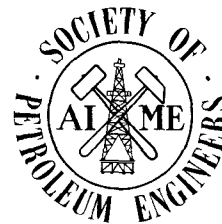
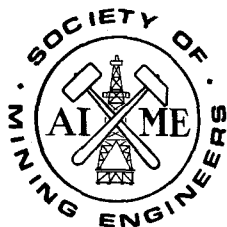
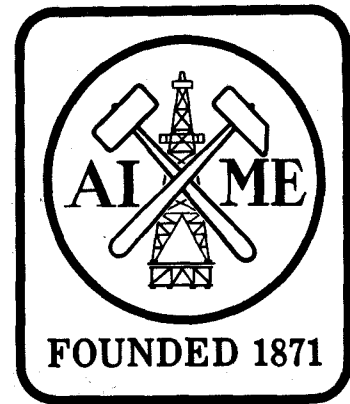


AIME Official Annual Report/1985



AIME
OFFICIAL ANNUAL REPORT
1985

TABLE OF CONTENTS

	<u>PAGE</u>
PRESIDENT.....	1
AIME BOARD OF TRUSTEES.....	5
AIME PAST PRESIDENTS AND HONORARY MEMBERS.....	9
HONORS AND AWARDS.....	11
114th AIME ANNUAL MEETING.....	14
STATEMENT OF AUDITORS.....Insert 1	
BALANCE SHEET, NOVEMBER 30, 1985 & 1984.....Insert 2	
REVENUE, EXPENSE, SURPLUS, 1985 & 1984.....Insert 3	
CHANGES IN ENDOWMENT AND QUASI-ENDOWMENT FUNDS, 1985 & 1984.....Insert 4	
NOTES TO FINANCIAL STATEMENTS.....Insert 5	
WOMAN'S AUXILIARY TO AIME.....	15

Report of the AIME President

It is a pleasure for me to report to the Member Societies and their members on the activities of AIME during 1985. I feel honored, indeed, to have been allowed to serve as the AIME President during a most significant time in its history.

The year 1985 was marked by major changes in the organizational structure and governance of the Institute. While there were some substantive legal reasons for effecting these changes, they were undertaken primarily because it is firmly believed that the changes will place the Societies in the position to respond more effectively to the needs of their members, now and in the foreseeable future.

After receiving approval from the individual members of the Societies, each of the Societies separately incorporated and obtained an exemption from federal income taxation under the provisions of Section 501(c)(3) of the Internal Revenue Code. As provided for in applicable AIME Bylaws, these actions were followed by the distribution of AIME assets to the Societies after receiving court approval to do so, as required by the New York State Not-for-Profit Corporation Law. The assets distributed to the Societies consisted principally of those which the Societies had generated and administered, but previously did not legally own due to the lack of corporate status. A total of approximately \$16,000,000 in assets was distributed to Societies on December 1, 1985, with approximately \$7,000,000 in assets being retained by the separate AIME Corporation. The Society Boards of Directors are now solely responsible for the assets and affairs of their respective organizations.

The new approach to governance of the Institute was implemented when the AIME Board of Trustees met for the first time on February 26, 1985. Consisting of equal representation from each of the Member Societies, the Board of Trustees is charged with carrying out the desires of the Member Societies in terms of managing the assets of the separate AIME Corporation, and facilitating cooperation and collective action among the Societies. Important to the new concept of governance is the provision that although the Board may act to adopt an AIME program or activity, each Member Society retains the right to decide unilaterally whether it desires to participate or share in the cost of the program or activity. In its three meetings during 1985, the Board of Trustees addressed these and other policy and procedural matters to set the stage for effective functioning in the separately incorporated mode. I am pleased to report that great progress was made, and I was most impressed with the commitment of everyone involved to strive to find areas for mutual cooperation and action.

Despite the considerable attention given to structural and governance changes during the year, AIME continued to serve the Societies and their members in a number of important ways. Some of these activities are worthy of comment.

AIME has, and will continue to administer, a comprehensive Awards Program, as

well as provide financial support to certain awards administered and bestowed by the Member Societies. In 1985, 20 AIME Endowment Funds were used to support Institute-wide and Society awards. An additional nine Institute-level awards were made without endowment fund support, including seven Honorary Membership awards, the Institute's highest honor. In every case, the awards were given to Society members to recognize their achievements in the various fields embracing the activities of AIME and the Societies. The many Society members who comprise the Institute-wide and Society awards committees play a vital role in the success of the Awards Program and their dedicated efforts are to be commended.

Again this year, effective use was made of other AIME Endowment Funds to advance knowledge in the engineering disciplines represented within the Institute to the benefit of Society members and the public at large. For example, the Seeley W. Mudd Memorial Fund supported the publication of an updated version of **Economics of the Mineral Industries**, co-sponsored with the Society of Mining Engineers the publication of the **Mineral Processing Handbook**, and provided financial support to the guidance efforts of the Societies, and to the Mineral Information Institute. Additionally, the Henry DeWitt Smith Scholarship Fund supported two graduate level scholarships, one in mining engineering and one in mineral processing. Other funds were used to support additional publications efforts, lecture series, undergraduate scholarships, and the Engineering Societies Library.

Turning briefly to meeting activities, AIME once again in 1985 conducted its Annual Meeting in conjunction with the joint Annual Meetings of the Society of Mining Engineers and The Metallurgical Society. In addition to the traditional Annual Meeting Luncheon at which the new AIME President was installed, and the Annual Banquet during which the Institute's major awards were presented, an excellent All-Institute Program was conducted under the able direction of Dr. Tobey Yu of the Society of Mining Engineers. The same meeting concept and format will be followed in 1986 in New Orleans, with 1987 AIME President Alan Lawley chairing the All-Institute Program Committee. At its meeting on October 24, 1985, the AIME Board of Trustees voted to continue to schedule the Annual Meeting in conjunction with the joint Annual Meetings of SME and TMS for 1987 and beyond. The Board also approved a new meeting format, consisting of a morning Board of Trustees Meeting, one AIME Keynote Session in the afternoon, and an AIME Awards Banquet, all held on Monday of the meeting week. This format permits traditional AIME activities to be carried out with the least conflict with Member Society activities.

One of AIME's most important roles is to actively participate or maintain liaison with external organizations. Except in those cases where these relationships are handled directly by the AIME Executive Director who, in turn, keeps the Member Societies appropriately informed, most of the formal representation is accomplished by appointing the members of the Member Societies to positions on the governing bodies, councils and committees of these external entities. Approximately 50 Society members perform such representational duties.

Along with the other Founder Societies, AIME retains its position and vested interest in the United Engineering Trustees (UET). In addition to three representatives on the UET Board, AIME is also represented on the Boards of the Engineering Foundation and the Engineering Societies Library. Dr. Frank Aplan of the Society of Mining Engineers is to be congratulated on his recent appointment as

the Chairman of the Engineering Foundation Board of Directors. It should also be noted that during 1985, Kenji Okazaki of The Metallurgical Society, and Stephen A. Marinello of the Society of Petroleum Engineers were awarded research initiation grants of \$17,000 each by the Engineering Foundation.

The year 1985 was a crucial one for the American Association of Engineering Societies (AAES), an organization which AIME played a key role in initially establishing, and in which it retains membership. Although much was expected of AAES when it was founded, it did not live up to expectations, leading AIME, in 1983, to seriously consider resignation unless corrective measures were taken, as outlined in a Board-approved position paper. I am gratified to report that much was accomplished during 1985 to enhance the effectiveness of AAES, and I am optimistic about its future. Beyond solving its financial problems, moving to Washington, D.C., and reconstituting its staff there, AAES managed during the year to revitalize the Engineering Manpower Commission, expand its efforts in formulating positions on public policy issues, complete a comprehensive and valuable engineering manpower utilization study, serve as an effective forum for engineering societies to exchange views on matters of common interest, and establish dialogue and working relationships with federal and other entities, such that it is building a reputation as an effective voice for the approximately 500,000 engineers who constitute the memberships of the AAES Member Societies. As a member of the AAES Executive Committee and Board of Governors in 1985 and 1986, I am committed to working toward increased effectiveness of AAES in the coming year.

Among other external relationships carried on during the year, AIME and its Member Societies continued to be actively involved in the governance and accreditation activities of the Accreditation Board for Engineering and Technology (ABET). Special note is made of the election of Gordon Geiger of The Metallurgical Society as the ABET President-Elect for 1985-1986, after which he will succeed automatically to the Presidency, and Donald Gentry of the Society of Mining Engineers as the Chairman-Elect of the Engineering Accreditation Commission after which he will succeed automatically to the Chairmanship in July 1986.

AIME and the Member Societies also participated in an important two-day conference hosted by the National Science Foundation which addressed the challenges facing the engineering profession in the future, and resulted in the formation of a number of task forces to deal more intensively with issues addressed at the conference. Additionally, three meetings of the Founder Society Presidents and Executive Directors provided further opportunities to exchange views on matters of common interest. AIME also maintained its relationship with the Australasian Institute of Mining and Metallurgy, a relationship built primarily on a jointly sponsored Distinguished Lecturer Exchange Program. These and other outreach activities too numerous to mention were instrumental in sustaining AIME's reputation as one of the major professional engineering organizations.

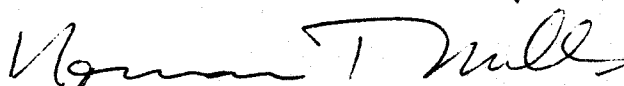
In my view, current AIME functions and activities as summarized above provide a solid foundation on which to build a viable role for AIME in the new organizational structure. However, as recognized by those committees involved in developing recommendations which led to the new structure, further study is needed to more fully define the future role and functions for AIME, recognizing

that the role and functions are subject to change with time. I am happy to report that action in this regard is already underway. As recommended by 1986 AIME President Arlen Edgar, the AIME Board of Trustees approved the formation of an ad hoc AIME Long Range Plan Committee comprised of two representatives from each of the Member Societies. The Committee is charged with setting a direction for developing a long range plan which will address AIME's activities over the next 10 years. It is anticipated that the Committee will complete its work and submit a final report to the AIME Board prior to the end of 1986.

Elsewhere in this Annual Report you will find the audited financial statement for the separate AIME Corporation for Fiscal Year 1985. As documented in the statement, the past year was very successful from a financial standpoint. The operating budget for the AIME Headquarters ended the year with a balance of revenue over expenses of \$75,000, and revenue from the AIME Endowment Funds exceeded expenses by approximately \$200,000. Close attention has and will continue to be paid to conducting AIME operations on a cost-effective basis, and to carefully managing the Endowment Funds, not only in terms of using them judiciously but also to follow an investment strategy aimed at achieving growth in total assets while meeting yearly income requirements.

I am indebted to the AIME Board of Trustees, the Society Boards of Directors, the AIME and Society staffs, committee members, and others for the dedicated support I received during my term as President. Finally, I should like to congratulate and pledge my full support to 1986 AIME President Arlen Edgar.

Respectfully submitted,



Norman T. Mills
1985 AIME President

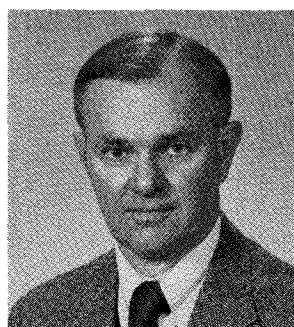
AIME



OFFICERS AND TRUSTEES 1986

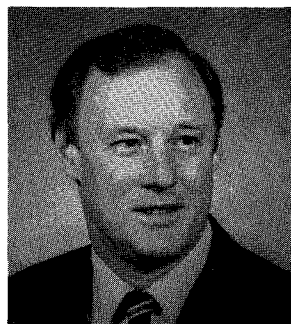
OFFICERS

PRESIDENT AND TRUSTEE



ARLEN L. EDGAR is an independent oil and gas investor and consultant in Midland, Texas. After graduating from the University of Texas in 1957, he joined Pan American Petroleum Corp. (now Amoco), working first in Odessa, then Midland. In 1961, he became associated with Leibrock, Landreth, Campbell and Callaway, rising to Manager of the Consulting Division before joining Tipperary Land Corp. as an officer and director in both Midland and Brisbane, Australia. He was General Manager of Western States Producing Co. from 1971 to 1973. Mr. Edgar has been Chairman of the Permian Basin Section and Chairman of the SPE Reprints, Investments, and Reserve Standards Committees. He served on the AIME Board from 1980-1982 and 1985, and as Vice President in 1982. A 1984 recipient of the SPE Distinguished Service Award, Mr. Edgar served as President of SPE in 1981. He is an SPE Distinguished Member and a Trustee of the SPE Foundation.

PRESIDENT-ELECT AND TRUSTEE



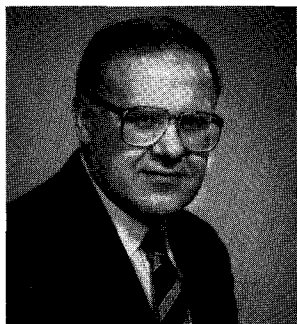
ALAN LAWLEY is Professor, Dept. of Materials Engineering, Drexel University, Philadelphia. He received his B.Sc. and Ph.D. in Metallurgy from the University of Birmingham, England. Dr. Lawley has been a post doctoral fellow at the University of Pennsylvania and Manager of the Solid State Sciences Laboratory of the Franklin Institute. From 1969 to 1979, he was Head of the Dept. of Materials Engineering at Drexel University. He has published over 100 technical papers, lectured world-wide, and is a consultant to industry and government in the areas of physical and mechanical metallurgy, powder metallurgy, and composite materials. Dr. Lawley is a Fellow of ASM, a member of the National Materials Advisory Board and Editor-in-Chief of the International Journal of Powder Metallurgy. He served as a Krumb Lecturer (AIME) in 1985 and is a Past President of The Metallurgical Society.

PAST PRESIDENT AND TRUSTEE



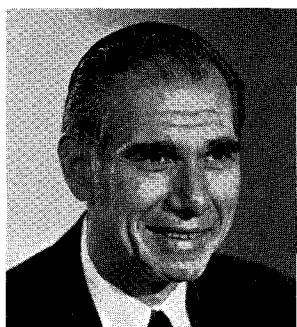
NORMAN T. MILLS is Materials Manager, Inland Steel Company. He received his B.S. in Chemical Engineering from Purdue in 1959 and his M.S. in Chemical Engineering from the University of Delaware in 1961. Before joining Inland Steel in 1966, he worked in research at Standard Oil Company of Indiana, the Linde Division of Union Carbide, and the Allison Division of General Motors. His primary expertise is in the area of steelmaking and continuous casting. Mr. Mills served as President of the Iron and Steel Society in 1981, as Vice President of AIME in 1982, and as a member of the AIME Board in 1980-1982 and 1984-1985. He was elected a Distinguished Member of the Iron and Steel Society in 1983, and is active as Vice President of the ISS Foundation. Mr. Mills is a member of numerous honorary fraternities and is listed in several directories of prominent engineering and science professionals.

PRESIDENT-ELECT DESIGNATE AND TRUSTEE



THOMAS V. FALKIE is President of Berwind Natural Resources Company in Philadelphia, Pennsylvania. He received his B.S., M.S. and Ph.D. in Mining Engineering from The Pennsylvania State University. From 1961-69 he held various technical and managerial positions with International Minerals and Chemical Corp. in Illinois and Florida. From 1969-74 he was Professor and Head, Dept. of Mineral Engineering, Penn State University. Dr. Falkie also chaired Penn State's interdisciplinary program in Mineral Engineering Management. From 1974-77 he was Director of the Bureau of Mines, U.S. Dept. of the Interior. A Distinguished Member of the Society of Mining Engineers, he was the 1985 President of the Society. He has served on the Board of Directors of both SME and AIME, and was an AIME Vice President in 1977-78. Dr. Falkie was a Henry Krumb Lecturer in 1977-78, and has presented numerous publications and speeches on mining, mineral and energy topics.

TRUSTEES



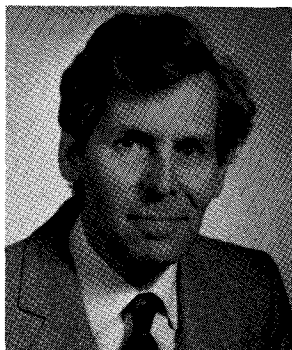
GEORGE S. ANSELL was appointed President of the Colorado School of Mines in 1984. He received his B.S., M.S. and Ph.D. in Metallurgical Engineering from Rensselaer Polytechnic Institute. Prior to assuming the Presidency of CSM, he was a member of the faculty at RPI and served as Dean of the School of Engineering from 1974-1984. Dr. Ansell has published extensively and is a consultant to industry. Among the numerous awards he has received are the TMS Hardy Gold Medal, the Young Teacher Award of the American Society for Metals, and the McGraw Research Award of the American Society for Engineering. He holds many honorary society memberships and memorial lectureships. He will serve as President of the Metallurgical Society in 1986 after serving the Society as Treasurer for four years.



DENNIS E. GREGG is General Manager—Europe and Mid-East—International Production with Conoco Inc. in Houston. After receiving his degree in Petroleum Engineering from the Colorado School of Mines in 1950, Mr. Gregg joined Conoco in the U.S. Gulf Coast Area. He has been involved with Conoco's International Production since 1966. An active member of the Society of Petroleum Engineers, Mr. Gregg has held offices in the New York Section and was Chairman-elect of that Section in 1973 when he was transferred to Conoco's London office. While based in London, he participated in the formation of the SPE London Section. In 1973 he was co-Chairman of the first London-based European Spring Meeting. Mr. Gregg served as an SPE Director from 1980-1983 and is currently SPE President.



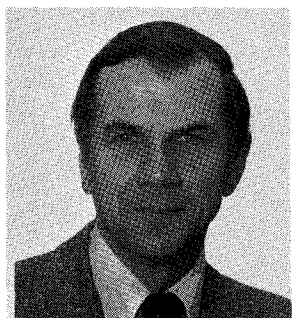
BRUCE A. KENNEDY is a Senior Vice President-Minerals of Asamera Inc. in Calgary, Alberta, Canada. He received his B.Sc. in Mining Engineering in 1965 from the Royal School of Mines, Imperial College of Science and Technology, University of London. Mr. Kennedy began his professional career with the Anaconda Company involved with their mines in the U.S., Canada, Mexico and Chile. In 1972 he joined Golder Associates, later becoming a Vice President, Principal and Director of that firm. In late 1981, he became President of Thyssen Mining Construction, Inc., the U.S. subsidiary of Thyssen Schactbau GmbH of West Germany. He assumed his current position in June of 1985. Mr. Kennedy is a past Chairman of the Mining and Exploration Division of SME. He was a Director of SME from 1975-1982, Treasurer of SME from 1980-1982, a Director of AIME from 1979-1983, and a Vice President of AIME in 1981 and 1983. Mr. Kennedy is a Distinguished Member of SME and is President-Elect of the Society.



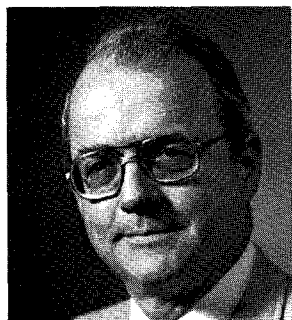
ALEXANDER McLEAN was graduated with a B.Sc. in Applied Chemistry and a Ph.D. in Metallurgy from the University of Glasgow. He was an Associate Professor at McMaster University before moving to the Graham Research Laboratory, Jones & Laughlin Steel Corporation, as supervisor of the deoxidation and casting group. In 1970 Dr. McLean joined the University of Toronto, Dept. of Metallurgy and Materials Science, and in 1984 was appointed Director of the Ferrous Metallurgy Research Group. Dr. McLean is also a Director of Intersteel Consultants Ltd., Toronto and of Tibur Howden Inc., Scarborough, Ontario. A Distinguished Member of ISS, Dr. McLean has served on the Board and as Chairman of the Process Technology Division. He is a 1977 recipient of the Briggs Award and a Citation for best paper on continuous casting, 39th Electric Furnace Conference. He is a Fellow of the Institute of British Foundrymen and has chaired the Iron and Steel Section of CIM. Since 1982 Dr. McLean has served as the AISI Distinguished Professor at the University of Toronto. He was the President of ISS in 1985.



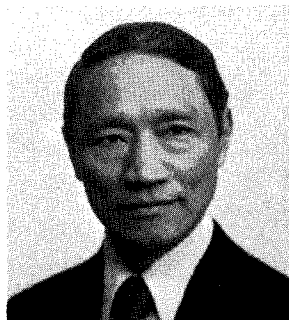
NOEL D. RIETMAN is Vice President and General Manager, Northern Division, Diamond Shamrock Exploration Company. A graduate of Texas Technical University with a B.S. in Petroleum Engineering and a B.A. in Geology, he also holds an M.S. in Mathematics from West Texas State University. He joined Diamond Shamrock in 1957 and has served there as Chief Petroleum Engineer and as Manager of Drilling and Production. Mr. Rietman has served SPE as Amarillo Petroleum Section Chairman, Program Chairman and General Chairman of the Deep Drilling and Production Symposium and on various committees. He has also served on the AIME Board from 1982-1984 and as Region III Director for SPE. Mr. Rietman is currently SPE President-Elect.



PETER TARASSOFF is Director of R & D, Noranda Research Centre, Quebec. He received his B.Eng. in Metallurgical Engineering from McGill University, and his Sc.D. in Metallurgy from MIT. He began his career with the Quebec Iron and Titanium Corp., and in 1964 joined Noranda as a Research Engineer, assuming his present position in 1982. Dr. Tarassoff is a Past President of the Metallurgical Society of CIM. A member of TMS since 1955, he is a recipient of the TMS Extractive Metallurgy Technology Award and was the 1984 TMS Extractive Metallurgy Lecturer. Dr. Tarassoff has served on the TMS Board of Directors (1980-83), chaired the Long Range Planning Committee (1982), and was President of TMS in 1985.



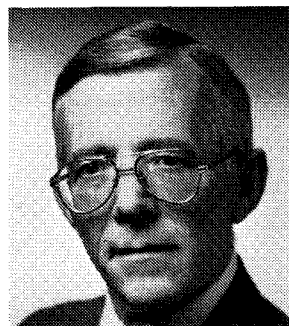
G. HUGH WALKER is Manager of Coke and Iron Production at Dofasco, Inc., Hamilton, Ontario. He was graduated from Queens University, Kingston, Ontario, with a B.Sc. in Civil Engineering, and received an M.B.A. from the University of Western Ontario. Joining Dofasco in 1959, Mr. Walker worked in the Engineering Department and in Mechanical Maintenance prior to moving to the Coke and Iron Production Division. Mr. Walker served as the Chairman of the AISI Technical Committee on Blast Furnace Practice in 1980-1981, and presently serves on the Board of Directors of Eastern States-Blast Furnace and Coke Oven Association. A member of the Iron and Steel Society Board in 1981-1983, Mr. Walker served as the Chairman of the ISS Ironmaking Division in 1981-1982. He is the 1986 President of ISS.



A. TOBEY YU is co-founder and Chairman of ORBA Corporation, a Division of AMCA International. He received his M.S. at MIT, Ph.D. at Lehigh, and M.B.A. at Columbia. In his 30-year career, Dr. Yu has played an active role as an educator, engineer, and manager in mining, processing, transportation and materials handling. With over 150 publications here and abroad, he also taught at N.Y.U. School of Engineering and Cooper Union. He was Technical Director of Cia. Minera Santa Fe in Chile; Vice President, Operations of Hewitt-Robins, a Division of Litton Industries. Dr. Yu's recent awards include the ASCE Outstanding Engineering Achievement of 1977 and the NSPE Outstanding Engineering Achievements in 1976, 1978 and 1980. He served as an AIME Director in 1984 and is the 1986 President of SME.



JOHN K. HAMMES, AIME VICE PRESIDENT-FINANCE, is Vice President, Metals and Mining Dept., Citibank, N.A., New York. He joined Citibank in 1968 as a Mining Engineer and was named a Vice President in 1972. From 1965 to 1968, he was employed by the Metal Mining Division of Kennecott Copper Corp. Prior to that, he worked for the U.S. Bureau of Mines under a fellowship program supporting research on the Lake Superior iron pellet industry. Mr. Hammes received his Bachelor's degree from the University of Missouri and his M.S. and Ph.D. in Mining Engineering from the University of Minnesota. He is a Past Chairman of the New York Section of AIME and has served as AIME Vice President-Finance since 1977.



ROBERT H. MARCRUM, AIME EXECUTIVE DIRECTOR AND SECRETARY, came to AIME in November, 1983, after a career of over 29 years as a U.S. Army officer. In addition to various command and staff assignments with artillery units, he served on the staff and faculty of the United States Military Academy (USMA) at West Point, in the Office of the Joint Chiefs of Staff at the Pentagon, as the Chief of Staff of the Army's Communications-Electronics Command and as the Post Commander for Fort Monmouth, N.J. He served two tours of duty in Korea and one each in Germany and Vietnam. He holds a B.S. in Engineering from USMA, an M.S. in Industrial Relations from Purdue University, and is a graduate of the Army's Command and Staff College.

AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC.
345 East 47th Street
New York, New York 10017

Member Societies

Society of Mining Engineers
Caller No. D
Littleton, CO 80127
Telephone: 303/973-9550
Claude L. Crowley, Executive Director

The Metallurgical Society
420 Commonwealth Drive
Warrendale, PA 15086
Telephone: 412/776-9000
Alexander R. Scott, Executive Director

Iron and Steel Society
410 Commonwealth Drive
Warrendale, PA 15086
Telephone: 412/776-1535
Lawrence G. Kuhn, Executive Director

Society of Petroleum Engineers
P.O. Box 833836
Richardson, TX 75083-3836
Telephone: 214/669-3377
Dan K. Adamson, Executive Director

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

AIME PAST PRESIDENTS

Active List

Clyde Williams	1947	James B. Austin	1973
Michael L. Haider	1952	Wayne E. Glenn	1974
Carl E. Reistle, Jr.	1956	Julius J. Harwood	1976
Augustus B. Kinzel	1958	H. Arthur Nedom	1977
Ronald R. McNaughton	1961	Wayne L. Dowdey	1978
Lloyd E. Elkins	1962	William H. Wise	1979
Karl L. Fetter	1964	M. Scott Kraemer	1980
Thomas C. Frick	1965	Robert H. Merrill	1981
Walter R. Hibbard, Jr.	1967	Harold W. Paxton	1982
John R. McMillan	1968	Edward E. Runyan	1983
James Boyd	1969	Nelson Severinghaus, Jr.	1984
John C. Kinnear, Jr.	1970	Norman T. Mills	1985
John S. Bell	1971		

AIME HONORARY MEMBERS

HONORARY MEMBERSHIP is awarded in appreciation of outstanding service to the Institute or in recognition of distinguished scientific or engineering achievement in fields embracing, broadly speaking, the activities of AIME and its Member Societies.

<u>Year of Election</u>		<u>Year of Election</u>	
Nathaniel Arbiter	1975	Michel T. Halbouty	1972
James B. Austin	1977	Julius J. Harwood	1980
Edmund C. Babson	1985	John F. Harvard	1980
Charles S. Barrett	1979	Claude R. Hocott	1974
John S. Bell	1976	M. King Hubbert	1977
James Boyd	1973	Richard N. Hunt	1965
Charles M. Brinckerhoff	1971	Donald L. Katz	1985
John C. Calhoun, Jr.	1975	Augustus B. Kinzel	1968
Morris Cohen	1980	M. Scott Kraemer	1983
Jesse F. Core	1980	H. Mark Krause, Jr.	1982
Donald A. Dahlstrom	1985	Carleton C. Long	1971
Wayne L. Dowdey	1983	George H. Love	1972
Robert C. Earlougher	1984	Plato Malozemoff	1985
Lincoln F. Elkins	1977	Dean A. McGee	1977
Lloyd E. Elkins	1969	Robert H. McLemore	1976
John F. Elliot	1982	Sir Ian McLennan	1971
Karl L. Fetter	1975	John R. McMillan	1984
Thomas C. Frick	1970	Frank W. McQuiston, Jr.	1977
Robert B. Gilmore	1985	Robert H. Merrill	1984
Wayne E. Glenn	1979	Stanley D. Michaelson	1977
Michael L. Haider	1963	Charles V. Millikan	1965

AIME Honorary Members (Continued)

Henry T. Mudd	1981
Morris Muskat	1971
H. Arthur Nedom	1981
Melvin E. Nickel	1978
Earl R. Parker	1982
William O. Philbrook	1985
Albert J. Phillips	1972
Fred H. Poettman	1984
William N. Poundstone	1982
Nathan E. Promisel	1974

Henry J. Ramey, Jr.	1984
Carl E. Reistle, Jr.	1960
Harrison H. Schmitt	1972
Cyril Stanley Smith	1973
Simon D. Strauss	1980
Michael Tenenbaum	1979
Norman L. Weiss	1974
Clyde Williams	1970
William H. Wise	1984
A. F. Van Everdingen	1985

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

RECORD OF HONORS AND AWARDS PRESENTED BY AIME IN 1985

The following Honors and Awards were presented by AIME in 1985:

HONORARY MEMBERSHIP was conferred upon

Robert C. Earlougher, "For his contributions to improvements in water-flooding and other secondary oil recovery technologies that have resulted in significant increases of oil recovery worldwide; and for more than a half-century of active participation in programs of the Society of Petroleum Engineers and of the Institute."

John F. Havard, "For exceptionally meritorious service to the Institute through outstanding performance in activities of unique worth to SME-AIME including his present role as Chairman of the Society's first long-range planning effort and for significant contributions to the profession of mining engineering and geology through an extended career of distinctive performance in important and challenging positions."

John R. McMillan, "For a distinguished management career in major and independent oil companies; for active participation in and leadership of industry professional and technical organizations; and for leadership as President of the Society of Petroleum Engineers and of AIME."

Robert H. Merrill, "For his work in rock mechanics and mine design and many contributions to the technical literature and for his long service to AIME and SME-AIME, culminating in the Presidency of SME-AIME in 1973 and of AIME in 1981, and his continuing involvement in Institute activities."

Fred H. Poettmann, "For noteworthy contributions to advancements in secondary and tertiary oil recovery technology, and natural gas storage and transportation; and for dedicated service at all levels including directorships of the Society of Petroleum Engineers and of AIME."

Henry J. Ramey, Jr., "In recognition of significant technical advances to thermal technology; and for technical contribution in the fields of fluid mechanics, secondary recovery, well testing, and geothermal energy; for service to the petroleum engineering professional as a director of the Society of Petroleum Engineers; and for his guidance work with petroleum engineering students."

William H. Wise, "In recognition of his contributions in the manufacture of ferro-alloys and his leadership in the Iron and Steel Society and the Institute."

The **JAMES DOUGLAS GOLD MEDAL** to **Merton C. Flemings**, "For notable contributions to the theory and practice of forming and processing metals and their alloys."

The **BENJAMIN F. FAIRLESS AWARD** to Frank W. Luerssen, "For his leadership in the modernization of steelmaking through new technology and his strong commitment to the continued development of the iron and steel industry."

The **HAL WILLIAMS HARDINGE AWARD** to James C. Bradbury, "Research scientist and author. For service to the Industrial Minerals Division of the Society of Mining Engineers and for his geologic studies for fluorspar, tripoli, and carbonate rocks."

The **ANTHONY F. LUCAS GOLD MEDAL** to N. Van Wingen, "For a long and distinguished career as author, petroleum engineer, educator, and consultant; and as a leader in the advancement of petroleum production technology particularly in secondary oil recovery."

The **ROBERT EARLL McCONNELL AWARD** to Robert W. Bartlett, "For his ability to combine a profound knowledge of engineering fundamentals with an instinct for commercial applications and his innovative leadership in the mining profession."

The **ERSKINE RAMSAY MEDAL** to Robert H. Quenon, "...for his outstanding leadership and contributions to the coal industry and various coal industry organizations, including responsible support of AIME over the years."

The **CHARLES F. RAND MEMORIAL GOLD MEDAL** to Ralph E. Bailey, "For his outstanding leadership in the coal and petroleum industries as an integral part of his management of Consolidation Coal Co. and Conoco, Inc."

The **ROBERT H. RICHARDS AWARD** to Alban J. Lynch, "For his leadership in developing and commercially implementing advanced engineering methods to understand, optimize and control grinding, classifying and flotation circuits."

The **ENVIRONMENTAL CONSERVATION DISTINGUISHED SERVICE AWARD** to Seth J. Abbott, Jr., "For his untiring efforts to bring the interest of the government, the petroleum industry and the environmental community together to address environmental issues."

The **MINERAL INDUSTRY EDUCATION AWARD** to William R. Holden, "In recognition of his exceptional contributions to the education and development of young engineers; and for his dedication to teaching, authorship and laboratory development in petroleum engineering education."

The **MINERAL ECONOMICS AWARD** to John E. Tilton, "To recognize contributions in teaching mineral economics and research in resource economics, international trade and the economics of technological change and materials substitution."

The **ROSSITER W. RAYMOND MEMORIAL AWARD** to Yanis C. Yortsos, for his paper "Distribution of Fluid Phases Within the Steam Zone in Steam-Injection Processes."

LEGION OF HONORS FIFTY-YEAR MEMBERS:

Paul W. Allen, David D. Baker, George M. Baumann, Neil S. Beaton, William

Bellano, Robert A. Blake, Charles C. Boley, James R. Caldwell, Donald F. Campbell, Vincente Cisneros, Strathmore R. B. Cooke, James D. Crawford, E. G. Dahlgren, David H. Davis, George H. Deike, Jr., Gerhard Derge, E. D. Dilling, Theodore A. Dodge, Walter E. Duncan, Floyd W. Erickson, J. McLaren Forbes, Charles G. Foreman, Gilford B. Gaylord, W. H. Goodrich, Edwin A. Goranson, Klem B. Gross, William D. Hanna, Dwight L. Harris, John F. Havard, Charles F. Herbert, Robert M. Hess, Charles V. O. Hughes, Alex B. Jackson, Raymond W. Jenkins, Fred E. Johnson, Roy A. Johnson, Sheldon Jones, H. F. Johnston, Donald L. Katz, Raymond B. Kelly, Sr., Garman O. Kimmell, Edward E. Liebig, John C. Lokken, Blake M. Loring, George Marshall, A. C. Melting, Robert S. Moehlman, F. R. Morral, Henry T. Mudd, Roland B. Mulchay, Richard S. Newlin, Telfer E. Norman, L. Arthur Norman, Jr., Philip D. Pearson, John Peperakis, William T. Pettijohn, George M. Potter, George R. Powe, Bailey E. Price, David D. Rabb, Robert H. Ramsey, Ralph W. Rampton, Robert H. Raring, S. F. Ravitz, Fred P. Reinhard, Joe W. Ribotto, Kenyon E. Richard, William J. Rundle, F. A. Rutledge, Floyd S. Sanders, Harry A. Shaw, Jr., Daniel C. Shay, Lyle W. Smith, Ernest M. Spokes, Keith C. Stansmore, Franklin E. Stasch, Albert B. Stevens, Maynard M. Stover, Leonard Tofft, Marshall C. Turner, Theodore J. Voll, Henry F. Warden, Harry V. Warren, Lendall P. Warriner, Robert J. Westwood, Glenn S. Wilder, Robert D. Williams, Clark L. Wilson, L. Kenneth Wilson, G. L. Yates, Lester G. Zeihen.

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

REPORT ON THE
114th AIME ANNUAL MEETING

The 114th AIME Annual Meeting was held in New York City, February 24-28, 1985. The New York Hilton served as the headquarters hotel for AIME, the Society of Mining Engineers, the Society of Petroleum Engineers and WAAIME. The Metallurgical Society and the Iron and Steel Society were headquartered at the Sheraton Centre.

Some 3,400 members, non-members and students attended the technical sessions sponsored by the AIME Constituent Societies during the five-day meeting. Three sessions were sponsored by the AIME All-Institute Annual Meeting Program Committee. These sessions, held at the New York Hilton, addressed the subjects of managing natural resource companies in austere times and trends and advances in microcomputer application for natural resources.

One of the highlights of the Annual Meeting was the AIME Annual Luncheon, held on February 25 at the Sheraton Centre. Mr. Norman T. Mills, Inland Steel Company, was installed as 1985 AIME President, assuming the position from 1984 President Nelson Severinghaus, Jr. Members of the 1984 AIME Board of Directors were recognized for their service to the Institute, and the newly-constituted AIME Board of Trustees was introduced. Concluding the Luncheon program, Jack E. Thompson, Vice Chairman Newmont Mining Corp. and Chairman of the Board, Newmont Oil Co., addressed the group on the topic of "The Changes in the Natural Resources Industries."

The 114th AIME Annual Banquet and Awards Ceremony was held Tuesday evening, February 26 at the Sheraton Centre. 1984 President Severinghaus served as the Master of Ceremonies for the Awards Ceremony during which several major Institute awards, including Honorary Membership, were presented, followed by a short address by Incoming President Mills.

To the Board of Trustees of the
American Institute of Mining, Metallurgical,
and Petroleum Engineers, Inc.:

We have examined the balance sheets of the AMERICAN INSTITUTE of MINING, METALLURGICAL, and PETROLEUM ENGINEERS, INC. (Note 1a) as of November 30, 1985 and 1984 and the related statements of revenue and expenses and surplus and changes in endowment and quasi-endowment 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 the American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. (Note 1a) at November 30, 1985 and 1984 and the results of its operations and the changes in its endowment and quasi-endowment fund balances for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Coopers + Lybrand

New York, New York
January 6, 1986.

STATEMENTS of REVENUE and EXPENSES and SURPLUS
for the years ended NOVEMBER 30, 1985 and 1984 (Note 1a)

	<u>1985</u>	<u>1984</u>
Revenue:		
Contributions by Member Societies for:		
Other engineering federations	\$154,165	\$150,370
Administrative expenses	56,000	68,462
Appropriations from endowment funds	272,000	271,000
Offshore Technology Conference	43,516	20,449
Meetings	37,555	63,952
Interest and dividends (Note 1f)	22,199	21,755
Miscellaneous	<u>18,070</u>	<u>34,651</u>
	<u>603,505</u>	<u>630,639</u>
Expenses:		
Federation support	162,165	158,370
Meetings	31,273	63,680
General and administrative expenses (Note 5)	<u>334,776</u>	<u>397,759</u>
	<u>528,214</u>	<u>619,809</u>
Excess of revenue over expenses	75,291	10,830
Surplus (unrestricted):		
Balance, beginning of year	<u>10,830</u>	<u>134,686</u>
	86,121	145,516
Transfer to Endowment funds	<u> </u>	<u>134,686</u>
Balance, end of year	<u>\$ 86,121</u>	<u>\$ 10,830</u>

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

STATEMENTS of CHANGES in ENDOWMENT and QUASI-ENDOWMENT FUNDS
for the years ended NOVEMBER 30, 1985 and 1984 (Note 1a)

	<u>1985</u>	<u>1984</u>
Balance of fund accounts, beginning of year	\$6,594,318	\$6,180,662
Revenue:		
Net gain on sales of investments (Note 1e)	125,525	84,896
Interest and dividends, net of investment advisor and custodian fees of \$38,992 in 1985 and \$33,212 in 1984 (Note 1f)	423,835	475,446
Sales of books, volumes, etc.	75,365	56,899
Royalties from oil and gas deeds	35,571	31,265
Transfers:		
From annual meeting surplus		46,385
From operating surplus		<u>134,686</u>
	<u>660,296</u>	<u>829,577</u>
Expenses and appropriations:		
Publication expenses	90,844	72,270
Awards	31,803	37,090
Sundry expenses	66,156	35,561
Appropriations to operating funds	<u>272,000</u>	<u>271,000</u>
	<u>460,803</u>	<u>415,921</u>
Balance of fund accounts, end of year	<u>\$6,793,811</u>	<u>\$6,594,318</u>

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

NOTES to FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

a. General

The financial statements comprise the accounts of the American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. (AIME). They do not include the accounts of the Society of Mining Engineers (SME), the Society of Petroleum Engineers (SPE), The Metallurgical Society (TMS), and the Iron & Steel Society (ISS), the four Member Societies of AIME.

In order to prepare AIME and the Member Societies to meet future challenges and opportunities, and to better serve their members, the Board of Directors of each Society adopted Bylaws and Articles of Incorporation which permits separate incorporation of each Society as provided by existing AIME Bylaws. The proposed Bylaws and Articles of Incorporation were approved by the respective Society's members in November 1984; and each Society became incorporated under the name of the respective Society, Inc. during 1985.

Quasi-endowment funds of \$5,420,474 and \$5,283,587 at November 30, 1985 and 1984, respectively, represent amounts which have been restricted by AIME's Board of Trustees. The Board of Trustees has also determined that such funds be retained and invested.

AIME's Board of Trustees periodically make appropriations from interest and dividend income of endowment funds to the operating fund and the individual Member 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. Equipment, Furniture and Fixtures

Equipment, furniture and fixtures are recorded at cost and are depreciated on the straight-line method over their estimated useful lives. Depreciation expense for 1985 and 1984 were \$6,730 and \$5,334.

CONTINUED

NOTES to FINANCIAL STATEMENTS, Continued

1. Summary of Significant Accounting Policies (continued)

d. Investments

Investments purchased are carried at cost or, if acquired by gift, at market value on date of gift plus accrued interest, where applicable. Purchases and sales of securities are reflected on a trade-date basis. An adjustment of the carrying value of the investment is recorded whenever market value is significantly below the carrying value.

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 commingled pool of investments are allocated to the individual funds based on their relative book values at the end of each quarter.

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 ex-dividend date.

g. Pensions

AIME and its four Member Societies have a defined benefit pension plan which covers substantially all full-time employees and is noncontributory with regard to the first \$10,000 of salary. Contributions are required from eligible employees who elect to participate in the contributory aspect of the plan and whose salaries exceed \$10,000. At December 1, 1984, the most recent actuarial valuation date, the Plan's net assets available for benefits (\$1,965,700) exceeded the actuarial present value of accumulated vested and nonvested benefits (\$1,140,300). AIME's portion of this actuarial data is not separately determinable. While contributions were not required in 1985 and 1984 under the minimum funding requirements of ERISA, AIME accrued and charged to expense its portion of the normal cost which amounted to \$500 and \$800 in 1985 and 1984, respectively.

CONTINUED

NOTES to FINANCIAL STATEMENTS, Continued

2. Financing of TMS/ISS and SME Headquarters Facilities

TMS/ISS Headquarters

During 1978, TMS/ISS 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, 1985 and 1984, the balance of the loan plus accrued interest at 7.3% (1985) and 8.6% (1984) per annum was \$237,430 and \$247,639, respectively.

SME Headquarters

On February 28, 1978, AIME's Board of Trustees 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. (See Note 8).

During 1979, SME 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, 1985 and 1984, the balance of the loan plus accrued interest at 7.3% (1985) and 8.6% (1984) was \$397,412 and \$414,136, respectively.

3. Changes in Investments

Endowment and quasi-endowment funds:	<u>1985</u>	<u>1984</u>
Investments at cost plus accrued interest, beginning of year	\$5,235,811	\$4,946,822
Purchases of securities	<u>3,249,609</u>	<u>4,512,383</u>
	8,485,420	9,459,205
Sales of securities	<u>3,129,114</u>	<u>4,287,801</u>
	5,356,306	5,171,404
Net realized gain on sales of securities	125,525	84,896
Net change in accrued interest	<u>(9,045)</u>	<u>(20,489)</u>
Investments at cost plus accrued interest, end of year	<u>\$5,472,786</u>	<u>\$5,235,811</u>

CONTINUED

NOTES to FINANCIAL STATEMENTS, Continued

4. Advances to United Engineering Trustees, Inc.

In accordance with an agreement between AIME and the United Engineering Trustees, Inc. (UET), AIME 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. AIME's share of these costs during 1985 and 1984 was \$46,956 and \$46,425, 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%.

5. General and Administrative Expenses

General and administrative expenses consist of the following:

	<u>1985</u>	<u>1984</u>
Payroll and employee benefits	\$162,198	\$193,652
Audit and legal services	47,180	26,270
Rent	46,956	80,424
AIME Board activities	17,444	10,174
Supplies, postage and maintenance and repairs	15,199	14,471
Insurance	9,161	9,883
Depreciation	6,730	5,334
Publications and printing	6,360	20,871
Other	23,548	36,680
	<u>\$334,776</u>	<u>\$397,759</u>

6. Reclassifications

Certain amounts in the Fiscal 1984 financial statements have been reclassified to conform to the Fiscal 1985 presentation.

7. Tax Status

AIME is a not-for-profit organization exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code.

8. Subsequent Event

In connection with the separate incorporation of the Member Societies described in Note 1a, the AIME Board of Trustees has approved the transfer of one-half of the Rocky Mountain Fund to SME. Such transfer will amount to approximately \$130,000 and will be accomplished by forgiving AIME's \$100,000 advance to SME (see Note 2) in fiscal year 1986 and by cash payments, over a period of time, of approximately \$30,000. The amount to be transferred to SME is comprised only of accumulated earnings on the fund; the principal of the fund will be maintained by 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

There has been progress in all programs of WAAIME during the year 10/1/84 to 10/1/85 even though the minerals industry stress has been felt in many areas, particularly membership. We lost three sections this year, Arizona-Ajo, Arizona-Casa Grande, and Michigan-White Pine, leaving us with 34 Sections. Membership decreased from 2,141 to 2,027, a loss of 114. A vigorous membership campaign is starting to show positive results.

We zealously guard our tax exempt IRS status and our financial status. Our investment portfolio is supervised by Brown Brothers, Harriman & Co.; Coopers and Lybrand are our auditors; Paul Goodman is our C.P.A. Our portfolio for Endowment Funds shows good growth.

The Scholarship Loan Fund (SLF), which is our basis for a tax exempt status, has continued the strong support to students majoring in the Earth Science and related fields. A student applying for a loan must be sponsored and approved by one of the WAAIME Sections, and the application then presented to the National Board for final approval. \$95,900.00 was advanced to students during the fiscal year 10/1/84 - 10/1/85. Since the original loan was granted, a total of \$1,796,295.00 has been awarded, interest free, on a 50% repayment basis to 1263 students. In May 1985, 40 new loans were approved totaling almost \$105,000.00 to 24 men and 16 women. 29 were undergraduates and 11 were graduate students. The major fields of study were: Petroleum (6), Mining Engineering (5), Metallurgy (8), Geology (7), Geological Engineering (8), Material Science and Engineering (3), Geophysics (1), and Hydrogeology (2). The total funds available in any one year are the sum of the interest income from Endowment Funds (the capital is never used), 75% of the contributions from Sections (the other 25% is added to the Section Endowment Fund) and 100% of student repayments. Repayments from students amounted to \$34,719.73. Our SLF program grows through the dedicated support of all members of WAAIME and the National Board. One new Endowment Fund was established in honor of Alice Dyrsmid.

The Engineers for Tomorrow (EFT) program is a source of information in the Earth Science fields for elementary and high school students. An audio visual library with films, slides, cassettes, film strips, is ready for distribution by loan and/or purchase from the EFT Chairman. "Minerals Foundation of Society" a film published by the League of Women Voters, including a teaching guide, has been added to the Library. The Minerals Information Institute, Inc. (MII) has been most helpful in providing information to dispense to our Sections. A new edition of "Mineral and Energy Information Sources 1985-86", available in January, 1986, will include career information. EFT projects have included field trips, participation in Science Fairs, assisting in Career programs, putting mineral articles in libraries, giving educational materials to local schools, sponsoring 2 teachers to attend the Colorado Mining Association "Summer Field Course", providing professional engineers to lecture to Junior and Senior High Schools, and helping develop videotape on careers and opportunities in the Mining Industry. We are finding new ways to achieve goals.

The Chest Assistance (CAS) is a program to provide emergency cash assistance to students and/or philanthropic projects of a national interest in keeping with the purposes of WAAIME. Over half of our Sections have active Chest projects helping students, teachers, community projects with funds, as well as donating volunteer help to worthy organizations, or helping in times of mine disaster, or earthquake relief. Donations are also made to the Bertha Hardinge Chest Fund.

The Library program aids in the establishment and/or developing of libraries, and providing technical books, magazines, journals where needed, particularly in High Schools. One Section provided computer software programs for student and teacher use. Books are also provided at the college level. This service is greatly appreciated, not only by the educational facilities and students, but by the general public as well.

The Newsletter was published four times and sent to every member. The Newsletter format is well designed for easy reading and keeps us informed on National Board Meetings, reports, Section activities, Pre-convention news, Annual Meeting plans, post-convention reports, items of special interest, and photographs.

The Liaison program promotes shared activities and projects of mutual interest with AIME and other WAAIME Sections, such as:

- Joint Meeting with AIME Sections (parties, dances, cruises, picnics)
- Cooperation with AIME Section or Individuals in Service/Education
- Support of Regional AIME or Industry-related Technical Society Meetings
- Exchange of Section Board & Membership lists with AIME
- Joint regular Meetings with AIME Section
- Cooperation with AIME Section in fund raisers
- Joint Meetings with other WAAIME Sections, sub-sections, etc.

Publicity has sent articles to the four technical society magazines of AIME as well as many other technical publications, providing news of WAAIME plans for Annual Meetings, Regional Meetings, programs of interest. It is our hope that through publicity we can become not only better known, but also encourage membership growth.

We are proud to be an Auxiliary of AIME, and to have a part in the future of AIME through our Scholarship Loan program, through our dedication to education, and our avid interest in the Mineral Industries and Earth Science professions. We appreciate the excellent rapport and cooperation we have had with the AIME staff and the staff of the four societies. We thank you for your attention and your support.



Mrs. Frank A. Balcar
President, WAAIME