<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
\$ (58.9)	\$ (32.5)	\$10.7	\$16.6	\$120.4	\$137.9	\$119.7
<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>		
\$ (19.4)*	\$239.8	\$106.0	\$530.1	\$236.1		

*Resulting from one time relocation related expenses of \$184,191.

The following shows the status of the Society Surplus Fund since it was started in 1957 (000's omitted):

<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
\$100.9	\$101.6	\$100.8	\$105.3	\$106.3	\$104.6	\$89.8
<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
\$109.9	\$111.1	\$163.7	\$193.8	\$193.8	\$183.3	\$165.7
<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
\$106.8	\$74.3	\$85.0	\$101.6	\$222.0	\$359.9	\$479.6
<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>		
\$629.0	\$1,082	\$1,204	\$1,756	\$1,992		

PUBLICATIONS

Although the rate of inflation slowed somewhat in FY 1982, economic performance in the publications area is a continuing concern, particularly during this period of recession and its dramatic impact on the minerals industry. In an effort to counter a downturn in revenue due to decreased advertising activity, ways to reduce costs, particularly for MINING ENGINEERING, were investigated. One cost-saving measure, a change in paper stock for the magazine, will be implemented in January, with an estimated savings of over \$16,500 during a year's time. Other economies have been prioritized and will be implemented as circumstance indicates.

The inflationary spiral in printing costs has slowed from an annual rate of 15% to about 10%, which includes anticipated postal rate increases in 1983.

MINING ENGINEERING

Three special issues were published during the year. The October issue was focused on transportation in the minerals industry, particularly the methods used to transport the bulk commodities such as coal, iron ore, potash, and other industrial minerals. The report, which included case studies, also addressed such areas as slurry systems and port development.

The two regular specials, Annual Review and Directory, were published in May and July, respectively. For the Annual Review, a number of mailings soliciting information was made to all technical committee personnel of the SME-AIME Divisions, mining companies, manufacturers, and state mining and geological organizations. Input from the latter organizations especially helped improve the coverage of exploration and development activities. These mailings are being continued to solicit input for the 1982 review to be published in May 1983.

Contributing Editors from each Division continue to collect data and contribute to the Annual Review issue. Current Contributing Editors are: Peter Phillips, Coal; Stanley J. Lefond, Industrial Minerals; Michael N. Greeley, John W. Peters, and Lee R. Rice, Mining & Exploration; and Peter V. Avotins, Mineral Processing.

During 1982, the Engineering Fundamentals series was continued, with articles on such topics as mine ventilation, hoses, and project management in mine construction. A special two-part article in January and February highlighted the Second Mexican Mining Rail Excursion from the perspective of Beth Robinson, a graduate student at the Colorado School of Mines. The objective of editorial coverage during the year was to cover as broad a spectrum of the many aspects of technology within the Society's jurisdiction as possible. Some topics covered included wall control blasting in open pits, a review of world oil shale deposits, state severance taxes, autogenous and semi-autogenous grinding, tungsten geology in China, large flotation machine development, potash mining, and the history of a limestone quarry. An interview with Robert Horton discussed the US Bureau of Mines' reorganization and an article by Ford B. Ford presented MSHA's outlook for the eighties.

The Technical Editors continued to fulfill a valuable function, providing reviews of feature articles, soliciting information, advising the editorial

staff, and writing and researching material for special issues. During the year the Technical Editors were Raymond E. Blair, Paul L. Russell, Paul R. Smith, Jr., and Bernard W. Washington. When Paul Smith moved to California, his place was filled by Earl L. Rau; when Bernard Washington was transferred to Alaska toward year-end, Andrew Hoover was named to take his place. Two readership surveys were conducted in 1982. A reader preference-audience profile survey was conducted in January in two ways: A sampling of approximately 1000 readers was surveyed by READEX, a St. Paul-based survey company, and the questionnaire was also published in the January issue of MINING ENGINEERING. Results of both surveys were tabulated and summarized in the June issue. The READEX part of the survey was done in order to have preliminary results for the MINING ENGINEERING Committee meeting in February. Because 75.3% of those responding to the READEX survey indicated they preferred dual notation--SI and English--the Committee reversed its previous position of SI only. About 3.5% of the total circulation responded; of those responding 78.8% indicated they thought the magazine attained the correct technical level. Of particular interest was the 25-34 age group, many of whom indicated they had been members for 10 or more years, some over 15. The second survey, made on the October issue, was an advertising notice type of survey, results of which will be available shortly after the first of the year.

Due to the economic circumstances in the minerals industry, advertising display and classified pages decreased in comparison with 1981. Only the Professional Services pages increased, although at year-end there are indications that the economy will impact on those pages also. The percentages of change are shown in the advertising statistics table. Advertising rates were increased July 1, 1982, by about 14.9%, partly to cope with continuing cost increases, especially postal rates, and partly to stay competitive in the marketplace. However, during 1983 advertising rates and the market situation will be monitored and rates may not be increased during the year. Comparative statistics are:

COMPARATIVE ADVERTISING STATISTICS (FY 81 vs. FY 82)

	FY 1981		FY 1982		Change,
	<u>Pages</u>	<u>\$ Income</u>	<u>Pages</u>	<u>\$ Income</u>	<u>Pages</u>
Display	330 5/12	\$566,475	285 6/12	\$567,977	-13.6%
Classified	55 1/12	93,362	34 11/12*	48,479*	-36.4%
Professional Services	105	27,549	129 10/12	30,265	+19.2%
	490 6/12	\$687,386	450 3/12	\$646,721	- 8.2%

*Includes \$2,290 Employment Service income and 5 10/12 pages.

In FY 1982, 667 10/12 editorial pages of all types (feature articles, regular columns, Society news, industry news, etc.) were published. In addition, 24 pages of material for other aspects of the Society's operations were published: advance publicity for the Fall Meeting, AIME newsletters, SME-AIME's annual report in April, AIME's annual report in June, and special pages on the Employment Service in November.

Advertising promotion efforts continued to be divided between in-house produced material and purchased services. In addition to the two READDEX surveys, purchased services included the circulation audit by ABC; an annual media data booklet that can be used by advertisers as a comparability document; and seven advertisements in "Standard Rate and Data," an advertising rate publication used by advertisers and their agencies. A circulation study showing the extent of the SME-AIME membership in the coal industry was an in-house project completed this year. Ads for SRDS are produced in-house and are also used in MINING ENGINEERING and as mailing pieces.

TECHNICAL PAPERS

The Technical Papers Section was published in 10 issues of MINING ENGINEERING (not included in May, the Annual Review issue, and July, the Directory, because of the size of those issues). A total of 256 pages was published plus 8 pages of abstracts of papers to be published in Vol. 272, the 1982 Transactions volume. Papers published included 48 technical papers, 4 technical notes, and 7 discussions of papers already published. Scheduled for publication in the annual Transactions volume are 45 additional papers, all of those accepted for the volume within a 12-month period since the last volume was scheduled. In Vol. 270, 1981, published in 1982, there were 39 additional papers, 202 pages, published. The backlog of papers awaiting publication in the Technical Papers Section was substantially reduced. At year-end there was a supply of papers for about four issues, a reasonable backlog for production purposes.

PREPRINTS

During FY 1982, 350 papers were preprinted: 165 for the 1982 Annual Meeting plus two Mini Symposia containing 15 papers; 118 for the 1982 Fall Meeting plus one Mini Symposium, containing 6 papers; and at year-end 73 papers for the 1983 Annual Meeting. The latter is an unusually high number for year-end; in 1981 only 27 papers had been preprinted for the 1982 Annual Meeting. Revenue from preprint sales at the 1982 Annual Meeting was \$19,056.05 compared with \$10,410.75 at the 1981 Annual Meeting, reflecting the increases in prices from \$1.00 to \$2.00 for members and \$2.50 to \$3.50 for nonmembers. At the meeting, 8,087 papers and 118 Minis were distributed. Revenue at the Fall Meeting (attendance 1,021) was \$7,533 compared with \$14,738 at the 1981 Fall Meeting (attendance 4,365); 5,982 preprints were distributed. Total revenue in FY 1982 for the program was \$45,460 and expense was \$45,284, attaining the goal of self-sufficiency. Expenses were impacted by the large number of papers preprinted (350 vs. 287 in FY 1981) and by an increase in copier cost from \$0.025 to \$0.035 per page. A recent investigation of alternative ways of producing preprints indicated that the present in-house system of production is still the most cost effective.

BOOK PUBLISHING

In FY 1982, 13 new titles were published with an additional 6 in final production stages at year-end. Published were:

- ° Asbestos, P. H. Riordon, editor
- ° Radiation Hazards in Mining, Manuel Gomez, editor

- ° Stability in Surface Mining, Vol. 3, C. O. Brawner, editor
- ° Fifth Annual Uranium Seminar
- ° Underground Mining Methods Handbook, W. A. Hustrulid, editor
- ° Proceedings of the 17th APCOM, T. B. Johnson and R. J. Barnes, editors
- ° Mineral Exploration, Mining and Processing Patents 1980, compiled by Oliver S. North
- ° Interfacing Technologies in Solution Mining, W. J. Schlitt, editor
- ° Proceedings of the 1st Mine Ventilation Symposium, H. L. Hartman, editor
- ° Issues in Rock Mechanics, R. E. Goodman and F. E. Heuze, editors
- ° Design and Installation of Comminution Circuits, A. L. Mular, and G. V. Jergensen, II, editors
- ° Mineral Resources of the Pacific Rim, T. M. Li, G. R. Brown, and N. E. Guernsey, editors
- ° State-of-the-Art of Ground Control in Longwall Mining and Mining Subsidence, Y. P. Chugh and Michael Karmis, editors

In final production stages at year-end are four camera-ready books: Sixth Annual Uranium Seminar; Ground Control in Room-and-Pillar Mining; Stability in Underground Mining; and Gold, Silver, Uranium, and Coal. Two typeset books are Coal Mining Technology--Theory and Practice by Robert Stefanko and Construction Engineering for Underground Coal Mining by Scott G. Britton.

Currently 18 book publishing projects have been approved by the SME-AIME Publications Board as recommended by the SME-AIME Book Publishing Committee. Three more are pending approval. However, some of these projects may have to be deferred or discontinued if economic conditions so dictate.

As a service primarily to schools and universities with a metallurgical engineering program, the Society produced a small supply of Rosin-Rammler Graph kits with the graph paper and explanation supplied by E. C. Winegartner of Exxon.

Of the 13 new titles published in 1982, nine were SME-AIME meetings related or SME-AIME generated and four were published for outside activities: APCOM Conference, Conference on Radiation Hazards, Rock Mechanics Symposium, and Conference on Stability in Underground Mining. Although the 1st Mine Ventilation Symposium was held at the University of Alabama, mine ventilation activities have become a charge to a joint Unit Committee of the Coal and Mining & Exploration Divisions of SME-AIME.

During 1982, Publications Board Awards were given to 18 individuals and a Local Section whose endeavors resulted in books published by the Society. The list of award winners is contained elsewhere in this report.

Book inventory is a sizable part of the Society's assets and the marketing of that inventory remained a challenge. Current efforts are being focused on the overseas markets. A marketing arrangement has been made with Brown's Geological Information Service, a London bookdealer, and with the

South African Institute of Mining & Metallurgy. In the coming year, marketing arrangements in South America and Australia will be explored. As a service to members in economically poor times and as an attempt to move inventory and improve the Society's cash flow, a special 10% discount was given on books purchased with the 1983 dues payment before December 31, 1982.

Book sales of all types grossed \$518,237, compared with \$451,940 in 1981. Of this, \$76,635 was for Fund Books (compared with \$153,467 in 1981) and \$441,602 was for SME-AIME books, plus \$99,870 in handling and postage fees (compared with \$298,473 and \$54,817 in 1981). Cost of sales was \$334,058, for a net surplus of \$54,558 (compared to \$282,135 and \$93,783 in 1981) after a reserve of \$50,000 for slow moving inventory. Cost recovery from book editing (the transfer of staff time and overhead to inventory and work-in-progress) was \$185,587 compared to \$134,523. The number of books sold was 20,420 compared to a previous record of 18,428 in 1981.

The book postage and handling fee was raised to \$3.50 from \$2.50 October 1 to reflect postal rate increases already enacted in 1982 and those increases anticipated in late 1982 or early 1983.

INFORMATION RETRIEVAL

Response to the information retrieval system through Information on Demand, (IOD) a Berkeley, CA, firm has been slow. An article about the service and the rationale for it will be published in a forthcoming issue of MINING ENGINEERING. Basically the service provides bibliographic database searches and, when needed, document hard copies through IOD's library "stringers" in key libraries throughout the country.

IOD has a phone line answered in the Society's name. When a person calls the number, IOD first interviews the person to find out exactly what information is required. They ask for any key words the client can suggest; if the question is a technical one, IOD asks for some background and explanation to help put the question in context. A mutually agreed upon budget is established for the work and deadlines are determined. IOD's usual turnaround time is 1-1 1/2 weeks, although special arrangements can be made for faster delivery. Once the parameters of the task have been established, IOD selects the databases that are appropriate for the topic. For questions related to geology, GeoRef (American Geological Institute), Geoarchive (Geosystems, London), and Compendex (Engineering Information Inc.) are usually used. Other choices, depending on the topic, might be NTIS (Dept. of Commerce), CA Search (American Chemical Society), Conference Papers Index (Cambridge Scientific Abstracts), or Metadex (American Society for Metals). Once the database has been searched, IOD delivers to the customer a bound volume of 8 1/2 x 11-inch printed sheets on which the appropriate information from each database appears, including author, title, name of journal or conference, date, and a brief abstract if one is included in the database. If the customer wants hard copy of any of the bibliographic entries, IOD can supply the copy, using its library stringer system.

MEETINGS

SME-AIME's Meeting policy remains unsettled. Working Party #63 continues in its effort to develop such a policy; a major part of the Long-Range Plan will be devoted to Meetings.

1982 was a tough year for SME-AIME meetings.

As reported in 1981, SME-AIME continues to hold its Annual Meeting in conjunction with the AIME Annual Meeting and the TMS-AIME Annual Meeting. The combined facility requirements of these three Meetings limit meeting locations. The 1982 Meetings were held in Dallas, Texas, in several widely dispersed hotels and the convention center. Despite these uniquely difficult logistic arrangements, the Meetings went well and the new management responsibilities determined in 1981 were validated. The Technical Program was good.

As expected, SME-AIME attendance at the Annual Meeting was down because of the lack of appeal of Dallas to its members. Economic problems further reduced attendance to the lowest level in at least six years. It has been proven again that SME-AIME Meeting attendance is location sensitive. The 1983 Annual Meeting will be held in Atlanta, Georgia, another location of limited appeal to the members of SME-AIME, during what is expected to be even worse economic conditions.

The First International SME-AIME Fall Meeting was held in Honolulu, Hawaii, September 4-9, 1982, with cooperating sponsorship by:

The Australasian Institute of Mining and Metallurgy
The Institution of Mining and Metallurgy
The Mining and Metallurgical Institute of Japan
The South African Institute of Mining and Metallurgy

Planning for this Meeting began in 1980 with a commitment to program excellence -- the consensus is that this goal was attained. Attendance (1,021) was about half of what was forecast in 1980 when planning started, but very near what was projected early this year when the worldwide economic difficulties for the minerals industries were considered.

The Offshore Technology Conference (OTC) was held in May, before the economic difficulties of the offshore industries became so oppressive, with its usual success. 1982 was the first year of surplus distribution under the new formula; however, the distribution to SME-AIME remained near the 1981 level because of the amount distributed. Distribution in 1983 will be down from the formula changes and possibly from reduced revenue at the Conference. At year-end, the 1983 OTC was experiencing an unusual loss of exhibitors because of economic problems. It can be expected that there may be more cancellations for 1984.

Overall, Meetings provided 12.1% (\$360,898) of the revenue and 12.9% (\$354,731) of the expense and contributed 2.6% (\$6,167) of the surplus for 1982 -- these compare to 20.4% (\$607,432) of the revenue; 17.2% (\$421,099) of the expense and 35.2% (\$186,333) of the surplus for 1981.

ANNUAL MEETING

The 1982 Annual Meeting was the first year of implementation of the AIME Annual Meeting Protocol. The AIME Board of Directors voted on October 20, 1982, to continue the management structure according to the AIME Annual Meeting Protocol. They felt the Protocol Agreement had worked extremely well at the 1982 Annual Meeting.

The following chart indicates attendance by SME-AIME members at the Annual Meeting since 1963:

SME-AIME MEMBER ATTENDANCE -- ANNUAL MEETINGS

<u>Year</u>	<u>Location</u>	<u>Attendance</u>		
		<u>Number</u>	<u>Percent</u>	
1963	Dallas, Texas	1079	47.0%	} 47.8% <u>Average</u> Institute of Metals → Division of TMS Stopped Programming
1964	New York, New York	1221	44.2%	
1965	Chicago, Illinois	1073	48.2%	
1966	New York, New York	1438	47.7%	
1967	Los Angeles, California	1421	48.5%	
1968	New York, New York	1632	51.1%	
1969	Washington, D.C.	1478	63.1%	} 65.49% <u>Average</u> Institute of Metals → Div. of TMS Resumed Programming
1970	Denver, Colorado	2399	69.4%	
1971	New York, New York	1460	62.0%	
1972	San Francisco, California	1581	72.8%	
1973	Chicago, Illinois	1145	62.9%	
1974	Dallas, Texas	1235	63.2%	
1975	New York, New York	1263	65.0%	
1976	Las Vegas, Nevada	1840	64.0%	} 57.6% <u>Average</u>
1977	Atlanta, Georgia	1381	55.0%	
1978	Denver, Colorado	2076	66.0%	
1979	New Orleans, Louisiana	1777	59.1%	
1980	Las Vegas, Nevada	2066	58.0%	
1981	Chicago, Illinois	1400	52.1%	
1982	Dallas, Texas	1144	49.1%	

For a comparison of attendance and financial performance between the Annual and Fall Meetings, refer to the chart at the end of the report on the next page.

FALL MEETING

Every fourth year the American Mining Congress holds its equipment show in Las Vegas. By Board policy, SME-AIME does not hold a Technological Information Exchange Exhibit in that year, but plans a special format Fall Meeting like The First International SME-AIME Fall Meeting with four cooperating societies, AusIMM, IMM, MMIJ, and SAIMM.

The First International SME-AIME Fall Meeting, held September 4-9, 1982, at the Sheraton-Waikiki Hotel in Honolulu, Hawaii, had an attendance of 669 Meeting registrants and 352 Spouse/Guest registrants, for a total of 1021.

The map on the next page indicates where the registrants for the 1982 Meeting were from. The following charts compare attendance and financial performance for the Fall and Annual Meetings since 1973.

SME Annual Meeting—1973 Through 1982 by Location-Registration-Financial Performance										
Registration	1973 Chicago	1974 Dallas	1975 New York	1976 Las Vegas	1977 Atlanta	1978 Denver	1979 New Orleans	1980 Las Vegas	1981 Chicago	1982 Dallas
Members	1,145	1,235	1,202	1,840	1,381	2,072	1,777	2,066	1,400	1,144
Nonmembers				423	188	270	247	350	208	160
Nonmember Authors				75	77	89	126	175	110	83
SEG				31	9	51	55	39	21	47
CIM				35	10	12	19	15	10	8
AIMMG				8	0	0	1	1	1	0
Founder Societies				0	0	0	9	8	3	1
Student Members				133	136	268	212	240	135	74
Student Nonmembers				35	14	30	27	23	7	15
Total Registration				2,580	1,815	2,792	2,446	2,917	1,895	1,532
Surplus (Loss)	\$(11,938)	\$(10,940)	\$(13,424)	\$35,860	\$ 32	\$16,967	\$19,830	\$30,280	\$ 6,674	\$(47,119)

SME Fall Meeting—1973 Through 1982 by Location-Registration-Exhibit Sales-Financial Performance										
Registration	1973 Pittsburgh	1974 Acapulco	1975 Salt Lake City	*1976 Denver	1977 St. Louis	*1978 Orlando/ Nassau	1979 Tucson	1980 Minneapolis	1981 Denver	1982 Hawaii
Members	490	550	1,131	1,340	915	637	1,702	804	1,789	630
Nonmembers	78	93	209	216	179	84	343	115	311	28
Student Members	0	0	53	133	103	20	104	85	234	3
Student Nonmembers	0	4	13	19	5	3	31	6	36	8
WAAIME's	78	411	315	297	177	287	452	135	294	352
Exhibitors***	74	0	413	494	350	0	517	185	701	0
Exhibits Only	0	0	0	215	137	0	175	50	502	0
Guests of Exhibitors	0	0	1,237	609	350	0	273	76	498	0
Total Registration	720	1,058	3,371	3,323	2,039	1,031	3,597	1,456	4,365	1,021
Exhibit Booths Sold	44	0	125	151	144	0	157	81	187	0
Exhibiting Companies	38	0	97	108	96	0	112	53	130	0
Surplus (Loss)	\$(8,387)	\$ 408	\$40,961	\$2,076	\$11,954	\$(33,654)	\$57,873	\$(12,646)	\$70,998	\$(49,586)

*1974, 1978, and 1982, the AMC Equipment Show was held in Las Vegas and no exhibit was held at the Fall Meeting

**Included 3rd MMU AIME Joint Meeting. Member registration includes 88 MMU members

***A significant number of the people registered as exhibitors are also members of SME

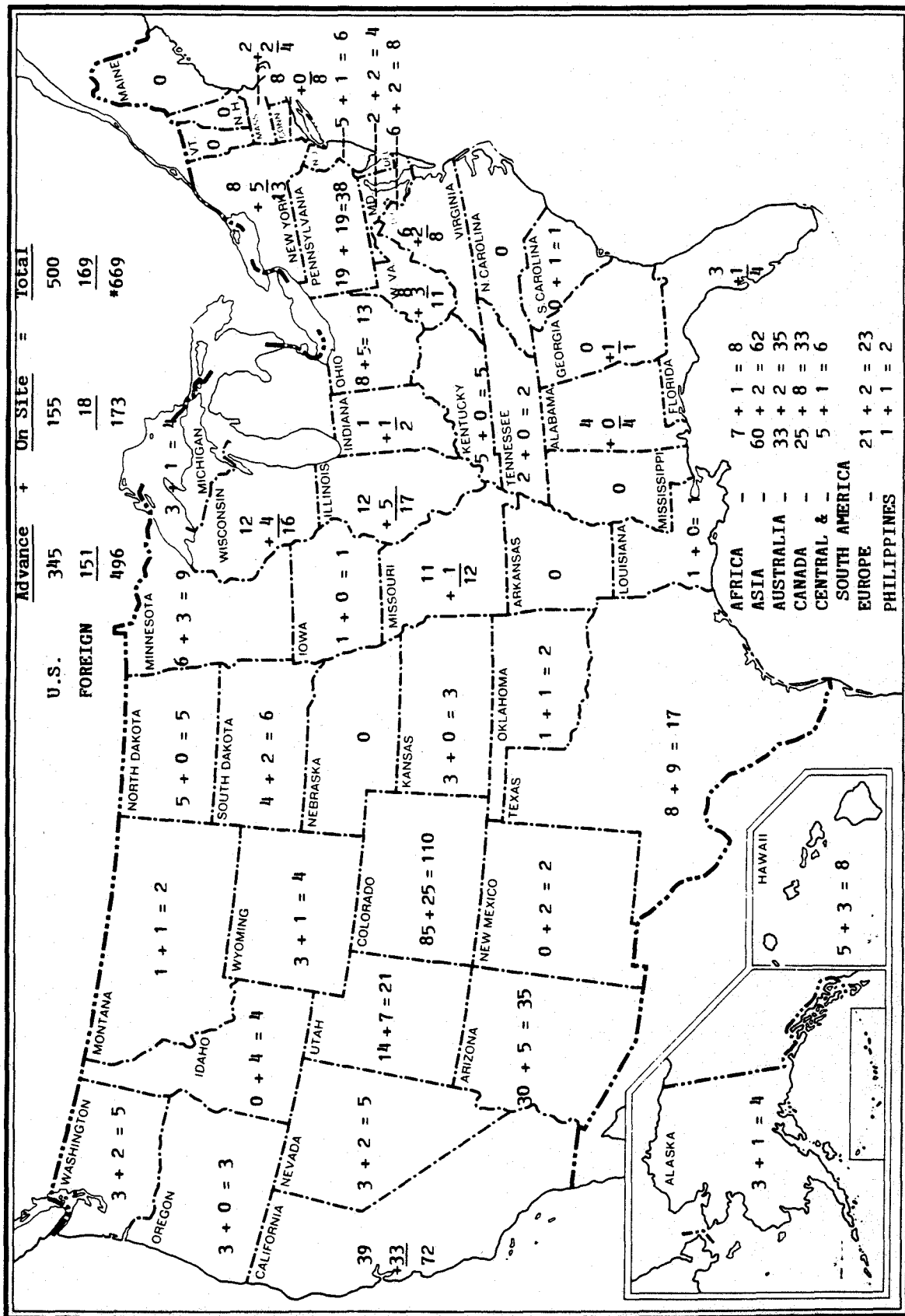
OFFSHORE TECHNOLOGY CONFERENCE (OTC): SURPLUS TO SME 1970 - 1982

Year	Surplus	Year	Surplus	Year	Surplus
1970	\$12,198	1975	\$57,838	1980	\$ 83,896
1971	11,994	1976	75,497	1981	111,846
1972	19,731	1977	84,518	1982	110,113
1973	31,187	1978	70,005		
1974	40,824	1979	98,592	Total	<u>\$808,239</u>

RAPID EXCAVATION AND TUNNELING CONFERENCE (RETC)

Plans were underway for the sixth RETC scheduled for Chicago, Illinois, on June 12-16, 1983.

**1982 - FIRST INTERNATIONAL SOCIETY OF MINING ENGINEERS
FALL MEETING
(Geographical Breakdown of Attendance)**



* DOES NOT INCLUDE SPOUSE/GUEST REGISTRATION

10/14/82

SOCIETY OF MINING ENGINEERS OF AIME
ANNUAL MEETING PROGRAM ACTIVITY—NUMBER OF SESSIONS/PAPERS BY SPONSOR
 (Indicating Joint and Symposium Activity)

YEAR LOCATION	COAL	IndMD	MPD	M & E	MRMC	SEG	TOTAL
1977 ATLANTA Joint Symp	11/47 —0— 9/61 Agglomeration w/ISS	6/30 —0— —0—	12/61 —0— —0—	12/42 —0— —0—	2/8 —0— —0—	—0— —0— —0—	43/188 0/0 9/61
TOTAL	20/108	6/30	12/61	12/42	2/8	—0—	52/249
1978 DENVER Joint Symp	10/41 —0— —0—	1/5 7/38 w/SEG —0—	17/82 —0— —0—	11/48 —0— —0—	—0— 4/16 Coun. of Ec —0—	—0— 7/38 w/IndMD —0—	39/176 11/54 0/0
TOTAL	10/41	8/43	17/82	11/48	4/16	7/38	50/230
1979 NEW ORLEANS Joint Symp	11/46 2/10 w/MPD 1/4 w/MRMC	5/24 1/5 w/ M & E —0—	18/86 2/10 w/COAL 1/5 w/MRMC	13/70 1/5 w/IndMD 1/4 w/MRMC	2/8 1/4 w/COAL 1/5 w/MPD 1/4 w/M & E	4/23 —0— —0— —0—	51/257 6/28 6/32
TOTAL	14/60	12/61	19/101	15/79	5/21	4/23	63/317
1980 LAS VEGAS Joint Symp	8/39 —0— —0—	6/30 2/10 w/MPD 1/4 w/MRMC	13/72 2/10 w/IndMD 16/91 Fine Particles	11/51 —0— —0—	2/7 1/4 w/IndMD —0—	5/23 —0— —0—	45/222 3/14 16/91
TOTAL	8/39	9/44	31/173	11/51	3/11	5/23	64/327
1981 CHICAGO Joint Symp	6/29 1/4 w/ IndMD 5/25 Longwall	6/27 1/4 w/COAL —0—	18/80 —0— —0—	12/60 —0— —0—	4/16 1/5 w/Coun. of Ec —0—	5/26 —0— —0—	51/238 2/9 5/25
TOTAL	12/58	7/31	18/80	12/60	5/21	5/26	58/272
1982 DALLAS Joint Symp	4/20 2/9 w/MPD 2/29 w/M & E 1/5 w/MRMC	5/20 1/3 w/MRMC —0—	19/109 2/9 w/COAL 3/17 w/M & E/TMS	8/42 2/9 w/COAL 3/17 w/MPD/TMS	4/18 1/5 w/COAL 1/3 w/IndMD	5/26 —0— —0—	45/235 9/43 0/0
TOTAL	9/43	6/23	24/135	13/68	6/26	5/26	54/278

SOCIETY OF MINING ENGINEERS OF AIME
FALL MEETING PROGRAM ACTIVITY—NUMBER OF SESSIONS/PAPERS BY SPONSOR
 (Indicating Joint and Symposium Activity)

YEAR LOCATION	COAL	IndMD	MPD	M & E	MRMC	*KEYNOTE/GEM	TOTAL
1977 ST. LOUIS Joint Symp	8/34 —0— —0—	8/38 —0— —0—	8/37 1/4 w/MRMC 4/20 w/Ld/Zinc	7/32 —0— —0—	1/6 1/4 w/MPD —0—	1 —0— —0—	33/147 1/4 4/20
TOTAL	8/34	8/38	13/61	7/32	2/10	1/0	38/171
1978 ORLANDO/ NASSAU Joint Symp	5/22 1/4 w/M & E 1/4 w/MRMC	4/19 2/9 w/MPD —0—	5/25 2/9 w/IndMD —0—	6/28 1/4 w/COAL —0—	3/13 1/4 w/COAL —0—	1/1 —0— —0—	24/108 4/17 —0—
TOTAL	7/30	6/28	7/34	7/32	4/17	1/1	28/125
1979 TUCSON Joint Symp	5/22 —0— —0—	5/23 —0— —0—	7/35 1/3 w/ISA 1/3 w/ISA	8/41 1/5 w/Ap. Com 10/47 w/Ap. Com	1/4 1/5 w/Ap. Com —0—	1/3 —0— —0—	28/132 3/13 11/50
TOTAL	5/22	5/23	9/41	19/93	2/9	1/3 1/4	42/195
1980 MINNEAPOLIS Joint Symp	6/31 1/5 w/MRMC —0—	5/23 —0— —0—	8/32 —0— —0—	10/53 —0— —0—	2/6 1/5 w/COAL —0—	1/2 —0— —0—	32/147 1/5 —0—
TOTAL	7/36	5/23	8/32	10/53	3/11	1/2 —0—	33/152
1981 DENVER Joint Symp	6/28 1/5 w/MPD 1/4 w/MRMC	3/15 1/5 w/MRMC —0—	6/29 1/5 w/COAL —0—	7/36 —0— 5/27 Sol Mining 11/59 Caving	1/4 1/4 w/COAL 1/5 w/IndMD	*1/5 Career Guid —0—	24/117 3/14 5/27 11/59
TOTAL	8/37	4/20	7/34	23/122	3/13	1/5 —0—	43/217
1982 HAWAII Joint Symp	11/54 1/4 w/MPD 1/5 w/MRMC 2/11 w/M & E 4/28 Longwall	5/30 2/8 w/MRMC —0—	8/43 1/4 w/COAL 7/60 Commutation	7/34 2/11 w/Coal —0—	5/25 1/5 w/COAL 2/8 w/IndMD —0—	—0— —0— —0— —0—	36/186 6/28 11/88
TOTAL	19/102	7/38	16/107	9/45	8/38	—0— —0—	53/302

GENERAL MEMBER SERVICES

The state of the economy would have had greater impact on the total numbers of members had it not been for additional collection and membership development efforts. The number of unpaid members remained higher than last year at year end, but other program areas of the Society exhibited growth. Four new Student Chapters were formed and two new Local Sections were established. Total membership increased from 28,404 to 28,734 for a net increase of 1.16%.

Because of the economic and employment circumstances of the minerals industry, the SME-AIME Board approved a Working Party to develop recommendations on what the Society should do to enhance the job opportunities of its members. The Working Party was to consider the present need and means of enhancement and also to consider the development of a long-term continuing program including the need and desirability of a computer matching service.

One of the Working Party's recommendations was implemented in November when MINING ENGINEERING carried a full page notice reminding members and employers of the opportunity to place ads for positions wanted and positions open. A second full page was an open letter to SME-AIME members responsible for hiring, a reprinted version of a letter mailed to 9,392 SME-AIME members who were identified by their position titles as in a position to hire or influence hiring.

The survey asked if they would be interested in placing a "Positions Open" ad, if they would like to receive future mailings concerning the matching of job applicants and jobs, and whether or not they would be interested in interviewing prospective job candidates at the 1983 SME-AIME Annual Meeting. The response follows:

EMPLOYMENT SURVEY RESULTS	
Letters Mailed	9,392
Interested in Receiving Future Mailings	330
Not Interested in Receiving Future Mailings	196
Listed Positions Open, Not Interested in Interviewing	6
Interested in Interviewing, No Positions Open	4
Listed Position Open, Interested in Interviewing	1

In addition, members placed 76 new positions wanted ads for the January 1983 issue and repeated 12 from the December issue for a total of 88. This is over three times the number of ads listed in the January 1982 issue.

The Working Party concluded that the response did not justify arranging interviews or systematically providing facilities at the Atlanta meeting; however,

they reported on two elements: caution in the interpretation of responses to the survey and the Working Party's on-going efforts to assist members in obtaining employment. The survey substantiated what was believed: there were few jobs available and many members who were looking.

The survey generated a list of 330 respondents interested in future mailings. This list could provide the core for a second mailing, a survey for interviews at a future meeting, or a computerized matching of applicants and positions by specialty. These are some activities still under consideration by the Working Party.

Another activity was an analysis of the Society's group insurance program. Two proposals will be presented early in the year for comparison of programs, rates, and administrative services.

MEMBERSHIP DEVELOPMENT ACTIVITY

Early in the year, it was recognized that membership development was in trouble as a result of an increase in unpaids, an increase in resignations, and a decrease in new member applications. Actions to turn this trend around included a continued emphasis on collecting unpaids and special mailings to: 55 nonmembers registered at the 1982 Annual Meeting who indicated mining as their technical interest, 7,000 nonmembers listed in E&MJ's International Mining Directory, 372 nonmembers registered at the Fifth Industrial Minerals International Congress, 187 nonmembers listed in the Mining Directory of Georgia, and 55 nonmembers registered at Zeo-Agriculture '82.

In contrast to previous special mailings, these generated a considerable number of responses expressing interest, but inability to support another professional society at the present time. Economic conditions limiting outside activities was also a common response. Nevertheless, the mailings did generate some new applications as indicated in the following table.

MEMBERSHIP DEVELOPMENT RESULTS		
<u>Source</u>	<u>Number Mailed</u>	<u>Applications Received</u>
1982 Annual Meeting	55	4
E&MJ Directory	7,000	63
5th Industrial Minerals International Congress	372	11
Mining Directory of Georgia	187	0
Zeo-Agriculture '82	<u>55</u>	<u>2</u>
Total	7,669	80

As in previous years, the most successful membership development tool for 1982 was the annual President's letter encouraging members to recruit at least one

new member. This program produced 373 new applications; however, the results of this effort were also down from the previous year's total of 497.

The Society's membership booth was located near the registration area at the American Mining Congress International Mining Show. Over 200 applications were distributed, as well as publications lists and other information on services available through the Society. A total of 11 applications have been received from those distributed at AMC.

At the Fall Meeting, the Membership Committee considered how to recruit new members. The value of a page in MINING ENGINEERING describing the techniques for soliciting new members was debated. The committee concluded this would be a valuable tool for explaining how to recruit new members, the importance of membership development, and as a reminder of membership benefits. Additionally, the committee stressed the need for industry's top management to understand and support the Society. It was suggested that a letter be drafted to attain this goal. These two efforts were assigned to a four-man subcommittee for further evaluation with a report due at the Annual Meeting.

The Society continued its recognition for special membership development efforts as follows:

Annual Membership Development Recognition Program: This program was developed to recognize the individual SME-AIME member who contributed the most to the Society's membership development activities within the year October 1, 1981, to September 30, 1982. For 1982 this honor again went to Gordon C. Presley of the Colorado Section. Mr. Presley will be recognized at the SME-AIME Dinner at the Annual Meeting for adding 131 new members to the professional membership roles. For his efforts Mr. Presley receives round-trip air fare to the Annual Meeting, free room, and two sets of social function tickets. In its eighth year, recipients of this special form of recognition have included three individuals:

1975	Charles N. Speltz	54	Colorado Section
1976	Charles N. Speltz	39	Colorado Section
1977	Charles N. Speltz	23	Colorado Section
1978	Charles N. Speltz	24	Colorado Section
1979	Joy J. Merz	50	Philippines Section
1980	Gordon C. Presley	66	Colorado Section
1981	Gordon C. Presley	321	Colorado Section
1982	Gordon C. Presley	131	Colorado Section

Continuing Membership Development Recognition Program: Also in its eighth year, the continuing program has had 2,130 participants and recruited 5,534 new members since the program's inception in 1974. Forms of recognition and number of participants by year follow:

	1975	1976	1977	1978	1979	1980	1981	1982	TOTAL
1-Set of Coasters	-	-	-	-	-	269	271	216	756
5-Paper Clip Holder	17	25	30	30	25	29	34	21	211
10-Desk Clock	4	6	16	6	12	13	16	10	83
25-Pen/Pencil Set	1	1	1	2	5	1	7	-	18
50-Special Plaque	1	-	-	-	1	1	-	-	3
100-Life Membership	-	-	1	-	-	1	-	-	2

The use of the set of coasters for members sponsoring one new member was introduced in 1980. All items carry the SME-AIME logo. Coasters are sent directly to the individual; all other items are sent to the appropriate Local Section Chairman for presentation at a Local Section meeting. Section Chairmen are reminded of the importance of professional development and the forms of recognition afforded those who participate.

Division Membership Program: The Division recording the highest percentage membership growth in 1982 was the Industrial Minerals Division with a 5.4% increase--from 1,314 to 1,385.

Local Section Membership Program: The SME-AIME Local Section recording the highest percentage growth in 1982 was the North Pacific Section with a 54.8% increase--from 330 to 511.

MEMBERSHIP STATISTICS

In 1982 SME-AIME membership grew from 28,404 to 28,734 for a net increase of 1.16%. This compares to last year's growth of 6.0%.

MEMBERSHIP BY GRADE

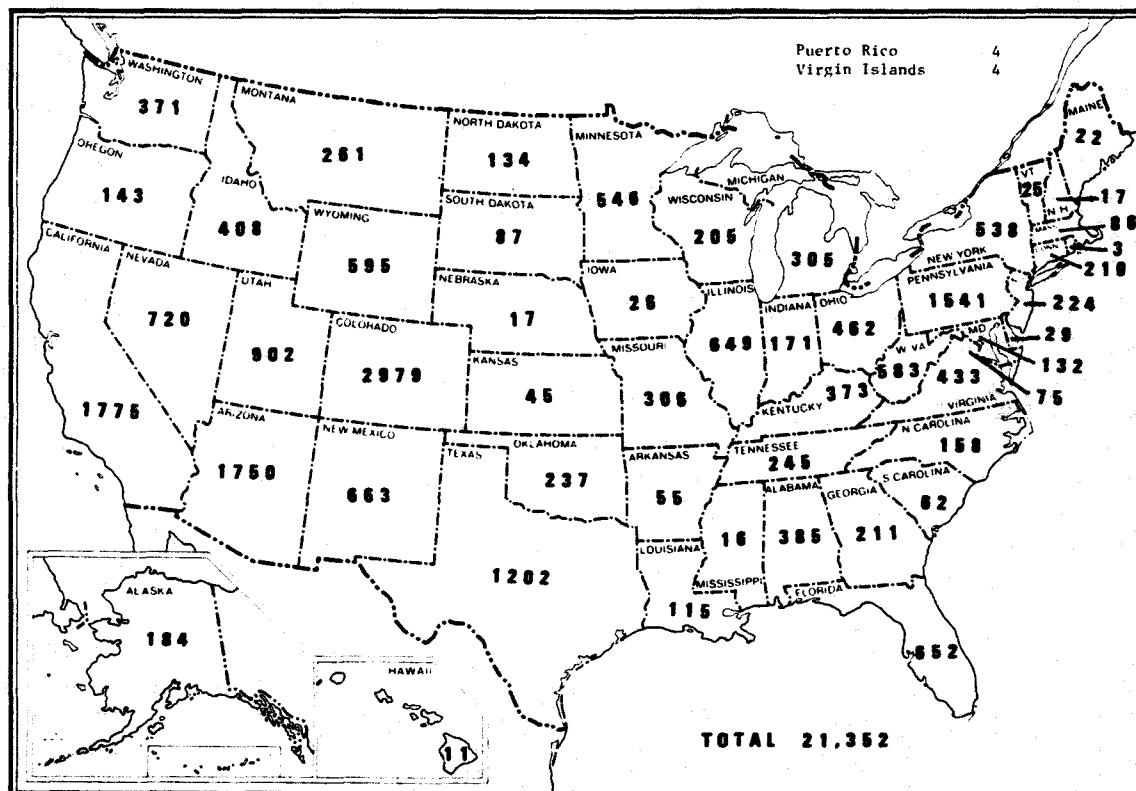
<u>AS OF</u>	<u>TOTAL MEMBERS</u>	<u>CORPORATE MEMBERS</u>	<u>FULL MEMBERS</u>	<u>ASSOC. MEMBERS</u>	<u>JUNIOR MEMBERS</u>	<u>ASSOC. JUNIOR MEMBERS</u>	<u>STUDENT MEMBERS</u>
1/1/1968	14,489	13,716	9,892	2,214	1,610	-0-	773
1/1/1969	15,427	14,422	10,763	2,449	1,786	-0-	1,372
1/1/1970	16,175	15,180	11,089	2,583	2,141	-0-	1,330
1/1/1971	16,642	15,778	11,503	2,753	2,305	-0-	1,653
1/1/1972	17,841	16,671	11,343	2,840	2,488	-0-	1,170
1/1/1973	18,329	17,200	11,410	3,054	2,736	-0-	1,129
1/1/1974	18,329	16,887	11,203	2,950	2,734	-0-	1,442
1/1/1975	18,997	17,125	11,096	3,036	2,992	-0-	1,872
1/1/1976	20,943	18,217	11,506	3,210	3,501	-0-	2,726
1/1/1977	22,472	18,864	11,867	3,411	3,506	80	3,608
1/1/1978	24,211	19,784	12,631	3,671	3,782	121	4,427
1/1/1979	25,280	20,668	12,476	3,597	4,426	169	4,612
1/1/1980	25,877	21,858	12,813	3,766	5,059	220	4,019
1/1/1981	26,786	23,361	13,817	3,792	5,492	260	3,425
1/1/1982	28,404	24,840	14,487	4,251	5,800	302	3,564
1/1/1983	28,734	25,255	14,547	4,462	5,926	320	3,479

MEMBERSHIP BY DIVISIONAL INTEREST

AS OF	M&E	COAL	INDMD	MPD	EDUC	ECON	STUD	UNCLASS	TOTAL MEMBERS	CORPORATE MEMBERS
1/1/1968	7,074	1,377	766	2,284	83	273	773	1,849	14,489	13,716
1/1/1969	7,423	1,435	793	2,384	86	300	1,005	2,001	15,427	14,422
1/1/1970	7,782	1,436	795	2,416	90	301	995	2,360	16,175	15,180
1/1/1971	8,035	1,413	811	2,448	95	321	864	2,655	16,642	15,778
1/1/1972	8,288	1,501	838	2,538	99	348	1,170	3,059	17,841	16,671
1/1/1973	8,348	1,518	851	2,541	104	364	1,129	3,474	18,329	17,200
1/1/1974	8,151	1,517	834	2,517	106	349	1,442	3,413	18,329	16,887
1/1/1975	8,222	1,615	824	2,506	104	354	1,872	3,500	18,997	17,125
1/1/1976	8,517	1,860	864	2,638	115	388	2,726	3,835	20,943	18,217
1/1/1977	10,345	2,749	999	3,116	149	502	3,608	1,004	22,472	18,864
1/1/1978	10,812	3,098	1,085	3,267	146	527	4,427	849	24,211	19,784
1/1/1979	11,240	3,485	1,079	3,395	177	563	4,612	729	25,280	20,668
1/1/1980	11,856	3,818	1,108	3,566	186	585	4,019	739	25,877	21,858
1/1/1981	12,523	4,243	1,249	3,819	176	632	3,425	719	26,786	23,361
1/1/1982	13,191	4,721	1,314	4,085	183	710	3,564	636	28,404	24,840
1/1/1983	13,298	4,919	1,385	4,094	201	753	3,479	605	28,734	25,255

U.S. MEMBERSHIP BY STATE

As of January 1, 1983



MEMBERSHIP OUTSIDE U.S. BY LOCATION	
As of January 1, 1983	
Africa	258
Asia	430
Australia	615
Canada	1,290
Central America	25
Europe	602
Mexico	178
South America	479
West Indies	<u>25</u>
TOTAL	3,903

CORPORATE MEMBERSHIP CHANGES 1975-1982								
<u>Losses</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Deaths	124	132	141	178	122	135	128	153
Resignations	188	276	241	385	367	506	812	691
Drops & Changes of Status	1,032	1,137	653	858	1,213	987	1,143	1,256
Unaccepted	<u>44</u>	<u>23</u>	<u>11</u>	<u>—</u>	<u>16</u>	<u>51</u>	<u>70</u>	<u>42</u>
TOTAL	<u>1,388</u>	<u>1,568</u>	<u>1,046</u>	<u>1,421</u>	<u>1,718</u>	<u>1,679</u>	<u>2,153</u>	<u>2,142</u>
<u>Gains</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Total	2,480	2,215	1,966	2,305	2,908	3,182	3,632	2,557
NET	<u>1,092</u>	<u>647</u>	<u>920</u>	<u>884</u>	<u>1,190</u>	<u>1,503</u>	<u>1,479</u>	<u>415</u>
Corporate Members	18,217	18,864	19,784	20,668	21,858	23,361	24,840	25,255
Student Members	<u>2,726</u>	<u>3,608</u>	<u>4,427</u>	<u>4,612</u>	<u>4,019</u>	<u>3,425</u>	<u>3,564</u>	<u>3,479</u>
TOTAL	<u>20,943</u>	<u>22,472</u>	<u>24,211</u>	<u>25,280</u>	<u>25,877</u>	<u>26,786</u>	<u>28,404</u>	<u>28,734</u>

CORPORATE MEMBERSHIP CHANGES BY REGION (1977-1982)							Cumulative Change
	1977	1978	1979	1980	1981	1982	(1977-1982)
Eastern	4,807	4,851	4,999	5,264	5,567	5,864	+1,057
Central	3,466	3,882	4,107	4,571	4,686	4,703	+1,237
Western	9,364	9,803	10,202	11,015	11,772	11,951	+2,587

SUSTAINING MEMBERS PROGRAM

The impact on the membership of the state of the economy was measured by three factors: 1) lower new admissions activity, 2) less response to membership development efforts, and 3) difficulty in collecting on new admissions. To decrease the number of members dropped at year-end for non-payment of dues, additional collection efforts were made. Members who do not pay their dues by the end of March are considered delinquent. The follow-up dues billing in January carried the notation that bylaws require that mailings be suspended for delinquent members at the end of March. A third and "final" dues billing was made in March.

By the end of April, a four-month comparison between 1981 and 1982 indicated an increase of 31 in the resignations or deceased category and total corporate unpaids were up 49 over an unusually high 1981 unpaid total which was attributed to the dues increase last year. Through an intensive effort, including numerous mailings from the Executive Director and the President, the difference was reduced; however, corporate unpaids are up 113 (from 1,143 to 1,256), loss of members through death is up 25 (from 128 to 153); but resignations were down 121 (from 812 to 691). These numbers, combined with the total gain of new corporate members, result in a net gain of 415 or a 1.67% corporate membership growth. This compares to a net gain of 1,479 and a 6.3% corporate growth in 1981.

A total of 1,747 members were identified as unpaid when the 1983 dues billing was mailed on September 29, 1982. Consequently, these members did not receive a 1983 billing. A total of 74 people paid their 1982 dues after the 1983 billing was made. These people will receive a supplementary dues bill in January; the other 1,673 were dropped from membership on December 31, 1982.

UNPAID MEMBERS: 1981 vs. 1982		
	Unpaid 1981 Dues Dropped 12/31/81	Unpaid 1982 Dues Dropped 12/31/82
Members	1,143	1,256
Students	474	417
TOTAL	1,617	1,673

ADMISSIONS ACTIVITY

Admissions activity dropped for the third year in a row. In 1981 the committee considered 2,393 applications (including new admissions, change of status requests, and reinstatements) for a monthly average of 199. This average dropped to 140 in 1982 for a total of 1,690. Comparative statistics follow:

APPLICATIONS REVIEWED BY SME-AIME ADMISSIONS COMMITTEE					
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
January	146	201	173	187	165
February	135	94	118	176	218
March	157	159	269	275	105
April	116	140	130	151	77
May	154	123	385*	382	210
June	127	156	376*	234	149
July	64	122	147	178	124
August	57	88	120	191	139
September	95	126	118	0**	110
October	84	137	199	296	146
November	113	140	281	179	123
December	<u>99</u>	<u>99</u>	<u>190</u>	<u>144</u>	<u>124</u>
TOTAL	<u>1,347</u>	<u>1,585</u>	<u>2,506</u>	<u>2,393</u>	<u>1,690</u>
*Increased activity due to one-time change of status mailing, reminding Associate Members of qualifications and procedures for change of status to full Member.					
**Meeting cancelled due to lack of a quorum.					

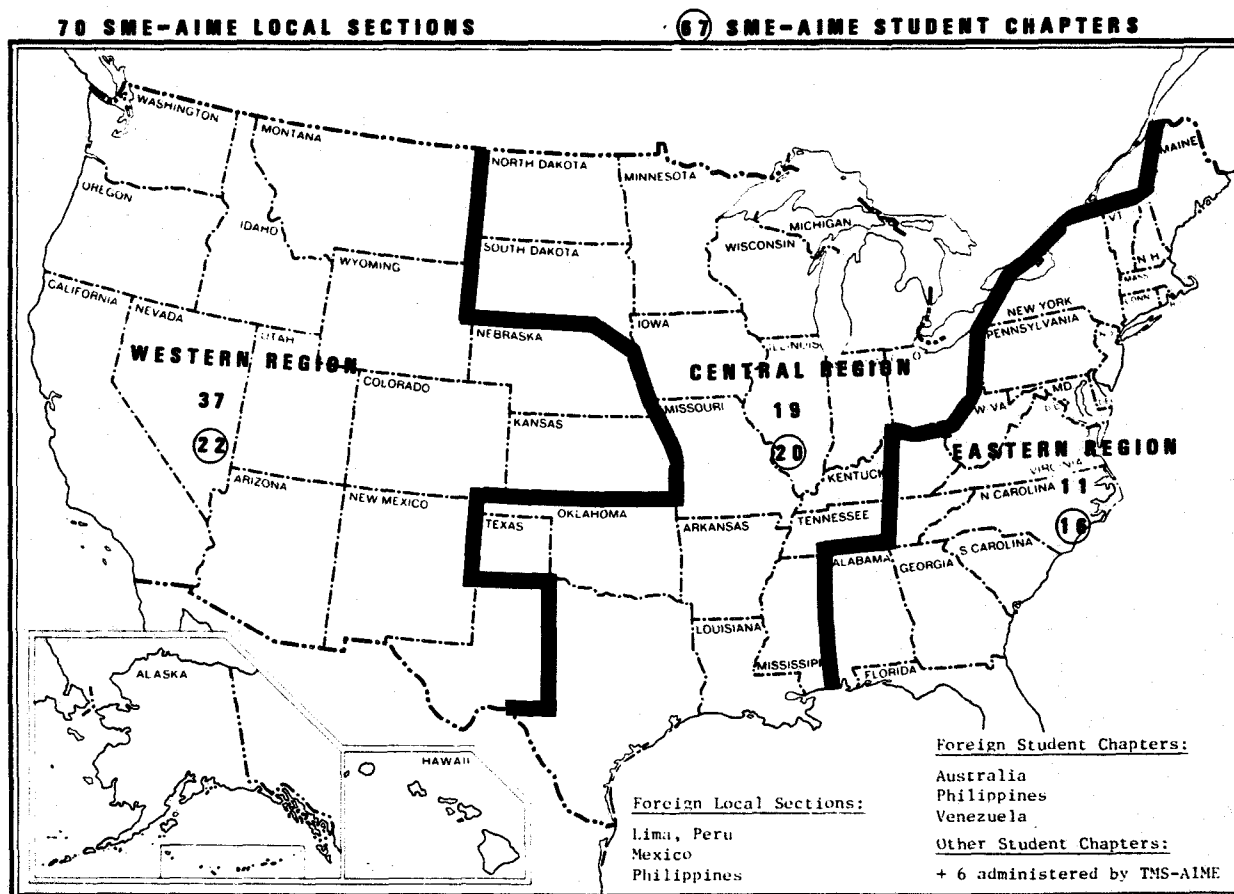
The Committee operated in 1982 under the Board-approved reorganization, resulting in a committee of 12 — three from each Division. The designation of a Chairman and Vice Chairman, as well as the increase in terms of office for the committee members from one year to three years has developed the needed continuity.

LOCAL SECTION ACTIVITY -- BY REGION

Eastern Region: At the Eastern Regional meeting the Section Representatives considered how to involve more people in regional activities. It was concluded that the best vehicle for communication between Local Sections, regional officers, and staff was the Regional Meetings. A major emphasis for next year will be to increase attendance at the Eastern Regional Section Representatives meeting. The meeting was held on October 2, 1982, in conjunction with the Carolinas Section Fall Meeting. The Section Representatives also considered the emphasis on the continuation of a strong liaison between Local Sections and Student Chapters and the request that an organization chart be included in the Local Sections' Operations Manual and printed in MINING ENGINEERING with an overview of national versus section activities. Two new

student chapters were formed in the region: The Pennsylvania State University, New Kensington campus, sponsored by TMS' Pittsburgh Section and Fairmont State College, West Virginia, sponsored by the Central Appalachian Section. Early in the year the Baltimore Subsection of the Washington, DC, Section was disestablished due to lack of activity in the area. In other action, the Pennsylvania-Anthracite Section reviewed their bylaws and clarified ambiguous language and added a list of responsibilities for section officers and committee chairmen. The Region totals 11 Local Sections and 16 Student Chapters -- seven of which are sponsored by the Central Appalachian Section.

Central Region: Activity in the Region included the formation of a new Section and a new Student Chapter. The New Mexico State University in Las Cruces, New Mexico, petitioned for Student Chapter affiliation with the Society. The sponsoring Section is the El Paso Section. Following the settlement of a territorial dispute, the formation of the Northeastern Ohio Section was approved. There was some early sentiment that the state of Ohio should remain assigned to the Ohio Mining Section; however, after the Presidential Fact-Finding Group presented its recommendation that the protestations of the Ohio Mining Section be overruled and the new Northeastern Ohio Section be approved, the way was paved for amicable relations between the two Sections. The Northeastern Ohio Section was approved at the Annual Meeting. Through the



Section Representatives meetings, the Region had been attempting to assign to appropriate Local Sections all unassigned counties in Wisconsin. Once an agreement was reached on which Sections should be assigned which counties, the Upper Mississippi Valley, Upper Peninsula, and Minnesota Sections all revised their bylaws accordingly. The Region conducted its annual Section Representatives meeting on May 9, 1982, in conjunction with the American Mining Congress Coal Convention. There was discussion on the continued need for new members, not only for the financial resources, but for the input of new ideas and the exchange of ideas that benefit the Society's membership.

Western Region: The largest SME-AIME Region grew a little more in 1982 with the addition of the Western Nevada Section. Routine territorial releases were obtained from the Northern and Southern Nevada Sections to permit formation of the new Section. Expansion also occurred in the Student Chapter program with the addition of Portland State University, sponsored by the Oregon Section. The Sierra Nevada Section approved a bylaw amendment to reflect the current section practice on officer election dates and the Wyoming Mining and Metals Section formed a committee to review its bylaws and make appropriate recommendations for change. The Region's Section Representatives meeting was held on October 10, 1982, in conjunction with the American Mining Congress International Mining Show. A number of items were discussed at the meeting. Two which received formal motions and will be referred to the Executive Committee of SME-AIME Section Representatives were that the basis on which SME-AIME is contemplating separate incorporation be made available to members and a condensed financial report of SME-AIME be published in MINING ENGINEERING. The Colorado Section introduced a new concept: a meetings calendar listing all Section Meetings, the SME-AIME Fall and Annual Meetings, a list of Section officers with phone numbers, and a list of sponsors. Due to the interest by other Section Representatives, copies were distributed with the minutes of the Western Regional meeting.

STUDENT AFFAIRS ACTIVITY

Again this year, the number of SME-AIME Student Chapters increased. Four new Student Chapters were formed: The Pennsylvania State University (New Kensington campus), Fairmont State College in West Virginia, the New Mexico State University, and Portland State University. The Society now has a total of 67 Student Chapters--64 domestic and 3 foreign.

At the time of the 1983 dues billing, the end of September, 302 students graduating in 1982 had not yet responded to three requests for graduation and/or employment information. A final mailing and continued follow-up reduced this number to 196 who were dropped at year-end for not supplying this required information. Additionally, another 417 were dropped for nonpayment of dues. This brought the year-end total of student members to 3,479 representing a loss of 85. This compares to last year's 202 and 474 who were dropped for nonresponse to graduation information and nonpayment of dues, respectively. The significant difference in student membership is the decrease of 388 new applications (from 1,820 in 1981 to 1,432 in 1982). New student member

statistics for the past five years follow:

STUDENT MEMBERSHIP CHANGES 1978-1982					
<u>Losses</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Deaths	--	8	2	--	--
Resignations	27	--	--	--	--
Drops	807	1,126	1,213	676	613
Changes of Status	812	1,085	1,020	1,005	904
TOTAL	1,646	2,219	2,235	1,681	1,517
<u>Gains</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Total	1,831	1,626	1,641	1,820	1,432
NET	185	(593)	(594)	139	(85)
TOTAL STUDENT MEMBERS	<u>4,612</u>	<u>4,019</u>	<u>3,425</u>	<u>3,564</u>	<u>3,479</u>

DIVISION ACTIVITY

Coal Division: The Coal Division's Scholarship Endowment Fund drive continues as the predominant concern of the Division. At the Fall Meeting, the Division Executive Committee reviewed the two brochures developed for the fund drive



(one for individuals and one for corporations). Changes were made as deemed appropriate, including increasing the goal to \$500,000 to be raised within one year. Mr. Robert L. Frantz is heading the membership solicitation and Dr. Thomas V. Falkie is directing the corporate solicitation. As the fund drive began, the Endowment

Football field progress is charted monthly.

Fund contained a little over \$50,000. Mr. Frantz's plans included the designation of 24 area representatives and the compilation of another list of people to contact all coal members in companies with five or more members. There are 138 companies with five to ten coal members and 176 companies with more than ten members. Dr. Falkie introduced the "fair-share" concept for the corporate solicitation. The Division's Executive Committee debated how to determine what each company's fair share should be and if a formula could be

developed referencing either profits or tonnage. It was decided that Dr. Falkie and Division Chairman Robert E. Murray would develop a method to determine the targeted amount for each company.

The Division reaffirmed its scholarship program and continued to stress the importance of accreditation. Coal Division "scholarships are restricted to mining and/or mineral engineering degree granting schools that are ABET accredited and engaged in coal-related activities." The Division voted to increase scholarship awards to \$1,000 each and maintain the current level of 18 plus the Breidenbach Scholarship of \$1,100 which is administered by the Division. Accordingly, \$19,100 in scholarships was awarded. Distribution of the scholarship funds was under the new plan where the Scholarship Selection Committee determines the amount of money to be sent to each school and the school distributes the funds at its discretion.

The trial run of the Division's Best Paper Award procedures proved lengthy and unworkable. A new set of procedures are ready for trial at the Annual Meeting. The session chairmen will evaluate papers based 50% on content and 50% on presentation with only preprinted papers eligible for the award.

The four-session symposium "State-of-the-Art of Ground Control in Longwall Mining and Mining Subsidence" was one of the major programming efforts of the Division. The symposium, which was cosponsored by the Mining and Exploration Division and conducted prior to the 1982 Fall Meeting, resulted in a publication available at the meeting.

As a matter of procedure, the Division published a bylaw change in the October issue of MINING ENGINEERING. The change results from the addition of the joint Coal/M&E Underground Ventilation Committee. With the resulting membership approval, the Division will seek SME-AIME Board approval of the bylaw changes at the Annual Meeting.

Industrial Minerals Division: The Division took a major step forward in its scholarship activities with the donation of \$10,000 to its scholarship fund from an anonymous donor. Appropriate action was taken at the Annual Meeting to clear the deficit in the scholarship fund and apply it to the Division Fund. This action was taken so the prior debt would not be charged against any new contributions received for the fund. The scholarship fund was reviewed at the Fall Meeting and the Executive Committee voted to increase the scholarship award to \$1,000 -- payable from the interest in the fund. At year-end, 11 applications were under review for the "Gerald V. Henderson Memorial Scholarship of the Industrial Minerals Division."

The Division undertook a review of perceived scheduling conflicts between the Division and the Society of Economic Geologists, which programs at SME-AIME Annual Meetings. The Division decided to eliminate any conflicts or potential problems by establishing some guidelines. The Division Executive Committee supported the concept of a joint IndMD and SEG Luncheon, with separate business meetings to follow. The first joint luncheon is scheduled for the 1983 Annual Meeting.

At the Fall Meeting, the Division received the suggestion that their bylaws be changed to expand the Executive Committee membership to include individuals in

the program chairman succession as well as the current program chairman. This suggestion will receive further consideration at the Annual Meeting.

In 1981 the Division produced a brochure to promote membership in the Industrial Minerals Division. The Executive Committee voted to update the brochure, adding more emphasis on the industrial minerals activities of the Society and further encouraging affiliation with the Industrial Minerals Division. Suggestions from the Executive Committee were being incorporated at year-end.

Mining and Exploration Division: The Division Publications Committee reported at the Fall Meeting that strict adherence to review guidelines has led to rejection of more papers for lack of permanent merit. The Committee feels this has improved the overall quality of papers in MINING ENGINEERING and the annual "Transactions" volume and partially as a result of this policy, the backlog of technical papers was at a desirable level for the first time in years.

The Division has several things under consideration for the Annual Meeting, including a move to establish a new unit committee on Health, Safety, and the Environment; a response to the SME-AIME Education Board's question of the Division's potential interest in scholarship activities; and a question on the Division's committee appointment procedures.

A generic call for papers will be published in a future "Rock in the Box" column to assist potential authors in identifying the appropriate method to submit a paper for consideration for presentation at an SME-AIME meeting. This action resulted from the Division's concern that many members may not know how to proceed if they are interested in presenting a paper, since no formal "call for papers" is issued for SME-AIME meetings.

Mineral Processing Division: The Division's primary concern has been the establishment of a quarterly technical journal as an option to increase the dissemination of information on technological developments in mineral processing.

In a letter to the SME-AIME Board of Directors, Division Chairman P. Somasundaran indicated that a segment of the MPD membership had expressed the need for a quarterly journal. He further indicated that studies had led the Executive Committee to conclude that a valid need exists and that such a journal would probably become self-supporting in a short time. The Division proposed that publication of such a journal be undertaken. Due to the possible impact of such action on the Society and the other Divisions, MPD recommended that a Working Party be appointed, with representatives from the Publications Board and each of the Divisions, to consider the proposal.

Acting upon the Division's recommendation, the SME-AIME Board approved the appointment of a Working Party to consider the MPD proposal that a Mineral Processing Quarterly Journal be established and to report back to the Board at the Annual Meeting.

The Working Party, under the chairmanship of Martin C. Kuhn, published a report in the December issue of MINING ENGINEERING to acquaint the reader with the issue of an MPD quarterly journal and to solicit thoughts and opinions on

the subject. A report at the Annual Meeting is anticipated.

Significant fund-raising activity in the Division has been the efforts to increase the principal in the Antoine M. Gaudin Award Fund. In earlier action at the Fall Meeting, the SME-AIME Executive Committee voted to purchase a five-year supply of silver medals on custodial assignment for MPD. Shortly thereafter, Mr. Kuhn, who is heading the solicitation, received a donation of 500 ounces of silver from Hecla Mining Co. -- enough silver for 18 Gaudin medals. Rather than order more medals, the silver has been transferred to Engelhard Minerals and Chemical Corp. and they have opened a pool account for SME-AIME. Whenever the determination is made to sell the silver, Engelhard will do so and transfer the revenue to SME-AIME. The January 1983 issue of MINING ENGINEERING will acknowledge Hecla's generous contribution and solicit additional contributions to make the award self-sustaining.

The Division noted another successful year in scholarship contributions with over \$7,000 raised by year-end from membership and corporate contributions. The Division chairman solicited the MPD membership through the Division's annual fund-raising letter; however, he requested donations of \$100, \$50, \$25, or \$10 and found that fewer donations were made, but of larger amounts. The Division awarded one \$2,000 scholarship plus an expense-paid trip to the Annual Meeting for the first place recipient in addition to three \$1,000 scholarships. This was the second year MPD awarded a trip to the Annual Meeting to the first place winner.

Among the varied programming activities of the Division was the symposium presented at the Fall Meeting on the "Design and Installation of Commutation Circuits." The Proceedings of the symposium were available at the meeting.

The Division is considering starting an Outstanding Young Engineer Award. A committee was formed to study the issue and return guidelines for the award and a recommendation for action to the Executive Committee.

Further discussions have been held on MPD programming activities in the extractive metallurgy field. A committee was appointed and charged with the responsibility of studying the issue and preparing a recommendation. The mechanism for programming under discussion is the expansion of an existing unit committee, formation of a new committee, or joint programming with TMS-AIME.

EDUCATIONAL ACTIVITY

A significant educational activity this year was the SME-AIME Board approved recommendation to reorganize the SME-AIME Education Board. Last year an ad hoc Educational Planning Committee was formed to sort out the most serious problems facing education. The Committee identified a need to reorganize the Education Board by consolidating the existing six committees into three, and creating a fourth committee on education planning as well as an inclusive forum of educators. Additionally the role of immediate Past Chairman was created to enhance the continuity of committee function. The overall functions and responsibilities of the Board remain unchanged. By year-end the new Educators' Forum and the Education Board and its subcommittees of Continuing Education, Education Planning, Educational Issues, and Student Member Affairs were organized. Since committee membership is determined by the Divisions,

the four Division chairmen approved the membership of the reorganized committees so official responsibilities could be handled prior to the Annual Meeting. The Continuing Education Committee remained the same; the Accreditation and Educational Publications Committees were consolidated to form the Educational Issues Committee, and the Career Guidance, Educational Statistics, and Scholarship Committees were consolidated to form the Student Member Affairs Committee. The membership of the Education Planning Committee was drawn from the membership of the ad hoc Educational Planning Committee and past active members of the Education Board and committees.

One of the recommendations of the AIME ad hoc Transition Committee, as approved by the AIME Board of Directors in October, was that a structure be created to permit the Constituent Societies of AIME to participate directly with outside activities on all matters that do not require or benefit from a common voice on the part of all Constituent Societies. Additionally, all pass-through costs for outside activities such as federations will be charged directly to the incurring Society. Educationally, this impacts on SME-AIME through the Society's involvement in the Accreditation Board for Engineering and Technology. With the Society budgeting and paying ABET costs directly, it is anticipated SME-AIME's representative to the ABET Board of Directors, Donald W. Gentry, and the SME-AIME Board of Directors will be more interactive in managing SME-AIME's ABET activities.

The SME-AIME Education Board continues to be active in the support, review, and announcement of the Engineering Foundation Research Initiation Grants program. Now in its fifth year, the program has distributed more than \$1.2 million to 75 researchers. Recipients of the three 1982-1983 grants to AIME members were two TMS-AIME members and one ISS-AIME member. Nineteen proposals were originally reviewed and ranked, including six from SME-AIME members.

The announcement of the 1983-1984 Foundation program noted that the Foundation was unable to continue the level of funding from previous years. The Foundation announced two grants worth \$17,000 to each Founder Society fully funded by the Engineering Foundation with a third grant available if the Founder Society would provide a matching \$8,500 to complete the funding. The AIME Board considered the request at its October meeting and declined to contribute matching funds. Further the Board recommended that the Engineering Foundation consider awarding one grant in a greater amount. A total of seven proposals were received from SME-AIME members. At year-end the Education Board was involved in the review and ranking of the proposals for transmittal to an AIME committee which will review the top selections from each of the Constituent Societies.

At the Fall Meeting the Education Board considered a request from the American Geological Institute that member society journals and other publications devote some space to articles or discussions of the declining quality of pre-college education in mathematics and science. The AGI suggestion was encouraging "grassroots involvement." The Education Board concluded that the Society was already involved in the activities recommended by AGI through the GEM Committee.

Continuing Education: The Society's role in continuing education and the definition of the scope of continuing education continued to dominate the

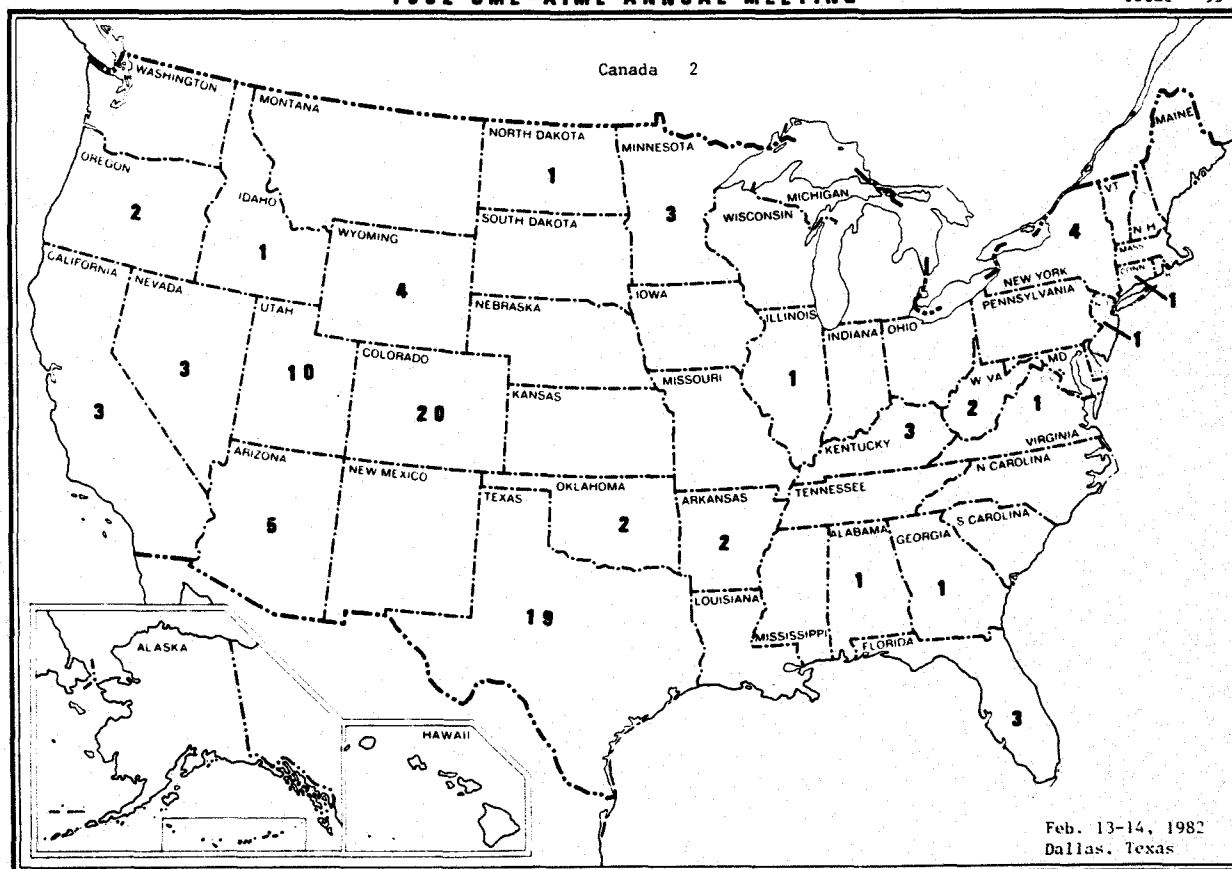
committee's concerns. At the Fall Meeting, it was concluded that the Chairman and Vice Chairman of the Committee should meet with the staff and begin developing a position paper on SME-AIME's role in continuing education. A preliminary draft is scheduled to be presented at the Annual Meeting.

Early in the year, the Committee requested that the SME-AIME Board of Directors approve an increase in the short course honorarium from \$300 to \$600 a day and to increase per diem from \$75 to \$100. The Board returned the recommendation to the Committee for justification of the increases. At the Fall Meeting the Committee debated whether or not to propose a new recommendation and concluded that until the direction and emphasis of the Society's continuing education program are determined, any further request for an increase would be premature.

Historically SME-AIME has set short course registration fees to break even on a direct cost basis with 20 member registrants. Fees were last raised in 1980. Increases in costs since then necessitated a fee increase for FY 1983 if the break-even point was to be maintained. The SME-AIME Executive Committee voted to raise fees for two-day courses from \$215 to \$275 for members and from \$320 to \$400 for nonmembers. No action was taken on fees for one- and three-day courses. The Executive Committee noted that these fees are set for anticipated break even on direct costs only; on a full cost absorption basis, the continuing education program is expected to lose \$18,000 in 1983. In keeping with the financing philosophy that users of a special-interest service should pay for the service, the Executive Committee expressed the goal that the continuing education program should be on a self-supporting basis within a few years.

**SHORT COURSE - GEOGRAPHICAL DISTRIBUTION
1982 SME-AIME ANNUAL MEETING**

US	93
Foreign	2
Total	95



A total of 95 registrants participated in the Society's short courses sponsored prior to the 1982 Annual Meeting. Course attendance continues to be location sensitive as illustrated on the map detailing the geographic distribution of attendees. Attendance by course was as follows.

1982 SME-AIME ANNUAL MEETING SHORT COURSES	
<u>Course</u>	<u>Attendance</u>
Design of Geophysical Field Programs: A Course for Mining Geologists	21
Economic and Econometric Forecasting	24
Professional Engineer Review Course in Mining Engineering, Part II	18
Project Financing in the Development of Mineral Resources	17
Spontaneous Combustion of Coal--Causes, Mechanism, and Related Mining Problems	15
Total Registrants	95

Though three of the five courses were below break-even, they were presented as a result of cutbacks in expenses agreed upon with the course instructors. Due to the location of the Fall Meeting, no continuing education program was conducted. Three short courses are scheduled for the 1983 SME-AIME Annual Meeting: Economic Principles for Industrial Mineral Property Valuations, Longwall Mining, and Professional Engineer Review Course in Mining Engineering, Part I. Currently only two courses are scheduled for presentation at the 1983 SME-AIME Fall Meeting: Part II of the Review Course and Utilization of the Mini-Computer in the Economic Analysis of Minerals and Energy Projects.

A new program has been approved for operation under the auspices of the SME-AIME continuing education program. The proposal to sponsor management-related short courses through Education for Management, Inc. was approved by the Board of Directors at the Fall Meeting. Nearly 80 courses are available through this program. The two groups most involved in the development of these courses were the American Management Association and the American Institute of Certified Public Accountants. The selection of the initial courses for presentation was underway at year-end.

In other deliberations, the Committee weighed the pros and cons of student participation in SME-AIME sponsored short courses. The Committee felt that since the Society provides other activities to students at reduced rates (such as meeting registration, books, and dues), that students should be allowed to register for SME-AIME short courses at a 35% discount on a space-available

basis. The Board of Directors approved this policy at the Fall Meeting.

Education Planning: This Committee continues the function of the ad hoc Educational Planning Committee and has as its charge to examine the problems that exist in mineral education and propose to the Education Board or to the relevant standing committee actions to correct these problems. The committee will examine the long-term implications or sufficiency or insufficiency of funding, faculty, and resources; it will also deliberate issues of standards and quality in minerals education; it will evaluate the planning implications of proposals made to the Education Board and it will help set the working agenda of the Education Board.

The first activity for the new Committee is to review and comment on the American Association of Engineering Societies (AAES) four-part program to solve the engineering faculty shortage crisis. The AAES prepared the document, "A Working Plan for Attacking the Engineering Faculty Shortage Problem," through its Educational Affairs Council.

Educational Issues: Previous activity in this area has been conducted by the former Accreditation and Educational Publications Committees. In the educational publications area, the Committee monitored the progress of the texts on Mine Electricity and on Operations Research. Additionally, consideration was given to a survey of educational materials in use; however, the Committee will review the Mineral Information Institute's catalog of educational material to avoid duplication of effort.

A significant educational activity this year has been the development of program (supplemental) criteria for ABET. As soon as the program criteria are adopted, engineering programs up for accreditation will have to conform to both ABET general criteria and the Society's approved program criteria. Society guidelines will no longer have equal weight with ABET general criteria and will have no direct bearing on the accreditation process. Subcommittees of the Accreditation Committee drafted the program criteria for each of the five disciplines covered by SME-AIME. These were then distributed for comment to the deans and department heads of all engineering schools listed in the SME-AIME Guide to Minerals Schools and published in the November issue of MINING ENGINEERING.

At the ABET Board Meeting on October 29, the Board voted to adopt, in principle the use of supplemental criteria and also endorsed the substitution of the term program criteria instead of supplemental criteria. However, the date of implementation was postponed. The ABET Board voted to implement program criteria for curricular objective and content in September 1984, and program criteria for curricular guidelines, faculty, student body, and administration in September 1985. The present Society guidelines will continue until these dates at which time they may be converted to advisories to visitors at the Society's discretion. If SME-AIME maintains its current schedule for program criteria with approval by the SME-AIME Board of Directors at the Annual Meeting and submission to the Engineering Accreditation Commission of ABET in March for consideration at their July meeting, there should be no gap in the SME-related disciplines accreditation program as was originally anticipated.

In mid-December a notebook containing all comments related to each of the pro

posed program criteria was distributed to the Program Criteria Subcommittee members for evaluation and possible rewrite. The program criteria will be on the agendas at the Annual Meeting for approval by the Educators' Forum, the Educational Issues Committee, the Education Board, and the Board of Directors.

The ABET visitors training session will be conducted during the Annual Meeting. There were nine vacancies in the SME-AIME list of ABET visitors. The Education Board elected the following members: Peter J. Conroy, Joseph J. Finney, and John D. Rockaway (Geological Engineering); Ihn Jae Won (Geophysical Engineering); Thomas E. Finch, J. Richard Lucas, and Jan M. Mutmanský (Mining Engineering); Douglas W. Fuerstenau (Mineral Processing Engineering); and Eric P. Sprouls (Mining Engineering Technology). These visitors, as well as two who were elected last year but were unable to attend the training session, have been invited to attend. All visitors must attend the training session prior to being listed as an ABET visitor.

At the Fall Meeting, as the Committee considered the balloting for the election and annual confirmation of ABET visitors, concern was expressed over the method of election, the presentation of supporting documentation for nominees, and the need to develop a procedure for the annual confirmation of visitors. A subcommittee was formed to evaluate the various procedures and report back at the Annual Meeting.

Student Member Affairs: The three committees comprising the new committee were involved in a considerable number of activities this year. The Career Guidance and Educational Statistics Committees jointly surveyed the needs of SME-AIME Student Chapters and as a result of the survey, implemented several new ideas this year.

The survey indicated the decline in SME-AIME student membership was as a result of a decline in enrollment and poor communication. A plan was developed coordinating suggestions from the survey. This fall Student Chapters received two new reports developed by the Career Guidance Committee. The Student Chapter Activity Summary is a comprehensive summary of activities generated from the reports received from the various schools that participated in the Outstanding Student Chapter Contest. The Committee recognized that common traits among the outstanding chapters was that they provided a wide variety of speakers, field trips, social activities, and civic and school improvement projects. The report to the Student Chapters detailed by subject ideas for monthly activities, social events, fund raisers, field trips, membership drives, and assorted other ideas, such as collection and refurbishing of old mine equipment.

The second report distributed was a guideline for Student Chapters to follow in preparing proposals to companies in the mining industry for supplemental support of chapter activities. The guideline is detailed enough so that Student Chapters may effectively adapt it to their individual activity and develop a professional document requesting industry support of their activities.

As the evaluation of the student member affairs program progressed, it became apparent to the Committee that there is not a great deal of participation in the student contests. Since the Committee felt it was important to sponsor the contests, it recommended a three-point program to enhance the contests

through detailed advance publicity in MINING ENGINEERING, prestige by considering the winning papers for publication in MINING ENGINEERING, and increased monetary awards. The SME-AIME Board of Directors approved these recommendations and increased the cash awards for the student contests to \$250 for the Outstanding Student Chapter and \$500 each for the Outstanding Student Paper contests.

The competition for this year's student contests included seven entries in the graduate paper division, five in the undergraduate division, and 20 in the student chapter contest. Recipients were determined at year-end.

SME-AIME STUDENT CONTEST WINNERS

Outstanding Student Chapter

University of Arizona	(Winner)
Cooney Mining Club, New Mexico	(1st Runner-Up)
Institute of Mining and Technology	
The Pennsylvania State University	(2nd Runner-Up)
Ward Beetham Student Chapter,	(3rd Runner-Up)
University of Wisconsin--Platteville	

Outstanding Student Paper: Undergraduate

"The Effect of Blasting on the Tensile Strength
of the Rock Surrounding an Underground Opening"
Thomas E. Leidich, Colorado School of Mines

Outstanding Student Paper: Graduate

"Study of the Ore-Dilution Problem at the Cyprus Bagdad Copper Mine"
Abdullah Arik, The University of Arizona

The Committee reviewed the SME-AIME publication, "Careers for Engineers in the Minerals Industry," and updated the narrative and added new photographs. The new brochure was available in November. As the career brochure was reviewed, the program for distribution of career information was reviewed also. The Committee felt a primary vehicle for distribution of career guidance information was through career counseling activities of Local Sections and Student Chapters. Thus a letter was prepared to these groups providing sample copies for their evaluation and cost information for bulk orders.

Through the Educational Statistics Committee, the "SME-AIME Guide to Minerals Schools" was updated. New information in the guide this year included enrollment statistics, placement data, and a salary statistics report.

The Career Guidance and Educational Statistics Committees have jointly considered further options to increase student activity in the Society. Still under consideration are a summer job availability program, SME-AIME involvement in the annual mining contest, increased student travel allowance, and encouragement of SME-AIME officers to visit Student Chapters.

The Scholarship Committee continued deliberations on a viable solution to the question of an SME-AIME sponsored national merit scholarship. As the

committee investigated further options, the SME-AIME Board of Directors approved the rejuvenation of the previous SME-AIME National Merit Scholarship for one year for \$1,000. In the fall, this was awarded to Joseph Sottile of The Pennsylvania State University. At the Fall Meeting the Committee reviewed the various options and concluded little support for an overall SME-AIME scholarship existed. The Committee asked that the Education Board chairman write to the M&E Division indicating that the Committee had been examining the Society's role in scholarship activity and found a certain disparity that the largest SME-AIME Division is the only one not involved in scholarship activity.

In other action, and in an effort to continue to build links between SME-AIME student membership and corporate membership, the following suggestions were made and are under investigation: 1) all Division scholarship winners receive student membership and the first year of Junior Member dues free and 2) a best Society scholar be designated from among the Division recipients.

PROFESSIONAL REGISTRATION COMMITTEE ACTIVITY

The SME-AIME Professional Registration Committee has had an exceptionally busy year, because of the National Council of Engineering Examiners' (NCEE) efforts to advance preparation of the yearly examination by a year.

At its February 1982 meeting, the Committee worked on question selection for the October 1982 Mining/Minerals Engineering examination. That work was completed by mail and the examination was sent to NCEE in March. This exam was returned to SME-AIME in April for review by the committee (this was done by mail), and the corrected exam was returned to NCEE on May 4.

Work was started on the October 1983 examination, which NCEE had hoped to have submitted by August, but that deadline placed too severe a demand on the Committee. Work was done on the exam at the Committee's meeting in September and the completed exam was sent to NCEE in early October. In December the Committee reviewed the exam returned by NCEE.

In addition to preparing the examination questions, which are administered by the various states in late October each year, the Committee handles the grading of the questions from the examination. Early in January the Committee met at SME-AIME headquarters to grade the questions from the October 1981 examination. The 804 questions from examinations administered by 24 states were graded in three days.

Although a spring examination in the specialty disciplines (of which Mining/Minerals Engineering is one) were not to have been administered in accordance with the once-yearly schedule for those exams, some states by law or by request do administer an April exam. The 195 questions from the April 1982 exams administered by six states were graded by a local group in the Denver area. It is anticipated that there will be about the same number of questions to be graded in April 1983.

The Committee plans to meet at SME-AIME headquarters the first week in January 1983 to grade the 1202 questions administered by 24 states in late October 1982. The number of questions to be graded is about 50% more than previously handled. Several members of the Committee also regraded six questions

from the October 1982 examination because the scores given had been challenged. The scores for these questions were not changed after review by the original graders.

The Committee, by mail, also reviewed a previously administered examination (November 1980) for a book of specialty discipline examinations to be published by NCEE. Since the examination questions will be published and available to potential examination candidates, the questions will be permanently retired and not used for any future examinations. The Committee had hoped to receive permission to use the same examination in the Study Guide being prepared for the Society's Mining/Minerals examination. However, NCEE refused that permission and the Committee then began preparing an entirely new examination just for the Study Guide. This examination, once completed, will never be sent to NCEE for administering as a fall examination.

The Committee, in addition to its work on the examination itself, monitors registration activities in two areas: NCEE actions and those of a political nature, particularly those actions taken by individual states.

In 1980 and 1981 NCEE conducted a Task Analysis designed to solicit information from already registered engineers that might aid in preparing and administering more effective registration examinations. The Professional Examination Advisory Committee (PEAC) of NCEE (Hedley S. Fowler represents SME and the Professional Registration Committee) has been working to apply the Task Analysis results to the examination process. One of the first steps, as applied to SME-AIME, was to tabulate the responses from those engineers who indicated mining or metallurgical specialty interests. The 77 areas of response, such as pit layout, mine ventilation, equipment specification/design, etc., were grouped according to the existing Mining/Minerals syllabus areas: exploration, mine planning, mine operation, ground control, mineral processing, and environment/government. After reviewing the list of interests in each syllabus area, the Committee decided that the syllabus did not need to be changed. The list will be helpful, however, as the Committee selects questions in each syllabus area for future examinations.

As an extension of its application of the Task Analysis study, NCEE has scheduled a workshop in February for persons writing examination questions. The SME-AIME Professional Registration Committee plans to be represented at the workshop.

One issue being debated by those involved in the professional examination process has been whether NCEE should offer one single book of examination questions or two, as is the current practice. Presently there is one book of questions for the major disciplines -- chemical, civil, electrical, and mechanical -- and a second book for the specialty disciplines including metallurgy, mining/minerals, and petroleum engineering. Representatives from several of the specialty disciplines met in Dearborn, MI, in February to consider certain challenges facing the registration process. A result of this meeting was to convey to NCEE the goals of 1) continuing to work with industry to encourage the licensing of engineers and 2) adopting one examination on general engineering principles. The encouragement of a one-book examination offering is the first step toward meeting the second goal. President Maurice C. Fuerstenau was SME-AIME's representative at this meeting.

During the NCEE annual meeting in August 1982 future direction of the examination was discussed. One possible direction is to develop a single book of examination questions. The book would be tailored for states which register people simply as professional engineers; however, the book would contain enough questions so that states, which register by discipline, could specify questions or groups of questions from which a candidate would be allowed to select. Questions in future examinations may have a much stronger emphasis on the protection of the public health, safety, and welfare from the actions of engineers.

In the political arena, there were a number of activities during the year. In January the Colorado registration board decided to discontinue offering the Book II specialty exams for a period of two years. After concerted efforts by the Colorado Engineering Council, Society of Petroleum Engineers of AIME, and SME-AIME members, the Board was persuaded to reverse its decision.

There was considerable discussion by the legislature in Arizona about "sunsetting" the registration laws. In part due to efforts by Arizona engineers, including Martin C. Kuhn, a member of the SME-AIME Committee, the laws were preserved, at least for a year.

In California there continues to be a thorough review of the structure of engineering in the state and the title acts in particular. California is one of the states that registers by discipline, there being 13 "titles" in all. The review and hearings in late fall 1982 are to result in proposals for legislative action to restructure the registration process in the state. SME-AIME is monitoring the situation, although Mining/Minerals is not one of the titles.

The Committee expects 1983 to be a busy year, with, however, less pressure from NCEE than in 1982.

LECTURE SERIES ACTIVITY

In its 16th year, the Henry Krumb Lecture program continued as a popular source of speakers for the SME-AIME and TMS-AIME Local Sections. The Krumb Lecture series is named after Henry Krumb, who died in 1958, and was a pioneer in applying engineering practices to mining. With nearly 70 SME-AIME Local Sections interested in the series, and with budget restrictions limiting the speakers to five Sections each, the program continues to be oversubscribed. Lecturers for 1982 were Nathaniel Arbiter, professor emeritus of the Krumb School of Mines, Columbia University; Herbert H. Kellogg, Stanley-Thompson Professor of Chemical Metallurgy, Henry Krumb School of Mines, Columbia University; and Thomas J. O'Neil, Manager of New Business Development, Amoco Minerals Co. Topics included:

"Milling Machinery -- Is Bigger Better?"

"Energy Use in Metal Production"

"Mine Evaluation in a Changing Investment Climate"

The lecturers made 17 appearances to SME-AIME and TMS-AIME Local Sections in the United States.

In 1978, the Australasian Institute of Mining and Metallurgy and AIME conducted a joint conference in Australia which resulted in a surplus of \$60,000. The earnings from the money are used to fund a Distinguished Speaker Exchange Program between the Institutes. The 1982 speaker was AIME President Harold W. Paxton, Vice President of US Steel Corp., who toured Australia and New Zealand in the fall.

GOVERNMENT, ENERGY, AND MINERALS (GEM) COMMITTEE ACTIVITY

In its eighth year, the GEM program activities have remained varied. The Committee is participating in the AIME All-Institute technical program at the Annual Meeting with the other Constituent Societies in the sessions: "Materials and Energy -- Facts, Problems, and Solutions: I-Materials" and "Materials and Energy -- Facts and Forecasts: II-The Energy Puzzle."

The Committee has been monitoring SPE-AIME's slide program produced by their Technical Information Committee. The "Visual Aids in Petroleum Exploration and Production" is a manual of visual aids to help SPE members illustrate and present programs to various lay groups. The manual consists of 75 35mm color slides with descriptions of each slide and is available for \$35. The SME-AIME GEM Committee has considered various options for producing a similar program or developing a lending library of slides for the illustration of talks. The Intermountain Field Operations Center of the U.S. Bureau of Mines has offered to make their newly-produced slides available as well as a brief description of each slide. The feasibility of producing a slide program package or establishing a lending library will be pursued at the Annual Meeting.

Through the auspices of the GEM Committee, the Society maintains its close liaison with the Mineral Information Institute. The Institute issued its first quarterly report in September, which was distributed to the Local Sections via the Regional meetings. The report acknowledged the generous grant arranged by SME-AIME through the Mudd Fund to support the second edition of "Mineral Information Sources," a catalog of films, video tapes, slide presentations, printed materials, and speakers offered to schools and community groups. The textbook, lab, and teachers manual, "Energy Resources and Environment," developed by John Christensen, underwritten by MII, and guaranteed by the Mudd Fund, had sold about 1,000 copies by early fall. The textbook has been accepted by the state boards of education in Louisiana and Nevada and has received favorable response in other states.

MII's concern over general public knowledge and misinformation has lead to development of a proposed series of articles for airline magazines, accompanied by talking guides for pilots, which will discuss mining and minerals of America. Funding is currently being sought to underwrite the development of the series. MII's Five Year Plan of activities includes programs to provide the nation's media with an introductory data bank of facts, figures, and information about the industry; to develop a nationally disseminated series of editorial page articles to weekly newspapers; and a nationally distributed series of radio and television tapes discussing current issues. New activities are approached only after adequate funding is assured and ideas have been well researched and field tested.

The Coordinating Committee on Productivity and Innovation of the Public Affairs Council of the American Association of Engineering Societies developed the statement, "Research and Development for Increased Productivity -- Where We Must Go." The GEM Committee reviewed the statement and formed a subcommittee to prepare a response to the statement. The Committee questioned the status and distribution of the statement and indicated that the statement placed undue emphasis on the participation and contribution of the government in the resolution of productivity problems. The subcommittee encouraged a "return to the basics of American ingenuity and productivity that flourished in the early part of this century." The subcommittee's response was relayed to SME-AIME's Council representative, Donald A. Dahlstrom.

The GEM Committee reviewed a request to participate in Washington Internships for Students of Engineering (WISE). Three years ago the American Society for Engineering Education received a \$225,000 grant from the National Science Foundation to launch the internship program. The goal was to obtain sufficient financial support from professional engineering societies to allow the project activities to continue after the grant expired. The full cost of operating a 15-student WISE program in 1983 will be \$66,000 or \$4,400 per student. The GEM Committee reviewed the program and recommended that SME-AIME not participate.

TERRA, The Earth Resources Research Alliance, requested formal support from SME-AIME by 1) becoming an affiliate of TERRA and formally endorsing its purposes, 2) describing TERRA to the membership, and 3) reviewing TERRA research when it is complete and endorsing its findings if the quality and conclusions are compatible with the goals of SME-AIME. TERRA represents a coalition of diverse organizations seeking through research and communications to demonstrate the positive interrelationship between sound resource development and environmental protection and conservation. Upon recommendation of the GEM Committee, the SME-AIME Board of Directors voted to respond to TERRA's three-point request as follows: 1) that SME-AIME not become an affiliate of TERRA nor formally endorse its purpose, 2) TERRA was described to the membership via MINING ENGINEERING, and 3) that the Society will be pleased to review the TERRA research when it is complete with endorsement if the quality and conclusions are compatible with SME-AIME goals.

For the second year in a row, the GEM Award Committee received no nominations for consideration. Since the SME-AIME Board approved the award on a limited funding basis, the GEM Committee will be reviewing the award program at the Annual Meeting.

MINERALS RESOURCE MANAGEMENT COMMITTEE (MRMC) ACTIVITY

The MRMC continues to promote programming in the economics arena, as well as joint programming with the Society's technical divisions. A series of sessions presented at the Fall Meeting resulted in publication of the proceedings, "Mineral Resources of the Pacific Rim," which was available at the meeting.

The Committee has a full session schedule for the Annual Meeting with joint programming planned with the Industrial Minerals Division and the Mining and Exploration Division. Upon invitation from the M&E Division's Solution Mining Committee, the MRMC has agreed to participate in the economics and proceedings

aspects of the Solution Mining Symposium scheduled for the 1983 Fall Meeting. The Committee is responsible for three papers on the economics of heap and dump leaching operations for gold, silver, and copper.

A symposium and book on mine financing are in the planning stages. As soon as a conceptual outline is presented to the Committee officers, they will pursue formal approval and development.

MRMC maintains its representation on two SME-AIME Committees: Continuing Education and Technical Papers Subcommittee. Discussion at the Fall Meeting included the possibility of MRMC representation on other Committees; however, it was determined not to pursue it further at the present time.

A major piece of work underway by the Committee is the drafting of a set of guidelines or bylaws for committee function. A draft is scheduled to be available at the Annual Meeting for review and discussion.

HONORS AND AWARDS ACTIVITY

The following honors and awards were selected for presentation during 1982 and 1983:

AIME Honorary Member
William N. Poundstone

AIME Rock Mechanics Award
James J. Scott

Howard N. Eavenson Award
Leslie C. Gates

Antoine M. Gaudin Award
Ponisseril Somasundaran

Hal Williams Hardinge Award
Stanley J. Lefond

Daniel C. Jackling Award
Richard D. Mollison

1982 Henry Krumb Lecturers
Nathaniel Arbiter
Thomas J. O'Neil

Mineral Economics Award
Walter R. Hibbard, Jr.

Mineral Industry Education Award
Douglas W. Fuerstenau

Robert Peele Award
David E. Nicholas

Erskine Ramsay Medal
Raymond E. Zimmerman

Robert H. Richards Award
Maurice C. Fuerstenau

SME Distinguished Member Award

Carroll O. Brawner
Severn P. Brown
John R. Clarkson
Howard L. Hartman
Joe E. House
Iwao Iwasaki
Arthur R. MacPherson
Donald W. McGlashan
Richard G. Miller, Jr.
Richard D. Mollison
Charles F. Park, Jr.
Woods G. Talman

SME Publications Board Awards

Central New Mexico Section

Randal J. Barnes
Charles O. Brawner
Grant R. Brown
Yoginder P. Chugh
Douglas F. Crickmer
Richard E. Goodman
Manuel Gomez
Nellie E. Guernsey
Howard L. Hartman
Francois E. Heuze
Gerald V. Jergensen, II
Thys B. Johnson
Michael Karmis
Ta M. Li
Andrew L. Mular
P. H. Riordon
W. Joseph Schlitt
David A. Zegeer

William Lawrence Saunders Gold Medal

Frank F. Espie

Arthur F. Taggart Award

Donald A. Dahlstrom

Young Engineer Award

Robert W. Cope

AIME LEGION OF HONOR
(50 Years of Continuous Membership)

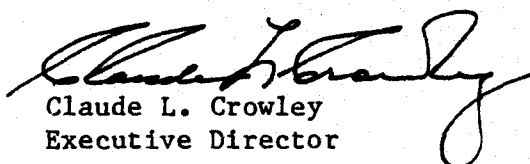
The following 20 SME-AIME members will become members of the AIME Legion of Honor during 1983:

J. W. Barnes
Arthur J. Beyer
G. Gregory Bryan
Robert D. Butler
James E. Cole
Frank Coolbaugh
G. Donald Emigh
Louis Gence
Phil R. Holdsworth
George W. Josephson

Stanton B. Keith
Leland H. Logue
John D. McAuliffe
Gill Montgomery
Richard F. Murphy
E. C. Robertson
John T. Ryan, Jr.
R. G. Sohlberg
Hugh A. Trestrail
James G. Urquhart

As a result of the AIME Ad Hoc Transition Committee's recommendations, administrative responsibility for four major AIME awards has been assigned to SME-AIME: Hal Williams Hardinge Award, Erskine Ramsay Medal Award, Robert H. Richards Award, and William Lawrence Saunders Gold Medal Award. The transfer of responsibility for the 1983 award committees was complete by year-end, with new committee members and committee officers named as SME-AIME presidential appointments.

Respectfully submitted,


Claude L. Crowley
Executive Director

THE METALLURGICAL SOCIETY OF AIME

REPORT

of the

EXECUTIVE DIRECTOR OF THE METALLURGICAL SOCIETY OF AIME

for 1982

"Project Revitalization" dominated the events of 1982 as TMS-AIME went through a year of self-examination as it marked its 25th year as a Constituent Society of AIME.

This study included an in-depth examination and review of the structure, services and mode of operation of the Society. The primary aims of the study are to:

- * Build unity and strength
- * Maximize service to membership
- * Increase member involvement in TMS
- * Maximize programming flexibility
- * Improve internal and external communications
- * Facilitate professional growth
- * Improve accountability
- * Develop policies and positions toward other professional/technical organizations within AIME and without.

The study commenced early in 1982, following its approval by the Board of Directors upon the recommendation of the Long Range Planning Committee. Each Board Member was assigned a specific functional area of responsibility within the Society. Functional areas included: Administrative - Long Range Planning, Honors and Awards, External Affairs, Financial Planning, Membership, Continuing Education, Publications and Programming and Technical - Basic Sciences, Materials Development, Materials Fabrication (Process Development), Extractive Metallurgy, and Technology and Public Policy. Ad Hoc Committees were formed and submitted status reports at each Board meeting with final reports and recommendations due at the October 1982 Board meeting. An Ad Hoc Bylaws Committee was also formed and drafted revised bylaws to implement the approved recommendations.

An integral part of the study was the "Project Revitalization Questionnaire" which was mailed to all members of the Society to obtain their input. Returns totaled 27% of the membership, so a reliable profile can be statistically estimated to guide the implementation of changes to the Society structure and services.

Highlights of the recommendations include:

Long Range Planning chaired by Peter Tarassoff:

Formal establishment of strategic objectives, annually update the long range plan, receive annually input from each functional area for incorporation into updated long range plan and restructuring the LRPC with the Chairman serving on the Board of Directors. A major activity was the Subcommittee for Regional Structure which developed a plan for initiating regional meetings in 1984 through a five region structure, establishment of a Regional Representative Council and the replacement of Regional Directors with Regional Technical Directors with dual responsibility of regional administration and programming.

Honors & Awards chaired by Albert R. C. Westwood:

A complete reorganization of the Society award programs to include adding new awards, balancing representation on Award Committees, establishing an overall Honors & Awards Committee, development of a uniform H&A Nomination Form and the generation of more publicity for the award presentations and selection announcements.

External Affairs chaired by Harris M. Burte:

In reviewing our relationships both within and without AIME, particular study is being given to AAES, FMS and NSPE and how TMS-AIME should interface with them to the benefit of our membership and the Metallurgical community.

Financial Planning chaired by Allen S. Russell:

The Treasurer position be expanded to include financial planning activities such as; investments of reserve funds, 3-5 year budget projections and greater analysis of economic trends. A small Financial Planning Committee would be formed to assist the new Financial Planning Officer as needed.

Membership chaired by Kenneth B. Higbie:

Proposal to revise the criteria and nomenclature for each membership grade are under review. A new "Retired" member grade has been established and certain membership promotion and development policies instituted.

Continuing Education chaired by Michael McNallan and Eugene G. Imperato:

This analysis and evaluation determined that while our programs were few they were of high quality and should be expanded. Further study will be made into exploring the use of video-tape courses and holding short courses on a regional basis.

Publications chaired by Christopher L. Magee:

Questionnaire confirms that publications are the primary service of the Society. The study has focused on structuring the publication activities of the Society into an integrated coordinated program while developing specific policies and procedures.

Programming chaired by Alan D. Zunkel with
 Basic Sciences; Robert J. Reynik
 Materials Development; Frederick S. Pettit
 Materials Fabrication; John E. Smugeresky
 Extractive Metallurgy; W. Joseph Schlitt
 Technology and Public Policy; Carl H. Cotterill

The entire area of programming received intensive study through six Ad Hoc Committees, established for different technical committee groupings. Their combined recommendations led to the restructuring of the Program Committee with three subcommittees which include:

Operations with responsibility for meeting planning, meeting program scheduling, short-term program coordination, meeting arrangements, statistical gathering and analysis and grid formulation.

Planning and Liaison with responsibility for short and long range program planning, programming policy, liaison and coordination with other TMS Committees and other societies, and regional programming coordination.

Review and Awards with responsibility for reviewing papers prior to presentation at the TMS meetings, reviewing proceedings prior to their publication and determining programming awards.

TMS-AIME is indebted to each Ad Hoc Committee Chairman and the numerous members who assisted them in their studies. The recommendations and implementation of "Project Revitalization" will have longlasting impact on TMS-AIME far beyond 1982.

Throughout 1982 and the intensive "Project Revitalization" studies business went on as usual in all other facets of the Society. Comment must be made about the national and international economic climate in which the Society operated in 1982. The recession influenced many activities and gave the Board and staff some agonizing decisions, but all in all we seemed to weather the economic storms very well. The Society finished the year with a modest surplus of \$30,935 on an income of \$1,836,230. Positive growth was realized in key areas including membership, publications and meetings.

An historical comment on finances is in order as the Society now approaches the 2 million annual budget level which should be attained in 1983. Since the Society's relocation in 1978 the activity level has grown so that in this 4 year period the annual budget has more than doubled from \$600,000 to the \$2,000,000 milestone. Certainly, inflation was a part, but more importantly Society services were expanded and improved. Significant areas of expansion in this period have been book production up from 5 books per year to now 20, the administration of Metallurgical Transactions and Journal of Electronic Materials, the management of the annual meeting, growth of all our meetings in both programming and attendance, Journal of Metals advertising and subscription revenue increases and perhaps most importantly a 26% increase in membership which passed the 10,100 mark in 1982.

Membership growth in 1982 was up over 9%, with some 756 new members and reinstatements added to the rolls. This was the largest gain in recent years. Improvement in the rate of retention for student members who transfer to Automatic Junior Membership also set a new record with 435 graduating seniors electing to continue their membership in TMS-AIME.

Publication of new books and their sales, again saw dramatic growth in 1982. This can perhaps be tied to our growth in membership. The interest in publishing and purchasing books seem to reflect the general high level of technical developments in metallurgical engineering and its related fields. Some 20 new conference proceedings were published in 1982. The quantity sold was 10,850 books and 5,250 paper selections for a combined income of \$330,000. Income was up 30% over 1981, a significant increase.

The meetings of the Society continued to draw good attendance, with the Annual Meeting in Dallas drawing a record 1,904 TMS members and "metals interest" attendees, and an overall attendance of 3,601. The Society members presented 732 papers in 117 sessions. The Fall Meeting drew 1,733 attendees in St. Louis. Some 85 sessions were scheduled with 633 papers presented. It was held jointly with the ASM Metals Congress with this arrangement continuing through 1985. The Electronic Materials Committee of TMS-AIME sponsored its 24th Annual Conference at Colorado State University drawing 518 attendees to hear 146 papers within 18 sessions. All of these meetings demonstrated the continued strong support of the Society's members of its meetings and the valuable service provided to the metallurgical community through TMS-AIME sponsored meetings.

Metallurgical Transactions continued in its role as the archival journal of the Society. Met Trans A - Physical Metallurgy subscriptions were 4,608 while Met Trans B - Process Metallurgy were 2,468. The number of pages published was about the same as 1981, with a total of 2,938, of which 2,290 were in Met Trans A and 648 in Met Trans B.

Combined with the 1982 performance of its key member service areas of meetings and publications and "Project Revitalization" recommendations TMS-AIME is positioned well for providing the professional and technical home for metallurgists and materials scientists in 1983 and the years beyond.

TMS-AIME

STATEMENT OF INCOME AND EXPENSE

YEAR END, NOVEMBER 30, 1982

REVENUE

Member Dues and Fees	\$299,862
Publications: Books, Paper Selections, Proceedings	375,797
Monthly Journal	287,217
Journal of Electronic Materials	56,240
Metallurgical Transactions	517,131
Interest and Dividends	33,589
Meetings: AIME Annual Meeting	120,956
Offshore Technology Conference	28,217
Fall Meeting	62,993
Electronic Materials Conference	32,183
Short Course	14,875
Other	7,170
<u>TOTAL REVENUE</u>	<u>\$1,836,230</u>

EXPENSE

AIME Corporate Headquarters	\$ 26,915
Society Headquarters and Business Services	178,146
Publications: Books, Paper Selections, Proceedings	307,917
Monthly Journal	370,281
Journal of Electronic Materials	43,489
Metallurgical Transactions	500,313
Membership and Meeting Services	103,746
Section and Student Chapter Rebates	19,043
Meetings: AIME Annual Meeting	118,105
Offshore Technology Conference	3,057
Fall Meeting	71,969
Electronic Materials Conference	31,602
Short Course	13,220
Awards: TMS-AIME	1,290
Other	16,202
<u>TOTAL EXPENSE</u>	<u>\$1,805,295</u>
<u>REVENUE OVER EXPENSE</u>	<u>\$ 30,935</u>
<u>TOTAL TMS-AIME RESERVES</u>	<u>\$ 371,244</u>

MEETINGS DEPARTMENTTECHNICAL CONFERENCES

The Metallurgical Society of AIME sponsored or co-sponsored the following technical conferences during 1982:

<u>Conference</u>	<u>Attendance</u>	<u>Number of Technical Sessions</u>	<u>Number of Papers Scheduled</u>
111th AIME Annual Meeting; Hyatt Regency, Hilton, Fairmont, and Dallas Convention Center; Dallas Texas February 14-18	3,601 (1,904 TMS)	117	732
14th Annual Offshore Technology Conference; Astrodomain; Houston, TX May 3-6	108,000	48	244
24th Annual Electronic Materials Conference; Colorado State University Fort Collins, CO June 23-25	518	18	146
1982 Joint TMS-AIME Fall Meeting and ASM Metals Congress; Radisson, Sheraton, Cervantes Convention Center; St. Louis, MO October 24-28	1,733	85	633
ICCM IV (International Conference on Composite Materials); Tokyo, Japan October 25-28	465	-	-

TMS Technical Program

The 1982 TMS Fall Meeting, St. Louis, MO, was held jointly with the 1982 ASM Metals Congress of the American Society for Metals. A total of 85 sessions with 633 papers in the physical metallurgy technical area were presented at the 1982 TMS Fall Meeting.

At the 1982 AIME Annual Meeting in Dallas, TX, 129 TMS sessions were held, consisting of 811 papers covering both physical and extractive metallurgy. 117 TMS sessions with 732 papers are planned for the 1983 AIME Annual Meeting in Atlanta, GA.

The annual 1982 Electronic Materials Conference was held at Colorado State University, Fort Collins, CO, June 23-25, 1982. There were a total of 18 technical sessions, with 146 papers covering the areas of photovoltaics, compound semiconductors, silicon on insulators, packaging materials, photoresist, infrared materials, and organometallic CVD.

SCHEDULE OF TMS-AIME CONFERENCES FOR 1983 AND 1984

1983

- March 6-10 112th AIME Annual Meeting; Hyatt Regency, Atlanta Marriott, Atlanta Hilton and Peachtree Plaza; Atlanta, GA
- May 2-5 15th Annual Offshore Technology Conference; Astrodomain; Houston, TX
- June 19-23 Topical Conference on Ferritic Alloys for Use in Nuclear Energy Technologies; Snowbird, Utah
- June 22-24 25th Electronic Materials Conference; University of Vermont, Burlington, VT
- October 2-6 Joint TMS-AIME Fall Meeting and ASM Metals Congress; Sheraton and Franklin Plaza; Philadelphia, PA
- November 6-9 1983 International Sulfide Smelting Symposium; Westin St. Francis Hotel; San Francisco, CA
(1983 TMS-AIME Fall Extractive and Process Metallurgy Meeting)

1984

- February 22-25 International Conference on Applied Mineralogy (ICAM '84); Biltmore, Los Angeles, CA
- February 26-
March 2 113th AIME Annual Meeting; Hilton, Biltmore, Hyatt, Bonaventure; Los Angeles, CA
- February 26-
March 2 International Symposium on Extraction, Recovery, and Refinement of Precious Metals; Biltmore; Los Angeles, CA
- June 26th Electronic Materials Conference (dates and location to be announced)
- September 9-14 5th International Conference on Titanium; Munich, West Germany
- September 17-21 Joint TMS-AIME Fall Meeting and ASM Metals Congress; Cobo Hall, Renaissance Center, Book Cadillac, Pontchartrain; Detroit, MI
- November 11-15 1984 TMS-AIME Fall Extractive and Process Metallurgy Meeting; International Symposium on Metallurgical Slags and Fluxes; Hyatt, Lake Tahoe, NV

MEMBERSHIP DEPARTMENT

This department continued in 1982 with one full-time staff member and one part-time employee. Continued growth of the department's responsibilities and duties warranted the restructuring of the department to include two full-time staff members for the 1983 fiscal year.

TMS membership growth increased dramatically for 1982. A total of 1,191 new members, special reinstatements, and AJM's were added to the membership rolls. Membership growth was up 9.09% for a net gain of 605 new members, outdistancing last year's record mark of 571 new members.

The 111th AIME Annual Meeting in Dallas, Texas, highlighted this year's membership promotion activities, convincing 174 attendees to join their professional society. Improvement in the rate of retention for student members who transfer to Automatic Junior Membership set a new record with 435 graduating seniors opting to continue their membership upon graduation.

In the final analysis, the significant growth in the recruitment of new members for the year reflects the continued success of the Society in providing first-rate personal and professional member services.

TMS-AIME MEMBERSHIP BY GRADE CLASSIFICATION

JANUARY 1, 1983

Member	4,251
Associate Member	1,150
Junior Member	1,507
Student Member	2,896
Honorary Member	12
Senior Member	316
Life Member	5
Rocky Mountain	2
Legion of Honor	<u>26</u>
GRAND TOTAL	10,165

TMS-AIME MEMBERSHIP 1977 - 1982

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
E&PM	2,103	2,041	2,038	2,176	2,428	2,794
MS&AM	3,090	2,964	2,978	3,224	3,564	3,933
Education	44	53	55	51	49	49
Economics	53	47	48	60	71	92
Unclassified	<u>780</u>	<u>704</u>	<u>616</u>	<u>582</u>	<u>552</u>	<u>401</u>
Total Members	6,070	5,809	5,735	6,093	6,664	7,269
No. of Members Gained (Lost)	226	(261)	(74)	358	571	605
Percent Change	3.84	(4.30)	(.99)	6.24	9.38	9.09
Student	<u>1,997</u>	<u>2,290</u>	<u>2,326</u>	<u>2,544</u>	<u>2,626</u>	<u>2,896</u>
GRAND TOTAL	<u>8,067</u>	<u>8,099</u>	<u>8,061</u>	<u>8,637</u>	<u>9,290</u>	<u>10,165</u>

1982 NEW MEMBERSMEMBERSHIP GRADE

<u>Technical Interest</u>		<u>New Member</u>		<u>Reinstatements</u>	
Extractive & Process Metallurgy	366	Member	450	Member	94
Metal Science & Application of Metals	369	Associate	40	Associate	7
Economics	21	Junior	138	Junior	27
	<u>756</u>		<u>628</u>		<u>128</u>
AJM's	435	Reinst.	+128		
			<u>756</u>		
TOTAL	1,191				

TMS-AIME PUBLICATIONS DEPARTMENT

Journal of Metals

Journal of Metals published 1,204 pages in FY 1982, an increase of 96 pages over 1981; 70 pages of this increase were in technical articles, and 18 additional pages were used in covering the Fall and Annual Meetings.

The breakdown of 1982 pages was as follows:

	<u>No. pages</u>
Technical and feature articles	523.5
Departments	151.8
Society news (TMS)	12.7
Display advertisements	33.7
Classified advertisements	35.6
House advertisements	58.9
Reader service cards	50.0
Membership directory	101.3
Fall and Annual Meeting material	201.0
AIME News	16.5
Miscellaneous	19.0
Total	1204.0

Net advertising revenue for FY 1982 was \$108,200, essentially unchanged from 1981. Approximately 47% of the advertising revenue was from classified advertising.

The practice of having dual emphasis topics each month, one for physical/mechanical metallurgy and one for extractive/process metallurgy, was continued in 1982 and will be continued in 1983. The topics chosen for 1982 were as follows:

	<u>Physical/Mechanical Metallurgy</u>	<u>Extractive/Process Metallurgy</u>
January	Titanium Update	Environmental Control
February	Advances in Powder Metallurgy	Continuous Casting
March	Microscopy/Surface Analysis	Copper Extraction and Refining
April	Rapid Solidification	Annual Review
May	Heat Treating Update	Steelmaking Technology
June	Surface Modification	Smelting Technology
July	Energy/Materials Conservation	Energy/Materials Conservation
August	Formability Update	Carbon Materials
September	Wear/Hardfacing/Tool Steels	Aluminum Extractive Metallurgy
October	Materials for Hostile Environments	Precious Metals
November	Computer Applications	Deformation Processing
December	Advanced Materials Technology	Advanced Extraction Technology

Journal of Metals changed printers beginning with the January 1982 issue; the new printer is Gray Printing Company of Fostoria, Ohio. The cover logo and format were also changed effective with the January issue. Other major aspects of the Journal remain unchanged.

Book Publishing Activities

TMS published 20 books in 1982, including 17 conference proceedings, two titles in our "Technology of Metallurgy Series," and one new textbook. The 1982 books are listed below:

1. Sadananda et al., Micro and Macro Mechanics of Crack Growth
2. Paton and Hamilton, Superplastic Forming of Structural Alloys
3. Wiffen and Spitznagel, Advanced Techniques for Characterizing Microstructures
4. Meshii, Mechanical Properties of BCC Metals
5. Fine, Extractive Metallurgy Laboratory Exercises
6. Clayton and Preece, Corrosion of Materials Processed by Directed Energy Beams
7. Fiore and Berkowitz, Advanced Techniques for Characterizing Hydrogen in Metals
8. Hasson and Hamilton, Advanced Processing Methods for Titanium
9. German and Lay, Processing of Metal and Ceramic Powders
10. Wells et al., Ultrasonic Fatigue
11. DeArdo et al., Thermomechanical Processing of Microalloyed Austenite
12. Hagni, Process Mineralogy II
13. Bramfitt and Marder, Metallurgy of Continuous-Annealed Sheet Steel
14. Chang and Ahmad, Thermodynamic Data on Metal Carbonates and Related Oxides
15. Aaronson et al., International Conference on Solid-Solid Phase Transformations
16. Koczak and Hildeman, High-Strength Powder Metallurgy Aluminum Alloys
17. Parker, Chloride Electrometallurgy
18. Singhal, High-Temperature Protective Coatings
19. Osseo-Asare and Miller, Third International Symposium on Hydrometallurgy
20. Adkins, Light Metals 1983

Other TMS Publishing Activities

TMS successfully assumed from Plenum Publishing Company the publication of our Electronic Materials Committee's Journal of Electronic Materials, beginning with the 1982 volume. We based publishing plans on obtaining 700 subscribers; by the end of FY 1982, we had 810 subscribers for net subscription revenue of \$50,163.

The Society published 32 paper selections from the 1982 Annual Meeting and 13 from the Fall Meeting.

INVENTORY AND BOOK STATUS
YEAR END, NOVEMBER 30, 1982

TITLE	YR. PUBL.	NUMBER PRINTED	COST PER COPY	INVENTORY QUANTITY	INVENTORY 11/30/82 VALUE	1982 INCOME	TOTAL INCOME	EXPENSE	INCOME OVER EXPENSE
Extractive Met. of Copper	'76	2540	\$ 5.65	192	\$ 1084.80	\$ 3689.50	\$ 65092.90	\$ 17512.99	\$47579.91
Lectures:Phase Transform	'75	2319	1.69	634	1071.46	1757.80	14182.00	4020.37	10161.63
Light Metals	'79	1056	8.84	238	2103.92	1756.40	25351.30	12482.42	12868.88
Light Metals	'80	1042	10.75	141	1515.75	2702.40	29809.60	15051.98	14757.62
Light Metals	'81	1028	10.12	117	1184.04	4408.40	32014.80	10403.61	21611.19
Light Metals	'82	1052	10.81	292	3156.52	28008.00	28008.00	11376.93	16631.07
Breeder Reactor	'78	695	11.85	233	2761.05	726.00	12618.00	6480.86	6137.14
Hardenability Concepts	'78	1257	5.48	357	1956.36	2523.24	16912.64	7075.47	9837.17
Failure Modes IV	'79	552	6.09	354	2155.86	1069.20	4138.20	3360.18	778.02
Formability	'79	1022	5.17	442	2285.15	1128.00	6868.50	5279.16	1689.34
Environment Sens. Fract.	'79	1082	9.03	80	722.40	6421.55	24491.55	9773.94	14717.61
Copper&Nickel Converters	'79	1314	4.75	363	1724.25	2334.80	19681.80	6388.33	13293.47
New Dev.&Appl. in Compos.	'79	560	6.90	290	2001.00	1007.20	6297.80	3863.34	2434.46
Metal Sci.Stainless Steel	'79	519	5.21	105	547.05	1647.00	7991.00	2703.24	5287.76
Toughness Characteristics	'79	496	7.14	147	1049.58	2036.00	8667.00	3539.89	5127.11
HSLA & Dual Phase Steels	'79	802	3.91	373	1458.43	1271.60	7013.80	3137.13	3876.67
Precip. Processes	'79	1046	4.97	110	546.70	2063.13	13256.48	5196.43	8060.05
Phase Diagrams	'79	1009	3.65	287	1047.55	3208.00	11423.80	4630.38	6793.42
Thermomechanical Process.	'79	509	6.53	170	1110.10	1620.00	5925.00	3324.95	2600.05
Dual Phase Steels	'80	512	7.54	42	316.68	2774.40	11978.80	3862.87	8115.93
Handbook	'80	2231	6.74	193	1300.82	15691.00	39850.00	23758.81	16091.19
Alloy Phase Formation	'80	518	8.93	176	1571.68	2769.00	12303.80	7312.38	4991.42
Corrosion-Erosion	'80	777	5.70	377	2148.90	2524.40	8117.00	4480.14	3636.86
Ion Implantation	'80	754	4.87	164	798.68	2531.40	9832.00	3673.87	6158.13
Lead-Zinc-Tin '80	'80	2066	8.26	94	776.44	5642.40	59878.15	17072.06	42806.09
Powder Metallurgy	'80	531	8.86	101	894.95	3558.60	10325.90	4702.34	5623.56
Creep-Fatigue-Environ.	'80	746	4.69	355	1664.86	1455.20	5586.60	3497.04	2089.56
Physical Metallurgy	'80	516	7.49	42	314.58	2676.20	8155.20	3862.47	4292.73
Advanced Fibers	'80	530	7.91	225	1779.75	2480.40	7184.60	4193.00	2991.60
Boron in Steel	'80	1571	3.62	478	1730.36	2712.80	13395.60	5966.91	6428.69
Titanium '80	'81	1499	35.00	369	12915.00	17375.00	81137.50	52465.88	28671.62
Sulphur Dioxide	'81	798	6.31	282	1779.42	3698.40	11694.00	5038.36	6655.64
High Speed Tool Steels	'81	778	4.35	583	2536.05	1646.80	3175.00	3382.54	(207.54)

TITLE	YR. PUBL	NUMBER PRINTED	COST PER COPY	INVENTORY QUANTITY	11/30/'82 VALUE	1982 INCOME	TOTAL INCOME	EXPENSE	INCOME OVER EXPENSE
Ext. Met.Refract.MtIs.	'81	808	6.35	310	1968.50	5146.80	11438.40	5133.66	6304.74
Metastable Phases	'81	529	5.55	372	2064.60	1702.80	2937.40	2934.88	2.52
Alum.-Lith. Alloys	'81	827	6.95	390	2710.50	5560.00	10646.00	5747.62	4898.38
Energy Eff.Elect.Steel	'81	764	4.71	624	2939.04	1840.00	3057.20	3598.32	(541.12)
Non-Dest.Evaluation	'81	796	6.19	452	2797.88	5508.80	7910.40	4929.92	2980.48
Chemical Metallurgy	'81	502	9.10	135	1228.50	8773.60	9723.60	4569.73	5153.87
Hydrogen Effects in Mtls	'81	998	11.52	172	1981.44	17907.76	27674.76	11496.21	16178.55
Interatomic Potentials	'81	541	8.09	342	2766.78	2539.00	3311.00	4376.86	(1065.86)
Metallurgical Treatises	'81	1046	10.69	155	1656.95	24168.00	25936.00	11177.02	14758.98
Modeling of Casting	'81	755	7.92	418	3310.56	8538.02	9744.02	5976.02	3768.00
Phase Stability	'81	525	11.17	330	3686.10	5564.00	6510.00	5863.09	646.91
Process Mineralogy	'81	1022	9.70	222	2153.40	29134.00	29759.00	9901.08	19857.92
Continuous Casting	'82	535	6.28	340	2135.20	4828.00	4828.00	3361.31	1466.69
Copper Smelting	'82	1053	5.02	610	3062.20	8666.00	8666.00	5287.15	3378.85
Fund.DualPhase Steels	'82	517	10.14	213	2159.82	7907.16	7907.16	5241.65	2665.51
Lasers in Metallurgy	'82	816	6.97	542	3777.74	6412.80	6412.80	5690.11	722.69
Titanium for Energy	'82	804	7.16	523	3744.68	6726.80	6726.80	5753.65	973.15
Adv.Proc.Mthds.for Titan.	'82	757	6.92	665	4601.80	2005.60	2005.60	5234.73	(3229.13)
Ext.Met.Lab.Exercises	'82	568	5.70	414	2359.80	2605.60	2605.60	3236.34	(630.74)
Mech.Prop. of BCC Metals	'82	500	8.36	380	3176.80	2385.00	2385.00	4179.42	(1794.42)
Micro&Macro Mech & Crack	'82	812	5.29	657	3475.53	2544.00	2544.00	4298.03	(1754.03)
SuperplasticForm/Stru.All	'82	817	6.88	441	3034.08	8677.20	8677.20	5624.64	3052.56
Adv.Tech.forChar.Micro.Str	'82	563	9.28	349	3238.72	3446.00	3446.00	5226.46	(1780.46)
Corrosion of Metals	'82	491	6.67	467	3114.89	196.80	196.80	3273.04	(3076.24)
Adv.Tech.forChar.Hydro inMts	'82	802	5.22	684	3570.48	2021.20	2021.20	4189.74	(2168.54)
Met.ofCont.Ann.SheetStl	'82	831	6.17	831	5127.27	0.00	0.00	5126.38	(5126.38)
Proc.of Mtl.&Ceram.Pwdrs	'82	523	8.45	523	4419.35	0.00	0.00	4421.03	(4421.03)
Ultrasonic Fatigue	'82	522	10.92	522	5700.24	0.00	0.00	5697.81	(5697.81)
					\$145972.99	\$311719.16	\$828428.26	\$430416.17	\$400196.09

METALLURGICAL TRANSACTIONS A AND B - REPORT FOR 1982

METALLURGICAL TRANSACTIONS A

Technical Papers Published

	<u>No. of TPs</u>	<u>No. of Pages</u>	<u>Total Pages</u>
A Sub+ and ASM	234	1,985	
B Sub++	<u>3</u>	<u>36</u>	
TOTAL	237	2,021	2,021

Communications Published

A Sub+ and ASM	31	89	
B Sub++	<u>-</u>	<u>-</u>	
TOTAL	31	89	89

Title Pages and Table of Contents, etc.	56
Blank Pages	<u>124</u>

Total Pages in 1981 MET TRANS A 2,290

METALLURGICAL TRANSACTIONS B

Technical Papers Published

	<u>No. of TPs</u>	<u>No. of Pages</u>	<u>Total Pages</u>
A Sub+ and ASM	3	44	
B Sub++	<u>61</u>	<u>528</u>	
TOTAL	64	568	568

Communications Published

A Sub+ and ASM	0	0	
B Sub++	<u>10</u>	<u>25</u>	
TOTAL	10	25	25

Title Pages and Table of Contents, etc.	19
Blank Pages	<u>36</u>

Total Pages in 1981 MET TRANS B 648

METALLURGICAL TRANSACTIONS A AND B COMBINED

Technical Papers Published

	<u>No. of TPs</u>	<u>No. of Pages</u>	<u>Total Pages</u>
A Sub+ and ASM	237	2,025	
B Sub++	<u>64</u>	<u>564</u>	
TOTAL	301	2,568	2,589

Communications Published

A Sub+ and ASM	31	89	
B Sub++	<u>10</u>	<u>25</u>	
TOTAL	41	114	114

Title Pages and Table of Contents, etc. 75
 Blank Pages 160

Total Pages in METALLURGICAL TRANSACTIONS A AND B

2,938*

* An Annual Index appears in the December issue of both A and B

+ TMS-AIME A Subcommittee

++ TMS-AIME B Subcommittee

METALLURGICAL TRANSACTIONS serves the needs of the entire metallurgical profession. Thus, Society distinctions are eliminated through both the review and publication process. Consequently, the tabular data represent the distribution of effort in the Board of Review and not the source of the papers.

HONORS AND AWARDS

The TMS-AIME Board of Directors has elected the following members to the grade of Fellow for 1983:

John Cahn
Robert D. Pehlke
Guy M. Pound
Francis L. VerSnyder
Charles A. Wert

The following awards will be presented by The Metallurgical Society of AIME to recognize our 1982 award recipients:

Robert Lansing Hardy Gold Medal

Subramanian Suresh is the recipient of the Robert Lansing Hardy Gold Medal in recognition of exceptional promise of a successful career in the field of metallurgy. This award is given annually to a metallurgist who has not reached their thirtieth birthday before the end of the calendar year during which their selection is made.

Champion H. Mathewson Gold Medal

The Champion H. Mathewson Gold Medal will be bestowed upon Paul Shewmon for his outstanding contributions to the understanding of hydrogen attack of carbon steels through his work on the theory of hydrogen attack and his studies of the kinetics of this phenomenon.

Extractive Metallurgy Science Award

D. Sharma, James W. Evans and Yuri Zundelovich were selected for this award for their paper entitled "A Mathematical Model for Prediction of Currents, Magnetic Fields, Melt Velocities, Melt Topography and Current Efficiency in Hall-Heroult Cells".

Extractive Metallurgy Technology Award

Anthony J. Weddick, Robert J. Anderson and Russell R. Beck were selected for this award for their paper entitled "The Utah Smelter as Modified for Environmental Compliance".

Extractive Metallurgy Lecture

William G. Davenport was selected as the Extractive Metallurgy Lecturer and the title of his topic is "The Versatile Copper Smelter".

William Hume-Rothery Award

Leo Brewer will be the recipient of the William Hume-Rothery award.

Acta Metallurgica Gold Medal

The Acta Metallurgica Gold Medal is an international award recognizing outstanding contributors to materials science. The 1982 award recipient is Charles S. Barrett.

ASM/TMS-AIME Joint Distinguished Lecture in Materials and Society

The 1983 Lecturer is Raymond L. Smith.

Institute of Metals Lecturer and R. F. Mehl Award

Michael F. Ashby - Lecture Title: "The Mechanical Behavior of Foamed or Cellular Materials".

ACKNOWLEDGMENT

Appreciation is extended to all members, Officers and Directors of The Metallurgical Society of AIME. Special thanks to President Alan Lawley.

Thanks also to the staff who have performed most admirably. The staff as of January 1, 1983 by position:

<u>Title</u>	<u>Name</u>	<u>Years of Service</u>
Executive Director	Alexander R. Scott	12
Administrative Assistant	Rosey Kaufman	3
Director of Administration	Peter DeLuca	9
Administrative Assistant	Gayle Geddes	-
Meetings Manager	Marilyn Zabel	5
Program Coordinator/Meetings Secretary	Barbara Kamperman	-
Membership Promotion Coordinator	Mark O'Connor	1
Administrative Assistant	Joanne Melder	3
Computer Services Manager	Frank Denio	5
Data Entry Clerk	AnnaMarie Miller	1
Publications Order Assistant	Elaine Rouda	4
Director of Publications	John B. Ballance	5
Administrative Assistant	Mary Jane Alsing	3
Managing Editor, JOM	Gail Oare	2
Advertising Manager	Linda Morgan	5
Book Production Coordinator	Elizabeth Luzar	-
Administrative Assistant, Book Production	Patricia Kwiatek	4
Graphic Artist	Robert Makowski	2
Mail Room Clerk	Robert Blosat	-

Respectfully submitted,



Alexander R. Scott
Executive Director

IRON & STEEL SOCIETY OF AIME

REPORT OF THE EXECUTIVE DIRECTOR OF THE IRON AND STEEL SOCIETY OF AIME FOR 1982

The growth record of the Iron and Steel Society of AIME, in 1982, was broken due to the most severe economic recession the iron and steel industry has faced in the last fifty years. The over-all impact on the Society was a decrease in the 10% annual growth established over the past seven years to a break even point in 1982. The major cause of the reduction in membership growth was the delinquency of existing members increasing by almost 50% over previous years. The cause of this increased delinquency was primarily the huge reduction in the work force of the industry, estimated as high as 35%.

Nonetheless, the Society prospered albeit at a reduced rate in comparison with previous years. Revenues were up in publications: the magazine recorded a 30% growth in advertising and book sales were up 60%. Dues income increased 5%, but meeting income was down 10% and income from continuing education was off 30% from 1981.

In June of 1982 new in-house typesetting equipment was integrated into the headquarters operation. By November all typesetting for the Society magazine, books, programs, etc., was accomplished in the Warrendale headquarters office.

During the year a staff committee was established to analyze the latest computer technology as it relates to Society operations and recommend a new computer to replace the computer presently being used. The present computer's five-year lease expires in June, 1983. Society operations have expanded to the point that the present computer is no longer adequate to handle the day-to-day administrative functions of the Society. A recommendation for a new computer was approved by the Board of Directors in December of 1982. The present plan calls for delivery of the new computer early in the second quarter of 1983. Concurrently, existing programs on the present computer will be translated and transferred into the new computer. The target calls for the new computer to be fully operative prior to June 1, 1983.

The addition of the new computer provides the opportunity to greatly expand the services to the Society operation. Conference registration, Board and Committee record keeping, financial record keeping, and maintenance of membership census will be greatly enhanced. New areas of service to the members will, it is hoped, come about through increased staff productivity related to full utilization of the new computer.

The Iron and Steel Society continued its activities in international affairs. ISS will join with the Society of Mining Engineers of AIME and the Canadian Institute of Mining and Metallurgy to sponsor the 4th International Symposium on Agglomeration in Toronto in the Spring of 1985. ISS will handle the administration of the conference. At a meeting of the Secretariat of Metallurgical Societies in Dusseldorf in November, professional Societies of Europe and Japan agreed to co-sponsor the 5th International Iron and Steel Congress in the Spring of 1986 in Washington, D.C. ISS will be solely responsible for the program and conference administration.

In publications, the Society contracted with the International Iron and Steel Institute to act as North American distributor of the Institute's book on Electric Arc Furnaces.

Also in the area of publications, the ISS Board of Directors approved a new publication, ISS-AIME Newsletter, which will be published periodically in 1983. The newsletter will be distributed to 18,000 recipients including all ISS members beginning in February of 1983. The new publication will expand on Society membership affairs that are currently being published in the Society magazine, the *Iron and Steelmaker*.

From the financial standpoint, Society revenues increased 7% from \$1,125,000 in 1981 to \$1,211,000 in 1982. Due primarily to a greatly expanded marketing program in all areas of Society endeavors, i.e., publishing, conference, and membership, expenses rose to \$1,185,000 an increase of 24% over 1981 expenses of \$953,000.

At year-end 1982, AIME assets under custodial assignment to the Iron and Steel Society amounted to \$1,001,000. The operating reserve fund was \$410,000 down from \$428,000. The difference being accounted for in the reduced market value of securities held by the Society. The Society Award Fund was \$108,500 up from \$98,000 at year-end 1981.

HONORS AND AWARDS

James B. Austin Award

The James B. Austin Award will be presented to J.S. Anslow, 1982 President of the Iron and Steel Society of AIME. The past-president award was named after Dr. Austin to honor him for his contributions of time, effort and ability towards the formation of the Iron and Steel Society of AIME.

Distinguished Member

The grade of Distinguished Member will be presented to three members of the Society in 1983. The Distinguished Member of the Iron and Steel Society of AIME is a member of the Society who has made outstanding contributions toward the production of iron and steel, or in fields embracing the activities of iron and steel technology and the Iron and Steel Society of AIME.

The three members who will be elevated to the grade of Distinguished Member in 1983 are:

Alexander McLean

"For his excellence in teaching, his contributions to research and the scientific literature in ferrous metallurgy, and his outstanding service to the Iron and Steel Society of AIME."

George W. Knepshield

"For his administrative expertise which he has faithfully contributed to the Iron and Steel Society of AIME."

Robert L. Stephenson

"For his significant contributions to the literature on ironmaking in the blast furnace and through direct reduction."

Robert W. Hunt Silver Medal Award

This award is given for the best original paper on iron and steel. Richard J. Fruehan, Gerrit J.W. Kor, and Ethem T. Turkdogan were the 1982 recipients for their paper, "Studies of Blast Furnace Reactions."

John Chipman Award

This award was established in 1971 by the Process Technology Division of the Iron and Steel Society of AIME to perpetuate the inspiration of John Chipman's outstanding contribution to the science of iron and steelmaking by granting an award to the author(s) of the best paper of the year. In 1982, the award was bestowed upon Richard J. Fruehan, Gerrit J.W. Kor, and Ethem T. Turkdogan for their paper, "Studies of Blast Furnace Reactions."

Charles H. Herty, Jr. Award

H. Ohzu, H. Ohmori and J. Yamazaki were selected for this award for their paper, "Problems with Automatic Liquid Level Control System for a Slab Caster."

Josef S. Kapitan Ironmaking Conference Award

The 1982 award was presented to I. Kurashige, M. Kojima, T. Mizazaki, Y. Shoji, Y. Kamei, T. Iba, and S. Yabe for their paper, "Coal and Oil Mixture Injection Into Blast Furnace." This award is given to the best paper presented at the annual Ironmaking Conference.

Michael Tenenbaum Award

This award was established in 1971 as the Mechanical Working and Steel Processing Division's highest award, given for the best paper presented at the previous year's conference and published in the proceedings. In 1978, the award was re-named the Michael Tenenbaum Award, honoring one of the earliest chairmen of the Mechanical Working and Steel Processing Committee. In 1982, the award was presented to S.S. Hansen for his paper, "Optimization of Structure and Properties of As-Hot-Rolled Dual-Phase Steels."

Mechanical Working and Steel Processing Meritorious Award

This award is "runner-up" to the Michael Tenenbaum Award. Runners-up in the Roll Technology Division for 1982 were T. Masui, T. Nunokawa, E. Yasui, T. Takigawa, H. Ono, and J. Yamada for their paper, "The Development of the Sumitomo VC (Variable Crown) Roll System."

Runners-up in the Tubular Products Division in 1982 were T. Goda, H. Naoi, T. Kimura, K. Nakajima, S. Yoshiwara, and M. Kawaharada for their paper, "New Rolling Process for Close Dimensional Tolerance Seamless Pipes with the Press Roll Piercing Method."

Runners-up in the Bar, Rod and Semi-Finished Products Division in 1982 were Daniel E. Diesburg and Thomas B. Cameron for their paper, "The Influence of Aluminum, Nitrogen and Phosphorus on Fracture Properties of Carburized Cr-Mo and Mn-Cr Steels."

Reinartz Scholarship Award

This award was established by AIME in honor of Leo F. Reinartz, a graduate of Carnegie-Mellon University, to recognize each year an outstanding student in that university's Department of Metallurgy and Materials Science. The award, a 3,150 dollar scholarship, was presented in 1982 to David A. Vensel.

Charles W. Briggs Award

This award is conferred for the best paper presented at the annual Electric Furnace Conference. The 1982 award was given to A. Schei and K. Larsen for their paper, "A Stoichiometric Model of the Ferrosilicon Process."

Joseph Becker Award

This award is given for distinguished achievements in coal carbonization and in 1982 the award was presented to Michael Perch.

T.L. Joseph Award

This award is conferred for distinguished contributions to ironmaking operations which significantly increase production or decrease the cost of production. The 1982 winner was Edward J. Ostrowski.

J.E. Johnson, Jr. Award

This award is given to encourage young men in creative work in the metallurgy or manufacture of pig iron. The recipient of this award must be under forty years of age when he completes the work that merits recognition. The 1982 recipient was W.L. Ziegert.

"For his display of enthusiasm and eagerness to master the skills of ironmaking and his participation in the design, construction and start-up of Inland's No. 7 blast furnace including the training of its work force."

Frank B. McKune Award

This award is given for the best paper on open hearth or basic oxygen steelmaking written by an author or authors under forty years of age. The recipients of the 1982 award are D.J. Harris and J.D. Young for their paper, "Water Modeling - A Viable Production Tool."

Steelmaking Conference Award

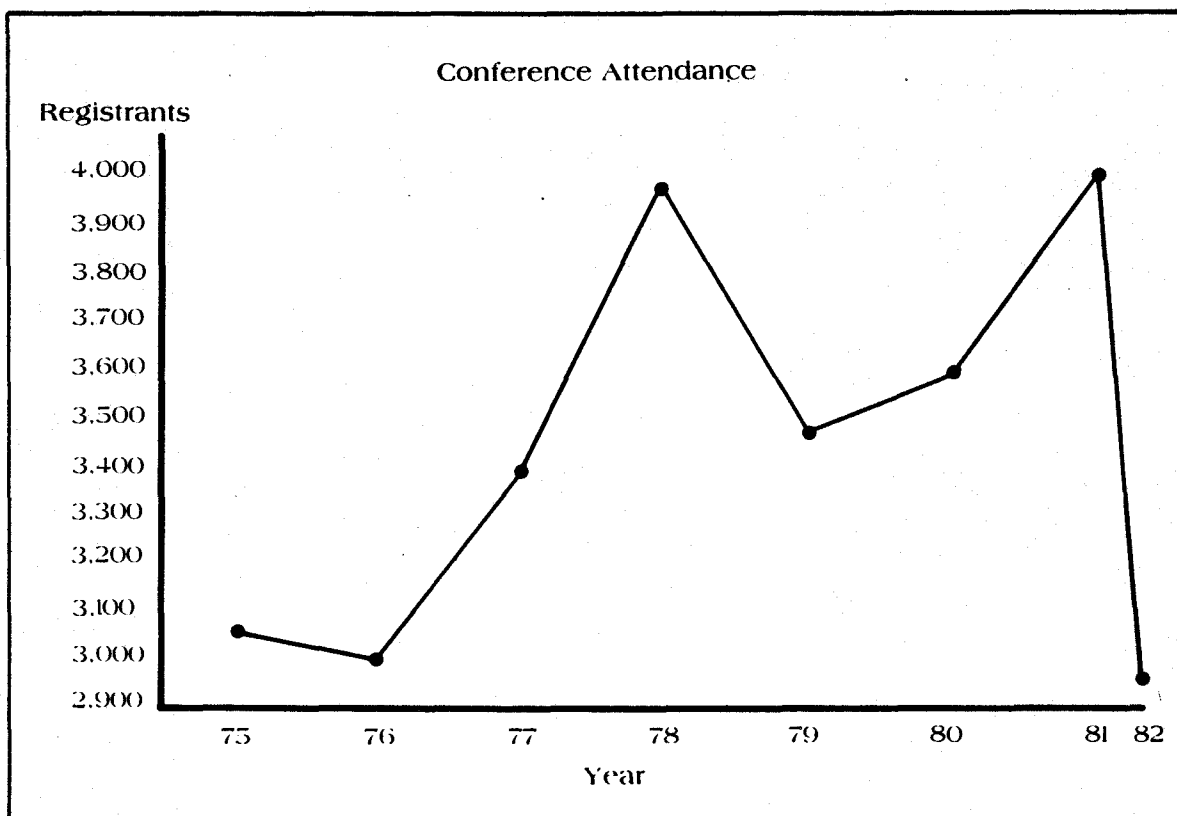
This award is presented each year for the best paper on some phase of primary steelmaking, and was presented in 1982 to E.M. O'Donnell for his paper, "The Effect of Disposable Submarine Ladle Covers on Hot Metal Temperatures Delivered to the BOF."

MEETINGS DEPARTMENT

Technical Conferences

The Iron and Steel Society of AIME, through its divisions, sponsored or co-sponsored six technical conferences during 1982. The conferences attracted 2,943 registrants.

The actual attendance at each of the conferences and the number of sessions and papers presented is listed below:



Conference	Attendance	Sessions	Papers Presented
IIIth AIME Annual Meeting Dallas, Texas Dallas Convention Center February 14-18, 1982	101	10	56
3rd Process Technology Conference Mathematical Modeling Pittsburgh, PA Pittsburgh Convention Center March 29-31, 1982	111	6	28
65th Annual Steelmaking Conference Pittsburgh, PA Pittsburgh Convention Center March 29-31, 1982	944	9	45
41st Annual Ironmaking Conference Pittsburgh, PA Pittsburgh Convention Center March 29-31, 1982	664	12	57

24th Annual Mechanical Working and Steel Processing Conference Houston, Texas Sheraton-Houston Hotel October 27-28, 1982	198	9	38
40th Annual Electric Furnace Conference Kansas City, MO Radisson Muehlebach Hotel December 7-10, 1982	925	11	56
Totals	2943	57	280

Schedule of ISS-AIME Conferences for 1983 and 1984

1983

March 6-10	112th AIME Annual Meeting Atlanta, Georgia
April 17-20	66th Annual Steelmaking Conference 42nd Annual Ironmaking Conference Westin Peachtree Plaza Atlanta, Georgia
October 26-28	25th Annual Mechanical Working and Steel Processing Conference Franklin Plaza Hotel Philadelphia, PA
December 6-9	41st Annual Electric Furnace Conference 4th Process Technology Conference Westin Hotel at Renaissance Center Detroit, Michigan

1984

February 26- March 1	113th AIME Annual Meeting Los Angeles, CA
April 1-4	67th Annual Steelmaking Conference 43rd Annual Ironmaking Conference 5th Process Technology Conference Hyatt Regency Chicago, Illinois
October 17-19	26th Annual Mechanical Working and Steel Processing Conference McCormick Inn Chicago, Illinois
December 4-7	42nd Annual Electric Furnace Conference Royal York Hotel Toronto, Ontario

Technical Information Exchange

Technical Information Exchange is a small exhibit that is held at three of the Iron and Steel Society's Conferences each year: The Steelmaking/Ironmaking Conference and the Electric Furnace Conference.

The purpose of the Technical Information Exchange program is to provide an opportunity for supplier companies of the iron and steel industry to display their products and services by purchasing exhibit space at these conferences.

Each exhibit is held adjacent to the registration area at a conference, thus promoting maximum interchange between conference attendees and representatives from the supplier companies demonstrating the equipment the attendees use every day in their jobs.

Results of the TIE programs held during 1982 are as follows:

Conference	Number of Exhibitors
65th Steelmaking Conference and 41st Ironmaking Conference	67
40th Electric Furnace Conference	51

CONTINUING EDUCATION

In 1982 the Iron and Steel Society held a total of six short courses - three at national conferences, two in conjunction with local section meetings and one not tied to any other activity drawing attendees from a specific region. A total of 207 people attended these six courses.

Although total attendance at short courses was down somewhat in 1982, the number of courses offered was only down one from the seven offered in 1981.

More important was the activity in development of new courses for the future. It is the intent of the Society's Continuing Education Committee to increase the variety of topical courses offered and continue to expand the program into the local section and regional areas.

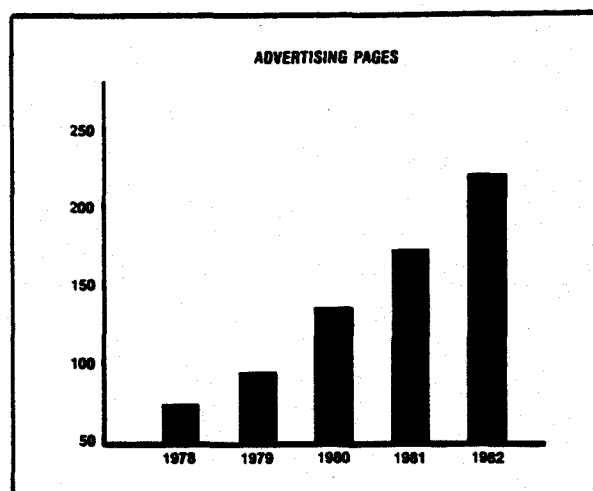
The 1982 Continuing Education Program included:

Date	Topic	Attendance
March 28, 1982	Metallurgy - Tap to Teeming	68
May 4, 1982	Metallurgy - Tap to Teeming	34
October 14, 1982	Continuous Casting	32
November 10, 1982	Metallurgy-Tap to Teeming	23
December 7, 1982	Refractories	22
December 7, 1982	The AOD Process	28
	Total Attendance	207

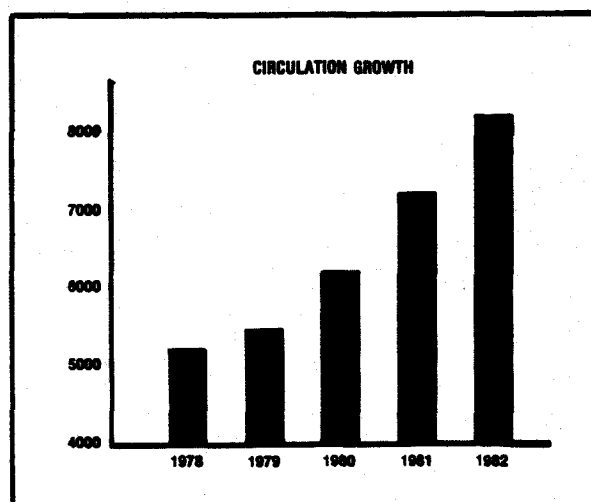
PUBLICATIONS DEPARTMENT

Iron & Steelmaker magazine, the monthly publication of the Iron and Steel Society, enjoyed in 1982 the most successful year of its eight-year history.

For example, the number of advertising pages in 1982 jumped 30 percent over 1981. And since 1979 the number of advertising pages has nearly tripled.



The magazine's monthly circulation average also increased in 1982, up 35 percent from 1980.



In addition, the November, 1982 issue of *Iron & Steelmaker* was received by every CEO and every works manager of every major iron and steel producer in North America, and these executives will receive every 1983 issue of the magazine.

The number of articles published in the magazine also increased. In 1982, 59 technical articles were published in *Iron & Steelmaker*. This is an increase of 11 technical articles over 1980's 48 papers. The following table is a list, by subject heading, of technical articles printed in 1982.

Category	Number of Articles
Blast Furnace	5
Continuous Casting	4
Direct Reduction	2
Electric Furnace	5
Ferroalloys	1
History	3
Metallurgy	8
Oxygen Steelmaking	7
Raw Materials	4
Refractories	3
Rolling - Mechanical Working	9
Steelmaking	4
Technology and Economics	4
TOTAL	59

The international news coverage of *Iron & Steelmaker* was also improved in 1982 by the addition of a foreign correspondent covering South America. *Iron & Steelmaker* now has foreign correspondents located in Japan, South America, England and Europe. *Iron & Steelmaker* has the most extensive international industry coverage of any iron and steel related magazine.

A continuing education section excerpted from past Iron and Steel Society short courses was also introduced into the magazine in 1982. Entitled "Keeping Current," this section presents a series of articles which, when clipped together, form an introduction to that particular subject. In 1982, "Keeping Current" contained a four-part series on the external treatment of hot metal and the first three parts of a series on pit practices.

Subscribers to *Iron & Steelmaker* also received the magazine's first Annual Review and Membership Directory issue in 1982. This 13th issue of the magazine was distributed in mid-July and in addition to the regular July issue of the magazine.

The Annual Review and Membership Directory is an almanac-style, desk-top reference. The 1982 Annual Review contained a listing of the world's BOFs, the world's electric furnaces, the world's continuous casting installations, the crude steel production of the world over the past ten years, and the Society's membership directory in both alphabetical and geographical order.

1982 was also a witness to the expansion of the publishing side of *Iron & Steelmaker* as a new typesetter was phased in during the year. This culminated in the total in-house typesetting of the December, 1982 issue and all subsequent issues of the magazine.

In addition to the magazine, the publications' staff also launched the ISS Foundation publication entitled *Transactions of the Iron and Steel Society of AIME*, Volume 1, 1982, 106 pages, 7 papers. This cloth-bound volume contains original papers on all aspects of research and significant engineering advances in ironmaking and steelmaking technology. The emphasis is on the translation of ideas into operational techniques. Publication in *Transactions* requires peer review. Plans call for the *Transactions* to be initially published bi-annually.

The publications' staff also produced five conference proceedings:

Electric Furnace Proceedings, 1981, Volume 39
Houston, TX
356 pages, 49 papers

Ironmaking Proceedings, 1982, Volume 41
Pittsburgh, PA
510 pages, 56 papers

Steelmaking Proceedings, 1982, Volume 65
Pittsburgh, PA
376 pages, 46 papers

Process Technology Proceedings, 1982, Volume 3
Pittsburgh, PA
297 pages, 29 papers

Mechanical Working and Steel Processing Proceedings, 1981, Volume 19
Pittsburgh, PA
666 pages, 32 papers

The following specialized text was also published:

Mixed Gas Blowing in Steelmaking
129 pages, 17 papers

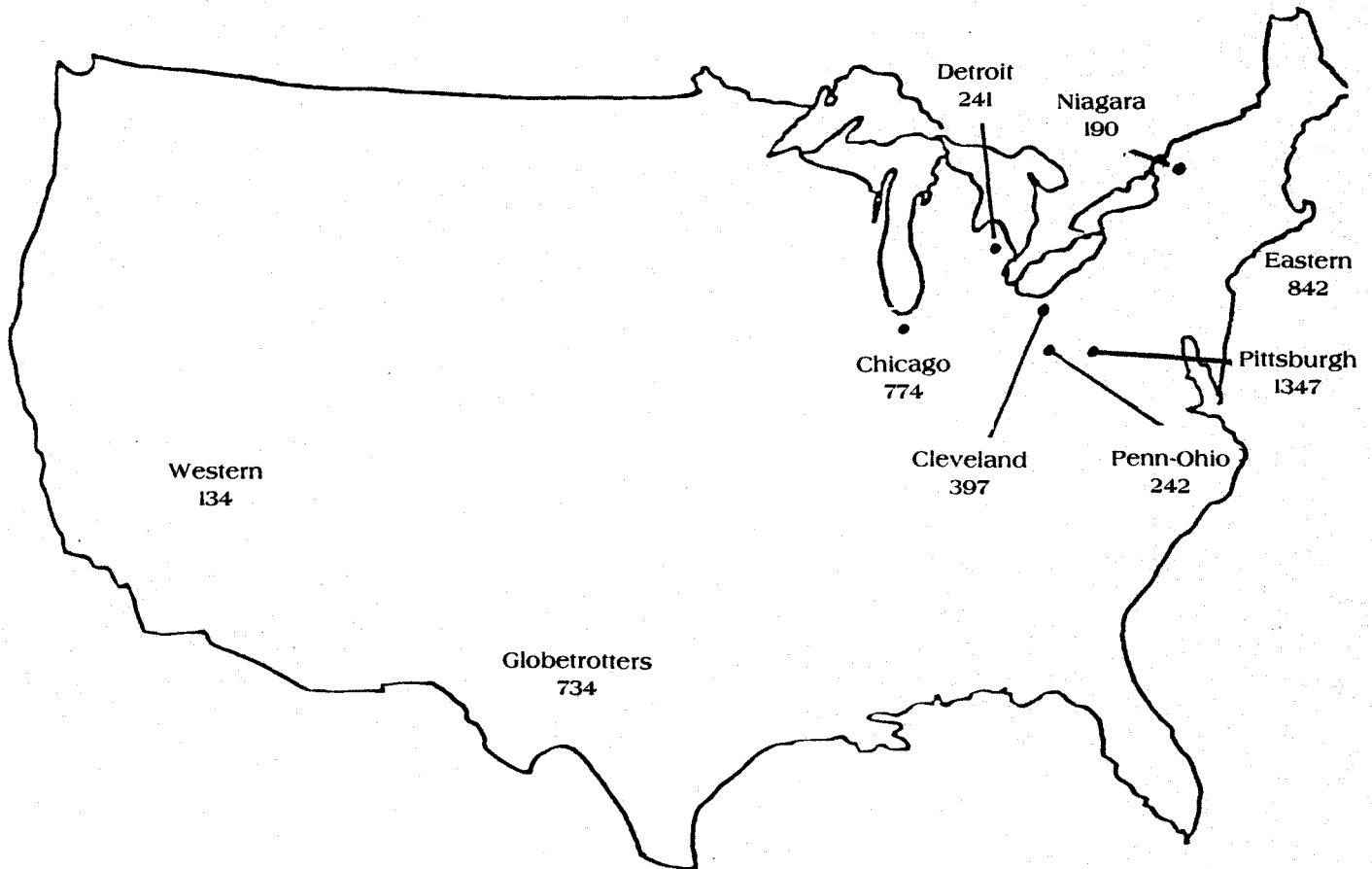
The Society also reprinted the following:

Desulfurization of Iron and Steel and Sulfide Shape Control
161 pages, 6 chapters

ISS-AIME LOCAL SECTIONS

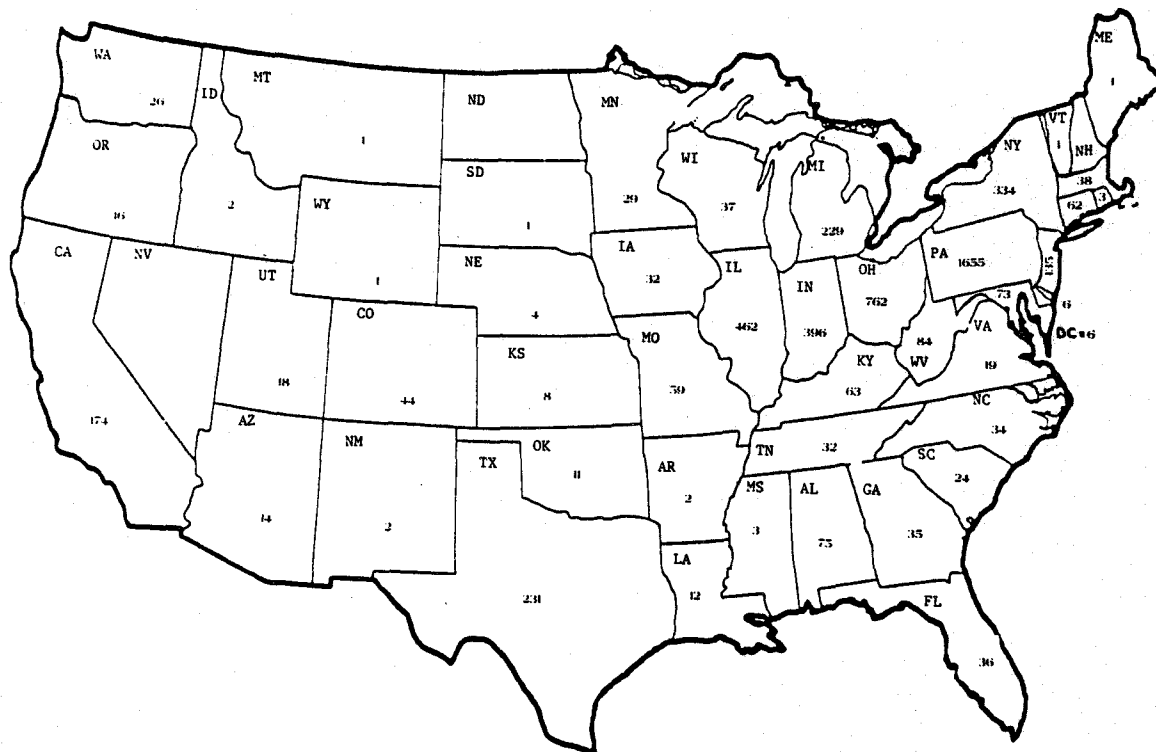
The nine sections administered by the Iron and Steel Society are listed below with the number of AIME members in good standing. The map illustrates the geographic distribution of members by section.

1. Chicago Section of AIME	774
2. Cleveland Iron and Steel Section of AIME	397
3. Detroit Iron and Steel Section of AIME	241
4. Eastern Iron and Steel Section of AIME	842
5. Globetrotters Iron and Steel Section of AIME	734
6. Niagara Section of AIME	190
7. Penn-Ohio Section of AIME	242
8. Pittsburgh Iron and Steel Section of AIME	1347
9. Western Iron and Steel Section of AIME	134



MEMBERSHIP DEPARTMENT

The Iron and Steel Society upon its inception, December 1, 1974, had an approximate census of 3100 members. We met the first five-year goal of 5000 members by December 31, 1979 set by the Board of Directors. In 1979 the Board set a goal of 8000 members by year-end 1985. As of December 31, 1982 there were 6514 members (including 86 students) in good standing in ISS-AIME.



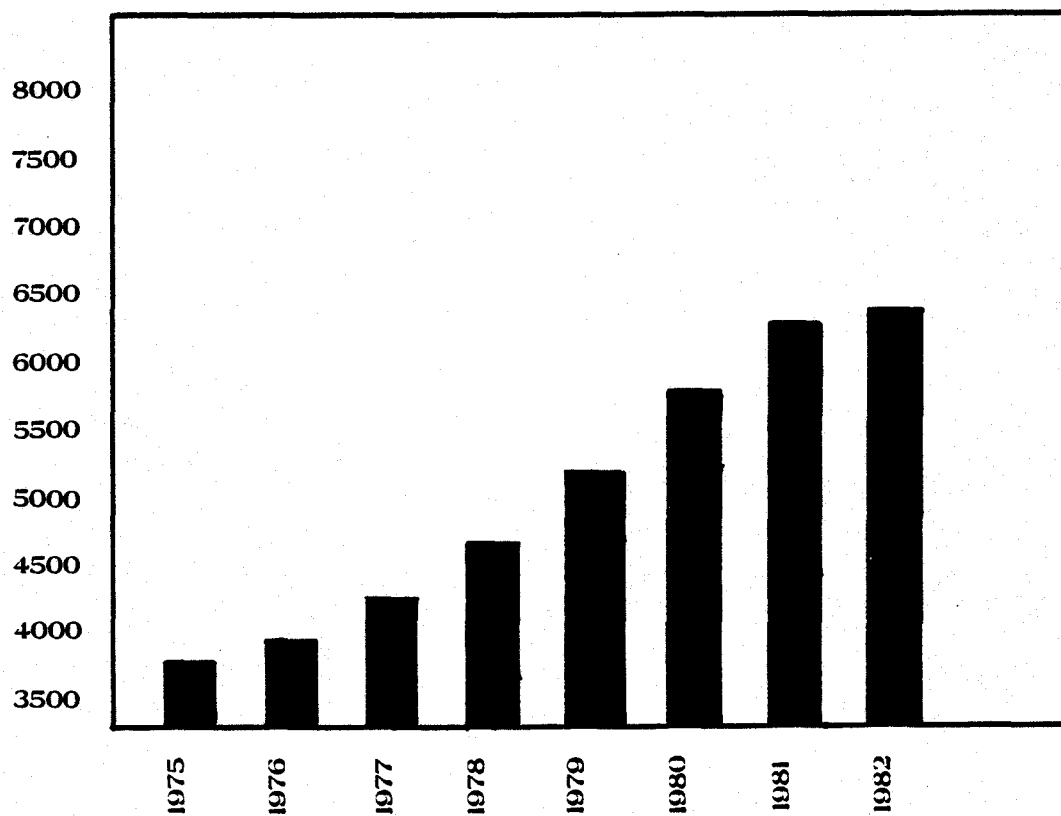
Foreign Membership

Canada 662
 Mexico 80
 Europe 279
 South America 55

Australia 21
 Japan 53
 Africa 27
 Other 38

*Corporate Membership

Year	Number
75	3616** (596) Joint
76	3885
77	4239
78	4470
79	5150
80	5772
81	6355
82	6428



* Student members are not included in corporate membership.

** In 1975 there were 596 joint members of TMS and ISS. Joint membership was discontinued in 1976.

OFFICERS OF THE IRON AND STEEL SOCIETY OF AIME

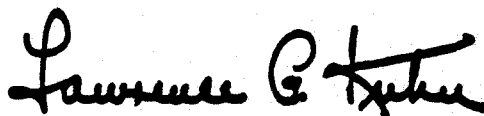
J.S. Anslow
 Howard N. Hubbard, Jr.
 N.T. Mills
 George W. Kneppshield

President
 President-Elect
 Past President
 Treasurer

IRON AND STEEL SOCIETY OF AIME
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Frederick C. Motts	General Manager
Elizabeth M. McGrath	Membership Services Manager
Bernard Queneau	Technical Editor
Claire G. Schmitt	Conference Director
Altha Shoup	Executive Secretary
Peg Simanaitis	Marketing Manager
Helen Slack	Special Projects
David Staniszewski	Accountant
Lelia Fisher	Clerk
Julie Pyles	Conference Secretary
Cheryl Hiles	Graphics/Production
J. Dennie Laughlin	Membership Fulfillment
Thomas McAloon	Associate Editor
Martha Novak	Accounts Receivable/Fulfillment Clerk
Leo Priore	Graphics/Production Magazine
Melinda Sample	Graphics/Production

Respectfully submitted,



Lawrence G. Kuhn
 Executive Director

REPORT
of the
EXECUTIVE DIRECTOR, SOCIETY OF PETROLEUM ENGINEERS OF AIME

OVERVIEW

SPE again during 1982 sustained the strong membership growth pattern of previous years with membership topping the 45,000 mark for the first time. The downturn in worldwide industry activity affected many programs, but the overall trend in most activities continued upward. The uncertainties that prevailed during the last half of 1982 confronted the Society and its members in 1983, and the challenges to maintain programs at current levels and to meet new member needs will occupy a major portion of the Society's efforts in 1983.

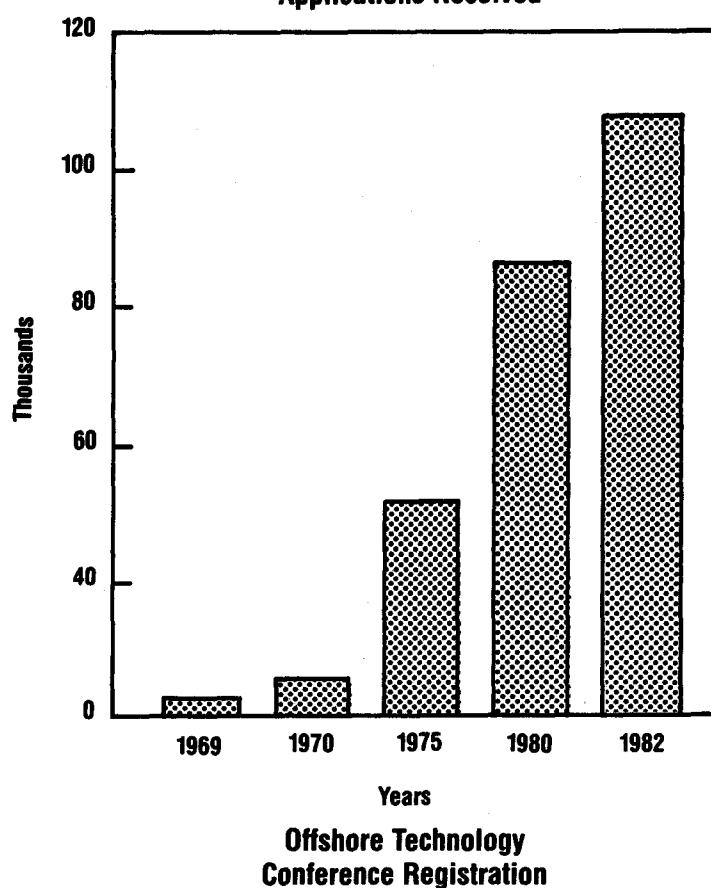
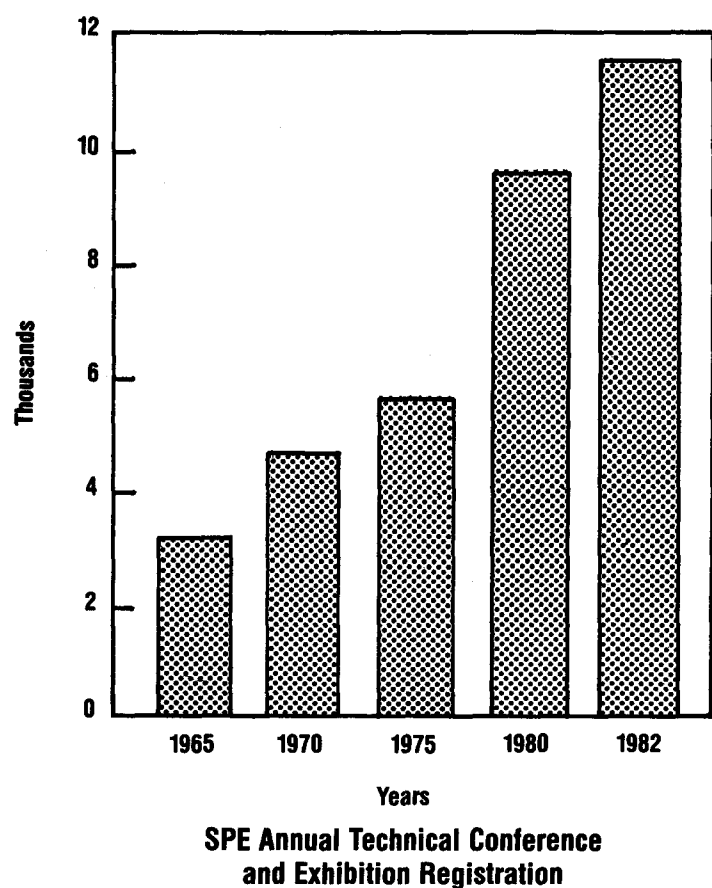
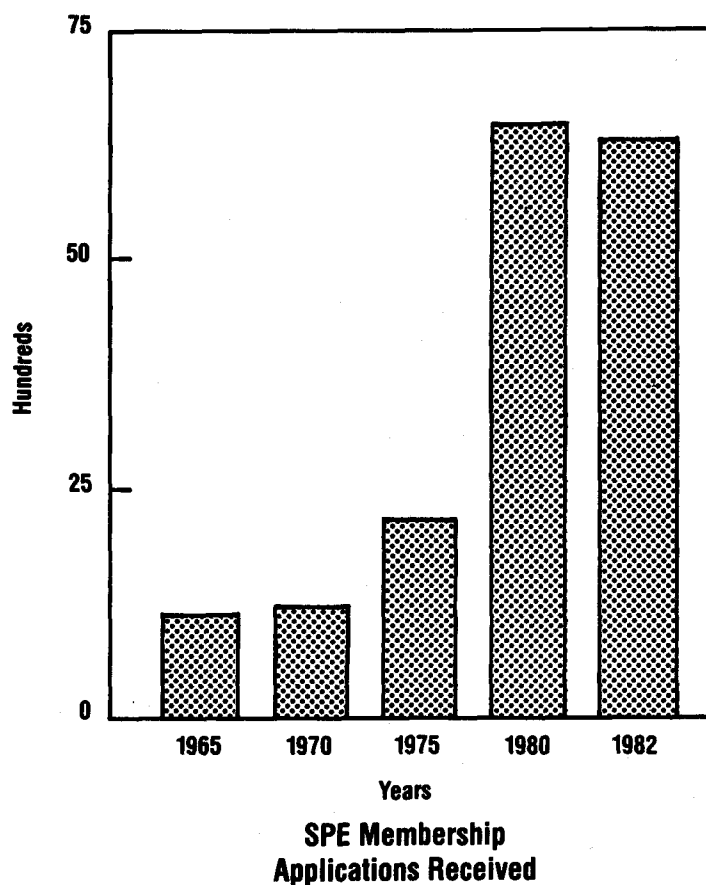
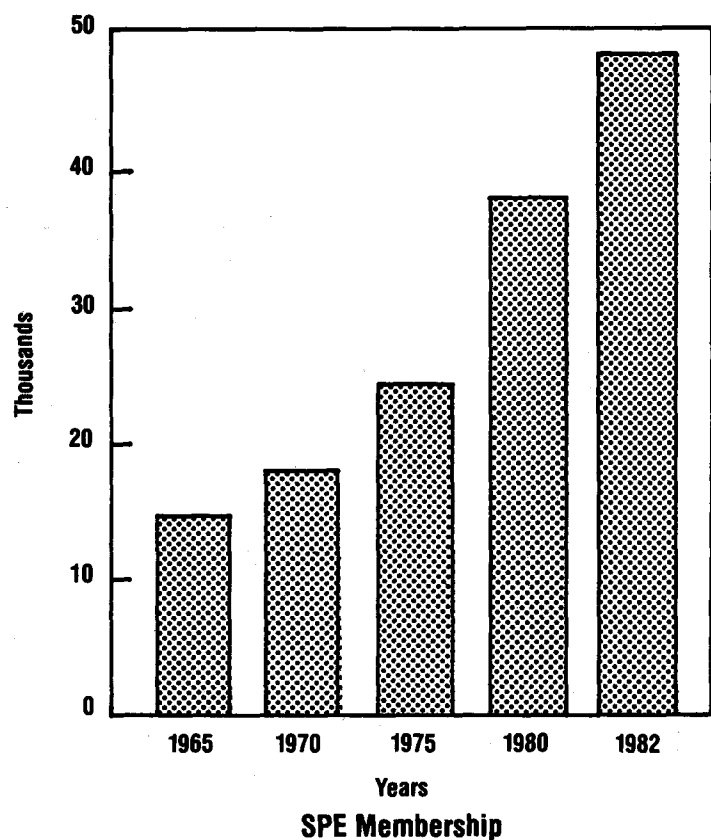
The Society continued its commitment to become increasingly worldwide in scope and service through expanded meetings and publications. SPE cosponsored the first International Meeting on Petroleum Engineering in the People's Republic of China with the Petroleum Engineering Society of the Chinese Petroleum Society in Beijing. Held in conjunction with the technical conference was the first SPE International Petroleum Equipment and Technology Exhibition. Attracting more than 150,000, the success of the meeting and exhibition resulted in SPE Board approval to explore further technical exchange with the PES.

Four new major awards were approved by the SPE Board of Directors. Created for the purpose of citing outstanding contributions not previously recognized and to encourage younger members to become more active in SPE, new honors include the Public Service and Young Member Outstanding Service Award, the SPE Distinguished Member Award and the Regional Service Award.

Educational support through scholarship programs accelerated with a 66 percent increase in section funding over 1981 figures and a 25 percent increase in 1982 Society supplemental funds.

To ensure that the ongoing growth and development of SPE is in keeping with the objective set forth in the Society's Long-Range Plan, an ad hoc Long-Range Plan Review Committee reviewed all areas of the plan and issued its final report in early 1982. After thorough evaluation, the committee noted that the Society has done a generally excellent job in implementing the Long-Range Plan adopted in 1975.

Included in the Long-Range Plan Review Report were recommendations relative to Local Section Finances, Programs and Organization; Society Structure; Membership; Technology and Professional Programs; and SPE Election Procedures. The Board, at its September, 1982, meeting approved for member vote proposed changes to SPE Bylaws that will affect nomination and election procedures for SPE officers, directors and regional directors. Upon return of member ballots in early 1983, the Board will begin the implementation of member approved procedures. All other Board approved recommendations have been assigned to specific SPE standing and ad hoc committees for study and implementation.



MEMBERSHIP

SPE sustained the membership growth trend by adding 5,295 new members for a total of 47,470. This represents a 12.5 percent increase over the 1981 year-end membership of 42,175. New member applications received totaled 6,271 compared with 6,427 in 1981. Membership growth has shown an average 11.4 percent increase for each of the past five years.

At the Society's Annual Technical Conference and Exhibition, seven local sections were cited for outstanding membership development work: Thailand (Bangkok); Western Wyoming-Rock Springs; Spindletop (Lake Charles); South Louisiana (Houma-Morgan City); Southwest Texas (Corpus Christi); and Delta (New Orleans).

The following members were recognized for outstanding contributions in member development. Presented one-hundred member awards were Robert L. Kite, Perth, Australia; E. E. Kauffman, London, UK; and A. M. Sarem, Brea, CA.

1982 Membership by Classification

Member	20,397
Honorary, Legion of Honor, Senior, Life	923
Associate Member	8,170
Junior	12,643
Associate Junior	1,302
Student Member	<u>4,035</u>
TOTAL	47,470

LOCAL SECTIONS

SPE increased to 82 - a new record - the number of local sections during the year. The four new sections were established at Roswell, NM; Victoria, TX; Australia, and Qatar. One new subsection was organized at Wind River Basin, WY. A major SPE strength continues to be the dedication of local section members in preparing creative meetings with discussion of timely and important technical topics, and in arranging and conducting conferences and continuing education activities. Section activities offer members many opportunities to improve technical competence and achieve professional growth.

Increased local section activity has resulted in additional contributions to scholarship funds, increasing interest in civic and professional affairs and expanded support of two important SPE programs - the Distinguished Lecturer Series and the SPE Speakers Bureau. Twelve Distinguished Lecturers made 211 presentations to 80 sections during the year. The Speakers Bureau gained momentum with 72 speakers participating in the local lecture program on a voluntary basis. Also popular with many local sections was the Community Relations Night, an annual event sponsored and coordinated by sections and designed to enhance and further communications between the industry, elected officials and the community in which the section is located.

Sections are actively engaged in sponsoring short courses and self-development seminars. In April, the Mid-Continent Section presented three short courses in conjunction with the SPE/DOE Enhanced Oil Recovery Symposium. The National Capital Section sponsored a short course on economic evaluation in conjunction with the Eastern Regional Meeting. Several local sections broadened continuing education activities with the sponsorship of half-day and one-day short courses on industry-related topics. The

Study Group concept drew increased participation during the year with the Los Angeles, Houston, and Permian Basin Sections conducting monthly study groups on such topics as Reservoir Engineering, Drilling and Production Operations.

Communication efforts between SPE headquarters and local sections broadened as SPE officers and staff members visited 58 sections during the year. At present, 10 regional directors and four at-large directors act as liaison between the Society and its members and represent local sections on the SPE Board of Directors.

STUDENT ACTIVITIES

Three new SPE Student Chapters were organized this year at the U. of Alaska, Fairbanks; the U. of Technology of Malaysia, Kuala Lumpur; and the California Polytech, Pomona, CA bringing the number of student chapters to 46. Total student membership in the Society exceeds 4,000.

Student members, several hundred strong, were active in the Student Sessions at SPE's Annual Technical Conference and Exhibition. The Student Chapters Officers Workshop preceded a well-attended Student Session at the SPE Annual Technical Conference and Exhibition in New Orleans. Workshops offer the student officers exposure to other chapter officers, faculty, and industry sponsors and provide an opportunity to discuss chapter programs and the role of students as officers. At the SPE Student Session, recent petroleum industry hiring trends and job interview techniques were discussed. Texas A&M U. was honored as the Outstanding Student Chapter during the Student Session. The honor is bestowed on the chapter that demonstrates the highest level of programming, membership development and key activities during the year.

SCHOLARSHIPS AND EDUCATION

Over the past six years the growing concern by members to provide support for educational funding has resulted in more than \$810,000.00 awarded through SPE educational scholarships.

In 1982, 200 scholarships were awarded. Sixty-three sections participated resulting in \$137,629.62 of SPE scholarship funds being raised. This local section funding resulted in a 60 percent overall increase from the \$82,885.00 figure achieved in 1981.

Supplementing local section funding, SPE operating funds and SPE Foundation funds increased from \$63,000.00 in 1981 to \$78,749.64 in 1982.

In 1982 local section funding (\$137,629.62) and SPE funding (\$78,749.64) totaled \$216,379.26.

The pilot graduate fellowship program, initiated in 1981, continued to be successful and well received by regions. Eleven graduate fellowships in eight regions were awarded. Each fellowship totaled \$5,000 with \$2,500 funded by the Society and the remainder funded by participating sections in a region. Participating regions, recipients, and their schools were: **Region I**-Western-Daniel Williams, U. of California; **Region II**-Rocky Mountain-Eric Carlson, U. of Wyoming, and Gregory King, Pennsylvania State U.; **Region III**-Central Plains-John Spivey, Texas A&M U. and Jim Lane, Colorado School of Mines; **Region IV**-Mid-Continent-Ronald Fey, U. of Missouri-Rolla, and Stuart Scott, U. of Tulsa; **Region VI**-North Texas-Janet Ply, U. of Texas; **Region VIII**-Southern-David Sutton, Louisiana State U.; **Region IX**-Eastern-David Remner, Pennsylvania State U.; **Region X**-European-Mark Bilsland and Eric Mahers, Imperial C.

The PESA Scholarship Program, administered by SPE in cooperation with the Petroleum Equipment Suppliers Association, awarded \$4,000.00 in scholarship funds to outstanding petroleum engineering students. Rock Petty of Texas Technological U. received a \$1,200.00 Junior PESA Scholarship. Debra Ann Grove of Texas A&M U., a former 1981 PESA Junior Winner, and Anthony Marino of the U. of Kansas each received a \$1,400.00 Senior PESA Scholarship.

The Society continued to support petroleum engineering education in 1982 by recognizing faculty members for teaching excellence, research, and student support. Recipients of the SPE Distinguished Achievement Award for Petroleum Engineering Faculty were chosen by an ad hoc committee composed of SPE industry representatives. Selection was made on the basis of demonstrated excellence in the aforementioned categories. All nominations were made by SPE student chapters. An award of \$3,000.00 each was made to the following recipients: Daniel M. Bass, Jr., Colorado School of Mines; Christine Ehlig-Economides, U. of Alaska at Fairbanks; Lyman L. Handy, U. of Southern California; Roland Nicholas Horne, Stanford U.; Leonard F. Koederitz, U. of Missouri-Rolla; and John Lee, Texas A&M U.

Meetings

"Collection and dissemination of technical information" is a major element of the Society's purpose as reflected in the SPE Long-Range Plan. And, the unprecedented participation at this year's meetings and international conferences reflects the ever-expanding influence of SPE worldwide. Virtually every SPE-sponsored or cosponsored meeting set new attendance records, and where provided, exhibit space was increased. The number of meetings rose from 14 to 15 in 1982 and total attendance at regional, topical and international meetings was 293,569 compared with 1981 attendance figures of 125,000. This figure reflects the 150,000 registrants at the International Meeting on Petroleum Engineering and the International Petroleum Equipment and Technology Exhibition held in Beijing.

Annual Technical Conference and Exhibition - New Orleans

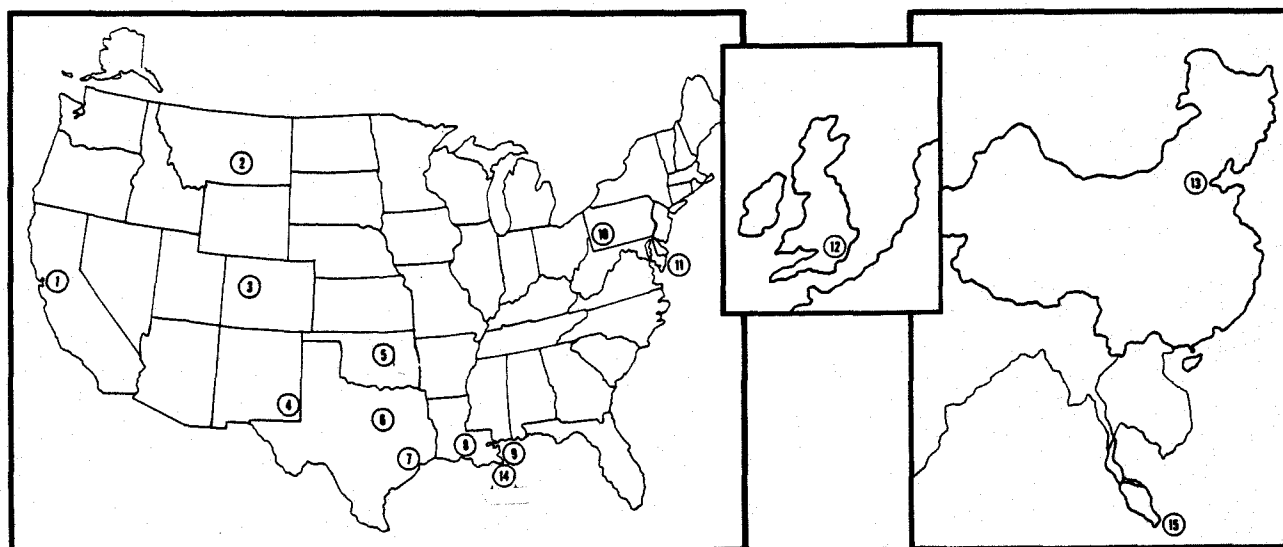
More than 11,500 registrants attended the 57th Annual Meeting held at The Rivergate Convention Center, September 26-29, establishing a new record. Presented in 47 sessions were 250 technical papers. The 1982 conference theme "Resource Management in a Changing Environment" was examined and discussed in a general session attended by more than 1,500 people. There were 262 exhibiting companies displaying products and services to registrants, utilizing more than 76,957 square feet of exhibit space.

Regional, Topical, and International Meetings

SPE sponsored or cosponsored 15 regional, topical, and international meetings during the year. Approximately 58 days were devoted to the presentation of technical papers, discussions and on-site technical exhibitions, indicative of the fundamental role of the Society in educating, presenting advanced technology and disseminating vital technical information. The highlight of the year was the joint sponsorship by SPE with the Petroleum Engineering Society of the Chinese Petroleum Society of the first major International Meeting on Petroleum Engineering held in conjunction with the SPE-sponsored International Petroleum Equipment and Technology Exhibition in the People's Republic of China. More than 80 technical papers were received by more than 6,000 engineers, managers and technical specialists. The conference was held March 17 through 24 in Beijing Exhibition Center where 300 firms from nine countries exhibited equipment and services in 32,500 square feet of exhibit space. Total attendance at the

exhibition exceeded 144,000. This was the first international exhibition received by the Chinese and the first association sponsored and managed exhibition in China.

The European Petroleum Conference in London (October 25-28) attracted an international assembly of 742 engineers and managers. More than 90 technical papers were presented at EUROPEC. The February 9-12 Offshore Southeast Asia Show drew more than 12,000 people who had an opportunity to participate in the presentation of 67 technical papers and view equipment and services displayed by 766 exhibitors in 58,000 square feet of exhibit space. New attendance records were again set for the Offshore Technology Conference in Houston, (co-sponsored with 10 other societies), which attracted more than 108,000 international attendance, petroleum-related management and industry specialists. Other meetings varied in attendance from 4,000 at regional meetings to 400 total registration at the limited-registration Forum Series Meetings in Glenwood Springs, Colorado.



(Map of World Showing Meeting Locations)

(1)	San Francisco	California Regional Meeting	March 24-26
(2)	Billings	Rocky Mountain Regional Meeting	May 18-21
(3)	Glenwood Springs	Forum Series	August 2-28
(4)	Hobbs	Production Technology Symposium	Nov. 8-9
(5)	Tulsa	Enhanced Oil Recovery	April 4-7
(6)	Dallas	Oilfield Geothermal Chemistry	Jan. 25-27
(7)	Houston	Offshore Technology Conference	May 3-6
(8)	Lafayette	Formation Damage	Mar. 24-25
(9)	New Orleans	Reservoir Simulation	Jan. 31-Feb. 3
(10)	Pittsburgh	Unconventional Gas Recovery	May 16-18
(11)	Washington	Eastern Regional Meeting	Nov. 3-5
(12)	London	European Petroleum Conference	Oct. 25-28
(13)	Beijing	International Petroleum Conference	Mar. 17-24
(14)	New Orleans	SPE Annual Technical Conference and Exhibition	Sept. 26-29
(15)	Singapore	Offshore Southeast Asia Show	Feb. 9-12

1982 SPE MEETINGS

<u>Subject of Meeting</u>	<u>Location</u>	<u>Number of Registrants</u>	<u># of Tech. Papers Given</u>
Oilfield & Geothermal Chemistry	Dallas	222	30
Reservoir Simulation Symposium	New Orleans	465	40
*Offshore Southeast Asia Show	Singapore	12,124	67
*International Meeting on Petroleum Engineering/SPE Petroleum Equipment Exhibition	Beijing	150,000	84
Formation Damage	Lafayette	861	22
California Regional Meeting	San Francisco	1,228	51
*Enhanced Oil Recovery Symposium	Tulsa	2,397	35
*Offshore Technology Conference	Houston	108,161	244
*Unconventional Gas Recovery	Pittsburgh	264	55
Rocky Mountain Regional Meeting	Billings	761	20
Forum Series	Glenwood Springs	400	N/A
SPE Annual Technical Conference and Exhibition	New Orleans	11,500	253
European Petroleum Conference	London, UK	742	97
Eastern Regional Meeting	Washington, D.C.	236	20
Production Technology Symposium	Hobbs	201	18

*Cosponsored with other organizations.

PUBLICATIONS

SPE monthly interfaces with members, local sections, the industry at-large and influential officials through its two international, highly regarded technical and professional publications: Journal of Petroleum Technology and the Society of Petroleum Engineers Journal.

The rapid advancement of the state of the art by SPE members is evident in the 38 percent increase this year of published technical papers in JPT and the 28 percent increase in SPEJ. Together, the two journals carried 78 more technical papers than in 1981—an increase of 35 percent to 301 technical papers. The Society published more than 6,500 technical pages during the year. The number of technical pages in both magazines increased by 25 percent from 2,090 in 1981 to 2,614 in 1982.

Growing with SPE membership, JPT now informs more than 50,400 readers, a 15 percent increase over last year. SPEJ enjoyed a 19 percent increase in readership now totaling over 15,000. Despite a general economic downturn, JPT, SPEJ, and the annual Membership Directory increased display advertising revenues by 8.5 percent over the preceding year. However, total number of display ad pages declined by two percent to 594 pages. Addition of advertising sales representatives in the United States, Canada and Europe helped lessen the economic impact on these advertising revenues.

The number of technical pages published in the annual Transactions volume and in other SPE books increased by 30 percent. Among technical book pages published during the year was the first title in the SPE Textbook Series, Well Testing, by John Lee. Publication of the book concludes four years effort on the part of Lee, professor of petroleum engineering at Texas A&M U., and the SPE Textbook Committee. The committee, formed in 1972, is charged with generating textbooks on all major topics for which no adequate book is available. The publication will fill a long standing need for a text that can be used to teach a beginning undergraduate course on transient well testing. Aimed at undergraduate students, the textbook summarizes major principles and engineering techniques and applies them to current problems.

In response to the acute need for high quality introductory texts, the committee has endorsed three additional textbooks. Anticipated is the Summer, 1983, publication of Applied Drilling Engineering. A two-volume textbook, Enhanced Oil Recovery, will be published in 1984. Well Logging, the committee's third and newest project is now being written. The Textbook Committee is currently polling petroleum engineering departments world wide to determine undergraduate textbook needs. After establishing a list of target topics, the committee will launch a new program to solicit book outlines.

SPE also published Thermal Recovery, the seventh title in the SPE Monograph Series, and the Spanish-language edition of The Reservoir Engineering Aspects of Waterflooding monograph. The Society joined with the Permian Basin Section to publish a book presenting extensive water resistivities data from that region.

The progress made by technical publications is the result of the involvement of hundreds of SPE committee members and authors. Monograph, Reprint Series, and Textbook Committee members worked on more than 20 titles to be published in these book series. Technical editors on the Editorial Review Committee screened hundreds of technical papers for publication in JPT and SPEJ. To help reduce this workload, committee membership was increased to 80, reaching out to involve individuals in North and South America and in Europe. J. E. Warren of Gulf Oil Corporation became the Society's Senior Technical Editor and chairman of the Editorial Review Committee.

Realignment of certain publications committee activities resulted from the work of an ad hoc Committee on Publications. Its "Master Plan for SPE Publications" won Board approval as an operating guideline to help publications and continuing education committees coordinate technical publication and contacts with authors and reviewers. New publications, increased technical content, and growing circulation were among the key features of the Society's publications program during 1982. As a result of recommendations derived from the Long-Range Plan, JPT added a new section entitled "SPE Briefing" to capsule news and activities of the Society's committees, sections, meetings, and other programs. The Society began a new information retrieval service, PetroSearch, to help members locate technical publications through electronic search media. The new member service offers discounted-rate searching of bibliographic data bases to locate information on specific topics.

CONTINUING EDUCATION

In April, 185 attendees of the SPE/DOE Enhanced Oil Recovery Symposium heard three short courses sponsored by the SPE Mid-Continent Section. The National Capital Section presented a short course on Economic Evaluation at the Eastern Regional Meeting. Registration for the short course was 23. SPE Continuing Education Committee is adding to its library of short courses with these topics: Gas Technology, Chemical Flooding, Reservoir Evaluation, Formation Damage, Reservoir Simulation and Production Optimization. Several of these courses will be available for presentation by sections in 1983.

At the 1982 Annual Meeting in New Orleans, the Society presented eight courses with 373 registrants. Two of the eight courses were presented for the first time. The SPE Continuing Education Committee is solving the difficult problems of transferring live courses into audience-stimulating videotape programs. Typical is the recent release of "Pressure Buildup and Drawdown Analysis" course. Production on several other courses continues.

DISTINGUISHED LECTURERS

The SPE Distinguished Lecturer Program, funded by SPE operating funds and a grant from Henry L. Doherty Endowment Fund provided 211 lectures to 80 sections in 1982 by 12 of the industry's most authoritative speakers. The lecture series serves as an educational tool for members and is a means through which meritorious achievements of selected lecturers are recognized. The 1982-83 slate of Distinguished Lecturers included: N. J. Adams, Adams & Roundtree Technology, Inc.; J. W. Collins, Cities Service Company; W. B. Gogarty, Marathon Oil Company; Dr. S. A. Holditch, Texas A&M U.; Dr. A. E. Lewis, Lawrence Livermore; R. L. Maby, Houston; J. M. Mach, Johnston-Macco Schlumberger; T. O. Marr, Conoco UK; Dr. H. A. Merklein, Texas A&M U.; L. L. Raymer, Schlumberger Well Services; A. H. Youmans, Dresser Atlas. Distinguished Lecturer Emeritus: Michel T. Halbouty, The Halbouty Center.

AWARDS

Four new awards were established in 1982, "for contributions not currently recognized and to encourage younger members." New awards include the SPE Public Service Award, SPE Young Member Outstanding Service Award, SPE Regional Service Award, and the recognition of an SPE Distinguished Member.

Receiving awards for outstanding contributions to petroleum engineering technology, the industry, the profession, and the Society at the 57th Annual Technical Conference and Exhibition were:

- | | |
|--------------------------------------|--|
| John Franklin Carll Award | - Floyd L. Scott, former director of research engineering, Hughes Tool Co. |
| Lester C. Uren Award | - William C. Goins, Jr., senior vice-president, O'Brien, Goins, Simpson & Associates, Inc. |
| DeGolyer Distinguished Service Award | - John C. Calhoun, Jr., deputy chancellor of Texas A&M U. |
| Cedric K. Ferguson Medal | - Walter B. Fair, senior reservoir engineer, Shell Oil Co. |
| SPE Distinguished Service Awards | - Dwayne E. Godsey, president, Twin-Eagle Petroleum Co. |
| | - Marvin L. Katz, vice-president of planning and evaluation, ARCO Oil and Gas Co. |
| | - Roland F. Krueger, research manager, Union Oil Co. of California |
| | - James G. Litherland, vice-president and treasurer, DeGolyer and MacNaughton, Inc. |

FINANCE

For 1982, income for Society operations was \$9,587,459 with a revenue commitment in expenses of \$8,963,568, compared with 1981 expenses of \$5,848,272.

Executive Committee of the Society of Petroleum Engineers of AIME

T. Don Stacy, President
J. R. Jorden, President-Elect
W. C. Barton, Jr., Past President
Bill M. Thompson, Treasurer
Dan K. Adamson, Executive Director

SPE Staff Management

Executive Director
Dan K. Adamson

Associate Executive Director/Manager
of Meetings & Exhibitions
Douglas L. Ducate

Administrative Services Mnager
Kenneth D. Conner

Communications Manager
Thomas W. Pellet

Manager, Special Projects
Roger R. Castenson

Operations Manager
Jane Lanier

Publications Manager/Editor
Jim McInnis

Respectfully submitted,



Dan K. Adamson, Executive Director
Society of Petroleum Engineers of AIME

**The Woman's Auxiliary
to the
American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.**

345 EAST 47th STREET, NEW YORK, N. Y. 10017

REPORT

of the

WAAIME

The year 10/1/81 to 9/30/82 continued to be a constructive one for WAAIME in terms of its basic scholarship loan fund and other programs. Membership started to show the effects of the increasingly unfavorable economic conditions in our industry and the country in general. Lay offs and mine closings brought about the dissolution of three Sections: Tennessee-Copper Basin, Arizona-Silver Bell and New Mexico-Carlsbad. Our total membership at the end of the year was 2,462, a decrease of 119. Our Sections now number 38, including Members-at-Large as a Section. This category of membership continues to be strong and provides an opportunity for participation for those in retirement or living too far away from any local Section.

The Scholarship Loan Fund (SLF), our basic purpose and the reason for WAAIME's tax exempt status, had a very active year aiding students in obtaining a technical education in Mining, Metallurgical and Petroleum Engineering, and related fields benefiting the mineral industry. In 1981 to 1982 ninety-three students were advanced funds that totaled \$97,000.00. Repayments were \$31,400.00; forty four loan recipients attained "paid-in-full" status; thirty-six graduated during the year. Contributions from the Sections and others totaled almost \$13,000.00. The total funds available for SLF loans any one year are the sum of the interest income from the SLF Endowment Funds, 75% of the contributions (25% is added to the Section SLF Endowment Fund), and 100% of repayments. At the May 1982 National Board SLF Meeting, forty seven new loans were approved and three emergency applications were granted during the summer, a total of fifty students sponsored by Sections; thirty two men and eighteen women (forty-one undergraduates and nine graduate students). The newly approved loans totaled almost \$83,000.00. Since 1920 the loans granted have amounted to \$1,499,432.00.

The Engineers for Tomorrow (EFT) program continues with its purpose of providing information on the earth science fields to elementary and high school students. An audio-visual distribution library is maintained by the National EFT Chairman; it contains films, slide-cassettes and film strips available on a loan basis to all our Sections.

The Chest Assistance to Students (CAS) program continues to help young men and women, proposed by the Sections, with funds for one time expenses - books, field trips, unexpected living costs and the odd emergency.

The Library program, with many Sections having active committees, donated many technical and non-technical books and magazines to local schools and libraries.

The Government, Energy and Minerals (GEM) committees continue to be active in some Sections, especially where AIME GEM committees are well established. The WAAIME National GEM Chairman publishes several bulletins or newsletters each year for our membership.

Newsletter is sent to each member about five times a year. It contains a summary of all National Board meetings and reports, many current articles of interest to our organization, and Highlights of Section News - activity reports and photographs sent by the local Sections. It has become customary to send a pre-convention issue by first class mail, to insure arrival of all last minute detail before the Annual Meeting.

Publicity sends releases on WAAIME activities, both local and national, to the magazines of the AIME Societies and several other technical publications.

The WAAIME takes pride in its role as the auxiliary to AIME, of its scholarship program, and all the other programs and committees designed to further the interests of our industry and the professions involved. We are most appreciative of the cooperation and help given us by Dr. Edward A. Buckley, Executive Director AIME, the AIME staff and many others in the member Societies.

Respectfully submitted,



Mrs. George E. Kruger
President, WAAIME