By 1980 the United States will require twice the amount of minerals and mineral fuels consumed today in order to provide for the growth of its economy and national security. The overwhelming need comes at a time when domestic ores are leaner when production costs are increased in providing for the abatement of air, water and land pollution when more and more of our mineral commodities are being imported.

These challenges must be met by the generation and use of new engineering advancements. AIME has the critical role of stimulating and communicating these engineering achievements on a timely basis through its publications and meetings.

During 1967 we moved to meet these unfolding challenges in the many ways outlined in this Annual Report. I urge that you read it carefully so that you will know and better understand the work of your own professional society.

Waite R Homanet

Walter R. Hibbard, Jr. 1967 AIME President

1967 Annual Report A I No Figure 1967 Annual Report

AIME IN 1967

In 1871 the American Institute of Mining, Metallurgical, and Petroleum Engineers was founded as a forum to provide continuing education for the minerals engineer. AIME meetings serve as "short courses" featuring the latest information on technical developments. AIME publications offer rigorously-reviewed papers which have been selected as the best and most valuable presented at our meetings. The Institute's continual aim is to improve its communication of technical information through meetings and publications.

In addition, the Board of Directors recognizes AIME's responsibility to cooperate with government on technical matters relating to the profession, to assist in solving the deepening shortage of mineral engineering graduates, to develop new AIME activities which will serve emerging technologies, and to fulfill the Institute's role as an Engineering Founder Society by providing full support to the various engineering federations. This 1967 Annual Report indicates how AIME has responded to these opportunities.

NATIONAL AFFAIRS

AIME's role in the development of statements and studies relating to "Technology and National Minerals Goals" was the subject of repeated Board of Directors discussions during the year. Although many points of view were offered, there was general agreement that the Institute: (1) should not engage in lobbying activity, but (2) should respond to calls by Congressional committees for advice on technical matters relating to its areas of expertise.

Finally a policy was evolved permitting the AIME National Affairs Committee to work with technical committees of the Institute to develop technical statements to fulfill requests of government. These technical statements require approval by legal counsel and the AIME Board before they are transmitted by the AIME President to policy-making units of government.

As a national affairs activity, an Underground Liquid Waste Disposal Committee was appointed to develop guidelines on technical aspects of feasibility, design and installation of underground waste disposal wells. Also, AIME responded with technical advice to questions posed by the Marine Engineering Technology Panel of the Federal government's Commission on Marine Science, Engineering and Resources.

To seek improved public understanding of the minerals shortage facing the world, a professional writer was hired to develop a book on this subject for newsstand sale to the general public. The book will be printed and distributed by a publisher of paperback books and will not carry the Institute name.

Moving forward in another program to gain public understanding, Minerals Awareness Kits were planned containing several illustrated speeches for delivery by AIME Section leaders to local civic and fraternal groups. The speeches were designed to alert the public to our impending shortage of minerals and the excellent opportunities available to the minerals engineer of tomorrow.



CAREER GUIDANCE

An Engineering Manpower Symposium sponsored by the AIME Council of Education again called attention to the worsening shortage in the mineral engineering profession. From the Symposium came additional ideas for determining short-range and long-range manpower needs of the mineral industries.

Three new career guidance booklets were issued—on "Penetrating New Frontiers with Mineral Engineers," "Careers in Metallurgy and Metallurgical Engineering," and "Careers in Petroleum and Natural Gas Engineering." Two filmstrips were completed (Filmstrip 1—"The World of Minerals", Filmstrip 2—"The Minerals Engineer") and distributed to all AIME and WAAIME Sections. These new materials were financed from AIME's Daniel C. Jackling Fund and Rocky Mountain Fund. In addition, a booklet describing scholarships and fellowships available in mineral engineering fields was under development as the year ended, supported by the Aldridge Fund of AIME.

AIME Sections across the country appointed Career Guidance Committees to formulate plans suitable to their own communities and designed to stimulate interest in mining engineering, metallurgical engineering and petroleum engineering. Helpful in the development of these plans was an AIME Section Career Guidance Manual published in mid-1967.

PUBLICATIONS

Through technical journals, books, and monographs, AIME published more than 11,900 pages during 1967. In 1950 when the Institute's present dues structure was established, some 4300 pages of technical material were published. From a publications standpoint, the value of AIME membership has almost tripled.

Completed by The Metallurgical Society of AIME during 1967 were the following books: High Temperature Refractory Metals, Environment-Sensitive Mechanical Behavior, Local Atomic Arrangements Studied by X-Ray Diffraction, High Temperature High-Resolution Metallography, Volumes 49 and 50 of Open-Hearth and Basic Oxygen Steelmaking Proceedings, Volumes 24 and 25 of Ironmaking Proceedings, and Volume 24 of Electric Furnace Proceedings.

Failure and Breakage of Rocks was published by the Society of Mining Engineers of AIME. In press were: Surface Mining, Coal Preparation, and Ore Deposits of the Western United States. Plans were developed to publish a new Mining Engineers Handbook, and work began on a cumulative index of mining publications of AIME from 1936.

A monograph entitled Pressure Buildup and Flow Tests in Wells was published by the Society of Petroleum Engineers of AIME. This is the first of a new series and the following monographs are now in production: Hydraulic Fracturing, Cementing, Multiphase Flow in Pipes and Reservoir Engineering Aspects of Waterflooding. An Index to Petroleum Publications of AIME, 1953-1966, was completed in 1967.

The 386-page July issue of Mining Engineering featured the Engineer's Reference File and the 1967 SME-AIME Membership Directory. Also, special issues were published in May on Australia's iron ore industry, in August on minerals from the sea, and in October on the technology of surface mining. Total pages in Mining Engineering and Transactions for 1967 were 2,286, compared to 1,300 in 1950. Mining Transactions Quarterly of AIME included 476 pages.

Inclusion of proceedings from various iron and steel conferences was the 1967 feature of *Journal of Metals*. Included were proceedings from the following conferences: Electric Furnace, Ironmaking, and National Open-Hearth and Basic Oxygen Steelmaking. The printing of color photomicrographs was featured for the first time in the October issue of the monthly *Transactions of The Metallurgical Society of AIME*. During the year 2,049 pages were included in this highly-regarded research journal.

The January issue of Journal of Petroleum Technology took a careful look at secondary recovery. Economics and evaluation was featured in February, and the future of hydrogen-deficient hydrocarbons was examined in depth in the October issue. The Society's quarterly publication of research-oriented papers, Society of Petroleum Engineers Journal, continued to grow in size and to be available free of charge.

For the second consecutive year, the annual Council of Economics Proceedings volume was published, containing 434 pages of papers on this subject.

MEETINGS

The quantity and quality of AIME meetings continue to increase, and strong attendance during 1967 indicates membership approval. Some 23,250 attended 1967 national and regional meetings of the Institute, its Societies, Divisions and Committees. If local Section attendance were included, this figure would more than double.

The AIME Annual Meeting in Los Angeles drew 4,100. Strong participation was attracted to the AIME Rock Mechanics Symposium, the AIME Oil Shale Symposium, the Pacific Northwest Minerals Conference, the Pacific Southwest Minerals Conference and the Annual Minerals Symposium.

Through 9 meetings, The Metallurgical Society served more than 8,200 registrants. Included were small meetings on such specialized subjects as Electronic Materials, Nuclear Metallurgy, Chemical Vapor Deposition. The Society of Mining Engineers attracted 1,654 to its Fall Meeting in Las Vegas and 211 to the Coal Division meeting in Birmingham. Some 7,939 attended meetings of the Society of Petroleum Engineers, including 4,361 at the Fall Meeting in Houston. Twelve petroleum regional meetings were held during the year, several of which were one-day meetings that continue to gain popularity.

Attention called to AIME through major meetings provided the best opportunity for television, radio and press coverage. AIME's Public Relations Office took full advantage of this, and in Las Vegas, for example, the total coverage included 9 radio and television interviews with local programming each day and nationwide publication of news and feature stories reaching a combined circulation of 10,287,962.

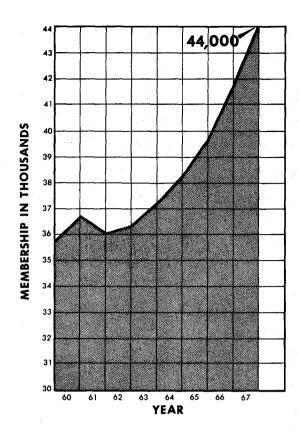
MEMBERSHIP DEVELOPMENT

The Institute continues its pattern of dramatic growth, reaching 44,000 members in 1967 before year-end drops brought the total back to 43,461. From 1961 through 1964, the Institute grew at a rate of 341 members per year. Since that time the average growth has been nearly 1,510 per year, following the introduction of intense but dignified membership development programs. Membership Development Clinics are now being held in conjunction with Council of Section Delegates Regional Meetings. A new Membership Development Manual has been produced. Close liaison with Section Membership Chairmen has been established.

At the same time, the Board of Directors has raised the requirements for the grade of Associate Member to ensure that only the person who can truly contribute to the programs of AIME is attracted. Additional modification of the definition of Associate Member was made during 1967. Now a person 30 years or over, with an engineering or scientific degree but lacking sufficient years of engineering supervision to qualify for Member, can be elected to Associate Membership until he has acquired the qualifications for the grade of Member.

On a Society basis, the following growth patterns were achieved: SME-AIME, 4.8%; SPE-AIME, 4.1%; and TMS-AIME, 3.7%. Winners of the AIME Membership Contest were:

Group A—Midwest Gas Storage Group B—East Texas Group C—Wyoming Petroleum



Group D—North Nevada Group E—Permian Basin Grand Winner—Gulf Coast

For the SPE-AIME Membership Contest, the following were victors: A—Midwest Gas Storage, B—Southern Louisiana, C—Wyoming Petroleum, D—Southwest Texas, E—Permian Basin.

SECTION ACTIVITIES

AIME Sections face a challenge in providing the primary contact between the minerals engineer and the Institute. The Section assumes the major burden in stimulating and maintaining interest in AIME, and in providing helpful programming and continuing education opportunities to the members which it serves. Indicative of the seriousness with which Section officers accept this duty is the large attendance attracted to 1967 Regional Meetings of the Council of Section Delegates, at which time Section leaders exchanged ideas on how to improve their operations.

A new videotape approach to continuing education courses was developed by the Society of Petroleum Engineers of AIME, and six Sections began offering a 40-hour course in Petroleum Reservoir Engineering. SPE-AIME is the first engineering society to adopt

the videotape method to this usage, and the response from members has been enthusiastic. Funding to cover the purchase of equipment and materials was provided by the SPE-AIME Activities Fund and Henry Krumb Endowment Fund of AIME.

Six Henry Krumb Lecturers toured mining and metallurgical sections during the year: A. M. Gaudin, Paul F. Kerr, W. C. Leslie, T. S. Lovering, John L. Mero, and V. L. Stevens. Seven Distinguished Lecturers visited petroleum sections: J. M. Campbell, N. J. Clark, H. F. Coffer, R. C. Earlougher, C. S. Matthews, D. G. Russell, H. J. Ramey Jr., H. K. van Poollen.

Five new Sections were formed during 1967: Southern Nevada, Colombian, Pittsburgh Petroleum, Northern Nevada, and National Capital Petroleum.

STUDENT AFFAIRS

New emphasis on student activities has increased the number of Student Members by better than 50% since 1963 (3470 vs. 2296) and the number of Student Chapters from 70 to 87. AIME officers are continuing the program of visiting Student Chapters throughout the country, and AIME Sections are showing rekindled interest in helping with technical programs, field trips and student paper contests.

Renewed for 1968 is the Student Affairs Program which provides free dues and a Transactions volume for the faculty sponsor, travel allowance for Student Members driving to AIME meetings, contests to select the outstanding student chapter and student paper, and an AIME Student Newsletter. Outstanding Student Chapters for 1967 were: Mississippi State University, Northwestern University, University of Arizona, Drexel Institute, and University of West Virginia.

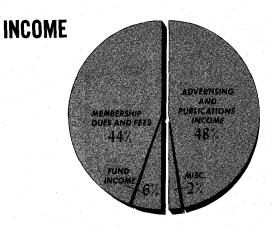
During the year new Student Chapters were formed at: University of Denver, Indian School of Mines and University of Maryland.

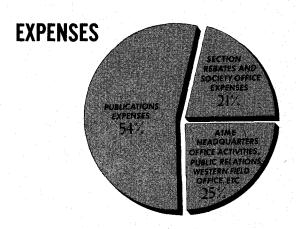
ENGINEERING FEDERATIONS

AIME was the second engineering society to be established in the United States and is considered to be one of the five Engineering Founder Societies. This designation carries considerable prestige—and responsibility. Part of the responsibility is the heavy financial support of various federations which have been established over the years.

During 1967 AIME continued to support the Engineering Societies Library, Engineers' Council for Professional Development, Engineers Joint Council, Junior Engineering Technical Society, Conference of Engineering Societies of Western Europe and the United States, U. S. National Committee of the World Power Conference, National Council of Engineering Examiners, and a number of other similar organizations. Part of this support is drawn from AIME endowment fund income.

Realizing that the Institute was not contributing significantly to many standards committees of the U.S.A. Standards Institute and the American Society for Testing and Materials, AIME representation was withdrawn from a number of committees of these two organizations. The Institute Board reaffirmed its desire to participate in those activities which will help the engineering profession and where AIME can provide a unique contribution, but not to dissipate its financial and manpower resources in lending its name to activities in which it has only marginal interest.





FINANCES

To assist the Institute in providing more and better service, the AIME Board decided in 1967 to begin to systematically use earnings from its endowment funds to implement special programs. Previously, endowment fund income had been held in reserve for the most part. Next, the Board specified that endowment fund income should be used primarily to cover costs of projects relating to continuing education, career guidance, national affairs, serving emerging technologies of interest to AIME, and in developing a more adequate staff for Institute Headquarters.

During 1967 AIME called upon more than \$156,000 from its endowment fund income to support many activities mentioned previously in this Annual Report, in addition to supporting various engineering federations, the new Student Affairs Program, the newly established office of AIME Controller and Director of Fiscal Planning, the Western Field Office, an AIME Employee Savings Plan, and other uses.

Dues income for 1967 was some \$750,000 or around \$17 per member. Expenditures for the year were near \$1,730,000 or nearly \$40 per member. Primarily through the financial assistance offered by endowment fund income, AIME dues remained at the rates established in 1950.

HONORS AND AWARDS

Honorary Membership is the highest honor the Institute can confer on a member. AIME bylaws stipulate that the number of Honorary Memberships shall at no time exceed twenty. In 1967, Joseph Jensen (left) and Clyde E. Weed (right) were elected to this esteemed group of leaders.





1967 AWARD RECIPIENTS

An AIME Rock Mechanics Award and an AIME Howard N. Eavenson Award were added for presentation in future years to the list of prestigious awards presented annually by AIME. The distinguished recipients of the Institute's 1967 awards are listed below.

James Douglas Gold Medal Walter R. Hibbard, Jr.

William Lawrence Saunders Gold Medal Daniel C. Jackling Award Ralph D. Parker

Charles F. Rand Gold Medal Robert G. Page

Anthony F. Lucas Gold Medal John E. Sherborne

Erskine Ramsay Gold Medal G. Albert Shoemaker

Robert H. Richards Award Theodore B. Counselman

Benjamin F. Fairless Award Alexander L. Feild

Hal Williams Hardinge Award Monson F. Goudge

Rossiter W. Raymond Award Martin H. Harris

Mineral Industry Education Award John C. Calhoun, Jr.

Mineral Economics Award Charles W. Merrill

James Boyd

Robert Peele Award Chester O. Ensin, Jr., John Trammell

Robert W. Hunt Award E. T. Turkdogan

Howe Memorial Lecturer Gerhard Derge

Mathewson Gold Medal Kenneth A. Jackson, John D. Hunt

Robert Lansing Hardy Gold Medal David N. Seidman

Extractive Metallurgy Division Lecturer Albert W. Schlechten

Institute of Metals Division Lecturer John W. Cahn

Fellows of The Metallurgical Society

Harold B. Emerick, Sir Charles F. Goodeve, O.B.E., Paul Queneau, George A. Roberts, J. S. Smart, Jr.

John Franklin Carll Award D. V. Carter

Cedric K. Ferguson Medal John L. Cochrane

Lester C. Uren Award Joseph B. Clark, Jr. R. Floyd Farris, George C. Howard, C. R. Fast

DeGolyer Distinguished Service Medal John M. Lovejoy

SPE-AIME Certificate of Service Edward H. Mayer

CONDENSED FINANCIAL STATEMENT FOR THE YEAR ENDED NOVEMBER 30, 1967

INCOME	Mining	Metals	Petroleum	AIME Total
Membership Dues & Fees	\$261,321	\$197,831	\$291,221	\$ 750,373
Advertising and Publications Sales	352,999	248,768	210,632	812,399
Transfers From Endowment and Custodian Funds	28,509	50,370	89,497	168,376
Interest, Annual Meeting, and Miscellaneous	9,830	12,400	6,806	29,036
TOTAL	\$652,659	\$509,369	\$598,156	\$1,760,184
EXPENSE				
Sections & Student Chapters	\$ 22,738	\$ 14,225	\$ 25,823	\$ 62,786
Society Secretaries' Offices	54,118	74,466	129,027	257,611
Institute Activities and Public Relations	20,488	20,823	19,575	60,886
Annual Meeting	3,959	7,062	1,446	12,467
Special Membership Activities	11,844	872	13,738	26,454
Library Support	7,238	6,512	8,250	22,000
Publications	370,412	274,958	279,979	925,349
Executive Director & Secretary's Office	18,860	16,967	21,496	57,323
Controller and Business Office	55,060	53,798	58,052	166,910
Western Field Secretary's Office	22,527	4,227	•	26,754
Provision for Depreciation	3,190	2,964	6,168	12,322
Pensions and Related Expenses	19,606	16,764	20,995	57,365
ECPD and EJC Assessments	6,779	6,107	7,749	20,635
Miscellaneous Expenses	5,159	4,624	5,858	15,641
TOTAL	\$621,978	\$504,369	\$598,156	\$1,724,503
NET BALANCE OR (DEFICIT)	\$ 30,681	\$ 5,000		\$ 35,681

Endowment fund income provided approximately \$210,000 toward financing certain Board-approved services and activities. In addition, several meetings and publications were advanced funds to implement self-supporting functions and in most cases the funds were returned after completion of the activity. These important services are made possible by the availability of endowment resources, primarily Daniel C. Jackling Award Fund, Charles Hayden Memorial Fund, George D. Barron Memorial Fund, Henry L. Doherty Memorial Fund, Rocky Mountain Fund, James Douglas Library Fund, Karl Eilers Memorial Fund, Henry Dewitt Smith Trust Fund, Robert C. Gemmell Memorial Fund, Seeley W. Mudd Memorial Fund, Walter Hull Adridge Fund, Henry Krumb Endowment Fund, AIME Senior Member Fund, Student Relations Prize Fund, Unrestricted Contributions Fund, AIME Petroleum Research & Education Fund, and the SPE-AIME Activities Fund.

As of January 1, 1968, corporate and student memberships totals were:	
Society of Mining Engineers	14,489
The Metallurgical Society	12,755
Society of Petroleum Engineers	16,217
AIME (Total)	43,461

OFFICERS AND DIRECTORS (1967-1968)

PRESIDENT AND DIRECTOR

Walter R. Hibbard, Jr.

PAST PRESIDENT AND DIRECTOR

William B. Stephenson

PRESIDENT-ELECT AND DIRECTOR

John R. McMillan

TREASURER AND DIRECTOR

Gail F. Moulton

VICE PRESIDENTS AND DIRECTORS

Wayne L. Dowdey Lincoln F. Elkins H. Mark Krause, Jr. Albert E. Lee, Jr. Ernest M. Spokes Michael Tenenbaum

DIRECTORS

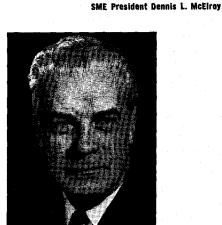
R. Charles Earlougher Harold B. Emerick Raymond H. Feierabend H. J. Gruy William J. Harris, Jr. J. Harry Jackson Deane F. Kent Ralph W. Marsden C. L. McCabe Dennis L. McElroy Jack M. Moore H. Arthur Nedom



1967 AIME President Walter R. Hibbard



SPE President H. Arthur Nedom



TMS President J. Harry Jackson

AIME STAFF

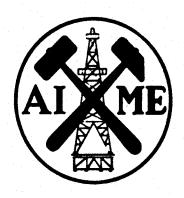
R. William Taylor, Executive Director and Secretary
Joe B. Alford, SPE-AIME Executive Secretary
John C. Fox, SME-AIME Secretary
Jack V. Richard, TMS-AIME Secretary
Thomas P. McConnell, Controller and Director of Fiscal Planning
Dominic A. Lisanti, Business Manager
Clifford J. Hicks, Western Field Office Secretary
C. Kenneth Carlson, Activities Manager

AUDITORS:

Lybrand, Ross Bros. & Montgomery

American Institute of Mining, Metallurgical and Petroleum Engineers, Inc. 345 East 47th Street, New York, New York 10017

OFFICIAL AIME ANNUAL REVIEW FOR 1967



AMERICAN INSTITUTE OF MINING, METALLURGICAL
AND PETROLEUM ENGINEERS
345 EAST 47TH STREET
NEW YORK, N. Y. 10017

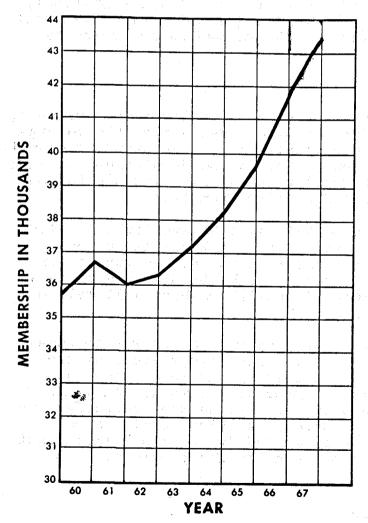
OFFICIAL AIME ANNUAL REVIEW COVERING THE YEAR 1967 INDEX

		age
Report of the Executive Director and	Secretary	1
Report of the Controller and Directo	or of Fiscal Planning	10
Audit report by Lybrand, Ross Bros. Certified Public Accountants	and Montgomery,	11
Report of the Business Manager		21
Report of the Institute Activities M	lanager	22
Report on Admissions to AIME Members	hip	27
Annual Report on Membership Statisti	cs	28
Report of the Western Field Secretar		30
Report of the Society of Petroleum E	ngineers Secretary	34
Report of the Society of Mining Engi	neers Secretary	41
Report of The Metallurgical Society	Secretary	48

of the

EXECUTIVE DIRECTOR AND SECRETARY, AIME

During 1967 the Institute achieved significant goals and established far-reaching policy in several areas. Membership growth continued dramatically, as shown by the chart. Kits containing two new career guidance filmstrips and Career Guidance Section Manuals were provided for all AIME and WAAIME Sections. Minerals Awareness Kits for distribution to Sections were in production as the A new AIME Rock Mechanics Award and a Howard N. Eavenyear ended. son Award were established. In areas of policy, agreement was reached on how the Institute Board will assign the handling of public statements relating to national affairs. A goal was established for specifying the needed financial reserve for the Institute and preferential activities for the use of endowment fund income were selected.



Because each Constituent Society has its separate report on subsequent pages, this presentation will highlight only the progress made by the parent organization through the AIME officers, staff, Sections, Councils and Committees. Equally significant progress was made throughout AIME.

Fiscal Planning

The establishment of the policy that the equivalent of one year of operating expense will be maintained by the Institute as a financial reserve was a highly significant decision. Based on AIME's 1967 budget, this would be around \$1.7 million. The Board ruled that

endowment fund income exceeding this reserve should be used primarily to: (1) provide needed staff at the Institute Headquarters level, (2) to support career guidance activities including services to Student Members, (3) to foster increased coverage of emerging technologies of interest to minerals engineers, (4) to further expand AIME's techniques in providing "continuing education" to its members, and (5) increase AIME's effectiveness in the area of national affairs.

The hiring of Thomas P. McConnell as Controller, Director of Fiscal Planning and Assistant Secretary of AIME was the first step taken by the Board to implement Item (1) of the new policy. Also, fringe benefits for staff members were improved to encourage retention of key employees.

Career Guidance

An AIME Section Career Guidance Manual was completed in September and sent to all AIME and WAAIME Sections. Also, a kit containing two career guidance filmstrips with commentary on magnetic tape was completed late in the year and has been sent to all AIME Sections and Student Chapters, all U. S. Bureau of Mines Stations, and all WAAIME Sections. Each AIME Constituent Society was well along the way toward publication of a revised career guidance booklet when the year ended.

National Affairs

A policy was approved for procedures to be followed in developing AIME responses to requests for technical advice from the government. The policy calls for participation of AIME standing committees in providing technical input used in the development of AIME statements, along with an approval process involving the National Affairs Committee and the AIME Executive Committee.

Early in 1968 Minerals Awareness Kits will be available to AIME Sections for use in making presentations to local civic and fraternal groups, designed to alert them to the decline of our mineral reserves. Also, an author hired by AIME is preparing a book to be printed by a commercial publisher which will tell of the impending mineral shortages.

The Ocean Engineering Committee is preparing an answer to questions posed by the Marine Engineering Technology Panel of the Commission on Marine Science, Engineering and Resources. A second committee is organizing to provide assistance on a study undertaken by Congressman Daddario to examine the technology gap between Europe and the United States. A third committee is developing guidelines on the underground disposal of liquid wastes in line with government emphasis on pollution problems.

Education and Student Affairs

The AIME Council of Education is in the process of being reorgan-

ized for greater effectiveness. The structure of the Council's Executive Committee and its pattern of operation will be changed. Also, the Council completed and gained Board approval of an AIME position statement on the Interim Report on Goals of Engineering Education. In September the Council sponsored a successful Engineering Manpower Symposium.

New Student Chapters were formed at Notre Dame, University of Denver, and University of Maryland. First presentations were made in a new Outstanding Student Chapters Contest. An experimental AIME Student Club was formed at Mesa Junior College at Grand Junction, Colorado. The improved Student Affairs Program, featuring free dues to faculty sponsors, financial aid to student travel, and several other incentives, was continued successfully through the year and extended by the Board for 1968.

Two graduate scholarships were awarded for the first time from the Henry DeWitt Smith Trust Fund to John T. Postle of Stanford University and John N. Carlson of University of Wisconsin. AIME work in the area of student affairs continued in close cooperation with The Woman's Auxiliary of AIME (WAAIME) through an ad hoc WAAIME-AIME Liaison Committee.

Membership Development

The chart on the first page of this report provides statistical testimony to the success of the 1967 membership development effort, based on teamwork of Society and Institute committees. Membership Clinics were held at each Council of Section Delegates Regional Meeting to instruct new Section membership chairmen. For the first time, AIME window decals were sent to all new members, and membership certificates were mailed to all who attained the grade of full Member. The definition of Associate Member was modified to permit an engineer to be admitted to this grade if he fulfills all requirements for the grade of Member except those pertaining to number of years in responsible charge.

Increasing the Scope and Effectiveness of AIME Service

The increased tempo of Institute activities and service has resulted in an increase by 50% in the last three years of the number of AIME Committees which work under the direct supervision of the Board of Directors. In 1967 highlights in this area are as follows:

- 1. The Centennial Celebration Committee developed a format for the 1971 Centennial Annual Meeting, which was approved by the AIME Board.
- 2. Plans for the Henry Krumb Lecture Series were revised to: (a) decrease the number of lecturers to three, (b) feature general interest technical lectures rather than very specialized technical lectures, (c) present plaques to all lecturers.

Staff administration of the program was assigned to the AIME Western Field Secretary and 1968 lecturers were chosen.

- 3. Taking a more active role in the leadership of the Institute, the AIME Executive Committee met six times during 1967, about twice as often as have previous Executive Committees in recent Institute history.
- 4. The Ocean Engineering Committee was changed from an ad hoc to a standing committee of the Institute and undertook to develop a program at the Annual Meeting for the second consecutive year.
- 5. The Continuing Education Committee sent copies of three new AIME Continuing Education Manuals to USBM Stations and encouraged these Stations and nearby AIME Sections to consider development of joint continuing education activity. The Committee has watched with interest the SPE-AIME video-tape continuing education program developed by that Constituent Society with the financial help of the AIME Henry Krumb Fund. Video-tape demonstrations were given at Regional Meetings of the Council of Section Delegates.
- 6. The Rock Mechanics Committee established with Board approval a new AIME award to be presented annually at the Intersociety Rock Mechanics Symposium.
- 7. President Hibbard established an ad hoc Minerals Industry Management Advisory Committee to stimulate increased participation by industry executives in AIME.
- 8. A new ad hoc Standards Coordinating Committee studied AIME participation in standards committees of the U.S.A. Standards Institute and the American Society for Testing and Materials. It recommended that AIME withdraw from those standards committees which are of marginal interest.
- 9. The Investment Committee, taking note of the Institute's plan to more actively use endowment fund income, started to adjust AIME's portfolio to provide higher yields.
- 10. The Section Affairs Committee worked with staff to develop an officer visitation schedule to include virtually all AIME Sections and Student Chapters. The Pittsburgh Petroleum Section, the National Capital Petroleum Section, The Colombian Section and the Southern Nevada Section were formed; the Chicago Petroleum Section was dissolved.
- 11. The Council of Section Delegates requested that each Society of the Institute develop 100 questions and answers within their fields of specialization to be provided through the National Council of Engineering Examiners to State Boards for use in giving registration examinations within AIME's fields.

- 12. The Council of Economics published its second annual Proceedings volume and presented its second Mineral Economics Award. The Council also established an upper limit on its treasury of \$10,000 and will transfer all funds exceeding this amount annually to the general funds of the Institute.
- 13. An analysis of AIME's new public relations program indicated that over 900 news stories about AIME were published in magazines and newspapers during 1967, with the total circulation exceeding 62.5 million.
- 14. The AIME Board endorsed philosophically the principle of greater AIME effort toward development of international relationships through increased officer and staff participation in international meetings and through intensified effort toward involvement of international dignitaries in AIME's meetings.
- 15. A booklet entitled "AIME Endowment Funds" was prepared by former Secretary E. H. Robie, presenting histories of many of AIME's Endowment Funds, quoting the donors' wills, and indicating expenditures made over the years from the Funds.
- 16. AIME received word that it would start to receive annual income from a trust fund of \$150,000 held by the Mellon National Bank and Trust Company in Pittsburgh. The money is to be used for coal activities including the establishment of a Howard N. Eavenson Award named in honor of the donor.
- 17. Further mechanizing AIME's accounting procedures, the Business Office placed on data processing equipment the following functions: (1) distribution by Society of new member income, (2) obtaining new member dues receivable information on a monthly basis including cumulative paid, payment differences, resignations and deaths, (3) distribution of subscription income by publication, and (4) printout of book order billing each month including maintenance of accounts receivable records.
- 18. To fulfill corporate responsibilities assigned by AIME Bylaws to the Board or Executive Committee and to improve internal communications, the Executive Committee approved the following policy: "(a) Members of the AIME Executive Committee should receive Minutes of all meetings of Constituent Society Boards of Directors or Executive Committees, and (b) the Executive Director and Secretary of AIME is to review Minutes of all meetings of Boards of Directors and Executive Committees of AIME Constituent Societies and is to call to the attention of the AIME Board or Executive Committee those actions which merit the consideration of the Board or Executive Committee. Actions requiring consideration of the AIME Board or Executive Committee are either those deemed by the Executive Director and Secretary to be contrary to Institute policy or those which represent meritorious activities on which the Institute should comment favorably to the Society."

Inter-Engineering Society Cooperation

UNITED ENGINEERING TRUSTEES, INC. -- Preliminary planning began for construction of the second tower of the United Engineering Center, which is not only fully occupied but crowded on certain floors. Engineering Foundation, the research arm of United Engineering Trustees, Inc., continued to give emphasis to research conferences on timely subjects relating to engineering technology and national problems, with twelve being held during 1967. The Engineering Societies Library had a successful year of increased usage of its services--by mail primarily. It continues to work with Engineering Index and the Engineers Joint Council Information Service toward the development of a United Engineering Information System.

ENGINEERS JOINT COUNCIL -- A new Constitution and Bylaws were approved by the member societies of Engineers Joint Council during 1967. The changes were intended to streamline the management structure of EJC and make it a more dynamic and influential force both within the engineering community and on society at large. Several member societies were not in agreement with the changes in EJC and two Founder Societies withdrew from membership. The Engineering Manpower Commission of EJC continued its effective work, and published the booklet "Professional Income of Engineers --1966-67".

ENGINEERS' COUNCIL FOR PROFESSIONAL DEVELOPMENT -- A new Engineers' Council for Professional Development career guidance booklet entitled "Engineering--A Challenge" was published. AIME members continued to participate actively on a number of ECPD committees, the most active and important of which is the Engineering Education and Accreditation Committee which recommends accreditation of curricula. A special AIME committee was established during the year to work with those now restructuring the Engineering Education and Accreditation Committee. The AIME Committee's goal is to ensure that AIME members representing the separate disciplines of mining engineering, petroleum engineering, and metallurgy and metallurgical engineering are retained on this important committee.

Honors and Awards

The following Honors and Awards were presented by AIME at the 1967 Annual Meeting, in addition to those presented by our Constituent Societies and described elsewhere in this Annual Review:

A CERTIFICATE OF HONORARY MEMBERSHIP to Joseph Jensen, "For his contribution to the science of engineering as an author, editor, and professor; his outstanding leadership in the development of petroleum resources as an engineer; his unselfish service to industry, community and profession in the development of water resources."

A CERTIFICATE OF HONORARY MEMBERSHIP to Clyde E. Weed, "For his integrity, loyalty, and competence which will serve as the standard for future generations of engineers, and for his outstanding contributions to the World mining industry."

The JAMES DOUGLAS GOLD MEDAL to Walter R. Hibbard, Jr., "For his persevering leadership in advancing the Metallurgical Profession as a teacher, outstanding contributor to the technical literature, manager of industrial research and public servant."

The BENJAMIN F. FAIRLESS AWARD to Alexander L. Feild, "For his outstanding contributions to the progress of iron and steelmaking technology through his advancement of metallurgical understanding, and for his discoveries leading to a vast increase in the economic utility of stainless steels."

The HAL WILLIAMS HARDINGE AWARD to Monson F. Goudge, "Eminent mining engineer and author; for his penetrating studies of a broad range of industrial minerals and their processing in his native Canada and overseas."

The ANTHONY F. LUCAS GOLD MEDAL to John E. Sherborne, "For dedicated service through academic and professional contributions which reflect the highest attainment in personal character and application of engineering in the finding and recovery of petroleum."

The ERSKINE RAMSAY GOLD MEDAL to G. Albert Shoemaker, "For his stability in assisting coal out of a depressed market into one cost-competitive with other fuels, through research in transportation, production and safety, and the development of conservative and responsible mining men."

The CHARLES F. RAND MEMORIAL GOLD MEDAL to Robert G. Page, "For his leadership of his Company and in the mining industry, which has been strong, yet flexible; imaginative yet realistic; and always marked by breadth of vision and unwavering integrity."

The ROBERT H. RICHARDS AWARD to Theodore B. Counselman, "In recognition of his dedicated service, many contributions and his pioneering work in the application of fluidized-bed techniques to the minerals industry."

The WILLIAM LAWRENCE SAUNDERS GOLD MEDAL to Ralph D. Parker, "For his outstanding contribution toward the determination and development of Canada's major nickel deposits, also for his foresight and leadership in the management of these operations."

The MINERAL INDUSTRY EDUCATION AWARD to John C. Calhoun, Jr., "Eminent petroleum engineer, educator, author and administrator whose unusual insight and drive sparked a revolution in petroleum engineering education through the application of science and continuation study."

The ROSSITER W. RAYMOND MEMORIAL AWARD to Martin H. Harris for his paper, "The Effect of Perforating on Well Productivity".

STUDENT PAPER AWARDS in the Graduate Division to: L. Courtland Lee, University of Arizona, for a paper entitled "Analysis of Diversification in the Mining Industry from the Investment Point of View", entered by the Arizona Section; Phillip L. Hembree, Northwestern University, for a paper entitled "Kinetics of Wustite Reduction", entered by the Chicago Section; Ashok R. Sapre, University of Tulsa, for a paper entitled "Volume Requirements in Air and Gas Drilling", entered by the Mid-Continent Section.

Undergraduate Division to: Charles T. Cloud, University of Washington, for a paper entitled "A Geological Investigation of the St. Louis and Jackson Mine, Silverton Mining District, Snohomish County, Washington", entered by the North Pacific Section; Ronald J. Livak, Carnegie Institute of Technology, for a paper entitled "Observations on Stress-Corrosion Cracking in Ti-5A1-2.5 Sn and The Crystallographic Orientation of the Fracture Surface", entered by the Pittsburgh Section; A. Theodore Bourgoyne, Jr., Louisiana State University, for a paper entitled "A New, Simplified Procedure for Generalizing Rotary Drilling Hydraulics", entered by the Delta Section.

OUTSTANDING STUDENT CHAPTERS CONTEST

Louisiana Polytechnic Institute
Society of Petroleum Engineers AIME Student Chapter
New Mexico Institute of Mining and Technology
AIME Student Chapter
Northwestern University
The Metals Club AIME Student Chapter
University of Texas
AIME Student Chapter
West Virginia University
Petroleum Branch AIME Student Chapter

LEGION OF HONOR INSIGNIA were conferred upon the following fiftyone members: C. Kremer Bain, William Addison Baker, Jr., Leon
Maxwell Banks, Joseph C. Barton, Bennett R. Bates, Paul Cuno
Berkefeld, David Wells Boise, Emil John Bruderlin, Alan Bruyere,
Leonard Jerome Buck, Allison Butts, Willis B. Clemmitt, Clifton
Sherwin Corbett, Joseph Abraham Daniel, Lyndall Phillips Davidson,
Edward Wilson Davis, Ralph Emerson Davis, Harold Clinton Eddy,
F. Stillman Elfred, Edward William Engelmann, Alexander L. Feild,
Rollins Sanders Foster, Thomas Fraser, Caroll A. Garner, Frank
Garratt, Anton Gronningsater, Dennis Frederick Haley, Clyde Willis
Hall, Harlowe Hardinge, T. Gaines Hawkins, Richard P. E. Hermsdorf,
Joseph Austin Holmes, Olaf Pitt Jenkins, G. E. Johnson, Philip
Kraft, Thayer Lindsley, Donald Markle, Edward Duffield McDermott,
Harry E. McDonnell, Harold Blair Menardi, Gilbert Frank Metz,
Sydney A. Mewhirter, Clarence Thomas Patterson, Gerald Mungo

Ponton, James Childs Rea, Ernest John Ristedt, Joseph P. Ruth, Jr., Stuart St. Clair, John Robert Suman, Fred Warren Varney, Harry V. Welch.

Appreciation

With the technical interests of the U. S. Bureau of Mines and AIME being parallel in breadth, President Walter R. Hibbard, Jr., displayed during 1967 the most complete knowledge of the three disciplines served by AIME of any AIME President in recent years. Consequently, he was able to communicate readily with members throughout the Institute, and travelled widely to speak to 34 AIME Sections and Student Chapters. No AIME President has attracted press coverage to the Institute equal to that of President Hibbard, who brought credit and public attention to AIME throughout his term of office.

Special appreciation is expressed to Thomas P. McConnell who joined the staff in mid-year in the newly-created position of Controller and Director of Fiscal Planning and Assistant Secretary, and immediately brought additional strength to headquarters operations. Similar appreciation is extended to C. Kenneth Carlson who has ably replaced Clyde L. Hopkins as Activities Manager, and to his new assistant William V. O'Connell. Continued close cooperation was received throughout 1967 from Business Manager Dominic A. Lisanti, Western Field Secretary Clifford J. Hicks, Administrative Assistant Wanda Laskowski, SME-AIME Secretary John C. Fox, TMS-AIME Secretary Jack V. Richard, and SPE-AIME Executive Secretary Joe B. Alford. A strong staff and dedicated officers are significantly improving AIME, its Societies and its Councils with each passing year.

Respectfully submitted,

William Taylor Executive Director and Secretary

REPORT

of the

CONTROLLER AND DIRECTOR OF FISCAL PLANNING OF AIME

Both the past and the projected growth of AIME and the increasing importance of its financial aspects have dictated the need for the same type of financial management as used in commercial enterprises. Historically, the Institute financial management has very adequately safeguarded the assets and provided the necessary statutory reporting; but, it has not been geared to recognition of the size and complexities of AIME and the information needs of its management. Responding to this situation, the AIME Board of Directors created the position of Controller and Director of Fiscal Planning, reporting to the Executive Director and Secretary. The major responsibility of the position is described——"receipt and disbursement of all Institute Funds and for the fiscal planning function of the Institute and its constituent societies.

Some significant steps have been taken during the last half of 1967 to increase membership service values. Planning and implementing a management information system for the Institute management highlighted the need for a reporting system with management accounting and responsibility reporting which could supply decision making tools, and replace the outgrown present accounting system. To implement the information system, the 1968 budget was prepared in a departmental responsibility format. Department heads prepared their own budgets with the aid of the accounting department, and a consolidation of the departmental budgets became the total AIME headquarters budget. Interim financial and statistical reporting will be on a management by exception basis with variance analysis. A narrative style monthly analysis explains the variances from the approved budgetary plan. Program budgeting will be a part of the normal accounting routine.

Finalization of the U. S. Internal Revenue Service regulations on taxation of advertising income (effective with fiscal year December 1, 1968 - November 30, 1969) has been considered in all of the fiscal planning through the counsel of the taxation specialists of our auditors, Lybrand, Ross Bros. and Montgomery, who will continue to advise the Institute and Societies on all taxation.

Cash flow analysis, started in October, projects cash requirements so that interest bearing short-term investments and certificates of deposit are being purchased. Consolidation of bank accounts and streamlining of banking procedures has been completed.

The over-all fiscal plan is being coordinated to the philosophy of the Planning Committee to assure an early awareness of long-range requirements, and at the same time the functions of the Investment Committee and the Finance Committee are being served. The creation of this position has allowed the business manager to concentrate on the day to day routine of the business office services to the members.

The year 1968 is primarily committed to implementation of the planned programs, further investigations into services to members and fiscal leadership for projects of AIME's officers so that Membership Service Values can be optimized.

Respectfully submitted,

Im Comell

T. P. McConnell

Controller and Director of Fiscal Planning

LYBRAND, ROSS BROS. & MONTGOMERY

CERTIFIED PUBLIC ACCOUNTANTS

COOPERS & LYBRAND
IN AREAS OF THE WORLD
OUTSIDE THE UNITED STATES

Board of Directors,

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

We have examined the balance sheet of AMERICAN INSTITUTE of MINING, METALLURGICAL, and PETROLEUM ENGINEERS, INC. as of November 30, 1967 and the related statements of income and expenses, surplus and changes in endowment and custodian fund balances for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the financial statements for the year ended November 30, 1966.

In our opinion, the aforementioned financial statements present fairly the financial position of American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. at November 30, 1967 and 1966, and the results of its operations for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Lybrand, Ross Bros. & Montgomery

New York, January 23, 1968.

AMERICAN INSTITUTE of MINING, METALLURGICAL, and PETROLEUM ENGINEERS, INC. BALANCE SHEETS, November 30, 1967 and 1966

ASSETS:	<u>1967</u>	1966	LIABILITIES and FUND BALANCES:	<u> 1967</u>	<u> 1966</u>
Working fund: Cash, in 1967, principally interest-bearing deposits	\$ 309,128	\$ 265,797	Working fund: Accounts payable and accrued liabilities	\$ 97,603	\$ 109,691
Accounts receivable	129,009	146,561			
Inventories, at cost or lower: Publications on hand	32,027	33,272	Annual meeting surplus fund	12,587	10,941
Postage and supplies	6,441	10,260			* .
	38,468	43,532	Deferred credits to income: Membership dues received in		
Equipment, furniture and fixtures, at cost	340 046		advance	423,664	293,098
	148,846	145,296	Life membership fund	17,400	17,140
Less, Accumulated depreciation	53,338	56,585	Other	35,383	53,588
	95,508	88,711		476,447	363,826
Prepaid expenses and other assets	55,227	44,772	Surplus (per statement annexed)	40,703	104,915
Total working fund	627,340	589,373	Total working fund	627,340	589,373
Endowment and custodian fund: Investments (at market quotations approximately \$4,400,000 in 1967 and \$3,900,000 in 1966) (Note 1)	3,502,076	3,370,648	Endowment and custodian fund (per statement annexed):		
Cash, principally savings accounts	470,331	345,073	Endowment funds	3,447,748	3,301,319
, , , , , , , , , , , , , , , , , , ,			Custodian funds	524,659	414,402
	3,972,407	3,715,721		3,972,407	3,715,721
Founder Society advances to United Engineering Trustees, Inc. (Note 2)	265,000	265,000	Property fund (Note 2)	265,000	265,000
	\$4,864,747	<u>\$4,570,094</u>		\$4,864,747	\$4,5 70,094

STATEMENTS of INCOME and EXPENSES for the years ended November 30, 1967 and 1966

	<u> 1967</u>	<u> 1966</u>
<pre>Income: Members' dues and entrance fees</pre>	\$ 750,373	\$ 724,454
Advertising and publication sales	812,399	807,494
Transfers from endowment and custodian funds	98 , 966	98,929
Interest, annual meeting, and miscellaneous	16 , 569	21,142
	1,678,307	1,652,019
Expenses: Society direct expenses	346 , 851	326,031
Publications	925,349	912,326
AIME headquarters	439,836	384,365
	1,712,036	1,622,722
Excess of income (expenses) for the year	(<u>\$ 33,729</u>)	\$ 29,297

<u>Note:</u> Income and expenses of endowment and custodian fund accounts are not included in this statement.

STATEMENTS of SURPLUS for the years ended November 30, 1967 and 1966

•	1967	<u> 1966</u>
Balance, beginning of year	\$104,915	\$ 86,201
Transactions affecting beginning balances: Transfer to custodian fund accounts		
(Activities Fund of Society of Mining Engineers)	(53,742)	
Receipt from (transfer to) Activities Fund of the Society of Petroleum		
Engineers (a special project fund not included herein)	23,259	(10,583)
Balance, beginning of year, after adjustments	74,432	75 , 618 .
Excess of income (expenses) for the year (per statement annexed)	(33,729)	29,297
Balance, end of year	\$ 40,703	\$104,91 <u>5</u>

STATEMENTS of CHANGES in ENDOWMENT and CUSTODIAN FUNDS for the years ended November 30, 1967 and 1966

		1967			1966	
	Endowment Fund	Custodian	,	Endowment	Custodian	
	Accounts	Fund Accounts	Total	Fund Accounts	Fund Accounts	Total
Balance of fund accounts, beginning of year	\$3,301,319	\$414,402	\$3,715,721	\$3,138,784	\$407,961	\$3,546,745
Income:						
Contributions	\$ 45,030	\$ 1,937		\$ 38,472	\$ 4,704	
Net gain (loss) from sale of securities	17,441	3,681		29,140	(1,401)	
Interest and dividends	189,048	20,490		174,015	17,148	
Sales of books, volumes, etc.	8,705	31,458		10,694	30,517	
Income from conferences and committee meetings	-,100	66,184		10,094	65,245	
Transfer from working fund surplus		53,742			05,245	
Repayment of loan made to The Metallurgical Society		233142				
Royalties from publishers				5,310	26,690	
Other		8,097			4,001	
	270	540				
	\$ 260,494	\$ 186,129	446,623	\$ 257,631	\$146,904	404,535
			4,162,344		· ·	3,951,280
Expenses and transfers:			, ,,,			3,771,200
Publication expenses	\$ 12,362	\$ 44,801		\$ 13,516	\$ 62,444	
Awards	14,271	2,738		10,086	1,706	
Contribution to Golden Jubilee Fund of Woman's Auxiliary						
· ·	7,000					
Lecture series and student travel	7,187					
Repayment of loan of The Metallurgical Society					24,199	
Sundry expenses	6,328	1,796		5,647	8,245	
Transfers to working fund, including \$20,505 applicable to controller's office expenses						
in 1967	66,917	26,537		65,847	43,869	
Balance of fund accounts.	<u>\$ 114,065</u>	<u>\$ 75,872</u>	189,937	\$ 95,096	<u>\$140,463</u>	235,559
end of year	\$3,447,748	\$ 524,659	\$3,972,407	\$3,301,319	\$414,402	\$3,715,721

NOTES to FINANCIAL STATEMENTS

- 1. Purchased investments are stated at cost; those received as contributions are recorded at market value on date of gift.
- 2. By agreements dated February 28, 1958, the Founders' Agreement of August 10, 1916 between the four Founder Societies and United Engineering Trustees, Inc. was superseded by a new Founders' Agreement which provides, in part, for recognition of advances of \$265,000 to United Engineering Trustees, Inc. by the American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., in connection with the erection of the United Engineering Center Building. Such advances are not repayable by United Engineering Trustees except upon its dissolution, but advances bear interest at 4% per annum.
- 3. No amounts are included in the accompanying statements for assets, liabilities, income or expenses of Local Section Funds and certain Special Funds of the three Societies.



AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC. INCOME AND EXPENSE STATEMENT FOR THE YEAR ENDED NOVEMBER 30, 1967

Throng		100			
INCOME:					
Membership:	MINING	METALS	PETROLEUM		TOTALS
Current Dues	231,686	\$ 181,61 6	\$269,062	\$	682,364
New Member Dues	12,759	7,328	8,772		28,859
Entrance Fees	16,876	8,887	13,387		39,150
TOTAL.	261,321	\$197,831	\$291,221	\$	750,373
Publications:				. ———	
Monthly Journal Advertising	3267,384	\$ 77,791	\$166,129	\$	511,304
Directory Advertising	27,755	• • •	6,554		34,309
Monthly Journal Sales	15,242	24,299	8,772		48,313
Non-Monthly Advertising	-	•	1,292		1,292
Non-Monthly Journal Sales	10,462	51,694	4,476		66,632
Transaction Volume Sales	17,326	21,993	17,179		56,498
Reprint Sales	7,955	72,486	6,136		86,577
Preprint Sales	6,786	-			6,786
Directory Sales	89	505	94		688
TOTAL	352,999	\$248,768	\$210,632	\$	812,399
Other Income:					
Transfer From Funds(Sch.A)\$	28,509	\$ 50,370	\$ 20,087	\$	98,966
Interest, Dividends & Misc	2,495	2,260	2,844	•	7,599
Annual Meeting	3.376 ~	3,078	2,516		8,970
TOTAL	34.960	\$ 55.708	\$ 25,447	\$	115,535
TOTAL INCOME	648.700	\$502,307	\$527,300	* 1	,678,307
		<u> </u>	12-112		10101201
EXPENSES:					
AIME Headquarters:					
Executive Director & Secretary(1)\$	18.860	\$ 16,967	\$ 21,496	\$	57,323
Controllers Office(1)	6,746	6,070	7,689	•	20,505
Secretary's Office S.L.C(2)	22,527	4,227	•		26,754
Business Office(3)	48.314	47,728	50,363		146,405
Institute Activities & Public Relations(4)	20.488	20,823	19.575		60,886
TOTAL\$	116,935	\$ 95,815	\$ 99,123	\$	311,873
Assessments by Federations:		J. J. J. Link	1 //1/	<u> </u>	722,017
Engineering Society Library(1)\$	7,238	6,512	\$ 8,250	. . \$	22,000
Engineering Joint Council(1)	3,339	3,009	3,819	Ψ	10,167
E.C.P.D(1)	3.440	3.098	3,930		10,468
TOTAL\$		\$ 12,619	\$ 15,999	-	42,635
Other All Institute:		<u> </u>	¥ -71777	<u> </u>	12,000
Pensions & Related\$	19.606	\$ 16,764	\$ 20,995	: \$	57,365
Allowance for Depreciation	3,190	2,964	6,168	Ψ	12,322
Miscellaneous Expenses(1)	5,159	4.624	5,858		15,641
TOTAL\$		\$ 24,352	\$ 33,021	\$	85,328
Society Direct Expense:	211777	4 211772	<u>Ψ)), υετ</u>	Ψ	0),720
Sections & Student Ch Rebates & Exp\$	22 738	\$ 14,225	\$ 25,823	\$	62,786
Membership Development	11 8HH	872	13,738	Ψ	26,454
Society Headquarters Office	54 118	74.466	129,027		257,611
TOTAL\$	88 700	\$ 89,563	\$168,588	•	346,851
Publications:	00,100	ψ 09, <u>70</u>	\$100,700	Ψ	740,071
Monthly Journal Advertising\$	150 180	\$ 47,240	\$ 98,143	\$	295,563
Monthly Journal Prod. & Edit	155 803	101,825	133,530	Ψ,	391,156
Directory	14 778	159	8,194		23,131
Non-Monthly Advertising	17, (10	- J7	237		237
Non-Monthly Journal Prod. & Edit	18,384	100,420	15,177		133,981
Transactions Volume	12,021	15,137	20,539		47,697
Reprint Expenses	4,780	10,177	4,159		19.116
Preprint Expenses		,	+,±)}		14,468
TOTAL.		\$274,958	\$279.979	\$	925,349
TOTAL EXPENSES. \$	18.019	\$497,307	\$596,710	* 1	712,036
		\$ 5,000	\$(69,410)	*	(33,729)
EXCESS OF INCOME OR (EXPENSE)		1	41.021.150	*	1//1/27

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

NOTES TO INCOME AND EXPENSE STATEMENT FOR THE YEAR ENDED NOVEMBER 30, 1967

-SCHEDULE A - TRANSFER FROM FUNDS

To	Offset	Office Services	\$11,638 aam - mar	٠.
		Library Assessment	4,760 Douglass	
To	Offset	Institute Activities and Public Relations	\$11,638 am - May 14,760 Douglar 5,500 and Nayon	
		Western Field Office Roots not	6,000 coly mt 12,493 Jochem 20,505 km	,
		Rent Expenses	_12,493 Jacket	
		Controller's Office France	20,505 Kmh	
		The Metallurgical Society Office	27,409	
		Annual Meeting Services	7,441	
		Engineers Council for Professional Development	3,220. Kmb	
_		Total Transfer from Funds	\$98,966	

1. These items are pro-rated to the Societies on a membership ratio during 1967 as follows:

MINING - 32.9%

METALS - 29.6% PETROLEUM - 37.5%

2. Secretary's Office - Salt Lake City - Distributed as follows:

MINING - 84.2%

METALS - 15.8%

3. Business Office - allocated on a use basis:

MINING - 33.0%

METALS - 32.6% PETROLEUM - 34.4%

4. Institute Activities and Public Relations - allocated as follows: 50% on a membership ratio:

MINING - 32.9%

METALS - 29.6%

PETROLEUM - 37.5%

50% on a use basis:

MINING - 34.4%

METALS - 38.8%

PETROLEUM - 26.8%

AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC. PRELIMINARY BUDGET - INCOME AND EXPENSE STATEMENT FOR THE YEAR ENDED NOVEMBER 30, 1968

INCOME	Mining	Metals	Petroleum	Total
Membership:		*		
Current Dues	\$230,000	\$180,000	\$280,000	\$ 690,000
New Member Dues	13,200	7,500	11,000	31,700
Entrance Fees	13,200	9,000	14,000	36,200
TOTAL	\$256,400	\$196,500	\$305,000	\$ 757,900
Publications:				
Monthly Journal Advertising	\$278,700	\$ 80,000	\$150,000	\$ 508,700
Directory Advertising	30,000	- ,	6,000	36,000
Monthly Journal Sales	16,100	25,000	12,000	53,100
Non-Monthly Journal Advertising	_		1,300	1,300
Non-Monthly Journal Sales	11,000	53,000	4,500	68,500
Transactions Volume Sales	17,000	22,000	19,500	58,500
Reprint Sales	4,500	91,400	6,100	102,000
Preprint Sales	6,500	-	4100 /00	6,500
TOTAL	<u>\$363,800</u>	\$271,400	\$199,400	\$ 834,600
Other Income:	A / O OOO	A 00 700	4110 050	6 242 050
Transfer From Funds (Sch. A)	\$ 42,000	\$ 88,700	\$112,250	\$ 242,950
Interest, Dividends & Misc.	2,700	2,500	2,800	8,000
Annual Meeting	7,500	16,300	1,000	24,800
TOTAL	\$ 52,200	\$107,500	\$116,050	\$ 275,750
TOTAL INCOME	\$672,400	\$575,400	\$620,450	\$1,868,250
EXPENSES	······································			
AIME Headquarters:		in a second second		
Executive Director & Secretary (1)	\$ 20,200	\$ 17,500	\$ 22,200	\$ 59,900
Controller's Office (1)	10,900	9,400	11,900	32,200
Secretary's Office - S.L.C. (2)	22,900	4,300	•	27,200
Business Office (3)	54,800	54,100	57,100	166,000
Activities & Public Relations (4)	24,300	24,400	21,500	70,200
TOTAL	\$133,100	\$109,700	\$112,700	\$ 355,500
Assessments by Federations:				
Engineering Society Library (1)	\$ 7,700	\$ 6,600	\$ 8,500	\$ 22,800
Engineering Joint Council (1)	3,400	3,000	3,800	10,200
E.C.P.D. (1)	3,600	3,200	4,000	10,800
TOTAL	\$ 14,700	\$ 12,800	\$ 16,300	\$ 43,800
Other All-Institute:				
Pensions & Related	\$ 30,800	\$ 23,600	\$ 26,300	\$ 80,700
Allowance for Depreciation	2,700	2,600	5,800	11,100
Miscellaneous Expenses (1)	4,700	4,000	5,100	13,800
TOTAL	\$ 38,200	\$ 30,200	\$ 37,200	\$ 105,600
Society Direct Expense:			* **	A (F F00
Sections, Student Ch. Rebates & Exp.		\$ 15,000	\$ 28,000	\$ 65,500
Membership Development	18,000	2,000	11,000	31,000
Society Headquarters Office	56,400	80,000	128,000	264,400
Annual Meeting	2,500	9,500	500	12,500
TOTAL	\$ 99,400	\$106,500	\$167,500	\$ 373,400
Publications:		à E0 000	A 00 000	6 269 000
Monthly Journal Advertising	\$130,000	\$ 50,000	\$ 88,000	\$ 268,000
Monthly Journal Prod. & Edit.	167,100	125,000	149,000	441,100
Directory	14,000	-	8,500	22,500
Non-Monthly Journal Advertising	- 0- 000	107 000	250 16 000	250 148,000
Non-Monthly Journal Prod. & Edit.	25,000	107,000	16,000	
Transactions Volume	12,000	16,000	21,000	49,000 2 4,9 00
Reprint Expenses	2,700	18,200	4,000	13,000
Preprint Expenses	13,000	6216 200	\$286 750	\$ 966,750
TOTAL	\$363,800	\$316,200	\$286,750	
TOTAL EXPENSES	\$649,200	\$575,400	\$620,450	\$1,845,050
EXCESS OF INCOME OR (EXPENSE)	\$ 23,200	<u>\$ -</u>	<u>\$</u> -	\$ 23,200
			-	

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

NOTES TO 1968 BUDGET

SCHEDULE A - TRANSFER FROM FUNDS

Library Assessment	\$ 8,000
Rent	12,300
Office Services	12,300
Student Development	2,000
Salt Lake City Office	6,000
Travel Administration and Lecture Series	3,500
Various Awards and Honorariums	5,200
Controller's Office	31,500
Savings Plan	6,800
Student Travel	5,000
Annual Meeting	16,200
The Metallurgical Society of AIME Service for Divisions	39,000
The Metallurgical Society of AIME Activities Fund	16,500
Society of Petroleum Engineers of AIME Activities Fund	78,650
Total Transfer From Funds	\$242,950

1. These items are pro-rated to the Societies on a membership ratio.
The membership ratio for 1968 is as follows:

MINING - 33.7% METALS - 29.2% PETROLEUM - 37.1%

2. Secretary's Office - Salt Lake City - Distributed as follows:

MINING - 84.2% METALS - 15.8%

3. Business Office - Allocated on use basis:

MINING - 33.0% METALS - 32.6% PETROLEUM - 34.4%

4. Institute Activities and Public Relations are allocated partially on a direct basis to the Societies wherever possible and the balance on a membership ratio for 1968.

REPORT

of the

BUSINESS MANAGER

The year 1967 for the Business Office, was one of stability and efficiency. New methods inaugurated last year in our data processing system are working as planned. Few changes in procedures were made and some modifications of those in effect were accomplished. Although there has been an increasing requirement for services to the Members, committees and staff as a result of a 15% increase in membership since 1964, the number of employees rendering these services has not been increased.

The functions of the Business Office include accounting, purchasing, membership records, book order (sales and billing), change of address, keypunching, data processing, nonmember subscriptions, filing and shipping. Also, we maintain personnel records, prepare reports on Institute's Investment portfolio, administer and render reports on AIME fringe benefits such as Life Insurance, Hospitalization, Major Medical In addition, we prepare semi-annual and Pension Plans. circulation reports on the business classification and geographical breakdown of our publications. As a part of our accounting functions we prepare the following: Monthly financial statement comparing income and expenses to the budget; a detailed analysis of expenses for each department; income and expense statement for each of our meetings; periodic statements on our Endowment and Custodian funds. With regard to our data processing system, our records presently represent an excellent and the most accurate master file of our Members and Subscribers since the conversion to this type of system. Because our data processing system worked so well during 1967, we were able to add accounting functions and utilize the master record more In the future, we plan to use the computer for efficiently. additional Member service information and management reports. In general, the other aforementioned services are diversified and involve a seemingly insurmountable amount of tedious detail.

In conclusion, I wish to thank the staff of the Business Office for their efficient handling of the arduous details and for their loyal and devoted service during the year.

Respectfully submitted,

Dominic A. Lisanti Assistant Treasurer and Business Manager

of the

ACTIVITIES DEPARTMENT

The Activities Department completed its first full year of operation after the merger of the former Activities Department and Public Relations Department in 1966. The Department was headed by Clyde L. Hopkins for the first part of the year, who resigned July 1 to accept employment with a New York Public Relations firm. C. Kenneth Carlson was appointed Activities Manager on July 17, 1967. On August 21, 1967 William V. O'Connell joined the staff as Assistant Activities Manager with the primary responsibility for Public Relations.

This report will review the major projects and accomplishments of the Activities Department during the year with the understanding that there are numerous and miscellaneous additional duties performed in meeting our major responsibility - service to AIME membership. The additional projects included, for example, maintenance of Section records and their Bylaws, producing the AIME Directory Supplement, producing the Senior Member Fund Mailer, etc.

Our revised budget, with adjustments for 1967, was \$60,886.00. In providing these services we kept our total expenses under budget.

MEMBERSHIP DEVELOPMENT

The Activities Department has staff responsibilities in support of the All-Institute Membership Committee in membership development. The Department administers reporting and accounting for the membership contests in addition to performing additional administrative responsibilities.

Under the Chairmanship of Deane Kent, six membership clinics were held in conjunction with the Council of Section Delegates meeting during the year. The Activities Department worked closely with Dr. Kent in organizing and conducting these clinics. A "non-member" slide presentation produced by the staff for use by AIME Sections was presented and made available during the clinics. As a focal point of the clinics, participants who are Section officers, were called on to relate their formulas of success in the various aspects of membership development, for example, delinquency retention, activities at Section meetings, during Society meetings, etc. The clinics proved most effective in providing a forum for exchange of ideas.

During 1967, the Institute membership grew to almost 44,000. Membership growth during 1967 was 1,843. This increase was achieved as a result of the energetic and effective work of the Societies and Institute Membership Committees and staff.

Winners of the 1967 All-Institute Membership Contest were: Group A - Midwest Gas Storage Section; Group B - East Texas Section; Group C - Wyoming Petroleum Section; Group D - Northern Nevada Section; Group E - Permian Basin Section. The grand prize for the greatest increase in total number of members was the Gulf Coast Section with 139.

PUBLIC RELATIONS

More than 900 news stories were prepared, produced and distributed about AIME meetings and sessions, officers, Krumb Lecturers, student activities, honors and awards, etc. The magazines and journals and the newspapers in the United States and Canada gave extensive coverage to the news stories generated by the Activities Department. The news releases were published by news media reaching more than 62,540,000 circulation.

Activities which received the most interest and coverage during the year were the election and activities of the Institute and Society Presidents, significant technological breakthroughs by minerals engineers as reported at the AIME meetings, awareness of the possible shortage of many key minerals, and the inadequate supply of minerals engineers. Also of news interest was the important social and economic role of minerals engineers participating in such problem areas as air and water pollution, development of new mineral resources, better methods of extraction of minerals, improved recovery procedures of discarded scrap metals and the overall effort to meet the mineral needs of Society in the future.

Major meetings provide the best opportunity to call attention to AIME by pinpointing television, radio, and press coverage. The Public Relations Office took full advantage of this fact and geared its efforts accordingly. Press rooms were provided at all major meetings to furnish information and assistance to the news media. The press rooms proved popular, resulting in good attendance of reporters and consequently effective news coverage.

The office was particularly successful in the television and radio coverage secured during the year. For example, the SME Fall Meeting in Las Vegas had daily broadcasts on the meeting by nine radio and televisions stations. The speakers at the various luncheons received coverage and personal interviews were arranged for key participants during the meeting. AIME news received increased attention by the wire services during the year with exclusive press conferences being arranged with our officers and members which produced nationwide publicity.

The Public Relations Office has devoted special efforts to developing within AIME Sections an on-going public relations effort. Letters, inquiries, assistance, advice, and encouragement have been offered, which, in many cases, has borne excellent results.

The 1967 Annual Report which highlights the AIME's activities and achievements during the year, was produced and distributed,

in close cooperation with the Executive Director and Secretary, by the Activities Department. It will be published in the March, 1968 issue of AIME's monthly journals.

The Honors Book features the program at the Annual Banquet and all winners of AIME and Society awards. This booklet is produced by the Department just before the Annual Meeting for distribution at the Annual Banquet.

The AIME's Public Relations Program is definitely showing momentum with a marked increase in the frequency of news being published about AIME and its Societies. News media rely increasingly on the Activities Department, recognizing that AIME is a good source of important news.

STUDENT AFFAIRS

The Activities Department has complete responsibility for administering the AIME Student Affairs Program as directed by the Student Affairs Committee. Major efforts were spent towards the goals of increasing student membership in AIME, making students aware of their professional responsibilities, and maintaining contact with this "key to the future" of AIME and minerals engineering profession.

During the early fall, a survey was completed by the Activities Department analyzing participation by AIME Student Chapters in various activities -- on - campus, with AIME Sections, with industry and in AIME national programs. The survey is useful in pinpointing those Chapters that are doing well and should accordingly be recognized. But of greater importance, it has proved invaluable in pointing out Chapters needing personal attention to develop a stronger vitality and sense of participation in sponsored affairs.

The Outstanding Student Chapter Contest received enthusiastic participation during its second year of operation. This contest is judged on the Annual Reports submitted by Student Chapters to AIME. The quality and effort put into the Annual Reports showed considerable improvement over last year.

The caliber of the papers submitted for the Student Paper Contest remained consistently high. In 1968 the deadline date has been moved to June 30 in order to permit more time for judging of papers and to allow winners sufficient time to make arrangements to attend the AIME Annual Meeting to receive their awards.

AIME officers continued the program of visiting Student Chapters throughout the country; and AIME's Sections showed increased activity in helping with technical programs, field trips, and the Student Paper Contest.

Student Hospitality Suites were set up at major AIME meetings to provide a room in which students can meet, talk, and

relax. Twenty-seven Chapters took advantage of the Student Travel Reimbursement Program. AIME pays 2ϕ per mile to Student Members to cover travel to and from AIME meetings.

An Honorarium of free dues and transaction volume was provided to Faculty Sponsors with 15 or more students in their Chapter which is considered the minimum for effective Chapter operations. The Honorarium is given in recognition of the valuable contribution of the Sponsors. Sixty-three Chapters qualified for the Honorarium as compared to fifty-three in 1967.

In carrying out these various projects, the Activities Department is responsible for all correspondence, keeping records and administering the various funds and incomes supporting the programs. As an indication of the effectiveness of the program, student membership increased from 2,706 in 1966 to 3,183 in 1967. Also, during the year new Student Chapters were formed at the University of Denver, Indian School of Mines and the University of Maryland for a total of 86 Student Chapters at the present time.

MEETINGS MANAGEMENT

More than \$170,000.00 was handled by the Activities Department in cash flow at the major meetings for the Institute and Constituent Societies during 1966. Complete financial management was the responsibility of the Department for the following meetings: AIME Annual Meeting, Open Hearth Meeting, TMS Fall Meeting, SME Fall Meeting, and the Operating Metallurgy Conference and Exposition.

More than 23,000 members attended national and regional meetings of the Institute, Societies and its divisions and committees - up 3,000 from the previous year. These meetings required investment of thousands of dollars by AIME. Also considerable staff time is required to provide sound business practices of accounting and cash flow controls.

The increased attendance and complexities of the meetings require more efficient techniques in handling registrations and other aspects of the meeting. The Activities Department is constantly alert to improvement and management of meetings and when different methods will prove more efficient and effective they are implemented.

In addition to major meetings, the Department is called upon to lend advice and assistance to many smaller meetings not requiring staff attendance.

COUNCIL OF ECONOMICS AND COUNCIL OF EDUCATION

Council of Economics produces a Proceedings Volume each year after the AIME Annual Meeting of all papers presented at the Council session during the meeting. The Activities Department produces the Volume. In addition, the Department produces two Council of Economics Newsletters each year.

The Council of Education also sponsors a Newsletter which is produced and distributed by this Department.

The Activities Department enthusiastically looks forward to a very successful year of providing extended and improved services to AIME membership. The areas of responsibilities of the Activities Department are extremely diversified and complex, yet challenging and rewarding. I wish to express appreciation to a dedicated staff which was considerably strengthened with the addition of the Assistant Activities Manager, William V. O'Connell. My secretary, Madeline M. Panica has provided invaluable assistance in the transition between Activities Managers and lending continuity to Departmental operations.

Respectfully submitted,

C. Kenneth Carlson

REPORT ON ADMISSIONS TO AIME MEMBERSHIP

Applications for new membership, reinstatements and change of status, to the number of 5629 came before the Committee during 1967.

The statistical record of Committee actions is given in the following tabulation.

CLASSIFICATION OF APPLICATIONS RECEIVED AND ELECTIONS MADE BY THE ADMISSIONS COMMITTEE

	1966	<u> 1967</u>	Mining 1967	Metals 1967	Petr. 1967
New Applications and Reins: Members Associates Juniors	2,042 518 <u>653</u> 3,213	1,841 580 <u>752</u> 3,173	75 ⁴ 233 169 1156	379 89 172 640	708 258 411 1377
Applications for C/S					
Associate to Member Junior to Member Junior to Associate Student to Member Student to Junior Junior to Student Junior to Joint Student Student to Joint Student Joint Student to Student	399 49 1 4 8 2 1 7 1 472	567 30 1 3 1 1 2 - 5	96 14 1 1 1 - - 3 117	135 4 - - 2 2 143	336 12 - 2 - - - - - - - - - - - - - - - -
Applications for Student Mbr	s.1,860	1,846	387	1,035	424
Grand Total	5,545	5,629	1,660	1,818	2,151

Automatic Change of Status are not included in above figures due to the fact that applications are not necessary.

Membership Data

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

1871 to 1966

				0444	
Year	Members	Year	Corporate Members	Student Members	Total
1871 1872 1873 1874 1876 1876 1877 1879 1879 1879 1877 1877 1877 1877	22 1574354824821357945470482170524072106811409040007 12235677780234547048217052407210681144444444456 111111112222222222233333444444444456	1918 1919 1920 1921 1922 1923 1933 1933 1933 1933 1933	77889953595483135576678954845140900522386383828780828 77777777777667899948451409005223833828780828 7777777777776678999484514090052238338383333333333333333333333333333	619 1,0410 1,3268 1,3268 1,3268 1,3268 1,3268 1,3268 1,3268 1,327 1,3286 1,	78.00.998.888.888.887.778.01.134.93.481.18.19.09.88.888.888.888.777.80.11.11.11.11.11.11.11.11.11.11.11.11.11

Total AIME Membership 1965 through 1967

CLASSIFICATION OF MEMBERS

	1965	<u> 1966</u>	<u> 1967</u>	SME	1967 TMS	SPE
Honorary Mbrs. Members Associates Juniors Total	19 24,099 5,850 6,910 36,878	21 25,507 6,190 7,194 38,912	21 26,800 6,438 7,019 40,278	9,883 2,214 1,610 13,716	4 6,480 1,822 2,710 11,016	8 10,437 2,402 2,699 15,546
Student Mbrs.	2,561 39,439	2,706 41,618	3,183 43,461	7 73 14,489	1,739 12,755	$\frac{671}{16,217}$

MEMBERSHIP LOSSES 1967

	<u>sme</u>	TMS	SPE	AIME
Deaths Resignations Drops Unaccepted	116	149	40	205
	119	160	143	422
	465	749	729	1943
	83	<u>36</u>	<u>87</u>	206
	783	994	999	2776

Distribution of Members in Societies During Last Decade as Approximate Percentage

	Mining	Metallurgical	Petroleum
	Members	Members	Members
	%	%	%
Date December 21, 1958 December 21, 1959 December 31, 1960 December 31, 1961 December 31, 1962 December 31, 1963 December 31, 1964 December 31, 1965 December 31, 1966 December 31, 1967	37.5 36.0 35.6 35.5 34.6 33.0 32.2 32.7	22.8 23.5 24.1 25.4 26.7 28.0 29.1 29.5 29.6 29.2	39.7 40.5 40.3 39.3 38.4 37.9 38.3 37.1

MEMBERSHIP STATISTICS

ALASKA ARIZONA BRACK HILLS BOSTON CARLSBAD POTASH CENTRAL APPALACHIAN CHICAGO CLEVELAND COLORADO COLORADO COLORADO COLOMBIA CONUNECTICUT DELTA DETROIT EAST TEXAS EL PASO GULF COAST WICHITA PETROLEUM LEHIGH VALLEY MID CONTINENT MIN ESOTA MONTANA NORTHERN NEVADA NORTHERN NEVADA NORTH PACIFIC OHIO VALLEY OKLAHOMA CITY OREGON PENN-ANTHRACITE PERMIAN BASIN PHILADELPHIA PITTSBURGH ST. LOUIS SAN FRANCISCO SOUTHWESTERN ALASKA WEST CNTRL TEXAS SOUTHWESTERN ALASKA WEST CNTRL TEXAS ADIRONDACK LIMA PERU LOU-ARK SOUTH PLAINS FORT WORTH DALLAS MISSISSIPPI COLORADO PLATEAU ARKANSAS SAN JOAQUIN VALLEY CENTRAL NEW MEXICO CENTRAL NEW MEXICO		1
POTASH APPALACHIAN APPALACHIAN APPALACHIAN ND O O ICUT INENT A IST INENT A INENT A ICITY A CITY A	SECTION	
13 600 34 50 34 297 1156 119 83 37 512 21 127 512 36 1176 426 427 1177 512 36 1177 512 37 118 38 119 119 119 119 119 119 119 119 119 11	Min. & Explor.	
134 134 134 139 149 149 167 177 178 178 178 178 179 178 178 178 178 178 178 178 178	м.в.D.	SOC
240 80 80 37 27 27 31 103 103 103 103 103 103 103 103 103	Coa_	SOCIETY OF MINING
13 14 14 15 16 17 18 18 18 19 10 10 10 11 10 11 11 11 12 12 13 13 14 14 15 16 17 17 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Hind.	MINING
3 2 -42 3 632 - 3 8 3 - 2 26 8	Educ-E	
~	Econ Un-	ENGINEERS
	Total	
	ron t	TH.
	Extr.	THE METALLURGICAL SOCIETY
20 20 20 22 25 25 20 20 20 20 20 20 20 20 20 20 20 20 20	Inst. of Met. E	LLURG
1 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Educ. Econ	ICAL S
	on- Un-	CIET
105 8 369 47 966 670 107 210 210 75 115 123 216 63 210 75 15 105 11,	Total	
1129 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Drilling & Well Complet- N	
4 0	Educ. & Prof.	
15 36 47 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Eval.	
10 10 10 1 15 15 15 15 15 15 15 15 15 15 15 15 1	Form- Eval.	
	Gas Tech	
14 1 1 1 3 1 6 8 7 1 1 1 2 4 6 4 1 1	Geol.	SOCIETY
3 2 2 5 3 1 5 2 1 5 1 2 1 3 3 4 3 6 1 1 1 3 3 4 3 1 1 2 2 1 3 3 4 3 6 1 1 1 1 3 3 4 3 1 1 2 2 1 3 3 4 3 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	l. Manage- g. ment	ETY OF
	ge-Prod Oper.	PETRO
14 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		PETROLEUM ENGINEERS
57 6 6 8 8 8 11 11 11 10 1 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1	Reservoir & F	ENGINE
3 3 3 3 3 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	FJ. Mech. & Oil Rec: Proc.	ERS
1 7 70 2	OP & FECH. E	:
2	Educ Econ	
1 1 322 2 1 1 2 2 2 896 2 896 1 1 322 2 1 1 2 2 2 896 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	on. Un-	
, and the second	s Total	
1,004 61 492 69 393 1,246 864 672 263 326 782 263 326 782 263 373 374 572 242 221 2,069 179 179 408 520 602 179 179 179 179 179 179 179 179 179 179	GRAND TOTAL	

MEMBERSHIP STATISTICS January 1, 1968

	GRAND	88 296	481 62 397 256	833 50 412 153	70 38 149 80 141	38	111 143 223	49 67 93	226 146 146	83 83	225 35 81 153 43 108	100 82 148 93 159 62 138	119 26 57 170 149	4,092 40,278 3,184 43,462
	Total	48 4	480 62 397 255	832 33 403	69 1 129 80 141	38	140	67 68 85	13 6 13	ო ფ ო	35 80 137 42 46 108	89 148 2 35 137	118 25 39 149 97	1,190 15,546 671 16,217
	C ass	32	216 32 189 94	339 163 66	20 20 35 35 35	16	62	2 8 3 3	8 1 1 46	2 8 2	1 1 2 1 1 2 1 4 4 4 4 4 4 4 4 4 4 4 4 4	22 53 1 8 8 3 2 5 6 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	28 4 6 2 2 8	
	Econ L	<u> </u>			·				-					28 8
	Educ			- 5							-		F	- 5
	Offsho OP & TECH Y			- 5	-				8		-	8	7 -	28
ERS	FI. Mech. & Oil Rec Proc X	e -	21 7 75	[4	30 4-7		9	- 2	N 60		28	88 - E	-e o.e	22 450
PETROLEUM ENGINEERS	Reservoir Eng. W	က	25 ³ 30	32 6	27 5 10	7	æ	v ∞ ∞ ∧	4 m	œ	18 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	27 % 81	- E & & O &	1,439
ROLEUM	Prod.	22	15	98 90 90 90	25	5	2 -	8 7 7 8		91	5 20 5 13	10 25 8 1	20 20 12 8	2,086
	Manage- ment U	S.	8 4 2 6	7 22 2 88	· 8	4 70	9 4	0 w w 4	4	- 7	862	7 6 115		100
SOCIETY OF	Geol. M Eng.		~ 0 · 0 · 0	2 2.0	4 ε	_	ю	- m -	22		. 22- 4	2 8 2	7.7	219
SOC	Gas Tech. S		0 24	r - 8 -	- 2	-	- -	8	9		5.5.5.	12 1		21 284
	Form. Eval. R	m 1	v 4 = 0	8 6 4	1 m dd 10		9	627		က	%	е п – n	4 w 4w	388
	Eco. & Eval. P	8	16	33	370	-	۲		- 2		40 6 6	4 L 0	2 2 2 15	58
	due. & Prof.		- 2	4 ~ m _	- 8		m				7.7		2 2	7 27
	Drilling & Well Complet. N	01	2 ° 2 8	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2 2	0 M	17	9 7 11 11	19	24	13 5 5 6 7 6	52 4 12	29 24 7	155 2,235
	Total Ogg	4 252	-	- e c	v w		89	- vo	1 49 108 16	2 - 4	92	9 32 41 12	25	1,273 11,016 1,740 12,756
HETY:	Un- class	18		<u></u>	2 2	:	- 2		30	7 2	1 12	4 νν κν	4	143
L 50C	Econ K								-		-			75
RGICA	Educ.	-					-			-	ļ.			72
LALLU	Inst. of Met. E	8			- -		134	,-	1 25 43 5	55 29	£	31 18	&	379 4,395
THE METALLURGICAL SOCIETY	Extr. Met. D	30		-			- %	4	21 4 15	5 - 4	<u>4</u> ∞	9 - 12	2	305
	Iron & Steel C	111	_		- 4		21		30	o- 10	30	181	- 7	438
	Total	40	_	9 .	34 48 48 48		110	- 01	3/ 89 112 17	34 34	132	59 83 83 1	57 1 15 120	1,629 13,716 773 14,489
	Un- class	æ	-	7 7	w 4 4		20	2	- <u>6 5</u> 6	3 6	26	21 2 2	· 4	265 1,849
ERS	Econ.					·	- 7		-			2	Ŋ	273 1
NGINE	Educ				-								-	83
MINING ENGINEERS	Min. H	S.		64	ر م		7 - 7		75 4	- 2	4	- 9239	- 2	57 776
ㅂ	Coal	7			-		6 -	·	. – ve	10	8	- 7 -	· .	57
SOCIETY	M. B. D.	14			<i>ო</i> თ		7 9		- 12 43	7 4	= -	L 27 6	22 1	317
	Min. & Explor. A	=		6 6 7	26 30 10		99		9 4 8 4	74	78	26 39 30	34 14 69	7,074
	SECTION	PAN HANDLE NIAGARA FRONTIER	DENVER PETROLEUM BILLINGS PETROLEUM NEW YORK PETROLEUM ILLINOIS BASIN PETROLEUM	LOS ANGELES BASIN E VENEZUELA PETROLEUM EVANGELINE W VENEZIELA PETROLELIM	GREAT BEND UPPER MISSISSIPPI VALLEY SOUTH EASTERN UTAH CARACAS PETROLEUM FOUR CORNERS PETROLUEM CALIFORNIA COASTAL	SNYDER ROSWELL PETROLEUM	WYOMING MIN & Mils. BALCONES HUDSON - MOHAWK	WILLISTON BASIN SAUDI ARABIA APPALACHIAN PETROLEUM NORTHERN OKLAHOMA	UIAH CUAL NORTH W. VIRGINIA NOROUSIN NETHERLANDS	EAST TENNESSEE COASTAL BEND VIRGINIA	TEXAS COAST MIN-MRT. UINTAH BASIN NORTHERN PLAINS BARTESVILLE EAST KENTUCKY BIG HORN BASIN OHIO PETROLEUM	AMARILLO TRANS PECOS PETROL MIDWEST GAS STORAGE GEORGIA INDIA SNAKE RIVER GOLDEN GATE PETR.	INTER MOUNTAIN SO LOUISIANA PETR. ITALIAN COLUMBIAN SOUTHERN NEVADA PITTSBURGH PETROLEUM	OUT OF SECTION TOTAL STUDENTS TOTAL MEMBERSHIP
	Ö		65 DE 66 BIL 67 NE 68 ILL	69 73 EV 73 EV	73 74 UP 74 VP 75 75 75 75 75 75 75 75 75 75 75 75 75									

REPORT

of the

WESTERN FIELD SECRETARY

To provide a geographically appropriate agency for communication, liaison and coordination among the widespread Western Sections, Subsections and Student Chapters, the Institute maintains a Western Field Office at 808 Newhouse Building, Salt Lake City, Utah. This office is staffed by the Western Field Secretary and a stenographer. It is the intent of the Secretary to offer the manifold services of AIME to Western Mining and Metallurgical Society members with a maximum of personal contact and individual attention. So that the functions of the office could be carried out in this spirit during 1967, visits were made to 18 Sections and Subsections, six Student Chapters and 13 major conferences, plus AIME and Society Boards of Directors meetings and two meetings of Regional Councils of Section Delegates.

Sections and Subsections Visited During 1967 by C. J. Hicks

- 1. Arizona Section, Maricopa Subsection, Phoenix, Arizona
- 2. Arizona Section, Yavapai Subsection, Prescott, Arizona
- 3. Black Hills Section, Central City, South Dakota
- 4. Central New Mexico Section, Socorro, New Mexico
- 5. Colorado Plateau Section, Grand Junction, Colorado (3)
- 6. Colorado Section, Denver, Colorado
- 7. Columbia Section, Coeur d'Alene, Idaho
- 8. Minnesota Section, Duluth, Minnesota
- 9. Montana Section, Butte, Montana (2)
- 10. Northern Nevada Section, Reno, Nevada
- 11. San Francisco Section, San Francisco, California (2)
- 12. Snake River Section, Pocatello, Idaho
- 13. Southeastern Utah Section, Moab, Utah (2)
- 14. Southern Nevada Section, Las Vegas, Nevada
- 15. Upper Mississippi Valley Section, Dubuque, Iowa
- 16. Utah Section, Salt Lake City, Utah (4)
- 17. Utah Coal Section, w/Utah Section, Bingham, Utah
- 18. Wyoming Mining and Metals Section, Riverton, Wyoming

Major Meetings and Conferences Attended by C. J. Hicks in 1967

- 1. Annual Mining Symposium of the University of Minnesota, Duluth, Minn.
- 2. 96th AIME Annual Meeting, including:

AIME Board of Directors

- 3. Fourth Annual Oil Shale Symposium, Denver, Colorado
- 4. Pacific Northwest Metals and Minerals Conference, Portland, Oregon
- 5. Pacific Southwest Mineral Industry Conference, Monterey, California
- 6. 12th Wyoming Mining Association Convention, Riverton, Wyoming
- Annual Meeting, MBD Subsection, Colorado Section, Colorado Springs, Colo.
- 8. Idaho Mining Association Annual Convention, Wallace, Idaho
- 9. Third Annual Minerals Conference, Vail, Colorado
- 10. SME Fall Meeting, Las Vegas, Nevada, including:

SME Board of Directors

Northwest Region Council of Section Delegates

Southwest Region Council of Section Delegates Membership Clinics

- 11. American Mining Congress Annual Convention, Denver, Colorado
- 12. International Mining Days, El Paso, Texas
- 13. Annual Meeting, Arizona Section, Tucson, Arizona

Student Chapters Visited During 1967 by C. J. Hicks

- 1. Colorado School of Mines, Golden, Colorado
- 2. University of Arizona, Tucson, Arizona
- 3. Montana College of Mineral Science and Technology, Butte, Montana
- 4. New Mexico Institute of Mining and Technology, Socorro, N.M.
- 5. University of Utah, Salt Lake City, Utah (2)
- 6. Mesa Junior College, Grand Junction, Colo. (2) (Student Club)

Most meetings and conferences attended by the Western Field Secretary were written up in a form suitable for publication and submitted, together with appropriate captioned photographs, to the editorial staffs of Mining Engineering and Journal of Metals.

Conference Assistance

The Western Field Office directly assisted in the planning and execution of six major western mineral conferences held during 1967 and acted in an advisory capacity for several others.

Staff assistance in the following 1968 meetings is being, or will be, supplied by the Western Field Office:

February 25-29	AIME Annual Meeting, New York, N.Y.
May 2-3	Fifth Annual Oil Shale Symposium, Denver, Colo.
May 10-11	Annual Meeting, MBD Subsection (Colorado Section),
	Colorado Springs, Colo.
May 16-18	Pacific Southwest Metals and Minerals Conference,
	Los Angeles, California
May 24-25	Minerals Symposium, Grand Junction, Colo.
August 7-10	Intermountain Minerals Conference, Vail, Colo.
September 18-20	SME Fall Meeting-International Surface Mining
	Conference, Minneapolis, Minnesota

Reports

A comprehensive monthly report of the activities and plans of the Western Field Office was submitted to the Executive Director and Secretary with copies to the three Society Secretaries. Included in these reports were comments believed worthy of Staff attention, gained from correspondence and conversation.

In addition, quarterly reports to members of the Rocky Mountain Income Fund Committee were sent during the year. The Western Field Secretary gratefully acknowledges the valuable support of this Committee.

News Letters

Quarterly news letters, under the title "Field Notes", containing lightly written news and comments of interest to Western Sections have been distributed to 260 members per issue. These include Section and Subsection Chairmen, Vice-Chairmen and Secretaries, faculty sponsors of Students Chapters, and AIME, TMS and SME Boards of Directors.

Manual Distribution

The looseleaf manual written by the Western Field Secretary, descriptive of the suggested responsibilities of Section officers, was distributed to each 1967 Section and Subsection Chairman of Mining and Metallurgical groups and will be distributed to 1968 Section and Subsection Chairmen as they become known.

Official Section Visits

The Western Field Office is responsible for the administration of the Official Section Visits Program wherein AIME, SME and TMS officers and directors are invited to attend meetings of their assigned mining and metals Sections and Student Chapters during the Institute year. All except two Sections, two Subsections and 16 Student Chapters in continental North America (excluding Petroleum Sections and Student Chapters which are administered by the SPE office) were covered. In addition, several foreign Sections were visited by volunteer officers. Assignments for the 1968-69 Institute year are being developed.

Student Summer Employment

A program designed to help students of minerals engineering obtain temporary summer employment was continued by this office. One thousand seven hundred three companies actively engaged in mining and/or metallurgical operations were contacted and requested to consider offering summer employment to students of minerals engineering. Eighty companies responded positively with over 935 job openings. One hundred thirteen others answered but offered no positions. Faculty sponsors of Student Chapters at 60 colleges of minerals engineering were simultaneously supplied with the necessary information regarding the openings so that interested students might make application directly to the employer.

Career Guidance Film Strips

Three hundred packaged minerals career guidance sound-film strips and printed transcriptions of the tapes, as authorized for production by the Rocky Mountain Income Fund Committee, were received from their producer, Herald Carlston of the University of Utah. These are to be wrapped and mailed by the Western Field Office and will include a letter of transmittal from R. W. Taylor and SME and TMS career guidance brochures. Distribution will be made to all domestic Sections, Subsections, Student Chapters, WAAIME Sections and U. S. Bureau of Mines Stations, plus several foreign AIME bodies.

AIME Student Club

A recent action of the AIME Board of Directors was the approval of the formation of a Student Club of AIME on the campus of Mesa Junior College, Grand Junction, Colorado, for a trial period of two years. Board sanction was required since students at non-degree-granting colleges are not eligible for Student Membership in the Institute. The parent body supporting this new organization is the Colorado Plateau Section.

New Assignments

The Executive Director and Secretary of AIME has requested the Western Field Office to assume the staff responsibility of administering the Rossiter W. Raymond Award, the Alfred Noble Prize and the Henry Krumb Lecture Series.

Plans for 1968

Plans are to continue and, if deemed necessary, expand all aforementioned services and functions.

Sincerest thanks are offered to the many Institute members whose helpful comments, willing cooperation and warm hospitality made 1967 a successful and rewarding year.

Respectfully submitted,

CLIFFORD J. HICKS

Western Field Secretary, AIME

REPORT

of the

EXECUTIVE SECRETARY OF THE SOCIETY OF PETROLEUM ENGINEERS OF AIME

Nineteen hundred and sixty-seven was a year for consolidation of past gains made by the Society of Petroleum Engineers of AIME, and a time for further development and expansion of new projects and member services. Innovation was the by-word in publications and continuing education programs; the Society's membership rolls swelled to a record high of 16,217 engineers; and more members than ever before attended the 42nd Annual SPE Fall Meeting in Houston.

This report will describe, in highlight form, the major facets of Society operations during 1967.

PUBLICATIONS: JOURNAL OF PETROLEUM TECHNOLOGY

SOCIETY OF PETROLEUM ENGINEERS JOURNAL

The Society's present publication program was established in 1961 with the monthly JOURNAL OF PETROLEUM TECHNOLOGY and the quarterly SOCIETY OF PETROLEUM ENGINEERS JOURNAL.

The report of the 1967 SPE Editorial Committees is shown below.

Total Number of Papers Handled by 1967 Editorial Committees:

Carried over from 1966 . Papers received in 1967.		
	Total	435
lon.		

Disposition:

	s published as Technical Papers in JPT	
Paper	s published as Technical Articles in JPT	. 69
Paper	s published in SPEJ	. 45
Paper	s declined	. 86
Paper	s withdrawn	. 20
	s pending action at present	
Paper	s approved for Technical Papers in 1968 JPT	. 3
Paper	s approved for Technical Articles in 1968 JPT	. 12
Paper	s approved for 1968 SPEJ	·6

Total

435

Following is a summary of the papers which appeared in the two publications:

TYPE OF PAPER AND PUBLICATION	1964	<u> 1965</u>	<u> 1966</u>	1967
JOURNAL OF PETROLEUM TECHNOLOGY				
Technical Article	84	76	. 75	69
Technical Paper	38	39	40	42
SOCIETY OF PETROLEUM ENGINEERS JOURNAL				
Technical Paper	<u>38</u> 160	<u>39</u> 154	42	45
TOTAL PAPERS PUBLISHED, JPT AND SPEJ	160	154	157	156

Following is a summary of pages published in JPT and SPEJ for 1967 as compared with previous years.

TYPE OF CONTENT AND PUBLICATION	1964	1965	1966	<u> 1967</u>
JOURNAL OF PETROLEUM TECHNOLOGY Editorial Pages Administrative Pages	948	955	1,067	1,080
	60	7 2	72	72
Advertising Pages (Display and Classified) Technical Bulletin, Sept. issue Total Pages, JPT	494	519	499	460
	90	62	68	52
	1,592	1,608	1,706	1,674
SOCIETY OF PETROLEUM ENGINEERS JOURNAL Editorial Pages Advertising and Administrative Pages Total Pages, SPEJ TOTAL PAGES PUBLISHED, JPT AND SPEJ	372	371	399	425
	48	35	39	31
	420	406	438	456
	2,012	2,014	2,144	2,130

SPEJ is mailed free of charge to all SPE-AIME members who request it. Production expenses for SPEJ totaled \$15,177 during 1967, while income from sale of non-member subscriptions was about \$4,200. Since its founding in 1961, the net circulation for SPEJ has increased from 1,625 to 4,065 in 1967.

PUBLICATIONS: TRANSACTIONS

Transactions Volume 240, to be available in April, 1968, will have a record number of 784 pages, topping the previous high of 720 in 1966. The figure compares with 672 pages for the 1965 volume and 684 for the 1964 volume.

PUBLICATIONS: 1967-68 SPE MEMBERSHIP DIRECTORY

A record number of 204 pages appeared in the 1967-68 SPE Membership Directory. The Directory is issued free of charge to all SPE-AIME members who request it, and a copy also is sent to all SPE national committee members and to all local section officers. Production costs amounted to \$8,194. Advertising income amounted to \$7,583. The Directory is composed by computer printout and printed by offset lithography.

PUBLICATIONS: MONOGRAPHS

The Society published the first in a series of monographs in mid-1967. "Pressure Buildup and Flow Tests in Wells", by C. S. Matthews and D. G. Russell, was well received by SPE members, as evidenced by the fact that more than 5,000 copies had been sold by the end of the year. The Monograph project is sponsored by the AIME Henry L. Doherty Fund and the Society's Activities Fund.

Other monographs now in preparation include the following:

"Multiphase Flow in Pipe"

[&]quot;Hydraulic Fracturing"

[&]quot;Profitability Criteria"

[&]quot;Cementing"

[&]quot;Reservoir Engineering Aspects of Waterflooding"

PUBLICATIONS: GENERAL INDEX 1953-1966

The Society's composite index covering material published from 1953 through 1966 complements the earlier General Index to Petroleum Publications of AIME, 1921-1952. The new edition, published in December, 1967, lists more than 13,000 entries in its 326 pages, and includes approximately two author and five subject entries for each paper or article appearing in the Transactions Volumes and JOURNAL OF PETROLEUM TECHNOLOGY from 1953 and in the SOCIETY OF PETROLEUM ENGINEERS JOURNAL since the magazine first was published in 1961. The new General Index is financed by the AIME Henry L. Doherty Memorial Fund.

PUBLICATIONS: PREPRINTS

The Society has continued its program of providing members with preprints of papers presented at SPE meetings. With a decrease in the number of local section meetings there was a corresponding drop in the over-all number of preprints produced. However, a record number of preprints were produced for the Annual Fall Meeting. Average production cost per preprint has decreased steadily from about 11.9 cents each in 1958 to 7.7 cents each in 1967. Following is a summary of the growth of the preprint program. (Figures indicate only those preprints prepared by the Society editorial staff and do not include papers printed by the authors for inclusion in SPE preprint packets.)

SPE FALL MEETING	1964	1965	1966	1967
No. Preprints	108	109	120	134
No. Pages	1,188	1,308	1,440	1,544
SPE REGIONAL MEETINGS			T (1)	
No. Preprints	120	166	164	152
No. Pages	1,320	1,992	1,968	1,998
SPE PREPRINT TOTAL			- 01	206
Total No. Preprints	228	2 7 5	284	286
Total Preprint Pages	2,508	3,300	3,408	3,542

PUBLICATIONS: AD HOC COMMITTEE

In late 1967 an ad hoc publications committee, appointed by the SPE Board of Directors, completed an extensive study of the Society's publications program. Subsequently, the SPE Board approved the committee's 7-point program, as follows:

- 1. New definitions for technical and professional papers and transactions papers;
- 2. Modified duties for the Society's General Editorial Committee and Transactions Editorial Committee;
- 3. Identical format and typographical style for technical and professional papers and transactions papers in JOURNAL OF PETROLEUM TECHNOLOGY;
- 4. Expanded scope for SOCIETY OF PETROLEUM ENGINEERS JOURNAL to allow inclusion of technical papers;
- 5. New efforts to obtain greater coverage of field case histories and operations technology in SPE publications;
- 6. Typographical and layout study for JOURNAL OF PETROLEUM TECHNOLOGY;

7. Standing committee to establish guidelines for selection of papers to be included in Transactions Reprint Series.

MEMBERSHIP

Society membership at year's end in 1967 totaled 16,217, the first time ever for the year-end figure to be above 16,000. A total of 1,229 new member/reinstatement applications were received during the year, an increase of 1 over 1966. Net membership growth in 1967 over 1966 was 640. Membership figures, including new member/reinstatement applications received and members lost, are shown below:

SPE Membership	1964 14,468	196 <u>5</u> 14,896	<u>1966</u> 15,577	<u>1967</u> 16,217
New Member/reinstatement Applications Received*	1,129	1,169	1,228	1,229
Members Lost (resignations, dropped owing dues, deaths)	865	988	1,137	999

*Student applications and special reinstatements are not included in this figure

MEETINGS

The Society sponsored a total of 14 meetings during 1967 (including 2 Student Paper Contests). Attendance at the meetings totaled 7,939, with some 350 technical papers presented.

The 42nd Annual SPE Fall Meeting held in Houston was attended by 2,922 members. The total meeting attendance was 4,361, the largest meeting in the Society's history. The 151 technical papers presented at the meeting also set a new record, compared to 131 papers presented in 1966.

A summary of the Society's Regional Meetings conducted during 1967 follows:

City	<u>Attendance</u>	Number of Papers on Program
Austin, Texas	166	22
Casper, Wyoming	400	16
Evansville, Indiana	235	13
Fort Worth, Texas	378	16
Los Angeles, California	750	27
Lubbock, Texas	100	15
Midland, Texas	357	15
Stillwater, Oklahoma	119	12
Pampa, Texas	119	8
Pittsburgh, Pennsylvania	189	15
Wichita, Kansas	165	16

DISTINGUISHED LECTURER PROGRAM

The Society's Distinguished Lecturer Program reached 50 sections, subsections, and student chapters during the 1966-67 season. The program is financed by the participating local organizations, the AIME Henry L. Doherty Memorial Fund, and the SPE Activities Fund. The six lecturers presented 109 programs during the year.

Total cost for the program was \$10,785.50. The local organizations paid \$2,320, the Doherty Fund paid \$2,000, and the SPE Activities Fund paid \$6,465.50.

Listed below are the lecturers with the number of lectures each presented:

Т.	0.	Allen		20
Ε.	C.	Babson		16
L.	\mathbf{F} .	Davis		16
D.	G.	Hawthorn		27
R.	T.	Hulsey		14
·W.	W.	Wilson		16

AWARDS

The AIME Anthony F. Lucas Gold Medal for 1967 was presented to John E. Sherborne, Union Oil Company of California, Brea, California.

The Society presented the following major awards during 1967:

Cedric K. Ferguson Medal DeGolyer Distinguished Service Medal

Certificate of Service

John Franklin Carll Award

Lester C. Uren Award

J. E. Cochrane, Standard Oil of California
John M. Lovejoy, former president of
Seaboard Oil Company, New York, New
York

Edward H. Mayer, THUMS Long Beach Company, Long Beach, California

- D. V. Carter, petroleum consultant, Dallas, Texas
- J. B. Clark, Pan American Petroleum Corporation, Tulsa, Oklahoma
- R. F. Farris, Pan American Petroleum Corporation, Tulsa, Oklahoma
- C. R. Fast, Pan American Petroleum Corporation, Tulsa, Oklahoma
- G. C. Howard, Pan American Petroleum Corporation, Tulsa, Oklahoma

CONTINUING EDUCATION

During the fall of 1967, 159 petroleum members of AIME in five local sections completed SPE's first video-taped continuing education course entitled "Fundamentals of Reservoir Engineering", taught by Dr. Ben H. Caudle, professor of petroleum engineering at the University of Texas. Using playback equipment and television monitors provided by the Society, the local groups met one night each week for 13 weeks to view 26 one-hour lectures taped by Dr. Caudle and routed to sections on a circuit from the Dallas office. For an enrollment fee of \$25, each student was provided with a booklet containing notes for the course and a hand-lettered Certificate of Completion suitable for framing.

Student reactions to the pilot course overwhelmingly endorsed the video-tape technique as an effective means for classroom instruction, and comments solicited from students enabled Dr. Caudle and the SPE staff to effect improvements in the first course before circulating it to five new sections, beginning in January, 1968. Plans for expanding the program with new courses are now being studied by the SPE Board of Directors.

Total expenditures for capital equipment and production of the first course amounted to \$11,750, of which \$4,800 was paid with a grant from the Henry Krumb

Endowment Fund of AIME. The remaining \$6,950 was paid by the program's permanent sponsor, the SPE Activities Fund. Income produced from local section enrollment fees amounted to \$3,975.

The video-tape program was designed to supplement, not replace, continuing education courses sponsored by local sections and taught in person by qualified instructors. Some 15 petroleum sections of AIME have conducted courses of this type during 1967, and by year's end more than 40,000 cumulative man-hours of SPE-sponsored courses had been completed.

FINANCE

The Society's consolidated income for 1967 totaled \$685,872, up more than \$50,000 from the \$634,840 recorded in 1966. Income exceeded expenses by \$7,290, slightly more than the budgeted surplus at the beginning of the year. Total assets for the SPE Activities Fund at the end of 1967 were \$455,313.12.

SECTION VISITATION

SPE officers and staff visited 30 sections during 1967. All of the local sections in the U.S. were visited by the regional directors. A list of the sections visited by 1967 SPE President, H. A. Nedom, is as follows:

Alaska
Bartlesville
Dallas
Delta
East Texas
Fort Worth
Gulf Coast
Los Angeles Basi

Los Angeles Basin Lou-Ark Mid-Continent Mississippi New York Petroleum Oklahoma City
Permian Basin
Pittsburgh Petroleum
Wichita Petroleum
Wyoming Petroleum
Calgary Section, CIM

Student Chapters
Oklahoma State University
Mississippi State University
University of Oklahoma
University of Tulsa

Members of the SPE headquarters staff visited the following sections:

Amarillo Petroleum
Balcones
Billings Petroleum
Calgary Section, CIM
Dallas
Delta
East Texas
Evangeline
Fort Worth
Gulf Coast

Illinois Basin
Los Angeles Basin
Lou-Ark
Mid-Continent
Mississippi
National Capital Petroleum
New York Petroleum
Northern Oklahoma
Northern Plains
Panhandle

Permian Basin
Pittsburgh Petroleum
South Louisiana
South Plains
Trans-Pecos
Williston Basin
Wichita Petroleum
Wyoming Petroleum

Overseas Sections

of Petroleum

Technologists

Libyan Association

HEADQUARTERS AND STAFF

On November 30, 1967, the SPE Headquarters staff consisted of the following persons:

Joe B. Alford, Executive Secretary
David L. Riley, Assistant Executive Secretary

Mrs. Sally Shank, Secretary

Dan K. Adamson, Publications Manager

Larry G. Allen, Assistant Editor

Miss Ann Gibson, Production Manager, SPE Publications

Mrs. Barbara Dray, Secretary

Mrs. Sally Wiley, Special Publications Supervisor

Miss Gayle Greene, Editorial Assistant

Michael D. Corley, Advertising Manager

Prentice F. Geddie, Assistant Advertising Manager

Miss Sharon Camp, Secretary

Richard E. Boyd, Activities Manager

Miss Susan Moore, Activities Secretary

Mrs. Karen Lee, Membership Secretary

David Holloman, Business Manager

Mrs. Carole Morgan, Business Secretary-Bookkeeper

M. C. Sirles, Mail Clerk-Printer

Respectfully submitted,

Joe B. Alford Executive Secretary

REPORT

of the

SECRETARY, SOCIETY OF MINING ENGINEERS OF AIME

This report covers the period February 1967 through February 1968. This is the second year that AIME has been on a fiscal year dating from December 1, 1966 through November 30, 1967. While the net income for this fiscal year was considerably less than the previous years transfer, it was still over \$30,000. This will bring the SME "warbag" to \$116,740 with every prospect of adding about another \$20,000 in fiscal 1968.

In this and the pages that follow it is our intent to examine all phases of Society activity and report briefly on each.

PUBLICATIONS

Difference between publication income and expense in fiscal 1967 was \$17,413 or about \$1.20 per member. The average net expense for the previous five years was \$2.72 per member. Publication income was at an all time high, \$352.999. Publication expense also, was at an all time high, \$370,412. Advertising income was about \$3,000 greater than 1966 and \$2,000 greater than budget.

Report of the Editorial Board Chairman will go into more detail on each of the Society's publications. Let it suffice here to point out that MINING ENGINEERING carried 120 more pages of Editorial material in 1967 than in 1966. Process color illustrations were employed in the Editorial Section in May, June and October. The Fall special report issue (October) was devoted to Surface Mining. Based on the forthcoming Surface Mining Volume, the issue received many compliments from members and advertisers. A special section of the September issue was devoted to the SME Fall Meeting and Exhibit in Las Vegas.

Each year the Directory has been produced by computer, the results have been unsatisfactory. Our contract with the data processing service expired in 1967. The 1968 Directory will be produced by other and we believe, more satisfactory means. Incidentally, the cost to produce the 1967 Directory, the most expensive yet, due to the large number of corrections that had to be made, was about 53% of the advertising income realized. In other words, the Directory more than paid for itself.

In 1967 there were 158 papers reproduced in the Transactions Quarterly - and Volume - for a total of 26 pages more than the previous year.

The recommendations of the Editorial Board for ways and means to enhance the prestige of the Transactions, increase the number of subscriptions and attract more, high quality papers to the Transactions, were implemented late in the year by the appointment of a full-time Staff Editor and Secretary plus the design of a dynamic new cover and improved format. It is intended to include the names of the Editorial Board and Transactions Editorial Committee Members on the masthead of the "new" Transactions.

The VIII Symposium on Rock Mechanics Proceedings volume titled "Failure and Breakage of Rock" was released in July 1967, ten months after the meeting at the University of Minnesota. This was the first hard cover book in the symposium series. It was also the first financed with SME funds. Income exceeded expense by about \$2,300.

The three special volumes being financed by the Rocky Mountain Club Fund and the Mudd Fund made good progress during the year. It is expected that "Ore Deposits of the United States", "Coal Preparation", and "Surface Mining" will be issued during the first half of 1968. The Society owes a debt of gratitude to the hard working editors John D. Ridge, Joseph W. Leonard and Eugene P. Pfleider and to the authors who worked so hard.

An AIME Student Guidance Committee commissioned a professional writer to produce a new career guidance booklet. The text he prepared, after having been reworked by committee Chairman W. B. Stephenson, Dr. J. D. Forrester and other members of the committee, was turned over to the SME Publishing Department in late October with instructions to polish the text and produce an attractive booklet as soon as possible. In December the project was completed and distribution of the booklet begun. The St. Joseph Lead Co. and The Anaconda Co. provided some of the color illustrations which were used generously throughout the booklet. More than 10,000 copies have been distributed, to date.

Publication of 70,500 copies cost \$4,838 of which \$2,500 will be advanced by the AIME. The remainder will be drawn from the SME Career Booklet Fund. The title of the new booklet is "Penetrating New Frontiers with Minerals Engineers - Geologists, Mining Engineers and Metallurgists."

The SME Preprint Program also continued to enjoy the favor of the membership. More papers (158) were preprinted for the Annual and Fall Meetings than ever before. It is still, of course, our goal to preprint every paper. However, for one reason or another, many authors are unable to provide manuscripts of the papers which they will deliver orally at the meetings.

During 1967 a longtime lobbying campaign in Washington by commercial magazine publishers led to a new interpretation by the Internal Revenue Service of the 1950 Federal Statute relating to the exemption of non-profit organizations on "unrelated" income.

However, the new regulations were made effective December 12, 1967 to apply to all publications whose financial year began after that date. Since the AIME fiscal year begins on December 1, AIME and its constituent Societies will have one year of grace in which to prepare for this additional burden on our publications. Based on interpretation of the new rules by competent authority, it does not, at present, appear that this burden will be crippling.

MEMBERSHIP DEVELOPMENT

In the table below, the membership of the Society of Mining Engineers on January 1, 1968 is compared with similar figures for January 1 of the preceding five years.

	1968	1967	1966	1965	1964	<u> 1963</u>
Members	9892	9401	8202	8624	8523	8531
Associates	2214	2080	1903	1824	1763	1737
Juniors	1610	1601	1500	1571	1627	1730
Students	773	664	574	523	523	<u>523</u>
Total	14489	13746	12899	12542	12436	12522

Examination of the above table will show that there was a smaller net gain in membership, including Students, during 1967 than there was during 1966. However, the fact is that SME Membership did increase 5.4% in 1967.

The net gain of 634 corporate members in 1967 (not counting Students) compares with a net gain of 757 in 1966. These were the result of the Admissions Committee consideration of 1100+ applications and corporate losses totaling 783. For SME the losses were sustained as follows:

	<u> 1967</u>	1966	<u> 1965</u>
Died Resigned Dropped Unaccepted	116 119 465 83	117 124 506 <u>55</u>	149 98 558 40
Total	783	803	7 45

The Society of Mining Engineers net gain in membership was again greater than that of the two other constituent societies. This

fine showing is due to the continuance of the "big city approach" instituted in 1966 by John W. Chandler. He will be succeeded 1968 as Membership Chairman by R. S. Shoemaker who gained experience in 1967 with the "big city approach" as he applied it to San Francisco. In addition to direct mail solicitation of an extensive prospect list, membership desks were set up and manned at national and regional meetings all across the country as they have been in previous years. The list below includes the major meetings at which membership displays were employed.

Minnesota Section Annual Meeting - Duluth, Minn.

96th AIME Annual Meeting - Los Angeles, Calif.

Southwest Metals & Minerals Conf. - Asilomar, Calif.

Pacific Northwest Minerals Conference - Portland, Ore.

Central Appalachian Spring Meeting - White Sulphur

Springs, W. Va.

Coal Division Annual Spring Field Meeting - Birmingham,

Illinois Coal Mining Institute - Springfield, Ill. 1967 SME Fall Meeting-RMMC - Las Vegas, Nevada Off-the-Record Meeting - Pittsburgh, Pa.

Quite as important as membership development is membership retention. In 1967 the Society and Institute contacted each member in danger of being dropped for non-payment of dues at least seven times. The final result was that on December 31 353 SME Members were dropped for non-payment of dues.

MEMBER SERVICES

Group Insurance Programs:

In 1967 the Group Insurance Programs of the Society continued in force and preparations were made to expand again with a World Wide Accident Policy. Based on good experience with the SME Group Life Insurance our administrators, the Joseph K. Dennis Company, announced that Continental Assurance Co. had agreed to reduce the Annual Premiums 10% on all SME Life Insurance policies in force. At this time, it is also announced that the benefits under the SME Accident and Disability policy are increased 10%, for a one year period - subject to renewal.

SME Personnel Service which was begun in August 1965 still renders a valued service to members looking for positions and to companies looking for employees. Administered by the Publications Department during 1967, 357 Men Available notices were carried in MINING ENGINEERING and 68 Positions Open advertisements were published. These resulted in many inquiries by mail, telephone and in person.

MEETINGS

Of the 4102 registrants at the 96th AIME Annual Meeting in February 1967 in Los Angeles, 1,577 indicated they were members of the Society of Mining Engineers. Although the Society and AIME turned over the sponsorship of the 9th Rock Mechanics Symposium held in Golden, Colorado to the Inter-Society Rock Mechanics Committee, the Society of Mining Engineers is planning to publish the Proceedings of this meeting. The Coal Division Annual Spring Field Meeting, attendance 211, was held in Birmingham, Alabama, April 20-22. The SME Fall Meeting and Exhibit - Rocky Mountain Minerals Conference was held at Las Vegas, Nevada September 6-8. This meeting was an outstanding success attracting some 1652 persons from all over the United States and many foreign countries.

SME members took part in a number of other Local and Regional meetings throughout the country; among them the Pacific Northwest Minerals Conference, the Southwest Metals & Minerals Conference, Pittsburgh Off-the-Record Meeting, Annual Meeting of the Minerals Beneficiation Division Subsection of the Colorado Section, 12th Annual Minerals Symposium, Moab, Utah, Joint CIM-AIME Industrial Minerals Meeting in Quebec, Canada, etc.

The Society of Mining Engineers is very grateful for the great service rendered by the 1967 Program Committee under J. M. Neilson, Chairman. He and the Division representatives on the committee, George W. Sall and Harold L. Lovell representing the Coal Division, B. F. Buie, Chairman of the Industrial Minerals Division Program Policy Committee, F. T. Davis, Chairman of the Minerals Beneficiation Division Program Committee, and D. O. Rausch who was Program Chairman of the Mining and Exploration Division Program Committee. These gentlemen and the Divisional Program committeemen working under them put together an outstanding program for the 96th AIME Annual Meeting and the 6th SME Fall Meeting-Rocky Mountain Minerals Conference. The SME Staff, Mrs. L. E. Donaldson, Mrs. R. M. Orologio and Mrs. A. L. Ruiz, again bore the brunt of the many details that go into the Fall and Annual Meetings. Mr. John V. Beall in his role as Assistant Secretary rendered invaluable assistance during the year in preparing for and managing the Fall Meeting.

HONORS AND AWARDS

SME Member Clyde E. Weed was awarded an Honorary Membership at the Annual Meeting in February 1967. The other SME Members listed below were awarded the indicated honors during the same meeting.

- J. Boyd D. C. Jackling Award and Lecture
- M. F. Goudge Hal Williams Hardinge Award
- G. A. Shoemaker Eskine Ramsay Gold Medal

R. G. Page - Charles F. Rand Gold Medal

T. B. Counselman - Robert H. Richards Award

R. D. Parker - W. L. Saunders Gold Medal

C. O. Ensign, Jr. and J. Trammell - Robert Peele Memorial Award

R. L. Stone and J. H. Healy - Best Presentation Awards

C. T. Holland - Percy W. Nicholls Award

C. W. Merrill - Mineral Economics Award

The following SME Members were inducted into the AIME Legion of Honor - Class of 1917:

C. K. Bain P. B. Dolman Donald Markle L. M. Banks E. D. McDermott F. S. Elfred J. C. Barton E. W. Engelmann H. B. Menardi B. R. Bates Thomas Fraser G. F. Metz P. C. Berkefeld C. A. Garner S. A. Mewhirter D. F. Haley C. J. Billwiller G. M. Ponton J. C. Rea E. J. Ristedt J. P. Ruth, Jr. C. W. Hall H. Hardinge D. W. Boise L. J. Buck C. S. Corbett T. G. Hawkins J. A. Daniel O. P. Jenkins Stuart St. Clair E. W. Davis Thayer Lindsley F. W. Varney

STAFF ORGANIZATION

During 1967 Mr. C. A. Chester, who had joined the staff in July 1966, left and was succeeded by Mr. Wm. Prevatt as Assistant to the Secretary. Mr. Prevatt's career was short and we have not filled the position. However, in a reorganization of duties at Headquarters, Mr. John V. Beall has turned over his Editorial duties to Paul Merritt and will concentrate more on his position as Assistant Secretary of the Society.

In the Publications Dept. Miss Valrie Simms left to be married and was succeeded by Mr. George Bookhard in the post of Production Manager. Although it bears the same title, this post of Production Manager now entails considerably more responsibility than was carried by Miss Simms. Miss Susan Davis was hired during the year as an Editorial Assistant and Mr. Jack Ward joined the staff as an Assistant Editor. Miss Marilyn Ward now occupies the post of Secretary in the Publications Department and handles the preprint program. At the year end, Miss Dahlia Blanco, who handled the Employment Service, left the Society to join a Management Consulting firm. Mr. Donald Tone, after twelve years with the Institute and Society, left at the beginning of 1968. His post as Eastern Advertising Manager has not yet been filled. Miss Fairley Muehleck is Editor of Transactions, adding that post to her position as Associate Editor.

CONCLUSION

In the course of this report I have mentioned a number of those who helped make 1967 so successful. At this point it seems fitting to express the thanks of the Officers and Staff to the more than 500 Committeemen who carried out their assignments to the letter. Without the loyal support of the entire membership, the Officer, Directors, committees and staff would find it impossible to carry out their duties.

It is fitting to end this report with an expression of thanks to the AIME Officers and Directors, to the AIME Executive Director and General Secretary, R. W. Taylor, Western Field Secretary C. J. Hicks, AIME Assistant Secretary and Activities Manager, C. K. Carlson and his staff, to the AIME Controller, Mr. T. P. McConnell and AIME Business Manager, Mr. Dominic Lisanti. Their willingness to cooperate with the Society helped to make our meetings successful and our day to day operations more efficient.

Respectfully submitted,

John Cameron Fox

REPORT

of the

SECRETARY OF THE METALLURGICAL SOCIETY OF AIME

for 1967

I believe that the measures taken in fiscal 1967 to cure the financial ills of the Society are the turning point that will enable the Society to fulfill its objectives and gain momentum to better serve the members and the profession.

The Society has consolidated the Metals Research Publications Fund, Projects Fund, Operating Exposition Fund, and Royalties Fund into THE METALLURGICAL SOCIETY ACTIVITIES FUND. The Activities Fund is established for the broad purposes of the Society but especially to underwrite new projects of the Society and its subdivisions. It is now the policy of the Society that excepting award funds, no new independent funds under the control of constituent divisions or committees shall be established and that the funds of any existing committee or division that would benefit from centralized management may be consolidated into The Metallurgical Society Activities Fund. However, the initiative for requesting consolidation must come from the groups involved. Proposals for new meetings, conferences, or seminars, or for programs not regularly established within the existing framework of the Society now require the advance approval of TMS Board. It is also established that all sponsoring groups for all meetings carrying sponsorship of TMS will be assessed realistic charges for staff services.

TMS Board has established, as a Standing Committee, the Long-Range Planning Committee charged with long-range objectives and studies for the Society in all of its aspects.

Significant too was the establishment of the Executive Committee of The Metallurgical Society consisting of the Officers of the Society to consider all business to come before the Board with appropriate study and recommendations to expedite the operations and policies of the Society. With the establishment of this Committee the Finance Committee was dissolved.

The Standing Committee for Annual Conference on Operating Metallurgy was discharged as of December 19, 1967, with the thanks and grateful appreciation of the Board of Directors.

Honors and Awards

Fellows of The Metallurgical Society

Newly elected Fellows of The Metallurgical Society were installed at the 1967 TMS-AIME Annual Meeting in Los Angeles, California, were:

Harold B. Emerick
Sir Charles F. Goodeve
Paul Queneau
George A. Roberts
J. S. Smart, Jr.

TMS Board of Directors has elected to the grade of Fellow:

Marc L. Allard

Farl Hamlin Bunce
John Frank Elliott
Benjamin Lustman
Lloyd Montgomery Pidgeon

These Fellows will be installed at the 1968 TMS-AIME Annual Meeting.

The following awards were presented by The Metallurgical Society during 1967:

1. Robert Lansing Hardy Gold Medal

David N. Seidman was the recipient of the Robert Lansing Hardy Gold Medal in recognition of his exceptional promise. This award is given, annually, to a metallurgist who has not reached his thirtieth birthday before the end of the calendar year during which the selection is made.

2. Champion H. Mathewson Gold Medal

The Champion H. Mathewson Gold Medal was bestowed on J. D. Hunt and K. A. Jackson for their closely related papers which were considered the most notable contribution to metallurgical science during a three-year period: "For a series of investigations utilizing organic substances to elucidate freezing mechanisms in metals," a portion of which was published in the February and June, 1966, issues of TRANSACTIONS OF THE METALLURGICAL SOCIETY OF AIME.

3. Robert W. Hunt Award

The Robert W. Hunt Award was presented, in 1967, to Eric T. Turkdogen for his best original paper on iron and steel "Causes and Effects of Deoxidation Occurring During Cooling and Solidification of Steels," published in TRANSACTIONS OF THE METALLURGICAL SOCIETY OF AIME, December, 1965, pp. 2100-2112.

4. Extractive Metallurgy Division Award

This award, given for the best paper in the field of extractive metallurgy within a two-year period, was bestowed upon John L. Dewey for his paper "Freeze Purification Process Upgrades Aluminum Purity." This paper appeared in JOURNAL OF METALS, September, 1965, p. 940.

5. J. E. Johnson, Jr., Award

The J. E. Johnson, Jr., 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 when he completes the work that merits recognition. The 1967 recipient is R. D. Salmon: "For his contribution in furthering the development of a Blast Furnace Computer Control Concept, and in refining and applying a

blast furnace burden model that maintains a high hot metal production rate with improved quality."

6. Frank B. McKune Award

The Frank B. McKune Award was presented to David R. Dendel for his paper "Ingot Relationships to Surface Quality" considered the best paper on open hearth and basic oxygen steelmaking written by authors under forty years of age in 1967. This was published in the 1967 Conference Proceedings.

7. Open Hearth Conference Award

"Runner-up paper" to the McKune Award was presented to Leslie D. Withrow for his paper "Job Quality Analysis." This was published in the 1967 Conference Proceedings.

8. Charles H. Herty, Jr., Award

Given for the best paper presented at the 1966 National Open Hearth and Basic Oxygen Steel Conference, and published in the 1966 Conference Proceedings, was presented to A. T. Gordon and E. A. Loria for their paper "Hot Model Studies of the Basic Oxygen Process for Stainless Steel Production."

9. Ironmaking Conference Award

Given for the best paper at the 1966 Ironmaking Conference to A. Rist and N. Meysson for their paper "A Dual Graphic Representation of the Blast-Furnace Mass and Heat Balances," and published in the 1966 Conference Proceedings.

10. Ironmaking Conference Award - Honorable Mention

This award was given to Makato Inoue for his paper "Effects of Burden Sizing on Blast Furnace Operation" for the second outstanding paper presented at the 1966 Ironmaking Conference, and published in the 1966 Conference Proceedings.

11. Joseph Becker Award

This award was presented to Charles C. Russell for distinguished achievement in coal carbonization.

12. T. L. Joseph Award

This award is given to recognize achievement in blast furnace technology and in 1967 was presented to Julius H. Strassburger.

13. Electric Furnace Conference Award

Established to be given to the best paper at the Electric Furnace Conference. This award was presented to J. F. Wallace, P. F. Wieser, and N. L. Church for their paper "Grain Refinement of Steel Castings," published in the 1966 Conference Proceedings.

Lectures

1. 1967 Extractive Metallurgy Division Lecture

Albert W. Schlechten - "Education for Extractive Metallurgists," and published November, 1967, in TMS TRANSACTIONS.

2. 1967 Howe Memorial Lecture (Iron and Steel Division)

Gerhard Derge - "Heterogeneity and Interface Reactions in Iron and Steelmaking," and published in TMS TRANSACTIONS, October, 1967.

3. 1967 Institute of Metals Division Lecture

John W. Cahn - "Spinodal Decomposition," to be published.

Technical Conferences

The Metallurgical Society through its units sponsored ten conferences during calendar 1967.

			Attendance	Number Technical Sessions	Number Papers Scheduled	
1.	February 19-23 Los Angeles, California	%th AIME Annual Meeting The Metallurgical Society	1,352	71	468	
2.	April 10-12 St. Louis, Missouri	50th National Open Hearth & Basic Oxygen Steel Conference	1,327	9	31	
3•	April 18-19 Madison, Wisconsin	Biomedical Engineering Materials Institute	51	4	10	
4.	May 11-12 Schenectady, New York	21st AIME New England Regional Conference	147	4	11	
5•	June 13-15 New York, New York	International Conference Vacuum Metallurgy	383	8	54	
6.	August 28-30 New York, New York	Electronic Materials Conference	361	6	41	
7•	September 12-13 Gatlinburg, Tennessee	Chemical Vapor Deposition Conference	280	9	28	

			Attendance	Number Technical Sessions	Number Papers Scheduled
8.	October 4-6 Phoenix, Arizona	Nuclear Metallurgy Conference	133	5	32
9•	October 15-19 Cleveland, Ohio	The Metallurgical Society Fall Meeting	1,537	5 5	3%
10.	December 11-15 Chicago, Illinois	Operating Metallurgy Conference	2,004	26	100
		TOTAL	7,575	<u> 197</u>	1,171

It is interesting to note that 1966 held the same number of meetings but in 1967, 771 less people attended the ten meetings to hear 257 more papers at 31 more sessions.

The Operating Metallurgy Conference was held as a unit for the last time. The Electric Furnace Conference, Extractive Metallurgy Division Conference, and the Physical Chemistry of Steelmaking Committee will continue to program at the same time of the year. The Ironmaking Committee will reunite with the National Open Hearth and Basic Oxygen Steel Committee to produce a conference in April of each year. The Mechanical Working and Steel Processing Committee will point its efforts to a Conference in January of 1969.

1968 shows an ambitious meetings program for The Metallurgical Society as listed below:

1.	February 25 - March 1	97th AIME Annual Meeting, Waldorf-Astoria Hotel, New York, New York	
2.	April 1-3	51st National Open Hearth and Basic Oxygen Steel Conference 27th Ironmaking Conference, Chalfonte-Haddon Hall Hotel, Atlantic City, New Jersey	
3•	April 25-26	Symposium on "Critical Topics in Metallurgy and Technology of Refractory Metals," Statler-Hilton Hotel, Washington, D. C. (IMD Refractory Metals Committee co-sponsored with NASA and U. S. Navy)	
4.	May 16-17	22nd New England Regional Conference, Hotel America, Hartford, Connecticut (New England Regional Conference Committee co-sponsored with the Boston, Connecticut,	3

and Hudson-Mohawk Sections of AIME)

5•	May 20-24	Inter-American Conference on Materials Technology, San Antonio, Texas (co-sponsored by Society for Non- Destructive Testing, American Society of National Engineers, The Metallurgical Society, American Welding Society, American Society for Metals, American Society for Testing and Materials, American Society of Engineering Education, National Association of Corrosion Engineers, and Society of Mining Engineers)
6.	May 21-24	International Symposium on Titanium, London, England (co-sponsored by IMD Titanium Committee, American Society for Metals, and The Institute of Metals - British)
7•	Summer	Engineering Foundation Research Conference "Corrosion Engineering" (co-sponsored by IMD Corrosion Resistant Metals Committee and Engineering Foundation Research Conference Committee)
8.	August 11-14	9th Annual Electronic Materials Conference, Palmer House, Chicago, Illinois
9•	September 4-6	International Symposium on "Structural Stability in Ni-Base Super Alloys," Seven Springs, Pittsburgh, Pennsylvania (co-sponsored by IMD High Temperature Alloys Committee, ASM, ASTM, and ASME)
10.	September	"Recent Advances in Metal Shaping and Forming," Case- Western Reserve University, Cleveland, Ohio (co- sponsored by IMD Shaping and Forming Committee and AIME Cleveland Section)
11.	October 2-4	Nuclear Metallurgy Symposium on "Materials for Radio- isotope Heat Sources," Mountain Hotel and Motor Lodge, Gatlingburg, Tennessee
12.	October 13-17	Annual Fall Meeting of The Metallurgical Society, Statler Hilton Hotel and Cobo Hall, Detroit, Michigan, with National Metal Congress and Exposition
13.	December 2-6	Electric Furnace Committee, Extractive Metallurgy Division, Physical Chemistry of Steelmaking Committee Conference, Sheraton-Cleveland Hotel, Cleveland, Ohio

Technical Information Exchange

While the first Technical Information Exchange was held in conjunction with the 1967 Operating Metallurgy Conference and falls into fiscal 1968 reporting, it is interesting to note that this first attempt at providing a visual communication exchange resulted in 26 units which resulted in greater income than the first two Operating Metallurgy Expositions combined. TIE is scheduled, again, for the 1968 December Conference.

Membership

A modest gain in the membership of the Society for fiscal 1967 is shown in the comparison that follows:

Breakdown by Division	As of December 1, 1966	As of December 1, 1967
Iron and Steel Division Extractive Metallurgy Division Institute of Metals Division Council of Education Council of Economics Unclassified	3,538 1,385 4,096 28 64 1,111	3,544 1,452 4,050 24 64 1,453
Total Corporate	10,222	10,587
Student Members	2,296	2,400
Grand Total	12,518	12,987
Breakdown by Grade		
Members Associates Juniors Students	6,349 1,635 2,238 2,296	6,523 1,727 2,337 2,400
Total	12,518	12,987

In September, a classification of Unclassified TMS Members was made. Out of 1,150 postcard questionnaires sent out, 769 were returned, reducing our Unclassified Members to 381. This information is of value to advertising sales and provides better distribution of specialized information mailings.

TRANSACTIONS OF THE METALLURGICAL SOCIETY

This year, TRANSACTIONS OF THE METALLURGICAL SOCIETY published an increase of 250 pages of technical information. The March issue contained papers presented at the Conference on Preparation and Properties of Electronic Materials for the Control of Radiative Processes (Boston, Massachusetts, August 29-31, 1966), sponsored by the Electronic Materials Committee of IMD. This issue constituted the Proceedings of this Conference and contained 27 technical papers, 134 pages of content.

Colored photomicrographs were introduced, as a test process, and published in connection with the Howe Memorial Lecture, in the October, 1967, issue.

TRANSACTIONS will be continued to be bound in two parts.

Divisions of The Metallurgical Society contributed Transactions as follows:

Division	No. of Papers	No. of Pages
EMD	31	178
ISD IMD	33 204	219 1313
March Issue	27	
Totals	295	1844

Communications Published

Division	No. of Papers	No. of Pages
EMD ISD IMD	7 8 <u>83</u>	13.5 15.0 <u>128.5</u>
Totals	98	157.0

1967 showed an increase of non-member subscriptions from 1,269 in 1966 to 1,406 in 1967, and an increase of member subscriptions from 2,120 in 1966 to 2,161 in 1967, or a total of 3,567.

JOURNAL OF METALS

In 1967 papers presented at the Electric Furnace Conference, the Ironmaking Conference, and the National Open Hearth and Basic Oxygen Steel Conference were published in JOURNAL OF METALS preparatory to publication as Proceedings volumes. To expedite publication of these Proceedings in 1968, papers selected as outstanding by the Operating Committees will be published in JOURNAL OF METALS. Breakdown of the papers and pages for these three groups:

Electric Furnace Committee	25 Papers 116 Page	
Ironmaking Committee	35 Papers 180 Page	24 Papers and 109 Pages
National Open Hearth and Basic Oxygen Steel Committee		 Description of the second of th

The total number of pages printed in the December, 1966, through November, 1967, issues of JOURNAL OF METALS is 1,072. This is lower than the number of pages printed during the preceding year (1,360 pages), and reflects economies that were introduced into production. During this past year "Coming Events" Department of the magazine has been greatly expanded to include AIME Section Meetings of interest to TMS members. TMS Spotlight was introduced to tell briefly of members on the move and to briefly highlight special events of TMS and AIME.

A total of 94 pages of technical programming for the units of The Metallurgical Society were printed in JOURNAL OF METALS during fiscal 1967:

Meeting	No. of Pages	Issue
%th TMS-AIME Annual Meeting	18	January
50th National Open Hearth and Basic Oxyger Steel Conference	n 10	March
21st New England Regional Conference	2	April
International Vacuum Metallurgy Conference	е 4	May
Chemical Vapor Deposition of Refractory Metals, Alloys and Compounds	4	June
1967 Nuclear Metallurgy Symposium	4	August
TMS Fall Meeting	24	September
1967 Operating Metallurgy Conference	<u>28</u>	October
Total	al 94	

It is interesting to note that the page breakdown by TMS Division articles other than Proceedings is as follows:

	No. of Articles	No. of Pages
IMD	17	75.5
EMD	21	98.5
ISD	20	96.0
Education	3	9•5

1967 showed an increase of non-member subscriptions from 2,375 in 1966 to 2,524 in 1967.

Advertising in JOURNAL OF METALS

JOURNAL OF METALS ADVERTISING

	1967	1966	1965
No. of Pages	194	206	238
Advertising Income	\$7 8 , 283	\$80,467	\$91, 133
Advertising Expenses	\$54,650	\$48,488	\$52,348

Proceedings Advertising

TMS advertising staff handles the advertising carried in Proceedings of the Operating Committees of the Iron and Steel Division. Fiscal 1967 follows:

	Advertising Pages	Gross Income
Vol. 24 Ironmaking Vol. 23 Electric Furnace Vol. 25 Ironmaking Vol. 49 NOH & BOSC	37 52 34 _59	\$ 7,925 10.957 6,490 13,755
Total	182	\$39,127

Abstract Bulletins

Institute of Metals Division

Volume 2, No. 1, issued in January, 1967, contained 319 abstracts in 130 pages from papers and abstract presentations to be given at the 96th TMS-AIME Annual Meeting in Los Angeles. Volume 2, No. 2, issued in August of 1967, contained 405 abstracts in 134 pages from papers and abstract presentations given at the 1967 TMS Fall Meeting in Cleveland in October.

New Concepts

In order to meet the demand for publishing new abstracts and to reduce the expenses, TMS studied and initiated author composition and offset printing of abstracts for the 1968 TMS-AIME Annual Meeting. These were assembled and subsequently will be printed in the January, 1968, issue of JOURNAL OF METALS.

TMS Committee Handbook

For the first time, TMS published the names, addresses, and telephone numbers of its Standing Committees in a TMS Committee Handbook. It is hoped that next year this can be expanded to include the divisional committees and in the future do away with the heavy expenditure of producing a Membership Directory.

Proceedings Volumes

The following Proceedings volumes were produced by The Metallurgical Society during the past year for a total of 778 pages:

- Volume 49 TMS-AIME Open Hearth Proceedings, Chicago, Illinois, April, 1966
- Volume 24 TMS-AIME Ironmaking Proceedings, Pittsburgh, Pennsylvania, December, 1965
- Volume 25 TMS-AIME Ironmaking Proceedings, Philadelphia, Pennsylvania, December, 1966
- Volume 23 TMS-AIME Electric Furnace Proceedings, Pittsburgh, Pennsylvania, December, 1965.

Volumes I and II - Electric Furnace Steelmaking were reprinted for additional distribution

Publications through Gordon and Breach Science Publishers, Inc. - four books were published through Gordon and Breach Science Publishers, Inc., between December, 1966, and November, 1967. The total number of pages published through this source during this period was 1,936.

1. Volume 34 - "High Temperature Refractory Metals," Part 2

Proceedings of a Symposium sponsored by the High Temperature Metals Committee of the Extractive Metallurgy Division, The Metallurgical Society, AIME, New York, New York, February 16-20, 1964. 468 pages. Edited by R. W. Fountain, Joseph Maltz, and L. S. Richardson.

2. Volume 35 - "Environment Sensitive Mechanical Behavior"

Proceedings of a Conference sponsored by The Metallurgical Society of AIME and the U. S. Army Research Office of Durham, and the Research Institute for Advanced Studies, Baltimore, Maryland, June 7-8, 1965. 706 pages. Edited by A. R. C. Westwood and N. S. Stoloff.

3. Volume 36 - "Local Atomic Arrangements Studied by X-Ray Diffraction"

Proceedings of a Symposium sponsored by the Physics and Chemistry of Metals Committee of the Institute of Metals Division, The Metallurgical Society of AIME, Chicago, Illinois, February 15, 1965. 381 pages. Edited by J. B. Cohen and J. E. Hilliard.

4. Volume 38 - "High-Temperature, High-Resolution Metallography"

Proceedings of a Symposium sponsored by the Ferrous Metallurgy Committee, Institute of Metals Division, The Metallurgical Society of AIME, Chicago, Illinois, February 15, 1965. 381 pages. Edited by Hubert I. Aaronson and George S. Ansell.

In addition, during this same period Gordon and Breach received six complete manuscripts to process towards publication. They are:

- 1. Symposium on Methods of Materials Selection Conference: Gainesville, Florida, May, 1966; (AIME/ASM/NACE)
- 2. Mechanical Working and Steel Processing V Conference:
 Philadelphia, Pennsylvania, December, 1966; (Mechanical Working and Steel Processing Committee-ISD)
- 3. Energy Bands in Metals and Alloys Conference: Los Angeles, California, February, 1967; (Committee on Alloy Phases-IMD)
- 4. Work Hardening Conference: Chicago, Illinois, October-November, 1966; (Chemistry and Physics of Metals Committee-IMD)

- 5. Neutron Scattering Conference: Los Angeles, California, February, 1967; (IMD)
- 6. Continuous Processing and Process Control Conference: Philadelphia, Pennsylvania, December, 1966 (EMD)

During fiscal 1967, TMS published 6,051 pages of technical communications.

Finances

For the first time since 1959 TMS operations resulted in a modest \$5,000.00 gain of income over expense. All obligations to TMS Activities Fund were retired and TMS is free from any indebtedness.

The total fund position of the Society at November 30, 1966, was \$397,222.00 and at November 30, 1967, \$440,900.00 or an increase of \$43,678.00.

Acknowledgment

The time, study, and effort given to the Society by the Executive Committee under the capable leadership of President J. Harry Jackson cannot be measured or evaluated. Their counsel, inspiration, vigor, and support are gratefully acknowledged. Too, the labor of love, and the resulting fine TRANSACTIONS OF THE METALLURGICAL SOCIETY, performed by Dr. Gerhard Derge, Editor, deserves the gratitude of the entire Society. 1967 has been an interesting and fruitful year for The Metallurgical Society, and I believe that we will look back in a few years to realize that it was the turning point towards greater progress for TMS.

Respectfully submitted,

JVR:as

ck 1. Bichard

Secretary