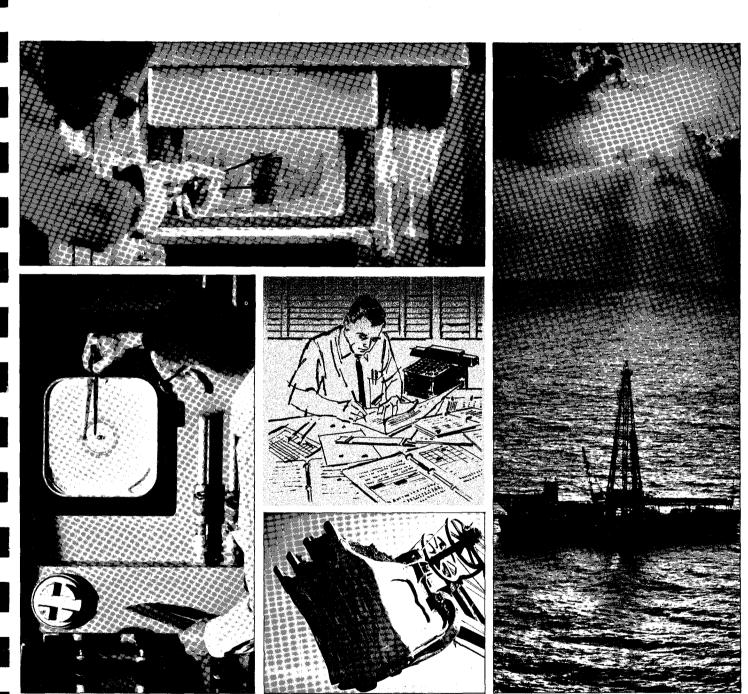
; AIME Annual Report



Mining, Metallurgical and Petroleum Progress



A Message from Thomas C. Frick 1965 AIME President

More than 2,000 new members of AIME in 1965—the greatest single year of growth since 1958. Rarely in our 95-year history have we attracted this many new members. This year of growth, when we reached the 40,000 member level, is particularly significant when we compare it to the 341 member per year average increase for the years 1961 through 1964.

Membership growth, and growth in services to members, too. We have a new Oil Shale Committee and now co-sponsor an Annual Oil Shale Symposium. We have a new Rock Mechanics Committee and co-sponsor an Annual Rock Mechanics Symposium. We instituted the Henry Krumb Lecture Series, which should be an effective aid to Section program chairmen.

In 1965 your staff, officers and committees worked diligently to recognize and define the responsibilities and obligations of AIME. The stamp of achievement was then gained only after carefully designing and implementing programs to fulfill specific needs.

STUDENT AFFAIRS

The shortage of students in mineral engineering departments is more significant than ever before. We attacked this problem at two levels during 1965. First, we attempted to work through established career guidance groups to bring the story of the minerals engineering professions to the attention of young people. We offered AIME awards to contests of the Junior Engineering Technical Society (JETS), increased AIME prizes in the National Science Fair-International, and continued offering financial assistance to Sections which participate in local science fairs.

Our second approach to the problem was through our 78 AIME Student Chapters. To encourage and help both the chapter and the faculty sponsor, the Student Affairs Committee devised an entire program which recognizes the important characteristics of students, their chapters and problems.

THE "GRASS ROOTS"

Institute and Society officers visited virtually every one of our 110 Sections during 1965. The close contact of national officers and members at the local level provides excellent communication, giving members the opportunity to express their views of the Institute directly to officers, and to offer suggestions on how to improve operations. Problems discovered through this visitation program have been pinpointed, and appropriate actions have been outlined.

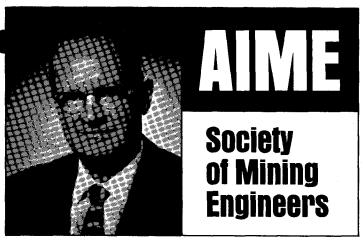
The Council of Section Delegates was reorganized in 1965, resulting in outstanding fall meetings in each of our six regions. Twenty-five resolutions for action to improve the Institute have resulted, to be discussed at the national meeting of Section Delegates and the AIME Board in February, 1966.

OUR "FOUNDER SOCIETY" OBLIGATIONS

As one of five engineering founder societies—the oldest and most prestigious engineering societies in the country—AIME has a strong obligation to support and provide guidance to the organizations which unite efforts within engineering as a whole.

We are indebted to many AIME members who have taken the lead in the reorganization of Engineers Joint Council, and in merging the career guidance activities of JETS and the Engineers' Council for Professional Development. AIME members are leading the formation of the national engineering information system, and we look with pride at the leadership provided by our members in the formation of the National Academy of Engineering.

AIME is one of the great technical institutes of America. Its membership directories provide an "honor roll" of the leaders in the mining, metallurgical and petroleum professions. We have a great heritage, a great obligation, and a compelling incentive to continually strive for improvement and increased service to our members.



BY JACK M. EHRHORN, 1965 PRESIDENT

For the Society of Mining Engineers of AIME, 1965 was an outstanding year. The Society's publications improved, its meetings were more successful, service to members increased and it is solvent.

PUBLICATIONS AND MEETINGS

Each issue of MINING ENGINEERING was bigger and better than the corresponding issue of 1964. The October special issue featured in-depth coverage of two major mining areas in the special section articles "Southwest Copper—A Position Survey" and "Mesabi Enters a New Era." The four-color process illustrations in this issue were the first used in any mineral industry publication. The October issue was the vehicle in which a new format was presented for all departments of the magazine. Transactions Quarterly presented 398 pages of important articles to its readers within weeks after approval by the critical Transactions review committee.

About half of those attending the AIME Annual Meeting in Chicago were SME Members. SME co-sponsored the VII Symposium on Rock Mechanics, held this year at Pennsylvania State University. About 800 attended the 1965 SME Fall Meeting and Rocky Mountain Minerals Conference in Phoenix, Arizona. Among other important meetings were: Colorado Subsection Minerals Beneficiation Division Meeting in Colorado Springs and the Coal Division Spring Field Meeting in Rawlins, Wyo., in May.

SERVICE TO MEMBERS

On February 1, 1965, the SME Group Insurance Policy providing accident and sickness disability income protection went into effect. On November 1, 1965 the SME Group Life Insurance Policy became operative, with more than 500 members participating.

A survey of M & E Division Members showed that MINING ENGINEERING magazine ranks first with

the members, followed closely by the SME Preprint program, Local Section meetings and Regional and Annual Meetings, including the SME Fall Meetings. There was no consensus on "What's wrong with the SME?" However, constructive criticisms are being taken into account in the Society's forward planning.

In October the SME Board of Directors voted a valuable additional service to the Members—an Exposition in connection with the 1966 SME Fall Meeting in Tampa, Florida.

SME and SPE cooperated in demonstrating that AIME is properly the professional society home for engineers engaged in the development of oil shale and in the growing field of rock mechanics.

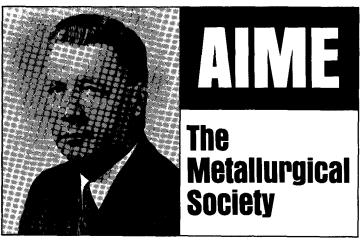
MEMBERSHIP DEVELOPMENT

Thanks to the efforts of Membership Chairman, Deane F. Kent and his associates, SME Membership is at an all-time high. The Admissions Committee acted on 1240 applications of all types, including 199 applications for reinstatement. Qualifications for admission as an Associate Member were upgraded.

CONCLUSION

At the end of this, my year of stewardship of your Society, I wish to thank all those who have been so helpful in making it a success.

First, I wish to thank you—the Members—for electing me to the post of President. Next, the Board of Directors and Officers of the Society were always cooperative. Their help made my tasks easier. Those of you who work on the 72 committees that it takes to make SME go, are the real heroes. Finally, my warmest thanks to the staff of SME and AIME in New York and Salt Lake City. They provide the continuity and guidance needed by us, the elected and appointed officials of SME, your Professional Society.



BY HAROLD B. EMERICK, 1965 PRESIDENT

Dramatic change was the keynote in The Metallurgical Society during 1965, as plans made in previous years for technical meetings and publications reached fruition. Highlights of these accomplishments follow.

JOURNAL OF METALS was redesigned both in appearance and in editorial content to fulfill the role of "The Magazine of Operating Metallurgy". The number of editorial pages was virtually doubled, and included all papers presented at the following conferences: National Open Hearth and Basic Oxygen Steelmaking, Ironmaking, and Electric Furnace.

Transactions of The Metallurgical Society is now published monthly, rather than bi-monthly, virtually eliminating the publishing time-lag normally experienced by technical publications.

The First Operating Metallurgy Conference, held early in December, attracted nearly 3,000 persons to the week-long series of meetings which included the 24th Ironmaking Conference, 23rd Electric Furnace Conference, 8th Mechanical Working and Steel Processing Conference, Symposium on Pyrometallurgical Processes in Nonferrous Metallurgy, Symposium on Vacuum Steelmaking, and the Symposium on New Metal Forming Processes. The First Operating Metallurgy Exposition, held in conjunction with the Conference, added appreciable educational value to the meeting.

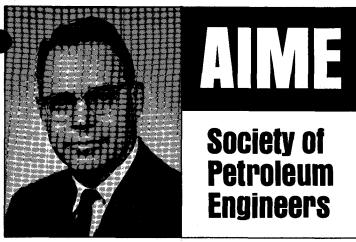
The 1965 Fall Meeting for the first time was held under the same roof as the Metals-Materials Congress of the American Society for Metals. In the meeting at Cobo Hall, Detroit, members of both societies found it convenient to attend the technical sessions of their choice.

Technical programming continued at a high rate in all divisions of The Metallurgical Society—Institute of Metals, Iron and Steel, and Extractive Metallurgy. Special conferences were conducted on Environmental Sensitive Mechanical Behavior of Materials, Engineering Management, Powder Metallurgy, Electronic Materials, Radiation Effects, and Physical Metallurgy of Refractory Metals.

Proceedings of the 48th National Open Hearth and Basic Oxygen Steel Conference and the 22nd Electric Furnace Conference were published in a new format, using the same page size as JOURNAL OF METALS. The "new look" of Proceedings found wide acceptance.

Among the new books published during 1965 through our cooperative agreement with Gordon and Breach, Science Publishers, Inc., were: Vol. 24, Unit Processes in Hydrometallurgy; Vol. 25, Deformation Twinning; Vol. 26, Mechanical Working of Steel; and Vol. 27, The Sorby Centennial Symposium on the History of Metallurgy. With the exception of Volume 27, all appeared in a paperback edition in addition to the hard cover.

The Metallurgical Society, currently the smallest of the three AIME societies, but growing steadily, continues to set the pace in the number of technical meetings, and in papers and books published. Our progress in 1965 has been heartening, pointing to still greater growth and service to members in 1966.



BY LINCOLN F. ELKINS, 1965 PRESIDENT

1965 was a banner growth year for the Society of Petroleum Engineers of AIME—in membership and particularly in services. Applications for membership or reinstatement were highest since 1960 and total membership at year end stood at an all-time high. We believe this growth reflects recognition of the increasing value of the Society to the members, and of course it is a tribute to the efforts of membership workers throughout the profession.

The basis of the increase in value is the tremendous expansion of services with no increase in dues since 1949. Editorial material published in JPT and SPEJ totaled 1,433 pages, and in 1965 the Society held a total of 11 regional or one day-section meetings in addition to the regular annual fall meeting, and even more are planned for 1966. Total attendance at regional meetings now exceeds that of the fall meeting—indicating that the benefits of the Society are being taken to the members where they are. One value of regional meetings is emphasis of the technical programs on the engineering problems of the local area.

THE ROLE OF SPE-AIME IN CONTINUING EDUCATION

The SPE Monograph program is off to a good start. The Committee has already commissioned the preparation of three monographs and is reviewing additional subjects and authors for more. These book length treatments of individual subjects are being written by outstanding memberauthors in the field. Preparation of the Monographs will be subsidized by the Society to make them available to members at the lowest cost possible.

Several Petroleum Sections of AIME have conducted refresher courses to assist their members in keeping abreast of petroleum technology. These have ranged from mathematics courses taught by local college staffs to lecture series presented mostly by industry representatives to short courses or courses for credit presented entirely by uni-

versity petroleum engineering staffs. Registration has ranged from about 20 to 200 and fees have ranged from \$20 to \$195. The success of all of these diversified approaches demonstrates the genuine interest of our members in maintaining competence in our profession.

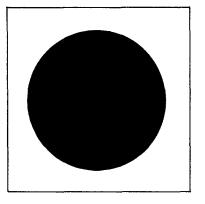
EXPANDING OUR COVERAGE

SPE has intensified its interest in assimilating the technology of shale oil recovery through cooperation with the Society of Mining Engineers in an all-AIME effort. This has resulted in AIME cosponsorship with The Colorado School of Mines and The Colorado School of Mines Research Foundation of an Annual Oil Shale Symposium. In a similar manner SPE and SME as AIME have joined with five universities in co-sponsoring an Annual Symposium on Rock Mechanics. Within our own area we have added a technical committee on Offshore Oil Production to insure our members of being fully informed regarding the technology of recovering oil from under the seas.

The increase in publications and other services to members caused us to outgrow our headquarters office space. In November we moved into new quarters at 6200 North Central Expressway, where everything is arranged for maximum efficiency.

CONCLUSION

The mergers between mining and petroleum companies during 1965 show the increasing mutual interests of petroleum and mining companies. The Society of Petroleum Engineers hence grows closer constantly to the Institute and the Society of Mining Engineers. We are most gratified by our excellent growth and our intensified effort to aid members through providing additional opportunities for continuing education. The Society of Petroleum Engineers of AIME pledges to continue to seek new ways of serving its members and aiding them in the challenging task of meeting the energy demands of the world.



Publication Highlights

In 1965 AIME published 8,400 pages in its magazines and Transactions volumes. In 1950, when the current dues were established, AIME published 4,300 pages, just one half of the current figure.

Publishing costs today are higher—much higher. AIME now publishes much more of the mathematical and theoretical engineering papers than ever before, and these papers are far more expensive to print than normal reading matter. Of course, additional expenses have to be met with more revenue. To maintain financial stability, subscription prices were established for specialized publications.

But, the fact remains that AIME today publishes twice as much as it did in 1950, and your dues are the same.

Mining

In a dramatic move, MINING ENGINEERING published a special issue devoted to Taconite and Southwest Copper—featuring full-color photographs. Offset printing was used for the special sections of the issue, permitting both economy and flexibility. This special issue was hailed as a pioneering step in mineral industry publications.

In addition to color, a new service was added in the pages of the magazine. MINING ENGINEERING now publishes "men available" notices free for members, and encourages "position open" advertisements.

MINING ENGINEERING is now providing a home for publication for the emerging new science of rock mechanics. In cooperation with AIME cosponsorship of the Annual Rock Mechanics Symposium, all papers presented at the meeting will be published in MINING ENGINEERING.

Metals

Journal of Metals moves into 1966 with a feeling of accomplishment. More pages were published than ever before, and advertising set a record. Non-member subscriptions rose to the record level of 2,363.

Major factors contributing to the notable year were the publishing of all papers presented at the National Open Hearth Conference and the Electric Furnace Conference. JOURNAL OF METALS was redesigned inside and out, and given the title The Magazine of Operating Metallurgy.

Transactions of The Metallurgical Society is now published on a monthly basis. This significant move was taken to provide speedier publication for the increasing number of papers.

In line with many other societies, The Metallurgical Society instituted page charges of \$35 to maintain publications on a sound financial basis and keep in line with increasing costs. Acceptance of page charges ran 91 per cent, a strong and positive response.

Petroleum

New publications were the feature of 1965 as SPE continued to recognize changing conditions in the rapidly expanding areas of petroleum technology.

The Monograph Committee moved strongly to establish subjects and authors for the first Monographs. The first three to be published will cover the subjects of pressure behavior in wells, hydraulic fracturing, and multiphase flow. Carefully planned to make a maximum contribution to these important areas of technology, the Monographs will be available to members at low prices.

The importance of student members was recognized with the establishment of a Student Journal. Published twice a year, the magazine features news and guidance to student members for their professional development.

Two Transactions Reprint booklets—Thermal Recovery and Miscible Processes—were published in 1965. The popular and convenient reprint booklets are published periodically as the need arises.



Financial Report

Condensed Financial Statement for the Eleven Month Period Ending November 30, 1965

INCOME	Mining	Metals	Petroleum	AIME Total
Membership Dues & Fees	\$211,424	\$166,528	\$251,807	\$ 629,759
Publications Sales	48,487	151,205	34,803	234,495
Advertising	208,962	76,370	181,872	467,204
Other	4,794	6,299	3,021	14,114
TOTAL	\$473,667	\$400,402	\$471,503	\$1,345,572
EXPENSE				-
Sections & Student Chapters	\$ 16,398	\$ 12,145	\$ 25,470	\$ 54,013
Society Secretaries' Offices	37,924	42,377	94,365	174,666
Institute Activities	12,830	14,639	11,537	39,006
Publicity	4,672	4,279	3,882	12,833
Special Membership Activities	13,411	3,372	10,847	27,630
Library Support	3,824	3,368	4,502	11,694
Cost of Advertising Pages	112,386	45,760	93,467	251,613
Publications—Editorial and Production	180,860	223,311	142,205	546,376
Executive Director & Secretary's Office	14,092	12,411	16,591	43,094
Business Office	30,398	26,653	30,050	87,101
Western Field Secretary's Office	18,390	3,475		21,865
Provision for Depreciation	2,889	2,650	2,642	8,181
Pensions and Related Expenses	14,264	10,680	13,419	38,363
ECPD and EJC Assessments	4,989	4,394	5,874	15,257
Miscellaneous Expenses	5,154	4,539	6,069	15,762
TOTAL	\$472,481	\$414,053	\$460,920	\$1,347,454
Net Income or (Expense)	1,186	(13,651)	10,583	(1,882)
Appropriation—Journal of Metals		16,181		16,181
NET BALANCE OR (DEFICIT)	\$ 1,186	\$ 2,530	\$ 10,583	\$ 14,299

Funds and Membership

In addition to operations income and expenses detailed above, AIME benefited from contributions from various funds which were applied as follows:

Name of Fund	Applied To	Amount
Met. Soc. Conference	Reimburse for Services	\$ 22,134
Various Endowment & Custodian	Reimburse for Services	8,965
SPE Activities	Various Services	21,370
Daniel C. Jackling Building	Reduce space charge	11,332
Various Awards	Awards	11,947
Henry L. Doherty	SPE Student Journal and Career Booklet	1,656
James Douglas Library	Reduce Library Assessment	4,361
George D. Barron	Public Relations	4,831
Karl Eilers Memorial	U. S. Comm., World Power Conf.	267
Henry Krumb	Public Relations	13,991
Henry Krumb	JETS and Int'l Relations Comm.	3,500
	Total From Funds	\$104,354

As in the past, certain meetings and publications received advances from conference and endowment funds. In practice, money advanced by these funds is usually returned to the fund by the proceeds of these self-supporting activities. Availability of this capital, however, makes possible many worthwhile activities that could not otherwise be undertaken. Advances in 1965 amounted to approximately \$121,000

Membership

As of January 1, 1966, corporate and student memberships totals were:	
Society of Mining Engineers	12,899
The Metallurgical Society	11,644
Society of Petroleum Engineers	14,896
	39,439



Officers and Directors (1965-1966)

WHAT HAPPENS TO MY \$20 DUES?

This is an often-asked and quite logical question. Of AIME's \$1,750,000 revenues, dues contribute 41 per cent. The rest comes from various forms of advertising and subscriptions (50 per cent) and from invested funds (9 per cent).

Your dues go primarily to support such vital AIME activities as publications and meetings. They also support Student Members, who pay only \$4.50 dues, of which \$1 is refunded to the Student Chapter; Junior Members, who pay only \$12 for the first five years; and they assure rebates to Sections to provide security for operating expenses.

Through AIME, your dues join those engineers in other disciplines to support the following: Engineers Joint Council, Engineers' Council for Professional Development, Engineers Societies Library, National Science Fair-International, Junior Engineering Technical Society, and National Council of State Boards of Engineering Examiners.

These organizations span all engineering to coordinate, unify, uphold educational standards, provide career guidance and many other important services.

"What happens to my \$20 dues?" Your dues are conscientiously handled by a Board of Directors of your peers. These Board members give generously of their time to serve as stewards of your dues dollars. In short, your dues help your continuing education, support the progress of the mineral engineering profession, and further the work of those organizations which join AIME to build a stronger overall engineering profession.

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

345 East 47th Street • New York, N.Y. 10017

OFFICIAL AIME ANNUAL REVIEW FOR 1965



AMERICAN INSTITUTE OF
MINING, METALLURGICAL, & PETROLEUM ENGINEERS
345 EAST 47th Street
New York, N. Y. 10017

OFFICIAL AIME ANNUAL REVIEW COVERING THE YEAR 1965 INDEX

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EXECUTIVE DIRECTOR AND SECRETARY

OF AIME

Only a few times in our 95-year history and not since 1958 has the Institute gained over 1300 new members in a single year. In fact, for the last four years our increases have averaged 341 members per year. In 1965 we received over 2000 new membership applications, showed a net gain of 1329 members for the year, and in November edged above the 40,000 mark in total membership.

Although active membership development work can be credited with a significant portion of the increase, this effort has been supplemented by active programs throughout AIME to enhance the value of membership in the Institute. The publication Mining Engineering is receiving wide acclaim. A re-designed Journal of Metals, a new Operating Metallurgy Conference and Exposition, and monthly publication of metallurgical Transactions have provided additional impetus to the work of The Metallurgical The Society of Petroleum Engineers has implemented imaginative new "continuing education" programs which other major engineering organizations will be following in the future. These new developments will be detailed in subsequent reports within this AIME Annual Review for 1965; however, the purpose of the Executive Director's report is to highlight the progress made during the year by the parent organization through its officers, staff, sections, councils and committees.

Management and Finance

During 1965 the AIME Finance Committee, Treasurer, Executive Director and Business Manager have given careful study to the Institute's method of doing business. The following improvements have been made:

- 1. Implementation of recommendations by a management consulting firm resulting in a number of significant changes designed to increase Business Office efficiency.
- 2. Conversion of AIME's data processing system to tape, rather than the card system which gave so much trouble during the earlier part of the year.
- 3. Change of AIME's fiscal year to a December 1 November 30 basis, to provide more time for analyses of accounts prior to the Annual Meeting in February.

- 4. Change of AIME's dues billing date to mid-October instead of mid-November in order to even out the year end work load for Business Office personnel and to avoid the mail problems encountered during the holiday season.
- 5. Completion of a new Salary Policy and AIME Staff Handbook for Institute headquarters, bringing these into line with industry.
- 6. Establishment of a new policy for handling of income at major AIME Meetings, to provide improved accounting and auditing procedures.
- 7. Formulation of a new Consolidated Financial Report, for distribution to the Board of Directors on a quarterly basis, in order to reflect all income and expense including that significant portion which comes from endowment and custodian funds.
- 8. Holding of initial meeting of AIME Operating Committee (Executive Committee plus Institute and Society Secretaries) to provide efficient mechanism for advising the AIME Board on difficult management problems.
- 9. Creation of Western Field Office Advisory Committee, to work with AIME Western Field Secretary and provide advice on functioning of this office to AIME President and Executive Director-Secretary.

Membership Development and Service

President Frick announced at the outset of 1965 that he would like particular emphasis placed on membership development, resulting in:

- 1. The highest membership growth rate since 1958.
- 2. Complete reorganization of the All-Institute Membership Committee.
- 3. Creation of a new Membership Development Manual.
- 4. Creation of a new Aims and Activities booklet.
- 5. Creation of new membership development tools buttons, a new certificate, new prizes for Section contests.
- 6. Formulation of a new leaflet describing the significance of AIME's Legion of Honor for distribution to Sections for use when presenting the Insignia.
- 7. Creation of AIME Medals Display Board to be shown at regional and national meetings to acquaint members with Institute medals.

8. Work toward single definition for grade of "Associate Member" to be used by all three Constituent Societies.

Student Affairs

Dedicated work by a reorganized Student Affairs Committee resulted in the following widely-acclaimed improvements during 1965:

- 1. Completion of a survey to obtain up-to-date information on all AIME Student Chapters.
- 2. Establishment of the following new Student Chapters: University of Pittsburgh (petroleum), University of The Philippines, Ricker College, Campbell College, and Drexel Institute of Technology.
- 3. Approval of plan to give free annual AIME dues plus a Transactions volume to the Faculty Sponsor of each Student Chapter with 15 or more national members of the Institute.
- 4. Approval of plan to select five Outstanding Student Chapters each year, with awards to go to the Chapters and travel allotment to the Faculty Sponsors, so they may attend the Annual Meeting and receive the awards.
- 5. Approval of plan to offer financial travel assistance (2¢ per student per mile) for car-load travel by students to AIME national and regional meetings.
- 6. Approval of plan to hold annual meeting of Faculty Sponsors for formulation of still more programs to help Student Members and Student Chapters.
- 7. Reorganization of the Student Paper Contest Committee to permit improved publicity, a larger Judging Committee and stimulation of Sections to hold local paper contests.

Career Guidance

AIME continues to improve its work in the area of career guidance in the following ways:

1. Participation through offering of AIME Awards in Regional JETS (Junior Engineering Technical Society) Contests.

- 2. Grant from Henry Krumb Endowment Fund of \$2500 to support national office operations of JETS.
- 3. Two special issues of JETS Journal devoted to mining, metallurgical, and petroleum engineering.
- 4. More effective participation in National Science Fair-International by offering of larger awards, presentation of an AIME certificate to each participant with a display relating to the mineral industries, and presentation of an AIME certificate to appropriate faculty sponsors.
- 5. Plans by the Council of Education to develop information to be included in an AIME booklet describing all scholarships available to students of mining, metallurgical, and petroleum engineering.

Benefits from Endowment Funds

Effort was intensified during 1965 to improve coordination in use by the Institute of its Endowment Funds. This has resulted in:

- 1. Approval of Henry Krumb Endowment Fund Committee to use its income annually for worthwhile projects of AIME, if such projects prove acceptable to the Committee and to the AIME Board.
- 2. Agreement by Seeley W. Mudd Memorial Fund Committee to support publication of book on "Surface Mining".
- 3. Appropriation from the Unrestricted Contributions Fund to permit the first publication of an annual proceedings volume by the Council of Economics and presentation of a new Mineral Economics Award.
- 4. Creation of the AIME Senior Member Fund to be administered by the Student Affairs Committee, under the guidance of the Board, and receipt by this Fund of contributions amounting to \$3593 during 1965.
- 5. Increased support from the Mudd Fund in permitting greater charges to be made by the AIME Business Office for the handling of Mudd Fund books.
- 6. Creation and circulation of a new booklet by the Endowments Committee entitled "Endowing the Mineral Engineering Profession".
- 7. Agreement by the Rocky Mountain Income Fund Committee to provide \$6000 per year support to the Western Field Office for 1966-68.

Assistance to Sections

Both the Section Affairs and Student Affairs Committees have assumed greater responsibility than in previous years resulting in:

- 1. Completion of plans for AIME Henry Krumb Lecture Series, to provide assistance to Sections in obtaining excellent speakers.
- 2. Visits to virtually every domestic Section of AIME by Institute or Society officers. (The Executive Director and Secretary has now visited 71 AIME Sections over the last several years.)
- 3. Completion of a survey by the Section Affairs Committee to determine the workings of each Section and information on the type of help they need.
- 4. Establishment of Snake River Section and India Section.
- 5. Reorganization of officer responsibility in the Council of Section Delegates, resulting in better continuity and more productive regional meetings.

Continuing Education

To implement the new ideas now pouring forth in the area of "continuing education", the following was accomplished:

- 1. Creation of AIME Continuing Education Committee.
- 2. Offering of Programmed Learning Courses to AIME members at reduced prices with sale of approximately 271 units.

Increasing Scope and Effectiveness of AIME Service

To serve developing technology and to insure that these technical interests are served within AIME, the following progress was made:

- 1. Conclusion of agreement by new AIME Rock Mechanics Committee for Institute to become co-sponsor of Annual Rock Mechanics Symposium.
- 2. Conclusion of agreement by new AIME Oil Shale Committee for Institute to become co-sponsor of Annual Oil Shale Symposium.
- 3. Formulation of plans by AIME Comminution Committee to accept leadership in inter-disciplinary work relating to this field, building toward a proposed international symposium on this subject.

Employment Assistance to Members

AIME has sought to increase its effectiveness in employment assistance to members during 1965, resulting in:

- 1. AIME leadership forcing the dissolution of the Engineering Societies Personnel Service, which recently had not capably served the engineering profession.
- 2. To fill the void left by the dissolution of ESPS, creation of a new AIME brochure entitled "Employment Aids" and a new booklet entitled "Employment Pointers for the Mineral Engineer". In addition, new policies have been established by the Society journals to permit two free employment notices to be published per calendar year by any member who seeks employment.

Cooperation with Other Societies

AIME continues to work closely with other engineering organizations as indicated by the following:

- 1. Formulated agreement with Canadian Institute of Mining and Metallurgy (CIM) to remove AIME name from Sections in Calgary and Edmonton in order to permit formation of Petroleum Society of CIM.
- 2. Appointed new AIME-CIM Liaison Committee.
- 3. Continued negotiation with American Society for Metals concerning possible consolidation of the two organizations.
- 4. Agreed to nominate possible recipients for the "Modern Pioneers of Creative Industry" Award of the National Association of Manufacturers.
- 5. Became "participant" in Joint Engineering Management Conference.

Inter-Engineering Society Cooperation

AIME continued during 1965 to take a strong role among the federations which serve the engineering profession. As a Founder Society, AIME has great prestige and responsibility in this area.

United Engineering Trustees, Inc.

Many visitors continue each year to visit AIME headquarters offices which occupy the 13th and 14th floors of the United Engineering Center, across from United Nations Plaza. Offices within the AIME space are rented to five other organizations, as the Institute has adopted

the practice of contracting all possible service work -thereby reducing staff. The 18-floor Engineering
Center is now fully occupied by engineering societies
and all debt has been retired.

Two departments of UET -- the Engineering Societies Library and Engineering Foundation -- have joined with Engineering Index, Inc., and Engineers Joint Council to plan the establishment of an Engineering Information Service. Such a Service would provide the nucleus of a modern national information communications network, meeting the growing need for availability of a single service to the engineering profession providing for the storage, documentation and retrieval of technical information. AIME continued to support the Engineering Societies Library with a payment in 1965 of \$16,056.

Engineers Joint Council

Dedicated work of a Planning Committee was the highlight of the year for Engineers Joint Council. Realizing that the federation had never reached its potential and showed little likelihood of doing so under present policies, the Committee examined EJC from top to bottom. Carleton C. Long was the AIME representative on this Committee.

Significant recommendations of the Committee, accepted by the EJC Board, include: (1) the hiring of a full-time president in the person of a highly respected engineer capable of exercising strong and inspiring leadership, (2) providing an effective forum for exchange of viewpoints among supporting societies on broad engineering issues, (3) developing plans to integrate the business operations and other staff functions of several united engineering entities --Engineers' Council for Professional Development, Junior Engineering Technical Society, Engineering Societies Library, Engineering Index, Engineering Foundation, and United Engineering Trustees, (4) undertaking special studies and programs of interest to the engineering profession and broader than the interests of any one Society, and (5) providing authoritative information to the public and government on technical and educational aspects of engineer-As these new goals are accomplished, EJC will become a much more valuable organization and the engineering profession will benefit. AIME continues to financially support EJC, to the extent of approximately \$10,000 in 1965.

Engineers' Council for Professional Development

Difficulties arose between AIME and Engineers' Council for Professional Development in 1965 when the In-

stitute's representation on the important Education and Accreditation Committee was cut from three to two persons. This left the mining and geological engineering curricula without a representative; therefore, AIME responded vigorously through a Board resolution plus energetic action by its ECPD representatives. Through the assistance of other Founder Societies which were not completely pleased with the way the Education and Accreditation Committee was structured, Constitutional changes were made and the third AIME representative restored before the end of the year.

Heeding ECPD requests, AIME was one of the first organizations to provide documents to be followed in accrediting its curricula. These were:

Standards for Accredited Undergraduate Curricula in Mining Engineering.

Standards for Accredited Undergraduate Curricula in Geological Engineering.

A Guide for Inspectors of Metallurgical Engineering Curricula.

AIME's financial support in 1965 to ECPD was \$6600.

Engineering Societies Personnel Service

Engineering Societies Personnel Service had been declining in ability to render services and in financial reserves for many years; therefore, to avoid financial demands on the sponsoring societies, the Service was terminated during 1965. Employment services continue to be conducted at former ESPS offices in New York, Chicago and San Francisco, through some of the same staff personnel but under private ownership.

Other Organizations

During 1965 AIME broadened its cooperation with other organizations by becoming a participant in the work of the Earth Science Division of the National Academy of Sciences-National Research AIME continued its support of a vast number of organizations, which include in part: Junior Engineering Technical Societies, National Council of State Boards of Engineering Examiners, American Association for the Advancement of Science, American Standards Association, World Power Conference, American Geological Institute, Joseph A. Holmes Safety Association, Hoover Medal Board of Award, National Science Fair-International, John Fritz Medal Board of Award, Alfred Noble Prize, Division of Chemistry and Chemical Technology of NAS-NRC, Division of Engineering and Industrial Research of NAS-NRC, and Division of Physical Sciences of NAS-NRC.

Honors and Awards

The following Honors and Awards were presented by AIME at the 1965 Annual Meeting, in addition to those presented by our Constituent Societies and described elsewhere in this Annual Review:

A CERTIFICATE OF HONORARY MEMBERSHIP to Ira B. Joralemon, "A mining engineer and geologist who combined art and imagination in his interpretations of geologic relations and their economic significance. Our country and the world have benefited from his wisdom and skill."

The JAMES DOUGLAS GOLD MEDAL to Frank A. Forward, "For inspired scientific, professional and academic leadership and for the development of new and successful processes utilizing pressure leaching and hydrogen reduction in hydrometallurgy."

The BENJAMIN F. FAIRLESS AWARD to Edward J. Hanley, "For his leadership in the steel industry, for his support of the research required for new steels and for his active aid to metallurgical education."

The HAL WILLIAMS HARDINGE AWARD to Horace E. Rose, "Distinguished investigator, author, educator, and inventor, for his studies of fundamental principles and process applications in the fields of comminution and fine particle technology."

The ANTHONY F. LUCAS GOLD MEDAL to Ralph D. Wyckoff, "For his early understanding and application of the physics of fluid movement in petroleum reservoirs which led to quantitative concepts of permeability and multiphase flow. His clear insight provided the basis for improved fluid injection patterns and optimum well spacing."

The CHARLES F. RAND MEMORIAL GOLD MEDAL to Herbert C. Jackson, "In recognition of his inspiring leadership and distinguished service as a mining executive who was instrumental in shaping the future of the iron ore mining industry and for his devotion to the youth of his community."

The ROBERT H. RICHARDS AWARD to Fred C. Bond, "For major contributions to increased knowledge of crushing and grinding processes and for achievement in industrial application of this knowledge to advancement of the milling industry."

The WILLIAM LAWRENCE SAUNDERS GOLD MEDAL to Francis Cameron, "For distinguished administration in the finding and development of important new mines, inspiring leadership in the mineral industry, and unstinting service in the nation's mineral procurement in times of vital need."

The MINERAL INDUSTRY EDUCATION AWARD to Howard L. Hartman, "Distinguished professor and author, whose contributions to the development of research and of international symposia have effected significant advances in mining engineering education."

The ROSSITER W. RAYMOND MEMORIAL AWARD to Leonard Pearce for his paper, "The Analysis and Solubility of Nitrogen in Silicon Iron".

STUDENT PAPER AWARDS in the Graduate Division to: Jose F. Teixeira Agapito, Missouri School of Mines, for a paper entitled "Block Caving at Grangesberg", entered by the St. Louis Section; Chen-Sheng Huang, University of Utah, for a paper entitled "Kinetics of the Decomposition of Cadmium Sulfate", entered by the Utah Section; Keith Millheim, University of Oklahoma, for a paper entitled "An Experimental Study of Linear Unsteady State Gas Flow through Low Permeability Porous Media", entered by the Oklahoma City Section.

Undergraduate Division to: Peter Rohde, Colorado School of Mines, for a paper entitled "On Heat Treatment and the Propagation Velocity of Dilatational Waves in Yule Marble", entered by the Colorado Section; Henry J. Rack, Massachusetts Institute of Technology, for a paper entitled "Modes of Fracture in Notched Bend Specimens of Polycrystaline Iron", entered by the Boston Section; Gerald A. Peters, Montana School of Mines, for a paper entitled "The Oil and Gas Lease; Formation and Interpretation", entered by the Billings Petroleum Section.

LEGION OF HONOR INSIGNIA were conferred upon the following forty-five members: Fred Thomas Agthe, Hector George S. Anderson, Simon Harry Ash, Harold Purdy Banks, John G. Baragwanath, Max Hayden Barber, Thomas Parry Billings, Reginald G. Bowman, Albert Dudley Brokaw, Ambrose Hammett Burroughs, Jr., Frank Cameron, John J. Croston, George Hamilton Cunningham, Eric Roy Emmerson, Calwallader Evans, Jr., Hallard W. Foester, G. Marshall Gillette, Lester Eames Grant, Arthur Howard Higgins, Larratt Tinsley Higgins, Leon Stuart Holstein, Ben Benight Hood, Joseph Jensen, Herbert D. Kynor, Walter Stuart Larsh, Edmund Townsend Lednum, W. Harrison Loerpabel, Kenneth Gerard Mackenzie, Walther Mathesius, Elwood S. Moore, Harry J. Morgan, Charles Yale Pfoutz, Oliver C. Ralston, Elmer Randall Ramsey, Hugh M. Roberts, Fred Searls, Jr., Carl Godfried Stifel, John Roy Thoenen, Lester S. Thompson, Henry Adolph Tobelmann, Joseph B. Umpleby, Wallace G. Woolf, Rufus Johnston Wysor, Howard I. Young, William Le Verne Zeigler.

Appreciation and Conclusion

AIME's 94th year has been one of the most outstanding in its history, as indicated by this report and others contained within this 1965 Annual Review. Certainly President Thomas C. Frick and a conscientious AIME Board of Directors deserve great credit. Also, a dedicated staff has contributed significantly, headed by Joe B. Alford, H. N. Appleton, John C. Fox, Robert W. Shearman, Dominic A. Lisanti, Clifford J. Hicks and Clyde L. Hopkins. Of invaluable help to me has been Miss Wanda Laskowski, my Administrative Assistant and Secretary.

After several lean years for the mineral industries and for the Institute, AIME has escaped from a "plateau" in membership development and is again growing rapidly. Growth is not the sole measure of progress, but the organization which is attracting new members and

retaining the old is almost invariably healthy and vigorous. AIME is definitely on the move - growing larger and becoming a constantly better organization.

Respectfully submitted,

. William Taylor

Executive Director &

Secretary

REPORT OF THE TREASURER AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC. BALANCE SHEET NOVEMBER 30, 1965 AND DECEMBER 31, 1964

ASSETS WORKING FUND Cash Unappropriated	DECEMBER 31, 1964 \$ 131,495 202,648 125,583
Inventories: Publications on hand\$ 27,432 Postage, Stationery & Supplies 8,168 Equipment, Furniture & Fixtures 139,886 Less: Reserve for Depreciation 68,393 Prepaid Expenses, Deferred Charges 50,333 TOTAL WORKING FUND \$ 653,713	\$ 28,035
ENDOWMENT AND CUSTODIAN FUNDS Investment at cost	\$2,645,507 651,674 3,297,181
PROPERTY FUND Founder's interest in real estate & other assets of United Engineering Trustees	265,000 \$4,176,065
LIABILITIES AND RESERVES WORKING FUND Accounts Payable General	\$ 150,726 20,160 h,511 26,629 \$ 290,965 29,779 69,315 23,369 (1,570) 91,114 \$ 613,884
ENDOWMENT AND CUSTODIAN FUNDS Endowment Funds	\$2,953,424 343,757 3,297,181
PROPERTY FUND AIME portion of contribution from Andrew Carnegie and others	265,000 \$4,176,065

INCOME ELEVEN MONT	AND EXPENSE	STATEMENT	106¢	
INCOME:	MINING	METALS	PETROLEUM	MODAT O
Membership:	PLINTING	PIET ATO	PEIROLEUM	TOTALS
Current Dues	\$191,565	\$148,425	\$ 227 £ 27	& E67 E07
New Member Dues	9,010	9,786	\$221,537 13,840	\$ 561,527
Entrance Fees	10,849			32,636
TOTAL	\$211,424	8,317 \$166,528	16,430	35,596
Publications:	<u> </u>	<u>Ψ100520</u>	\$251,807	\$ 629,759
Monthly Journal Adv. (Net)	\$181,858	# 76 270	#174 1.00	# Lat mag
Directory Advertising		\$ 76,370	\$176,482	\$ 434,710
Monthly Journal Sales	27,104	70 776	5,390	32,494
Non-Monthly Journal Adv.	12,161	19,716	6,785	38,662
Non-Monthly Journal Sales	8,097	41,937	2 800	تم . R1. a
Transactions Volume Sales	17,529	21,807	3,809	53,843
Reprint Sales (6)	3,989		17,295	56,631
Mining Preprint Sales	 In the second management of the s	67,745	6,914	78,648
TOTAL	6,711 \$257,449	2 007 E7E	B016 676	6,711
Other Income:	WED19447	\$227,575	\$216,675	\$ 701,699
Interest & Dividends (2)	\$ 2,222	€ 1 0€7	8 0 616	b 6 200
Annual Meeting Credit	2,572	\$ 1,957	\$ 2,616	\$ 6,795
TOTAL	\$ 4,794	4,342 \$ 62299	405	7,319
TOTAL INCOME	\$473,667	27/	\$ 3,021	\$ 14,114
	#413,001	\$4,00,402	\$471,503	\$1,345,572
EXPENSES:				
AIME Headquarters: (2)	a .	A = 0 1 = =	* = < ===	A 1
Executive Director & Secty.		\$ 12,411	\$ 16,591	\$ 43,094
Secretary's Office SLC (4)	18,390	3,475		21,865
Business Office (5)	30,398	26,653	30,050	87,101
Institute Activities (3)	12,830	14,639	11,537	39,006
Public Relations (2)	3,297	2,904	3,882	10,083
Pensions & Related	5,258	4,631	6,190	16,079
Provision for Depreciation		1,917	2,459	6,440
Engineering Society Library		3,368	4,502	11,694
E.J.C. & E.C.P.D. Assessment		4,394	5,874	15,257
	(2) 5,154	4,539	6,069	15,762
TOTAL	\$100,296	\$ 78,931	\$ 87,154	\$ 266,381
Society Direct Expense:	₩ 7 € 700		#	
Local Sections & Student Ch		\$ 12,145	\$ 25,470	\$ 54,013
Membership Development	13,411	3,372	10,847	27,630
Society Headquarters' Office		42,377	94,365	174,666
Pension & Related	9,006	6,049	7,229	22,284
Provision for Depreciation	825	733	183	1,741
Public Relations TOTAL	1,375	1,375	47.00 col	2,750
	\$ 78,939	\$ 66,051	\$138,094	\$ 283,084
Publications:	#770 ng/	# 1 m/a	# oo 1 (m	A and a day a
Monthly Journal Adv. Exp.	\$ 112,386	\$ 45,760	\$ 93,467	\$ 251,613
Monthly Journal Prod. &Edit.	126,209	116,544	103,504	346,257
Directory	12,115	25	5 , 779	17,919
Non-Monthly Journal Adv. Exp	• •	00 51 55		
Non-Monthly Jnl. Prod. & Edit. Transactions Volume	14,627	80,747	9,096	104,470
	11,989	13,594	18,881	44,464
Réprint Expenses (6)	3,129	12,401	4,945	20,475
Mining Preprint Expenses TOTAL	12,791	8070 005	800E / BO	12,791
TOTAL EXPENSES	\$293,246	\$269,071	\$235,672	\$ 797,989
Less: Received from Funds*	\$472,481	\$414,053	\$460,920	\$1,347,454
TOTAL NET EXPENSES	का.च्या १.घर	\$ 16,181 \$207 872	81.60 000	\$ 16,181
INCOME OR (EXPENSES)	\$472,481 \$ 1,186	\$397,872	\$460,920 \$ 10,583	\$1,331,273
	TOO L	\$ 2,530	4月、エジュフジブ	\$ 14,299

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

NOTES TO INCOME AND EXPENSE STATEMENT

ELEVEN MONTHS ENDED NOVEMBER 30, 1965

- 1. Current dues are credited to each individual Society.
- 2. These items are being pro-rated to the societies based on the percentage of membership as at 12/31/64 as follows:

MINING - 32.7%

METALS - 28.8%

PETROLEUM - 38.5%

3. Institute Activities expenses are net after certain items chargeable against Annual Meeting. The use percentage for 1965 is:

MINING - 34.4%

METALS - 38.8%

PETROLEUM - 26.8%

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

MINING - 84.2%

METALS - 15.8%

5. Business Office Expense - Allocated on us basis:

MINING - 34.9%

METALS - 30.6%

PETROLEUM - 26.8%

6. Metals Reprint Sales and Expenses included the following:

SALES	EXPENSES
\$ 4,248.70 7,956.36 55,540.00	\$ 1,528.64 4,193.80 6,678.83
\$67,745.06	\$12,401.27
	\$ 4,248.70 7,956.36 55,540.00

STATEMENT OF ENDOWMENT & CUSTODIAN FUND BALANCES FOR THE YEAR ENDED NOVEMBER 30, 1965

Balance - January 1, 1965		,
Endowment Funds Custodian Funds	2,953,424	** ***
Out out the second of the seco	343,757	\$3,297,18
Receipts & Credits		
Cash received from Estate of Elizabeth W. Young \$	2,469	
Cash received for AIME Senior Member Fund	3,563	en de la Santa de la Santa La compansa de la Carlo de la Carlo de la Santa de
Cash received for Thomas L. Joseph Award	1,730	
Securities received from Henry DeWitt Smith Trust	24,965	and American Company of the Company
Cash received for Robert Peele Award Fund	1,000	
Cash received for Mineral Industry Education Award	700	
Cash received for Coal Division AIME Scholarship Fund	976	
Cash received for Sectional Regional Fund	1,196	
Other Cash Contributions	729	
Mining Society 1964 Income	13,905	
Gain from Sale of Securities	77,615	
Dividends and Interest	151,219	
Income from Oil Royalties	4,626	
Sale of Books, Volumes etc.	35,647	
Income from Conferences and Meetings	95,616	
Income from Royalties-Book Publishers	10,169	
ASM Participation in Metallurgial Society Fall Mtg.	4,384	
Sundry Income and Receipts	3,040	l.22 El.
and the carban	3,040	433,54
ess: Disbursements, expenses etc.		\$3,730,73
Scholarship Awards	1. 208	
Other awards, medals, plaques, and related expense	4,308	
Publication of Books, volumes etc.	7,638	
Expenses of Conferences and Meetings	14,123	and the second
	74,462	
Public Relations expenses	19,662	
Contribution to Junior Engineers Technical Society	2,500	
Contribution to Committee on International Relations	1,000	
Other Expenses and payments	5,305	
· [1] - [1]		
For Business and other services	12,015	
a and the contract of the cont	and the second s	
of Investment income to cover portion of Library		
Assessment	4,361	
Assessment of Investment income to cover portion of rent expense	11,332	
Assessment of Investment income to cover portion of rent expense For Metallurgical Society Services	11,332 21,001	
Assessment of Investment income to cover portion of rent expense For Metallurgical Society Services For appropriation to Journal of Metals	11,332 21,001 1,500	
Assessment of Investment income to cover portion of rent expense For Metallurgical Society Services For appropriation to Journal of Metals To Deferred Meeting Income	11,332 21,001 1,500 2,248	
Assessment of Investment income to cover portion of rent expense For Metallurgical Society Services For appropriation to Journal of Metals To Deferred Meeting Income For Portion of Metallurgical Society 1964 Deficit	11,332 21,001 1,500	\$ 183,98
Assessment of Investment income to cover portion of rent expense For Metallurgical Society Services For appropriation to Journal of Metals To Deferred Meeting Income For Portion of Metallurgical Society 1964 Deficit Salance of fund accounts, November 30, 1965	11,332 21,001 1,500 2,248	\$ 183,98
Assessment of Investment income to cover portion of rent expense For Metallurgical Society Services For appropriation to Journal of Metals To Deferred Meeting Income For Portion of Metallurgical Society 1964 Deficit Salance of fund accounts, November 30, 1965 per Balance Sheet	11,332 21,001 1,500 2,248	\$ 183,98
Assessment of Investment income to cover portion of rent expense For Metallurgical Society Services For appropriation to Journal of Metals To Deferred Meeting Income For Portion of Metallurgical Society 1964 Deficit Balance of fund accounts, November 30, 1965 per Balance Sheet	11,332 21,001 1,500 2,248	\$ 183,98

PRELIMINARY BUDGET-CONSOLIDATED INCOME & EXPENSE STATEMENT

FOR THE FISCAL YEAR ENDED NOVEMBER 30, 1966

	MINING	METALS	PETROLEUM	FUNDS	TOTALS
INCOME					
MEMBERSHIP					A (a) 000
Current Dues	\$211,200	\$162,000	\$251,000	- \$	\$ 624,200
New Member Dues	8,000	10,000	11,000		29,000
Entrance Fees	9,900	10,000	12,000		31,900
TOTAL	229,100	182,000	274,000	ing and the second	685,100
PUBLICATIONS				The state of the s	
Monthly Journal Adv. (Net)	233,140	112,000	186,000		531,140
Directory Advertising	31,860		5,500		37,360
Monthly Journal Sales	14,000	22,000	7,000		43,000
Non-Monthly Journal Sales	10,000	45,000	3,000		56,000
Transactions Volume Sales	18,000	23,000	17,000		58,000
Reprint Sales	4,000	97,000	4,000		105,000
Mining Preprint Sales	6,000	719000	4		6,000
TOTAL		000,000	202 500		638,500
	317,000	299,000	222,500		0,00,000
OTHER INCOME			A. A. S.	000 000	200, 000
Income From Funds (Sch. A)	-	- 0	-	299,900	299,900
Interest, Dividends & Misc.	1,900	1,800	2,300	•	6,000
Annual Meeting	2,600	4,500	1,000		<u>β,100</u>
TOTAL	4,500	6,300	3,300	299,900	<u>31</u> 4,000
TOTAL INCOME	550,600	487,300	499,800	299,900	1,837,600
EXPENSES					
AIME HEADQUARTERS	to a second second		•		
Executive Director & Secretary(1) 17,520	16,040	20,840	4,400	50,000
Secretary's Office -S.L.C. (2)	21,050	3,950	-	6,000	19,000
Business Office (3)	45,840	40,190	45,320	9,500	121,850
Institute Activities (4)	7,320	8,270	5,710	300	21,000
Public Relations (1)	8,050	7,380	9,570	13,450	11,550
Pension & Related (1)	6,500	6,000	7,800		20,300
Provision For Depreciation (1)	2,200	2,100	2,700		7,000
Miscellaneous Expenses (1)	5,490	4,960	6,450	900	16,000
TOTAL	113,970	88,890	98,390	34,550	266,700
ASSESSMENTS BY FEDERATIONS	1179710	00,00	77,370		
Engineering Society Library (1)	5,850	5,340	6,910	4,200	13,900
Engineering Joint Council (1)	3,400	3,100	4,050		10,550
E C P D (1)	2,100	1,950	2,550		6,600
TOTAL			12 570	4,200	31,050
	11,350	10,390	13,510	4,200	71,000
SOCIETY DIRECT EXPENSE	76 500	יין די	01. 000		52,000
Sections Student Ch.Rebates &Exp		11,500	24,000		22 500
Membership Development	8,000	5,500	10,000	a). oro	23,500
Society Headquarters Offices	53,800	85,950	108,000	24,959	222,791
Pensions & Related	9,500	8,200	9,000		26 ,7 00
Provision For Depreciation	900	800	3,000		4,700
Public Relations	1,500	1,500		7701 050	3,000
TOTAL	90,200	113,450	154,000	24,959	332,691
PUBLICATIONS			-0	000	
Monthly Journal Exp Adv.	122,400	55,400	98,000	800	275,000
Monthly Journal Prod. & Edit.	132,500	141,000	122,000	3,500	392,000
Directory	13,000	2,000	6 ,5 00	- 1	21,500
Non-Monthly Journal Prod. & Edit		96,100	13,200	400	129,700
Transactions Volume	14,000	12,500	20,000		46,500
Reprint Expenses	3,000	13,300	3,000	-	19,300
Mining Preprint Expenses	13,000	<u> </u>		<u> </u>	13,000
TOTAL	318,700	320,300	262,700	li, 700	897,000
TOTAL EXPENSES	534,220	533,030	528,600	68,409	1,527,441
Less: Received From Funds	18,300	45,730	28,800	210,630	117,800
TOTAL NET EXPENSES	515,920	487,300	499,800	142,221	1,645,241
INCOME OR (EXPENSES)	34,680		_=://	157,679	
				<u>۲۱۵و۱ ر ـ</u>	192,359

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

NOTES TO 1966 BUDGET

SCHEDULE A	-	INCOME	FROM	FUNDS

TNOOMS A - INCOM	E FROM FUNDS			
INCOME Interest & Di	eri dana		#11.r ooo	
			\$145,000	
Income from O			5,000	
	, Volumes etc.		50,000	
Sundry Income			2,000	
SPE Activitée	• Fund		97,900	
	TOTAL INCOME			\$299,900
EXPENSES		A second		
Scholarship A	wards		1,100	
	Medals, Plaques		8,000	
Publication o	f Books, Volumes, etc.		50,000	
Other Expense	s		5,000	
SPE Activitie			53,700	
	its - Metallurgical		7,851	
2002009 20110	Petroleum			and the state of
	retroteum	the state of the s	16,570	
	TOTAL EXPENSES			142,221
	INCOME OVER EXPENSES			\$157,679

The above excludes any gain or loss from sale of securities which is considered a part of principal and not income. Also, meeting income and expense is not reflected. It is recommended that budgets be submitted for each meeting to be included in the future.

1. These items are pro-rated to the Societies on a membership ratio.

The membership ratio for 1966 is as follows:

MINING - 32.2%

METALS - 29.5%

PETROLEUM - 38.3%

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

MINING - 84.2%

METALS - 15.8%

3. Business Office - allocated on use basis:

MINING - 34.9%

METALS - 30.6%

PETROLEUM - 34.5%

4. Institute Activities expenses are net after certain items chargeable against Annual Meeting. The use percentage for 1966 is:

MINING - 34.4%

METALS - 38,8%

PETROLEUM - 26.8%

Respectfully Submitted

GAIL F. MOULTON TREASURER

REPORT

of the

BUSINESS MANAGER

Throughout the year 1965, the Business Office continued to be the backbone of the Institute. The Business Office provided all services for the three Societies, other AIME departments, various Committees and Members. Included in these services are accounting, purchasing, change of address, data processing, keypunching, book order sales and billing, non-member subscription fulfillment, filing, shipping and maintaining personnel records.

The accounting function includes recording of all Institute income and expenses, preparation of monthly financial statements, disbursing checks for payment of supplies and services, crediting checks received to their proper accounts and deposited in Chemical Bank New York Trust Company. Over 100,000 entries were made in maintaining records for the Institute investments, Society Conferences, Endowment and Custodian Funds, and WA-AIME. Special reports were made periodically to various Committees such as Investment, Krumb Fund, Mudd Fund, Electric Furnace Steel, Ironmaking, Institute of Metals, and various other Divisions.

The change of address function is one which is vital and important. Over 22,000 changes of address were processed, coded, keypunched and transmitted to the Service Bureau.

We also keypunch statistical changes, new Members, new Subscriber and renewals, Member dues payments and accounting distribution for our receipts, disbursements, billings and subscriptions. All punched cards are transmitted to our Service Bureau for processing.

The data processing function is done by an outside Service Bureau. They process our changes each month to up date the master tape record. They prepare all Member and Subscriber labels for our monthly and quarterly Journals as well as annual Volumes and meetings.

The purchasing function includes almost all buying of supplies and equipment for the Institute and Societies except for Publications. Considerable time is spent endeavouring to obtain the best prices and services possible.

The shipping department handles all incoming and outgoing mail of the New York Office. In addition, the shipping clerk maintains a storeroom for our Journals and books as well as a large variety of office supplies.

During 1965, a study was made of the Business Office by outside Management Consultants. The survey revealed numerous areas in which they believed improvements could be made in our operations. The survey indicated that basic changes were not warranted but that there was room for procedural improvements to increase efficient service. The major improvement recommended was the reassigning of the membership application processing under the supervision of the Business Office, thus providing greater efficiency.

In August 1965, Mr. Joseph Eck was added to our staff as Chief Accountant to handle all accounting and preparation of financial statements.

In conclusion, I wish to comment again that the Business Office is the most important department of the Institute. Eighteen employees comprise the Business Office staff. It is the largest single department of the Institute. I wish to express my appreciation to the staff of the Business Office for their loyal and devoted service, and to especially thank Mr. Gail F. Moulton, Treasurer, AIME for his helpful advice and assistance.

Respectfully submitted,

Dominic A. Lisanti Assistant Treasurer &

Business Manager

REPORT

of the

INSTITUTE ACTIVITIES DEPARTMENT

<u>Meetings</u>

The many meetings in 1965 were self-supporting. There was no strain on the Institute treasury so far as the meetings were concerned.

Student Summer Employment

The Eastern Summer Employment Program continued in 1965. A large number of job opportunities were located for mining and metallurgical students, and a smaller number for petroleum students. Notices of these job opportunities were sent to Student Chapters in the Eastern United States.

Council of Section Delegates

Six Regional meetings were held in 1965. A number of significant resolutions were passed at these well-attended meetings. Results of points raised will be finalized at the 1966 Annual Meeting.

Council of Education

The newsletter continues. Proposed recommendations of the "Goals of Engineering Education" were given wide discussion within the Council. Also, accreditation received additional attention.

Membership
The data in succeeding pages details the gains and losses in 1965 affecting AIME and its constituent Societies.

In briefest form, 1964 and 1965 comparison is:

1964 Corporate 1964 Students 1964 Total	SME 12,019 523 12,542	SPE 14,062 406 14,468	MET.SOC. 9,659 1,441 11,100	AIME 35,740 2,370 38,110
1965 Corporate	12,325	14,504	10,049	36,878
1965 Students	574	392	1,595	2,561
1965 Total	12,899	14,896	11,644	39,439

The Institute has again gained ground. This gain has, as in the past, been due to the efforts of a great many persons.

Respectfully submitted,

Assistant Secretary

REPORT ON ADMISSIONS TO AIME MEMBERSHIP

Applications for new membership, reinstatements and change of status, to the number of 4672 came before the Committee during 1965.

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

CLASSIFICATION OF APPLICATIONS RECEIVED AND ELECTIONS MADE BY THE ADMISSIONS COMMITTEE

New Applications and Reins: Members Associates Juniors Applications for C/S	1964 1,335 374 521 2,230	1965 1,677 459 589 2,725	Mining 1965 604 141 100 845	Metals 1965 380 71 153 604	Petr. 1965 693 247 336 1,276
Associate to Member Junior to Member Junior to Associate Student to Member Student to Junior Member to Student Associate to Student Junior to Student Junior to Joint Student Student to Joint Student Associate to Joint Student Associate to Joint Student Joint Student to Associate Joint Student to Student	431 36 2 3 8 2 7 14 12 1 516	406 42 1 4 15 2 4 18 11 503	84 19 1 6 1 1 112	80 5 1 5 18 11 121	242 18 1 2 4 1 2 270
Applications for Student Mbrs.	1,271	1,444	367	853	224
Grand Total	4,017	4,672	1,324	1,578	1,770

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 1965

Year	Members 22	Year	Corporate Members	Student Members	Total
1871 1872 1873 1874 1876 1877 1876 1878 1879 1881 1882 1883 1888 1888 1889 1899 1899 1899 1899	274354821357945470482170524072106811409040007 1223567778023463945470482170524072106811409040007 1111111112222222222333334444444456	1919 1921 1922 1923 1924 1924 1924 1924 1924 1924 1924 1933 1933 1933 1933 1934 1934 1934 193	77888953595488313557669548451409005223883382878777777777777776678995484514111111111111111111111111111111	1,926 1,9328 1,9328 1,33153 1,1304 1,131,1304 1,131,131 1,131,131 1,131,131 1,131,131	78.00.00.00.00.00.00.00.00.00.00.00.00.00

CLASSIFICATION OF MEMBERS

		m m ~ 1.				
	<u> 1963</u>	<u>1964</u>	<u> 1965</u>	SME	1965 TMS	S P E
Honorary Mbrs.	21	18	19	<u> </u>	 4	 6
Members Associates Juniors Total	22,321 5,435 7,061 34,838	23,048 5,572 7,102 35,740	24,099 5,850 6,910 36,878	8,193 1,903 1,500 12,325	5,929 1,660 2,456 10,049	9,257 2,287 2,954 14,504
Student Mbrs.	2,289 37,127	2,370 38,110	2,561 39,439	574 12,899	1,595 11,644	392 14,896

MEMBERSHIP LOSSES, 1965

	SME	SPE	MET.SOC.	AIME
Deaths Resignations Drops Unaccepted	149 98 558 40 745	61 52 747 114 974	71 97 803 17 988	281 247 2108 171 2707

Distribution of Members in Societies During Last Decade as Approximate Percentage

Date	Mining	Metallurgical	Petroleum
	Members	Members	Members
	%	%	%
December 31, 1956	42.2	24.0	33.8
December 31, 1957	39.1	23.0	37.9
December 31, 1958	37.5	22.8	39.7
December 31, 1959	36.0	23.5	40.5
December 31, 1960	35.6	24.1	40.3
December 31, 1961	35.3	25.4	39.3
December 31, 1962	34.5	26.7	38.8
December 31, 1963	33.6	28.0	38.4
December 31, 1964	33.0	29.1	37.9
December 31, 1965	32.2	29.5	38.3

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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 707 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 1965, visits were made to 19 Sections and Subsections, seven Student Chapters and 14 major conferences, plus AIME and Society Boards of Directors meetings and three meetings of Regional Councils of Section Delegates.

Sections and Subsections Visited During 1965 by C. J. Hicks

- 1. Arizona Section, Bisbee-Douglas Subsection
- 2. Arizona Section, Morenci Subsection
- 3. Black Hills Section
- 4. Carlsbad Potash Section
- 5. Central New Mexico Section (2)
- 6. Colorado Plateau Section
- 7. Colorado Section
- 8. Colorado Section, MBD Subsection Annual Meeting
- 9. Colorado Section, Physical Metallurgy Subsection
- 10. El Paso Section
- 11. Mexico Section
- 12. Montana Section
- 13. North Pacific Section
- 14. Oregon Section
- 15. San Francisco Section (2)
- 16. Snake River Section (3)
- 17. Southern California Section
- 18. Southwestern New Mexico Section
- 19. Utah Section (5)

Major Meetings and Conferences Attended by C. J. Hicks in 1965 1. 68th Annual Western Mining Conference and Exhibition, Denver.

2. 94th Annual Meeting of AIME, Chicago, Illinois Including: Committee of Regional Representatives

TMS Board of Directors SME Board of Directors AIME Board of Directors

Institute Annual Business Meeting

- 3. Pacific Southwest Mineral Industry Conference, Reno, Nevada.
- 4. 10th Annual Minerals Symposium, Grand Junction, Colorado 5. Wyoming Mining Association 10th Annual Convention, Sheridan, Wyoming

6. SME Coal Division Annual Spring Field Meeting, Rawlins, Wyo.

7. First Intermountain Minerals Conference, Vail, Colorado

8. Conference on Materials Science and Technology in Integrated Electronics. San Francisco, California

9. Society of Petroleum Engineers Fall Meeting, Denver, Colo. Including: South Central Region Council

of Section Delegates

AIME Board of Directors

10. SME Fall Meeting and Rocky Mountain Minerals Conference,
Phoenix, Arizona

Including: Southwest Region Council of Section Delegates

SME Board of Directors

11. American Mining Congress, Las Vegas, Nevada

12. New Mexico Mining Association and International Mining Days, El Paso, Texas

13. Annual Fall Meeting, Utah Engineering Council, Salt Lake City, Utah

14. 71st Annual Convention of the Northwest Mining Association, Spokane, Washington

Including: Northwest Region Council of Section Delegates

Student Chapters Visited During 1965 by C. J. Hicks

1. Texas Western College, El Paso, Texas (2) 2. University of Utah, Salt Lake City, Utah

- 3. South Dakota School of Mines and Technology, Rapid City, S.D.
- 4. Colorado School of Mines, Golden, Colorado

5. Stanford University, Stanford, California

6. University of Washington, Seattle, Washington

7. Montana College of Mineral Science & Technology, Butte, Montana

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 1965 and acted in an advisory capacity for several others.

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, a quarterly report to members of the Rocky Mountain Income Fund Committee was implemented during the year.

The issues covering the last three quarters of 1965 have accented progress in informing secondary school vocational and career guidance counselors of the increasing employment opportunities presented by the mineral industry at all ability levels and in many diverse disciplines.

Student Summer Employment

A program designed to help students of mineral engineering obtain temporary summer employment was continued by this office. Two hundred six western companies actively engaged in mining and/or metallurgical operations were contacted and requested to consider offering summer employment to students of mineral engineering. Fifty-eight companies responded with 103 (plus) job openings. Faculty Sponsors of Student Chapters at 22 western colleges of mineral engineering were simultaneously supplied with the necessary information regarding the openings so that interested students might make application directly to the employer.

Western Field Office Advisory Committee

Institute President Thomas C. Frick appointed a committee of five men-two representing SME, two TMS and one SPE-to serve in an advisory capacity to the Western Field Office. It is anticipated that this committee will meet quarterly to discuss the aims and activities of the office.

Career Guidance Program

At the recommendation of the Rocky Mountain Income Fund Committee, which is generous in its support of the Western Field Office, a program designed to attract students and others to the mineral industry was implemented during the year. A study was conducted by this office as to what might be the most effective ways of approaching the problem. To this end, interviews were conducted in four western states with high school career and vocational guidance counselors, educators and school system administrators. Results and recommendations have been reported to all involved parties. Four western Sections are actively pursuing career guidance programs in their areas and further expansion is anticipated and will be encouraged during the coming year.

Official Visitation Program

The Western Field Secretary was appointed as the staff administrator of the Official Visitation Program as authorized by the Institute Board of Directors. As a result, almost every domestic Section, Subsection and Student Chapter (plus several foreign) has been visited and reported upon by an Institute or Society official during 1965. Administration of the program will be continued by the Western Field Office in 1966.

Publication of New Manual

A manual outlining suggested responsibilities of Section officers and committee chairmen has been prepared and its duplication and distribution authorized. It is to be sent from this office to all (other than Petroleum) 1966 Section and Subsection Chairmen in punched loose-leaf form so that the appropriate page may be conveniently issued to each individual concerned. A letter of transmittal will be included with the manual. It will clearly state that the embodied ideas are not to be construed as instructions but merely suggestions.

Membership

A membership desk, with accompanying promotional material and an attractive display, was manned at five regional conferences by the Western Field Secretary.

Registration lists of regional conferences, whenever available, have been forwarded to national headquarters to be screened for non-members. These names are added to a master prospect list.

New Western Sections and Subsections

During the year the Snake River Subsection (Columbia Section) applied for and received full Section status. This group, which serves southern Idaho, is now known as the Snake River Section.

In the interest of giving better service to Institute members and encouraging membership growth in areas geographically removed from meeting centers, this office is in the process of assisting in organizing Subsections in the following areas: Rolla, Missouri; Questa, New Mexico; Elko, Nevada and Southwestern Wyoming.

Plans for 1966

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 1965 a successful and rewarding year.

Respectfully submitted.

CLIFFORD J. HICKS

Western Field Secretary, AIME

REPORT

of the

SECRETARY OF THE SOCIETY OF PETROLEUM ENGINEERS OF AIME

for 1965

Publications: Journal of Petroleum Technology

Again in 1965, the total number of pages published in Journal of Petroleum Technology set a new all-time record. In 1965, a total of 1,546 pages was published as compared to the previous high of 1,502 in 1964. The total of editorial pages was also a record, 1,027 in 1965 as compared to previous years as follows:

Year	No. Editorial Pages Published
1965 1964 1963 1962 1961	 1,027 1,008 979 956 829

Advertising revenues in Journal of Petroleum Technology kept pace with the growth in editorial material during 1965. Net income from advertising in the monthly magazine and in the 1965-66 SPE Membership Directory totaled \$182,872, a 3.8 per cent increase from last year's income of \$176,049.

Publications: Society of Petroleum Engineers Journal

Since its founding in 1961, the Society's quarterly journal has experienced steady growth in both size and circulation—the 1965 total number of pages was 371, an increase of approximately 25 per cent during the five—year period. The SPEJ is mailed free of charge to all SPE-AIME Members who request it. Production expenses for the periodical during 1965 totaled some \$9,230. Income from sale of non-member subscriptions amounted to \$4,170. Circulation for the December, 1961, SPEJ was 1,625; the same issue in 1965 had a circulation of 3,490.

Publications: Transactions

Transactions Volume 234, to be available in April of 1966, will have 652 pages, down somewhat from the record total of 704 pages in 1963 and the total of 684 in 1964. However, more manuscripts were presented for publication in Transactions than ever before, but fewer were judged to be significant enough for retention in the permanent literature of the Society.

During 1965, two new Transactions Reprint Series booklets, No. 7--Thermal Recovery Processes and No. 8--Miscible Processes, were published. Net income from the sale of reprint booklets in 1965 amounted to \$3,803, compared to \$2,715 in 1964 and \$5,793 in 1963. Net income to the SPE Activities Fund during 1965 from sale of reprinted Petroleum Transactions volumes (1925-1953) was \$569.

Publications: 1965-66 SPE Membership Directory

The SPE Membership Directory contained 184 pages, an all-time high for the years in which it has been produced as a separate publication. Advertising income of \$5,390 was less than production costs of \$5,595 by \$205. The publication costs were the lowest to date. For the third successive year, the Directory was composed by computer printout and then printed by offset lithography. It is issued free of charge to all SPE-AIME members who request it. Not including a one-time, first-year programming charge of \$2,998 in 1963 paid by the Henry Krumb Endowment Fund, a cumulative financial statement for the three-year period reflects a surplus of income over expenses of \$565.

Publications: Commercial

SPE continued to sell to members, at reduced prices, books printed by commercial publishers. The gross income from this activity was \$13,817, with a net income to the Society of \$1.172.

Publications: Special

During 1965, the Society Board authorized the start of a Monograph series to provide an up-to-date discussion of the subject technology in such a manner that it will allow members specializing in other fields to re-educate themselves in the subject. During the past year, the Monograph Committee adopted standards for publication, a committee review procedure and a model outline to furnish authors. Three monographs are currently in stages of preparation. The outline has been approved and the first draft of the manuscript completed on a monograph entitled "Pressure Behavior in Wells and Reservoirs" by C. S. Matthews and D. G. Russell. Outlines have been reviewed and returned to authors for revision on two other monographs, "Multiphase Flow" by Kermit E. Brown, and "Hydraulic Fracturing" by George Howard and C. R. Fast. Publication of the first of the monographs is anticipated in 1966.

Sales continued for SPE's two previously published books. Income from Antitrust Laws et al. vs Unit Operations of Oil or Gas Pools was \$391. Income from Elements of Petroleum Reservoirs amounted to \$684.

In late 1965, a special Society Symbols Committee completed a two-and-a-half-year project to revise Letter Symbols for Petroleum Reservoir Engineering, Natural Gas Engineering and Well Logging Quantities. The Symbols Committee was appointed in 1963, and its first task was to review then existing symbols for reservoir and natural gas engineering and well logging. To facilitate the work, the committee divided the list into two parts--one for reservoir and natural gas engineering symbols, and the other for well logging symbols.

Requests for comments on the existing lists were published in Journal of Petroleum Technology. A tentative revised list incorporating changes was published in June of 1964.

Meetings

During 1965, the Society conducted the largest number of regional meetings in its history. The attendance at the 11 regional meetings totaled 4,119, including 3,467 members, also a new record. SPE regional meetings were held in the following cities, with attendance as indicated: Bakersfield, Calif.--1,000; Dallas, Tex.--900; Midland, Tex.--510; Tulsa, Okla.--409; Shreveport, La.--318; Billings, Mont.--314; Charleston, W. Va.--280; Liberal, Kans.--212; Pampa, Tex.--185; University of Texas--150; and Oklahoma City, Okla.--100. A total of 14 regional meetings is scheduled during 1966.

The 40th Annual SPE Fall Meeting was held in Denver, Colo., on Oct. 3-6, 1965. Total attendance was 3,095, including 875 women. The presentation of 126 technical papers was a record number. A total of 128 oil industry educational exhibits was staged.

Membership

At year's end in 1965, Society membership totaled 14,896. This represents the largest membership figure for SPE since the Society was made a constituent of AIME in 1957. Two factors are largely responsible for the current membership totals. During 1965, SPE received 1,169 new member or reinstatement applications as compared to 1,129 in 1964 and 1,118 in 1963. Also, the number of persons dropped during the year for non-payment of dues or other reasons was substantially reduced by an active promotion program. Delinquents totaled 619 in 1965 as compared to 865 in 1964 and 930 in 1963. Total member net growth for the Society in 1965 was 428. The net growth was the largest since 1958.

The 1965 Membership Awards Contest followed the program established in 1964 of making awards to individuals rather than to local sections. The contest was again conducted on a section basis, divided according to size. The Local Sections were divided into five groups: less than 100 members-group A; 100 to 199 members-group B; 200 to 299 members-group C; 300 to 499 members-group D; and 500 or more members-group E.

In effect, three contests were conducted. A drawing was held at the end of the year for Lifetime Membership in SPE-AIME and for a complete set of Petroleum Transactions. All SPE members who had three or more new member or reinstatement applications credited to their names were included. Winner of Lifetime Membership was C. W. Miller, Jr. of Hattiesburg, Miss., and the winner of the complete set of Transactions was R. B. Giles of Denver, Colo.

A gold desk clock was awarded to the member with the greatest number of credited applications in each of five sections which had the greatest percentage increase during 1965 in the various divisions. Winners of the gold clocks are listed in the following table.

Group	Winner	Appli- cations	Section	Total Appli- cations	Per Cent Increase
A	Marvin R. Neal	15	Midwest Gas Storage	26	92.86
В	L. E. Thomas	7	Hobbs Petroleum	36	20.22
C	R. B. Giles	18	Wyoming	37	14.86
D -	Robert L. Marple	11	Oklahoma City	66	14.16
E	E. E. Runyan	7	Permian Basin	56	7.94

An attractive desk set was awarded to the member who had the greatest number of credited applications in each of the five divisions. Winners of the desk sets were as follows:

Group	Winner	Applications	Section				
A .	Donald W. Jackson	46	Anadarko Basin				
\mathbf{B}	J. F. Willems	10	Northern West Virginia				
C	Richard N. King	9	Wyoming				
D	C. N. Tinker	9	Oklahoma City				
E	Elmer T. Ireton	18	Dallas				

Section Visitation

The SPE officers and staff visited some 29 local sections during 1965. A list of the sections visited by 1965 SPE President Lincoln F. Elkins is as follows:

Mid Continent	Lou-Ark	Denver Petroleum
Billings Petroleum	Hobbs Petroleum	Southwest Texas
San Joaquin Valley	Permian Basin	Coastal Bend
Delta	Spindletop	Northern Oklahoma
Evangeline	Gulf Coast	Oklahoma City
Dallas		

A list of the sections visited by the headquarters staff is as follows:

Northern Oklahoma	Panhandle	West Central Texas
Balcones	Trans-Pecos	Gulf Coast
Denver Petroleum	Evangeline	Dallas
Hobbs Petroleum	Spindletop	Fort Worth
Southwest Texas	Chicago Petroleum	Mid Continent
Anadarko Basin	Billings Petroleum	Appalachian
Amarillo	Permian Basin	Los Angeles Basin
Delta	Illinois Basin	Lou-Ark
San Joaquin Valley	Fort Worth	North Texas
East Texas	Oklahoma City	

Awards

The Anthony F. Lucas Gold Medal, an AIME award to a petroleum member, was presented in February 1965 to Ralph D. Wyckoff.

The Society Board authorized the creation of a new, high-level award during 1965. The award is the DeGolyer Distinguised Service Medal, and it will be presented from time to time to recognize distinguished and outstanding services to the AIME and the Society, to the professions of engineering or geology and to the petroleum industry. The 1965 award will be presented during the 1966 AIME Annual Meeting in New York, February 28-March 3.

Major Society awards presented during 1965 include:

DeGolyer Distinguished Service Medal

Everette Lee DeGolyer (posthumously)

John Franklin Carll Award

Douglas Ragland, Humble Oil & Refining Co.

Cedric K. Ferguson Medal

Bobby F. Abernathy, Pan American Petroleum Co.

Lester C. Uren Award

M. B. Standing, Standard Oil Co. of California

Certificates of Service

Irwin W. Alcorn, retired, Coastal-Marine Drilling and Construction Corp. Benjamin C. Craft (posthumously) Charles V. Millikan, Petroleum Consultant Gail F. Moulton, Consulting Engineer Edward H. Robie

Distinguished Lecturer Program

During the 1964-65 season, the following Distinguished Lecturers presented a total of 87 lectures before SPE Local Sections throughout the United States, Canada, South America, Europe and Africa. Listed below are the Lecturers with the number of lectures they presented:

Julius Aronofsky W. D. C. MacKenzie	9
Michel T. Halbouty	26
Harold Vance	16
Weldon O. Winsauer	13
M. B. Standing	<u> 14</u>
e sa si masa na kata da kata d	
Total	87

Report of 1965 Editorial Committees

Total Number of Papers Handled by 1965 Editorial Committees:

Carried over from 1964.											
Papers received in 1965	•	÷	•	•	•	•	•	•	• .	•	<u> 280</u>

Total 405

Report of 1965 Editorial Committees (contd)

Disposition:

Paners	muhliched ac	Technical	Papers in JPT 39
			Articles in JPT 76
Papers	published in	SPEJ	39
			20
Papers	pending acti	on at prese	ent 31
Papers	approved for	Technical	Articles in 1966 JPT 27
Papers	approved for	Technical	Papers in 1966 JPT 23
Papers	approved for	196 6 SPEJ	· · · · · · · · · · · · · · <u>· · 19</u>
			Total 405

Finance

Consolidated Society income for 1965, from all sources, was \$603,912, compared to \$578,331 in 1964. The Society surplus for 1965 was approximately \$51,000, which goes into the Society Trust Funds as financial reserve. Total assets for the Society Activities Fund at the end of 1965 were \$354,149.

Special Activities

Following the lead taken by the Society Board during 1964 in the continuing education field, some 10 local sections conducted continuing education courses ranging from 40 hours to more than 160 hours of instruction. In some cases, courses were offered for college credit, in others, for enrichment.

Evaluation of the entire field of continuing education, including areas outlined in the analysis made under Board authorization in 1964 by Dr. Monroe W. Kriegel, is continuing.

Headquarters and Staff

In late November, the Society headquarters offices were moved from 6300 N. Central Expressway to quarters in a new building at 6200 N. Central Expressway in Dallas, on a ten-year lease. Office and book-storage facilities have been combined in the new location to provide for increased member services. The new space includes larger office area to accommodate recent staff additions and to allow for future growth. The book-storage area has increased space efficiency in that movable storage cabinets are used.

The new space includes some 5,000 square feet, with about 500 square feet of book-storage area. This compares with a combined area of about 4,000 square feet of space at the 6300 location and at a downtown storage facility.

On November 30, 1965, the SPE headquarters staff consisted of the following persons:

Joe B. Alford, Executive Secretary
Dan K. Adamson, Assistant to the Executive Secretary
Virginia Howell, Secretary

David L. Riley, Editor and Assistant Executive Secretary Larry G. Allen, Assistant Editor Miss Ann Gibson, Assistant Editor Mrs. Barbara Dray, Secretary Miss Sally Avary, Special Publications Supervisor

Mauri D. Bratt, Advertising Manager Michael D. Corley, Assistant Advertising Manager Mrs. Corinne Harris, Secretary

Tom Huddleston, Activities Manager Catherine Johnson, Activities Secretary Mrs. Georgia Barry, Membership Secretary

David Holloman, Accountant
Mrs. Janet Kestner, Secretary-Receptionist

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 1965 through February 1966. For the Society of Mining Engineers of AIME it was a successful year in every respect. The outlook for 1966 and beyond is even brighter. SME is on the verge of greater accomplishments in the future.

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

PUBLICATIONS

Based on an 11-month year, net cost of all publishing activities was \$35,794 or \$2.72 per member. Five year average is \$3.92.

Transactions of the Society of Mining Engineers - Quarterly and Bound Volume No.232.

During 1965,260 papers were processed. When printed this came to 398 pages in four issues of the Quarterly. Transactions Volume #232 was mailed February 8.

Total Income realized from Quarterly and Volume was \$25,626. Total Expense was \$26,615, a net cost of \$0.077 per member, compared to \$0.5124 in 1964.

Mining Engineering

The monthly magazine for the second year in a row set a new record for pages of advertising (662) and dollar income (\$223,500). Net cost to publish the magazine was \$30,185 or \$2.34 per member.

The table below presents the statistics on pages published in ME and in the Transactions Vol. 235. The increase in pages of advertising are an indication of the improvement in quality of the articles, their editing and the magazine format in general.

	1961	1962	1963	1964	1965
ME Editorial	846	745	752	827	862
ME Advertising	431	435	418	5 7 5	662
Transactions Volume	504	512	480	450	398
" Quarterly		446	480	450	398
Papers Preprinted	106	149	111	121	126

Since 1955 ME's share of the Advertising Market has increased from 11.9% to 30.5%. In 1965, Advertising pages amounted to 173% of the number sold in 1955.

MINING ENGINEERING scored another scoop with photographic illustrations in the October special issue that featured in-depth position surveys of Copper in the Southwest and Iron Ore in Minnesota. These surveys were written by J. V. Beall and P. C. Merritt of the SME Staff.

Preprints

As shown in the table above, 126 papers were preprinted in 1965. According to a survey of the members of the M & E Division the Preprint Program is one of the most valuable services provided by the Society.

During 1965 more than 28,000 copies of preprints were distributed at meetings and by mail. In addition, Proceedings in two volumes were provided for the VII Rock Mechanics Symposium.

Special Volumes

Committees working on the Coal Preparation Volume, the Graton-Sales Volume on ore deposits, the Surface Mining Volume, all report satisfactory progress with projected publication not later than early 1968 for all three with the probability of much earlier availability.

The VIII Symposium on Rock Mechanics at the University of Minnesota will be sponsored by AIME. SME has offered to prepare the Proceedings for this meeting. It is expected that this volume(s) will constitute the definitive reference on the important and growing field of Rock Mechanics.

MEMBERSHIP DEVELOPMENT

Under the leadership of SME Membership Chairman, Deane F. Kent, an aggressive effort was made to bring into the Society all qualified persons.

The Admissions Committee passed on 893 of the 1240 applications of new members, reinstatements, changes of status, etc. The total of 1025 new members who accepted election before December 31 was offset by losses of 719 members, making a net gain of 306. SME, including 574 students, numbered 12,899 on January 1, 1966 compared to 12,542 on January 1, 1965.

A new "Prospectus" was prepared and published in 1965. In twelve pages this attractive pamphlet tells the prospective member about AIME the Parent, SME, membership requirements, the publications of the Society, the meetings in which members take part, the AIME Sections, WAAIME and the Awards for which members are eligible. It outlines the Group Insurance plans available and to be offered and tells how AIME takes part in national affairs.

Quite as important as membership development is Membership Retention. To this end SME continued its efforts to contact members in danger of being dropped for non-payment of dues. Three mailings made to a group, originally about 700 strong, reduced the number dropped at the end of the year, to 330.

In addition to direct mail solicitation of an extensive prospect list of about 6,000, Membership Desks were set up and manned at the national and regional meetings across the country as listed below:

AIME Annual Meeting in Chicago, Illinois
Minnesota Section Annual Meeting in Duluth
Central Appalachian Section Meeting in Abingdon, Va.
Coal Division Spring Field Meeting in Rawlins, Wyo.
American Mining Congress Meeting in Pittsburgh, Pa.
American Mining Congress Meeting in Las Vegas, Nev.
SME Fall Meeting & Rocky Mt. Mining Conference, Phoenix, Ariz.
Central Appalachian Section Fall Meeting, White Sulphur Springs, Va.

MEMBER SERVICES

Group Insurance Programs - two plans went into effect during 1965. One was the Accident and Sickness Disability Income Protection Plan, in February 1965. The other was the SME Group Life Insurance Plan in November, 1965.

SME Personnel Service was begun in August 1965, when the Engineering Societies Personnel Service was disbanded. This entailed implementing plans laid down in 1959. The service evidently fills a real need and is extremely successful.

From August through December 90 Man Available notices have been carried in MINING ENGINEERING as have 44 Positions Open advertisements. These have resulted in more than 2,000 inquiries made by mail, by telephone and in person. Employers seeking men and Members seeking jobs have been brought together.

A Mining & Exploration Division Survey questionnaire was sent to 12,800 SME Members. 1660 completed and returned it. Consensus of the completed questionnaires was that MINING ENGINEERING magazine provides great benefit to the members. The SME Preprint Program and Local Section Meetings were also adjudged most valuable to the members. It was agreed that Regional and Annual Meetings - including the SME Fall Meetings - provide, for those who attend, unparalleled opportunities to exchange information with colleagues and keep up with latest technological developments.

There was no consensus in the answers to the question "What's Wrong with SME?" However, due consideration is being given in SME forward planning to all constructive criticisms.

SME Exposition

In October the SME Board of Directors gave the green light to establishment of an exposition in connection with the SME Fall Meeting in Tampa. An announcement in November to prospective exhibitors was most cordially received. Present plans call for us to provide a new look in expositions - the opportunity for exchange of technological information between manufacturers and the engineer-registrants at the SME Fall Meeting.

HONORS AND AWARDS

Another SME member, Ira B. Joralemon, was added to the list of Honorary Members of AIME. This is one of the Institute's highest honors. There is permitted a total of 20 Honorary Members of AIME in all the world at one time.

At the 94th AIME Meeting in Chicago the SME Members listed below were presented with the indicated awards in recognition of significant achievement.

Frank Arthur Forward
Francis Cameron
Herbert C. Jackson
Fred Chester Bond
Horace Edgar Rose
Howard L. Hartman
Thomas S. Lovering
Carroll F. Hardy
C.H.Grant and V. N. Cox

James Douglas Gold Medal
Wm. L. Saunders Gold Medal
Charles F. Rand Gold Medal
Robert H. Richards Award
Hal Williams Hardinge Award
Mineral Industry Education Award
Daniel C. Jackling Award
Percy Nicholls Award
Robert Peele Memorial Award

The following 34 SME Members after fifty years of continuous membership were initiated into the AIME Legion of Honor.

H.G.S. Anderson	S. H. Ash
J. G. Baragwanath	M. H. Barber
A. H. Burroughs, Jr.	F. Cameron
C. Evans, Jr.	H. W. Foester
L. E. Grant	A. H. Higgins
L. S. Holstein	H. D. Kynor
E. T. Lednum	W. H. Loerpabel
H. J. Morgan	C. Y. Pfoutz
	H. M. Roberts
C. G. Stifel	J. R. Thoenen
H. A. Tobelmann	R. J. Wysor
	W. L. Zeigler
	J. G. Baragwanath A. H. Burroughs, Jr. C. Evans, Jr. L. E. Grant L. S. Holstein E. T. Lednum H. J. Morgan E. R. Ramsey C. G. Stifel

MEETINGS

About half of the registrants at the 94th AIME Annual Meeting in February were SME Members.

The Society was co-sponsor with the Pennsylvania State University, Colorado School of Mines, University of Minesota, University of Missouri at Rolla, of the VII Symposium on Rock Mechanics at Pennsylvania State University in June.

The Coal Division sponsored the Annual Coal Division Field Meeting in May in Rawlins, Wyoming.

The SME Fall Meeting and Rocky Mountain Minerals Conference in Phoenix, Arizona in October was a great success.

SME Members took part in a number of other meetings around the country. To name only a few, the Pacific Southwest Mineral Industry Conference at Reno, the 10th Annual Minerals Symposium at Grand Junction, Colorado and many others.

The Society is very grateful for the yeoman service rendered by the Program Committee under the leadership of Douglas R. Cook and J. R. Lucas. They and the Division representatives on the committee-Robert Llewellyn for Coal, H. F. Buchholtz for Industrial Minerals, D. W. Fuerstenau for Minerals Beneficiation and James M. Neilson for Mining and Exploration really did a fine job in providing timely papers of considerable merit for the 1965 SME Fall Meeting-RMMC plus the 95th AIME Annual Meeting. Mrs. Donaldson and Miss Cruz again bore the brunt of the many details that go into a Fall or Annual Meeting. In this they were ably assisted by Mrs. Ruiz.

Mrs. L. Capria still handles all the correspondence involved in shepherding papers through the review committees and into the pages of MINING ENGINEERING or the TRANSACTIONS.

1965 STAFF TRAVEL

	January		
Chicago, Illinois	Chicago Section		B (Speaker)
New York Section		JC:	
Minnesota Section		DR'	<u>l'</u>
	<u>February</u>		
Chicago, Illinois	AIME Annual Meeting		F, JVB,
			M, LED,SK,
		DR'	r, RWW
	March		
New York Section		JV	B (Speaker)
		JC	P
	April		
Florida Section - 1	Inspect Tampa Facilities	JC	F
	May		
Arizona - Material	for October issue of ME	JV	В

	May (Con't.)		
	University of Arizona Pacific Southwest Mineral Industry Conference	JVB	(Speaker)
	Pacific Southwest Mineral Industry Conference,	DOM	
	Reno, Nevada	PCM	
	10th Annual Minerals Symposium, Grand Junction,		
	ego por Colo. A company of the Colo. A color of the color	PCM	
	Coal Division Field Meeting, Rawlins, Wyo.	JCF	
	AIME Operating Committee, Chicago, Ill.	JCF	
	AMC Coal Convention, Pittsburgh, Pa.	JVB	
	June		
	VII Rock Mechanics Symposium, University Park, Pa.	JCF.	JVB
	Penn Anthracite Section, Dallas, Pa.	JCF	
	Central Appalachian Section Spring Meeting,		
	Abingdon, Va.	JVB	
		JCF	
	AIME Board Meeting, Cleveland, Ohio	JH	
	Oceanography Symposium, Washington, D.C.	JΠ	
	andre de la companya de la companya La companya de la co		
	July	DOM	
	Mesabi Range - Material for October ME issue	PCM	
	Material for Moon Mining - Washington, D.C.	SD	
14.7	August	****	
	Grumman Aircraft Press Conference, Bathpage, N.Y.	JVB	
			es in the second
	September	777	
	International Nickel Co. Press Conf., Sudbury, Ont.	JVB	
	White Pine Copper Co., White Pine, Mich.	JH	
	October		
	1965 SME Fall Meeting-RMMC, Phoenix, Ariz.	JCF,	JVB,
1			LED,
		VHS,	DRT,
		.2.	RWW
	AIME Board Meeting, Denver, Colorado	JCF	
	AMC Convention & Exposition, Las Vegas, Nev.	JCF.	JVB,
		PCM.	VHS,
		DRT,	RWW
	East Tennessee Section, Gatlinburg, Tenn.	PCM	
	mand remiended bedotten, adottmand, remi		
, t	November		
	Pittsburgh Section Off-the-Record, Pittsburgh, Pa.	JVB	
	Central Appalachian Section Fall Meeting,		
	White Sulphur Springs, Va.	PCM	
	uttre parbuar phirusp? Age		
	December		
	W. R. Hibbard Installation, Washington, D.C.	JCF	
	Arizona Section Annual Meeting, Tucson, Ariz.	JCF	
	WITZONG DECOTON WINNET MESCAME, INCOME, WITZ.	001	
			A STATE OF THE STA

Key to initials listed in Staff Travel summary:
 JCF - John C. Fox, SME Secretary
 JVB - John V. Beall, Editorial Dir. and Ass't Secretary
 DRT - Donald R. Tone, Ass't. Secretary & Eastern Adv. Mgr.
 PCM - Paul C. Merritt, Editor of SME Publications

LED - Lillian E. Donaldson, Administrative Assistant to Secretary

SK -- Susie Kransz, Secretary Publications

RWW - Robert W. Wilson, National Advertising Mgr.

JH - John Heston, Associate Editor

SD - Serge Delinois, Assistant Editor

VHS - Valrie H. Simms, Production Manager

STAFF ORGANIZATION

Serge Delinois, Assistant Editor, who came to work in February 1964, is just now leaving to go to work for a prominent PR firm. He will be stationed in Geneva. His place as Assistant Editor will be filled by Miss Catherine O'Donoghue who has been an SME employee since April 1965, officially as secretary in the Publications Department. However, like all SME employees, she has doubled in brass at many jobs including Preprints, SME Employment Service, etc. Her former spot in the organization will be partially filled by Miss Nancy Peterman who has been hired in the capacity of Clerk-Typist to handle the Preprint Section.

John Heston joined the staff in March 1965 as Associate Editor of MINING ENGINEERING.

CONCLUSION

In the course of this report I have mentioned a number of those who have helped make 1965 one of the most successful in the Society's history. At this point I would like to express the thanks of the Officers and the Staff to the 500 committeemen whose work contributed in no small measure to that success. Loyal support of the entire membership is necessary if the efforts of the Officers, Directors, Committees and Staff are to be effective. We have certainly enjoyed that support in the year just past.

Reserved to the end of the report but by no means lesser because of that position, the Society wishes to thank AIME Executive Director and General Secretary, R. W. Taylor, Western Field Secretary C. J. Hicks, Assistant Secretary and Convention Manager H. N. Appleton, Assistant Treasurer D. Lisanti and their staffs for their unstinted assistance and wise counsel during 1965.

February 15, 1966

John Cameron Fox, Secretary

Respectfully submitted,

of the

SECRETARY OF THE METALLURGICAL SOCIETY OF AIME

Summary

The year 1965 was one of change for The Metallurgical Society. Plans made in recent years were put into practice. These were the outstanding projects:

- 1. The First Operating Metallurgy Conference and Exposition was held in Pittsburgh, November 29-December 3. The Conference was regarded as a great success both in quality of papers and in attendees registered. The Exposition, however, while attracting a number of major exhibitors, was not a "sell-out," nor were attendance figures record breaking. The decision for 1966 is to hold the Exposition in the same hotel as the Conference.
- 2. JOURNAL OF METALS has projected a new image as "The Magazine of Operating Metallurgy." Editorial content has been greatly expanded with the original publication of all papers from the major iron and steel conferences in JOURNAL OF METALS.
- 3. TRANSACTIONS OF THE METALLURGICAL SOCIETY OF AIME became a monthly publication starting in January, 1965. This became possible with the adoption of page charges. (Each author was billed at the rate of \$35.00 per page.) The result has been the virtual elimination of a time-lag in publication of approved technical papers, thus speeding the communication of the results of research in the basic science of metals.

The Metallurgical Society sponsored 12 major meetings at which 998 technical papers were presented at 191 technical sessions before a total audience of 9,500. Pages of printed material in books and periodicals totalled 8,200.

Membership growth was steady. At the end of the year, membership totalled 11,644, including student members.

Finances

The Metallurgical Society in attempting to serve its members better through technical publications and technical programs had higher expenses. Increased expenses were met partly through increased income from dues, from advertising income, and from page charges in TRANSACTIONS. Direct comparisons with 1964 are difficult, as the 1965 figures are based on 11 months; the fiscal year now ends on November 30.

On the 11-month basis, operating expenses were \$437,538 (vs. \$420,663 - 12 months, 1964). Exclusive of TRANSACTIONS, operating expenses for 1965 totalled \$334,980 (vs. \$321,774 - 12 months, 1964).

Expenses of TRANSACTIONS in 1965 (11 months) were \$102,548 vs. \$98,949 in 1964 (12 months).

The major source of income continued to be revenue from members' dues. For 1965 (11 months), this was \$166,528 as compared to \$173,054 in 1964 (12 months). Based on its proportion of total membership, The Metallurgical Society received 28.8 per cent of Institute dues income, but on a use basis, the Society pays its share of Institute services at the rate of 30.6 per cent for the Business Office, and 38.8 per cent for Institute Activities.

The following "special" sources of income to The Metallurgical Society for the 1965 fiscal year (11 months) are noted:

- 1. Iron and Steel Division Conference Committees paid for staff office services \$16,875.
- 2. The Institute of Metals Division paid for staff office services \$5,500.
- 3. Net income from the 1965 AIME Annual Meeting, \$4,342.
- 4. From a loan from AIME for transitional expenses in developing the "new look" of JOURNAL OF METALS, \$16,181.
- 5. Use of page charge income (beyond TRANSACTIONS expenses) to meet operations of JOURNAL OF METALS, \$18,455.

The final income and expense statement for The Metallurgical Society in 1965 is shown in Appendix A.

Metals Research Publications Fund

Since 1954 the Metals Research Publications Fund had provided the additional income needed to publish TRANSACTIONS OF THE METALLURGICAL SOCIETY beyond the income provided by subscriptions and the sale of bound volumes, reprints, and offprints. In 1965 no withdrawals were made as page charge income was sufficient to meet the additional costs of publishing TRANSACTIONS. This was a new source of needed income.

The status of the Metals Research Publications Fund as of November 30, 1965, is shown in Appendix B. Balance was \$122,201 (vs. \$115,451 on December 31, 1964). The increment of \$6,750 was due to interest and gain on sale of securities.

TRANSACTIONS OF THE METALLURGICAL SOCIETY

Beginning in January, 1965, TRANSACTIONS OF THE METALLURGICAL SOCIETY has been published monthly, thereby virtually eliminating the publishing backlog experienced by many technical publications. The subscriber has benefited by the more rapid communication of new research results.

The growth of TRANSACTIONS continued. The number of published pages of technical papers and notes in 1965 numbered 2,115 (vs. 1,730 in 1964). A comparison with 1964 is given below by Divisions, using full calendar years for comparison.

	No. of Papers and Notes	Page	S
	<u>1965</u> <u>1964</u>	<u>1965</u>	1964
Extractive Metallurgy Division Institute of Metals Division Iron and Steel Division	30 25 339 261 <u>21</u> <u>27</u> 390 313	166.0 1,812.5 136.5	148.5 1,411.5 170.0
Masthead pages, etc. Annual Index Total:	390 313 390 313	2,115.0 13.0 38.0 2,166.0	1,730.0 8.0 34.0 1,772.0

Of the twelve issues of TRANSACTIONS published in 1965, one was a "special issue." This included 27 papers and constituted the Proceedings of the Third Conference on Electronic Materials entitled "Solid-Solid Interfaces, Electronic Properties, Preparation, and Applications," held in Boston, August 31-September 2, 1964. Proceedings of the Fourth Electronic Materials Conference on "Materials Science and Technology in Integrated Circuits" (San Francisco, September 7-9, 1965) will be published as a special issue with 32 papers in March, 1966.

Due to increased size of TRANSACTIONS, the 1964 bound volume was issued in two parts. The 1965 volume will be similarly bound in two parts.

Decisions were made in 1965 to effect the following improvements in 1966, effective with the January issue:

- 1. A new section entitled "Communications" to include:
 - a. Short, self-contained communications dealing with theoretical or experimental work of current interest in the fields represented by papers published in TRANSACTIONS, with the same general format and review procedure previously relevant to Technical Notes.
 - <u>b.</u> Discussions to Technical Papers and Communications published in TRANSACTIONS that provide significant technical contributions, to be accompanied by replies from authors.
 - c. Announcements of the availability of computations and computer programs of which the originals are available on request from the author and which are relevant to the scope of TRANSACTIONS.
- 2. The use of "perfect binding" of the monthly issues. By use of a special glue, our printer has replaced staples in the binding operation. The open journal lies flat, a definite improvement for the reader.

JOURNAL OF METALS

The year 1965 will be remembered for the introduction of the "New Look" to the JOURNAL OF METALS to fulfill the role of "The Magazine of

Operating Metallurgy." The Journal was redesigned both in appearance and in editorial content. The number of editorial pages was increased significantly and included all papers presented at the Annual Conferences of the Electric Furnace Committee, the National Open Hearth and Basic Oxygen Steel Committee, and the Mechanical Working and Steel Processing Committee.

Although pages devoted to iron and steel production were greatly increased, coverage was also given to non-ferrous extractive metallurgy and to physical metallurgy through survey and state-of-the-art papers.

Total number of pages printed for the year was 1,420, a new record (1,032 in 1964). The print order for each issue was higher than for any previous year (an average of 15,400 copies, compared with 14,500 for 1964). Non-member subscriptions continued to rise to a new high of 2,363 (vs. 2,299 in 1964).

Advertising, JOURNAL OF METALS

Advertising experienced a dramatic change for the better, arresting a three-year decline in pages. Comparisons are indicated below:

	1965	<u> 1964</u>	<u> 1963</u>
Number of pages of Advertising:	238	187	210
Advertising Income:	\$91,133	\$72,143	\$ 80,428
Advertising Expense:	<u>52,348</u>	_35,381	38,550
	\$38,785	\$36,762	\$41,878

The improvement in the advertising income was due to these factors:

- 1. Aggressive selling of space by the Advertising Sales Manager, replacing the less personal approach by a firm of advertising representatives.
- 2. Changed content of JOURNAL OF METALS, with increased coverage of fields of interest to suppliers to the iron and steel industry.

ABSTRACT BULLETIN OF THE INSTITUTE OF METALS DIVISION

A new publication, the ABSTRACT BULLETIN OF THE INSTITUTE OF METALS DIVISION, was decided upon in 1964. The BULLETIN will include the technical program and abstracts for Institute of Metals Division sessions at the AIME Annual Meeting each February, and for the Fall Meeting each October. It will be issued twice a year to AIME members who have indicated the Institute of Metals as their Division of major interest.

Volume 1, No. 1, was issued in January, 1966, and contained 57 pages.

Publications Through Gordon and Breach (See Appendix C)

Six books were published by Gordon and Breach, Science Publishers, Inc., in 1965 under the terms of the cooperative agreement concluded in 1963:

1. Volume 24 - "Unit Processes in Hydrometallurgy"

(Proceedings of an International Symposium sponsored jointly by the Extractive Metallurgy Division and the Minerals Beneficiation Division, Dallas, Texas, February 25-28, 1963). 1008 pages. Edited by Milton E. Wadsworth and Franklin T. Davis.

2. Volume 25 - "Deformation Twinning"

(Proceedings of a Conference sponsored by The Metallurgical Society and the College of Engineering, University of Florida in cooperation with the Florida Institute for Continuing Studies, Gainesville, Florida, March 21-22, 1963.) 478 pages. Edited by R. E. Reed-Hill, J. P. Hirth, and H. C. Rogers.

3. Volume 26 - "Mechanical Working of Steel"

(Proceedings of the Sixth Technical Conference sponsored by the Mechanical Working and Steel Processing Committee of the Iron and Steel Division, and the Chicago Section, AIME, Chicago, January 30-31, 1964.) 552 pages. Edited by T. G. Bradbury.

4. Volume 27 - "The Sorby Centennial Symposium on the History of Metallurgy"

(Sponsored by the Society for the History of Technology, the American Society for Metals, and The Metallurgical Society, Cleveland, Ohio, October 22-23, 1963.) 580 pages. Edited by Cyril Stanley Smith.

5. Volume 28 - "Precipitation From Iron-Base Alloys"

(Proceedings of a Symposium sponsored by the Ferrous Metallurgy Committee, Institute of Metals Division, Cleveland, Ohio, October 21, 1963.) 420 pages. Edited by G. R. Speich and J. B. Clark.

6. Volume 29 - "Alloying Behavior and Effects in Concentrated Solid Solutions"

(Proceedings of a Symposium sponsored by the Alloy Phases Committee and the Chemistry and Physics of Metals Committee, Institute of Metals Division, Cleveland, Ohio, October 21, 1963.) 454 pages. Edited by T. B. Massalski.

With the exception of Volume 27, all appeared in a paperbound edition as well as a hard cover edition. Members of AIME are able to purchase paperbound books at prices set at approximately 1.5 cents per printed page.

Other Publications (See Appendix C)

Proceedings of the 47th National Open Hearth and Basic Oxygen Steel Conference were published in the old style (6 in. x 9 in. size pages), with pages numbering 638. Proceedings of the 48th Conference were issued in the new style, using type set earlier for pages in JOURNAL OF METALS. With larger

page size, the 48th volume numbered 272 pages.

Proceedings of the 22nd Electric Furnace Conference were also published in the new format. Pages numbered 268.

Meetings and Technical Conferences

For the 12 major conferences held during 1965 under the sponsorship of The Metallurgical Society and its units, a total of 998 technical papers were presented at 191 technical sessions before an audience of 9,593. Data are given in Appendix D.

In addition, the National Open Hearth and Basic Oxygen Steel Committee conducted a comprehensive series of technical meetings through its nine local sections.

For 1966, The Metallurgical Society will sponsor the following ten major conferences and meetings, for which active planning has taken place in 1965:

1.	February	27-March 3	95th	AIME	Annual	Meeting,	Americana
				l, Nev	York,	N. Y.	

2. April 12-13	Conference on Metallurgical Education,
	Purdue University, Lafayette, Indiana
	(Jointly sponsored with American
Stranding &	Society for Metals)

3. April	17-20		2nd International Conference on Electron
J		£	and Ion Beam Science and Technology
			(Jointly sponsored with the Electro-
. 14 <u>1</u>	$(-4)^{-1} \leq N \leq 1 \leq -28$		chemical Society), Park-Sheraton Hotel,
×1.1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

4. April 18-20	49th AIME National Open Hearth and Basic
	Oxygen Steel Conference, Palmer House,
	Chicago, Ill.

5.	May 12-13		20th AIME New England Regional Conference
		*	("Effects of Structural Disorders"),
			Hotel Sheraton, Boston, Mass.

6. June 27-29	Technical Conference on "Oxide Dispersion Strengthening" (Sponsored by High
	Temperature Alloys Committee and AIME
The second secon	Hudson-Mohawk Section), Sagamore Inn,
$(\mathcal{A}_{i}, \mathcal{A}_{i}) = (\mathcal{A}_{i}, \mathcal{A}_{i}, \mathcal{A}_{i}) = (\mathcal{A}_{i}, \mathcal{A}_{i}, \mathcal{A}_{i}, \mathcal{A}_{i})$	Bolton Landing, N. Y.

7. August 29-31	AIME Electronic Materials Conference,
	Hotel Somerset, Boston, Mass. ("Prepara-
	tion and Properties of Electronic
Burk Commence of the Commence	Materials for the Control of Radiative
	Processes")

8. October 3-5

AIME Nuclear Metallurgy Conference ("High Temperature Nuclear Fuels"), Lake Lawn Lodge, Delevan, Wisconsin

9. October 30-November 3

Annual Fall Meeting of The Metallurgical Society, Pick-Congress Hotel, Chicago, Illinois

10. December 5-9

Second Annual Operating Metallurgy Conference and Exposition, Sheraton Hotel, Philadelphia, Pennsylvania

Operating Metallurgy Conference and Exposition

The First Operating Metallurgy Conference was held in Pittsburgh at the Penn-Sheraton Hotel, November 29 to December 3, and included the 23rd Electric Furnace Conference, the 24th Ironmaking Conference, the 8th Mechanical Working and Steel Processing Conference, and the Symposium on Pyrometallurgical Processes in Nonferrous Metallurgy. New attendance records were established for the Electric Furnace Conference and the Ironmaking Conference. Total attendance was nearly 3,000 registrants. The quality of the technical papers was generally regarded as superior, and most registrants appreciated the opportunities for "cross-fertilization" between unit conferences.

The First Operating Metallurgy Exposition was held concurrently in the Pittsburgh Civic Arena and Exhibit Hall. The attendance at the Exposition was disappointing, although the quality of exhibits was generally regarded as high. To correct the problem of low attendance, in large measure due to the distance between Conference and Exposition, the Second Operating Metallurgy Exposition will be held under the same roof as the Conference, viz., the Sheraton Hotel in Philadelphia, December 5-8, 1966.

Program planning for the Second Operating Metallurgy Conference is being actively pursued, with the same groups participating. The Extractive Metallurgy Division will sponsor a symposium on "Continuous Processing and Process Control." Continuous casting is expected to be a featured subject in both ferrous and nonferrous sessions.

Membership

Membership in The Metallurgical Society continued its steady gain.

Membership statistics for 1965 in comparison with 1964 are shown in the following tabulation:

	Totals	as of	December 31
	1965		1964
Iron and Steel Division	$\frac{3,251}{3}$		3,197
Extractive Metallurgy Division	1,261		1,239
Institute of Metals Division	3,816		3,805
Council of Education	24		23
Council of Economics	57		60
Unclassified	1,640		1,335
Total Corporate	10,049		9,659
Student Members	1,595		1,441
Grand Total	11,644		11,100

Awards

The Ironmaking Committee established a new award to honor Professor Thomas L. Joseph of the University of Minnesota, and to recognize the individual who had made significant contributions to the theory of blast furnace operations. Appropriately, Professor Joseph was chosen as the first recipient of the Thomas L. Joseph Award.

The following additional awards were made by The Metallurgical Society or its units during 1965:

1. Robert W. Hunt Award

Given for the best original paper or papers on iron and steel contributed to AIME during the period under review. Presented to W. H. McFarland for his paper "Effect of Processing Variables on the Recrystallization of Decarburized Steels."

2. J. E. Johnson, Jr., Award

Given to encourage young men in creative work in the metallurgy or manufacture of pig iron. The recipient must be under 40 when he completes the work that merits recognition. Presented to Kenneth R. Haley: "For courage in exploring the use of thin blast furnace linings which resulted in increased working volume, and for being the first to produce a million tons of iron from one furnace in a period of twelve consecutive months."

3. Mathewson Gold Medal

The medal is bestowed on an author or authors of a paper, or a series of closely related papers, with at least one common author, and considered the most notable contribution to metallurgical science during a three-year period. Presented to Michael B. Bever for his paper, "Liquid Metal Solution Calorimetry."

4. Robert Lansing Hardy Gold Medal

Recognizes exceptional promise, rather than accomplishment. To be given to a metallurgist who has not reached his 30th birthday before the end of the calendar year during which the selection of the recipient is made. Presented to Dale F. Stein.

5. Extractive Metallurgy Division Award

Given for the best paper in the field of extractive metallurgy within a two-year period. Presented to Roland P. Carreker, Jr., for his paper, "Dip Forming, a Continuous Casting Process."

6. Frank B. McKune Award

Given for the best paper on open hearth or basic oxygen steelmaking written by authors under 40 years of age. Presented to W. Theodore Ashley for his paper, "Rapid Carbon Analyzation on the Open Hearth Floor."

7. Open Hearth Conference Award

"Runner-up" paper to the McKune Award. Presented to Barnard F. Tandarich for his paper, "Ingot Weighing at Lukens Steel Company."

8. Ironmaking Conference Award

Given for the best paper at the 1964 Conference. Presented to Edward M. Summers for his paper on "Engineering and Design Considerations of Coal Injection."

9. Joseph Becker Award

For distinguished achievements in coal carbonization, this award was presented to Carl J. Otto.

10. Electric Furnace Conference Award

Given for the best paper of the 1964 Conference. Presented to Jack Keverian and J. G. Henzel, Jr., for their paper, "The Theory and Application of a Digital Computer in Predicting Solidification Patterns."

Fellows

Five outstanding men were inducted as Fellows of The Metallurgical Society at the 1965 AIME Annual Meeting in Chicago. They were:

Paul H. Beck Bruce Chalmers

G. V. Kurdjumov Carleton C. Long

Oscar T. Marzke

This brought the total number of Fellows to 30 Members of the Society were saddened to learn of the death of Zay Jeffries, a Charter Fellow, in the summer of 1965.

The following men were elected to the grade of Fellow in October, 1965, and will be installed at the 1966 ATME Annual Meeting:

Pol Duwez Werner Koster Earl R. Parker William G. Pfann

Jack H. Scaff

Merger Talks With American Society for Metals:

The Metallurgical Society of AIME has been studying the possibility of merger with the American Society for Metals since July, 1964. During 1965 a joint Steering Committee and eight Task Committees were appointed with membership from both societies. Such problems as finances, organization and committee structure, and publications were carefully studied. No decisions have yet been made, but a report from the Steering Committee is anticipated in February, 1966.

Staff Changes

Donald A. Parks, Assistant Secretary, resigned in August, 1965, to accept a staff position with International Resources and Geotechnics, Inc. His successor is Vernon H. Branneky, who had most recently served as Secretary-Treasurer of Radio Free Europe Fund, Inc.

Leonard F. Griffing was appointed Associate Editor of JOURNAL OF METALS to succeed Edward B. Bauer, who resigned. Mr. Griffing had formerly been Managing Editor of RUBBER AGE.

Mrs. Kathleen Fitzwater joined the staff as secretary to the Secretary of the Institute of Metals Division.

Leslie S. Wilcoxson, Advertising Sales Manager, resigned effective December 31, 1965. His successor is being sought.

Acknowledgments

However the accomplishments of The Metallurgical Society are assessed for 1965, the efforts have been those of many individuals - elected officers, appointed committee members, volunteer editors, and loyal staff. To them all we owe a deep debt of gratitude.

Especially to be acknowledged is the effective leadership of the President, Harold B. Emerick.

Respectfully submitted,

RWS:as Attach. R. W. Shearman, Secretary

The Metallurgical Society of AIME

	11 Months, 1965	12 Months, 1964
Metallurgical Society Income		
Membership		
Current Dues	\$148,425	\$156,120
New Members Dues	9,786	9,169
Entrance Fees	8,317	7,765
Subtotal:	\$166,528	\$173,054
Publications	7200772	<u> </u>
JOURNAL OF METALS - Ad.	\$ 76,370	\$ 72,143
JOURNAL OF METALS - Sales	19,716	21,278
From Page Charges	18,455	
Reprint Sales (J of M)	7,956	5,214
Subtotal:	\$122,497	\$ 98,635
Other Income		
Loan From AIME	\$ 16,181	\$ -
From ISD Conf. Funds	16,875	18,409
From IMD Conf. Funds	5,500	6,000
For TRANSACTIONS Services	1,100	1,220
AIME Interest and Dividends	1,957	2,255
Annual Meeting Credit	4,342	732
Subtotal:	\$ 45,955	\$ 28,616
Total Income:	\$334,980	\$300,305
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Expenses:	, et	Burney Burney
AIME Headquarters	A 1-2 ***	1 4 1, 125 4
General Secretary's Office, N. Y.	\$ 12,411	\$ 14,051
Secretary's Office, Salt Lake City	3,475	2,717
Business Office	26,653	26,456
Institute Activities Pensions and Related Expenses	14,639	13,868
Provision for Depreciation	4,631	6,014
Engineering Society Library	1,917	2,134 3,680
EJC and ECPD Assessment	3,368 4,394	4,592
Miscellaneous Expenses		4,822
Public Relations	4,539 2,904	3,099
Subtotal:	\$ 78,931	\$ 81 122
Society Direct Expense	φ 10,931	Ψ 01,433
Local Sections and Student Chapters	\$ 12,145	\$ 11,298
Membership Development	3,372	3,388
Society HQ, Offices	65,852	74,205
Pensions and Related Expense	6,049	5,992
Provision for Depreciation	733	643
Public Relations	1,375	1,500
Subtotal:	\$ 89,526	\$ 97,026
Publications		
JOURNAL OF METALS - Ad.	\$ 45,760	\$ 35,381
Production and Editorial (J of M)	116,544	104,404
Directory	25	(43)
Reprint Income (J of M)	4,194	3,513
Subtotal:	\$1.66,523	\$143,255
Total Expenses:	<u>\$334,980</u>	φ <u>5</u> <1, (14 g 16 g):0
Less: Received from Funds (Footnote, next page) Net Income From TRANSACTIONS	φ - 2 E20	φ 10,349
Total Net Expenses:	2,530 \$332,450	\$305.365
Income Over Expenses:	\$ 2,530	\$ (5,060)
en e	<u> المناسلية المناسلي</u>	

TRANSACTIONS

1965 Budget

		11 Months 1965	12 Months 1964
Transactions Income	:		
Transactions Transactions Vol Transactions Rep From Metals Res. From Page Charge Total Incomp	rints Pub. Fund s	\$ 41,937 21,807 4,249 55,540 \$123,533	\$45,336 18,161 19,681 15,771 \$98,949
Transactions Expens	es:		
Transactions Transactions Vol Transactions Rep Page Charges Total Expe	rints	\$ 80,747 13,594 1,528 6,679 \$102,548	\$82,267 9,258 7,424 - \$98,949
Income Over Expense	<u>s:</u>	\$ 20,985	\$ -
Less Income Allocat	ed to JOURNAL Operations	\$ 18,455	\$ -
Net Income Over Exp	enses:	<u>\$ 2,530</u>	<u>\$ -</u>

Note from preceding page:

From Institute Surplus Account	\$ 1,732
From Metallurgical Society Royalty Fund	10,000
From Metallurgical Society Projects Fund	4,617
Total:	\$16,349

Metals Research Publications Fund

Status as of November 30, 1965

INCOME:

<u>a</u> .	Contributions Received:		
	During 1954	\$42,225.00	
	During 1955	17,500.00	
	During 1956	51,600.00	
	During 1957	33,350.00	
	During 1958	16,200.00	
	During 1959	11,850.00	
	During 1960	37,325.00	Karali Kiji Ka
	During 1961	8,150.00	
	During 1962	13,650.00	
	Total Contributions		\$231,850.00
<u>b</u> .	Transferred from Metallurgical Society		
	Operating Fund (1957 and 1958)		1,806.36
<u>c</u> .	Gain on Sale of Securities:		
	To 12/31/64 (Cumulative)	\$ 7,576.67	
	To 12/31/65	2,306.20	9,882.87
d.	Interest:		
	To 12/31/64 (Cumulative)	\$25,970.13	
	To 12/31/65	4,296.55	30,266.68
<u>e</u> .	Net Royalties as of 12/31/63:		27,623.12
<u>f</u> .	Johnson Reprint Corp., Sales of back volumes		
	In 1964 In 1965	\$ 174.51 147.09	321.60
	Total Income:		\$301,750.63

METALS RESEARCH PUBLICATIONS FUND - Page 2

EXPENSES:

a. Support of Transactions:

	· ·
1954 - 140 pages (2 Supplements)	\$ 7,149.98
1955 - 512 pages (5 Supplements)	23,184.00
1956 - 656 pages (4 Supplements)	39,786.98
1957 - 576 pages (4 Supplements)	36,576.00
1958 - 896 pages (6 issues)	15,000.00
1959 - 1064 pagés (6 issues)	11,445.48
1960 - 1152 pages (6 issues)	1,994.92
1061 1076 (6.5.5.5)	,
1961 - 1274 pages (6 issues)	0.00 /
1962 - 1300 pages (6 issues)	3,318.97
1963 - 1478 pages (6 issues)	8,395.56
706/1 7720	
1964 - 1738 pages (6 issues)	15,771.21
1965 - No withdrawals	

Total Charges:

\$162,623.10

b. Transfer of Funds:

Transferred to Metallurgical Society Projects Fund (per item 3, Met. Soc. Board Minutes, 2/21/62):

5,437.10

Transferred to establish Metallurgical Society Royalties Funds (per item 3, Met. Soc. Board Minutes, 2/19/64):

1 1847 E. S. T. N. +

11,489.38

16,926.48

Total Expenses:

\$179,549.58

Balance 12/31/65:

\$122,201.05

Summary of Publications of The Metallurgical Society

Comparison of Pages Published, 1965 and 1964

Α.	Periodicals:	Pages, 1965	Pages, 1964
	JOURNAL OF METALS	1,420	1,032
	TRANSACTIONS OF THE METALLURGICAL SOCIETY OF AIME Total:	2,116 3,536	1,772 2,804
В.	ISD Proceedings:		
	Open Hearth Electric Furnace Total:	910 <u>268</u> 1,178	624 - 624
C.	IMD Special Report Series:		
	Nuclear Metallurgy, Vol. 10 Total:		804 804
D.	Gordon and Breach Books		
	Mechanical Working of Steel I (Vol. 21) Metallurgy at High Pressures and High		426
	Temperatures (Vol. 22) New Types of Metal Powders (Vol. 23) Ironmaking (22nd Proceedings Volume)		422 178 688
	Unit Processes in Hydrometallurgy (Vol. 24) Deformation Twinning (Vol. 25)	1,008 478	
	Mechanical Working of Steel II (Vol. 26) Sorby Centennial Symposium (Vol. 27) Precipitation From Iron-Base Alloys (Vol. 28) Alloying Behavior and Effects in	552 580 420	
	Concentrated Solid Solutions (Vol. 29) Total:	455 3,493	1,714
	Total Pages Published During Year	8,207	5,946

Technical Conferences and National Meetings of

The Metallurgical Society, 1965

				Number Technical	Number Papers
	in the second of	Section Sectio	Attendance	Sessions	Scheduled
1.	January 19 Pittsburgh	7th Mechanical Working Conference	209	3	10
2.	February 14-18 Chicago	94th AIME Annual Meeting (Met Soc)	1,383	<u>.</u>	y 283 (4.) y 1 (3.5 -) 1
3•	April 5-7 Cleveland	48th National Open Hearth and Basic Oxygen Steel Conference	1,575	8	
4.	May 13-14 Hartford	19th New England Regional Conference	120	4	100 pt 10
5.	June 7-8 Baltimore	Conference on Environment-Sensitive Mechanical Behavior of Materials	90		23
6.	June 9-11 Evanston, Illinois	4th Engineering Management Conference (Joint with American Society for Metals)	33 ***********************************	5	8
7.	June 14-17 New York	2nd International Powder Metallurgy Conference (Joint with Metal Powder Industries Federation)	1,588	10	66
8.	September 7-9 San Francisco	Technical Conference on Materials Science and Technology in Integrated Electronics	233 L	6 ,	41
9.	September 8-10	Conference on Radiation	138	5	14
۶۰	Asheville,	Effects	130		24
2 -	N. C.		Karana		
10.	October 4-5 French Lick, Indiana	Conference on Physical Metallurgy of Refractory Metals	230	16	82
1.75 1.8					
11.	October 17-21 Detroit	Fall Meeting of The Metallurgical Society	1,147	49	320
12.	November 29- December 3	First Annual Conference on Operating Metallurgy	2,847	32	105
	Pittsburgh	Total:	9,593	<u>191</u>	998