

AIP

1957

annual report

Submitted by the Director and accepted by the Governing Board of the American Institute of Physics as its annual report to the members of the AIP, March 24, 1958

THE year 1957 was a full one for the American Institute of Physics. The conversion of the building at 335 East Forty-Fifth Street mentioned in last year's annual report began on January 2. On June 8, the Institute staff moved into the new AIP headquarters. The building was completely modernized and provides the space so badly needed for present operations, and also considerable space for future expansion. Through the generosity of Mr. Alfred P. Sloan, Jr., a handsomely furnished board room, named in honor of Karl Taylor Compton, is available for meetings of the Institute Governing Board, other professional council meetings, and appropriate committee meetings.

Early in 1957, Dr. Henry A. Barton, Director of the Institute since its beginning, requested that he be relieved of the responsibility of directorship so that he could spend more time on personal matters. Dr. Elmer Hutchisson, Dean of the Graduate School, Case Institute of Technology, was appointed Director and took office on July 1. Dr. Barton was appointed Associate Director on a part-time basis, thus continuing to make his long experience and wise counsel available. On October 21, the new Institute building was dedicated, and the first Karl Taylor Compton Gold Medal was awarded to Dean George B. Pegram. The Institute was honored in having Prince Philip participate in the dedication and award ceremonies.

It was reported last year that a committee had been appointed to study the AIP organization. Based upon the recommendations of this committee, revisions in the Constitution and By-Laws of the Institute were approved by the Governing Board of the Institute and submitted late in 1957 to the Member Societies for adoption. As finally accepted, these revisions make

provision for a new membership category of Associate Member Society of the AIP for a scientific organization having a strong but not a primary interest in physics. Individual personal memberships in the Institute are eliminated in the revision, and directors-at-large are to be elected by the Governing Board rather than by a vote of individual members.

On October 4, Sputnik I was launched by the Soviet Union. The American public suddenly became aware of the technological progress that had been occurring in the USSR, and there followed an immediate upsurge of popular interest in basic research and science education. The Institute has consequently become far more deeply involved in public relations and in providing authoritative information to the public regarding advances in physics. The receptive public climate for strengthening education in physics at all levels has made it highly incumbent upon the Institute to accelerate its own educational activities.

1. *Archive Publications*

A PRINCIPAL responsibility of the Institute and one requiring the services of most of its staff is the publishing of archive journals in physics. The total number of pages published by the Institute continued to increase in 1957, and amounted to 20 244 pages. The circulation also continued to increase, and amounted to a total for all journals of 78 966. In addition to eleven American journals, the Institute was responsible for the translation of the complete contents of four Soviet journals, amounting to a total of 5930 pages and a total circulation of 1650.

The growth in number of pages published by the Institute since 1945 (excluding translations) and the

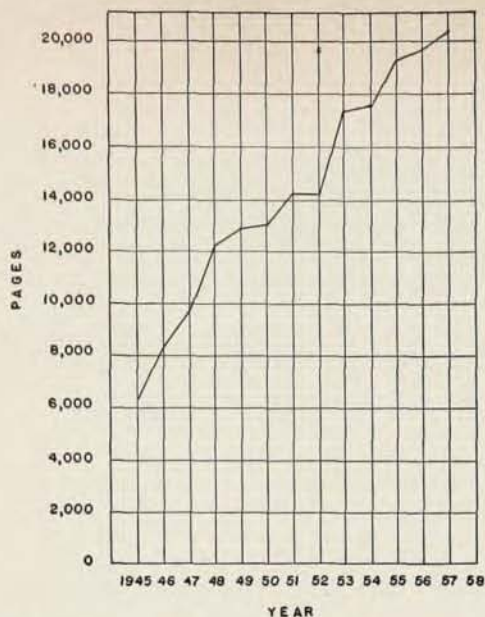


Fig. 1. Growth in the number of pages published in journals of the American Institute of Physics and its Member Societies since 1945. These pages ordinarily include notices of society meetings and abstracts of papers presented at these meetings. However, since 1956, abstracts from meetings are not reprinted in *The Physical Review*; the *Bulletin of the American Physical Society* is included from that date as a separate publication.

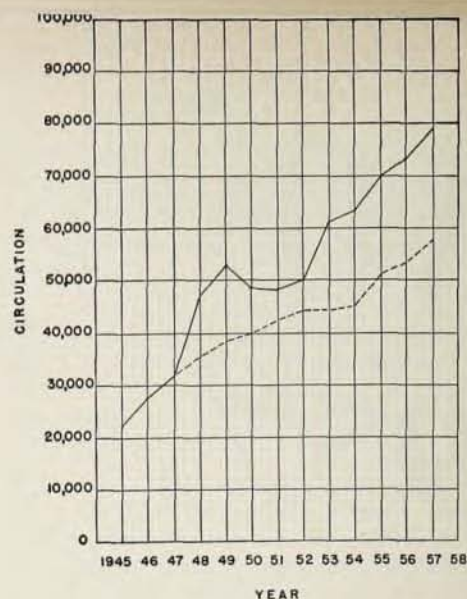


Fig. 2. Growth in the total circulation of all journals published by the American Institute of Physics and its Member Societies since 1945. The large increases in 1948 and 1953 occurred when *Physics Today* was given free to members of all AIP Member Societies. The fall-off in 1950 and years immediately following occurred when this policy was temporarily discontinued and the journal was sent only upon the basis of paid subscriptions. The growth of the total circulation of archive journals (excluding *Physics Today*) is shown by the dotted line.

growth in total circulation are shown in Figures 1 and 2. It is difficult to believe that this growth will continue at this same pace, but if it should, the space for expansion in the present Institute building will be none too large.

This rapid increase in total volume of published material in physics has made it difficult to maintain production schedules. Bottlenecks have developed in the monotype operations, which are necessary for setting economically the complex mathematical notation required in present-day physics. The editors' tasks have become more difficult and the referees have become busier. All of these matters cause peak loads to develop, which jam the printing facilities and delay the publication of research reports. Typical publication delays are shown in the time chart for the December 1957 *Journal of Chemical Physics* (Figure 3). It can be seen that an average of four to six months is required for a manuscript to be refereed, edited, styled, set in gal-

leys, proofread, printed, and mailed. The total time is short compared to publication in many fields, but is intolerably long in view of the rapidity with which new concepts are evolving in physics. Strenuous efforts are being made to speed up this publication process.

A compromise must always be made between utmost speed and minimum cost. Because of the large volume of printing and the efficiency of the operations, costs for AIP journals at present are low, and probably have not risen as fast as the cost-of-living index. An approximate expression for the total cost of production which has been used frequently is:

$$\text{Cost} = A + Bp + Cq + Dpq$$

where p is the number of pages published annually; q is the circulation; A is the total of the fixed costs such as that of the editors' offices; B represents factors depending upon the number of pages such as composition, authors' alterations, engravings, editorial mechanics, and the honoring of page charges; C depends upon cost of covers, and subscription and mailing handling charges; D represents paper, presswork, postage, etc. A corresponding expression for the income for a journal (exclusive of advertising) may be given as $E + Fq$, where E is income independent of present circulation such as that from back number sales, and F is the average subscription price. Using these expense and income expressions, a typical break-even chart may easily be drawn, such as shown in Figure 4 for the *Journal of Applied Physics*.

The year 1957 has been an active year as far as the initiation of new journals is concerned. Upon the recommendation of the Committee to Study Publishing Problems in Physics, and with the expected support of the Air Force Office of Scientific Research and the Office

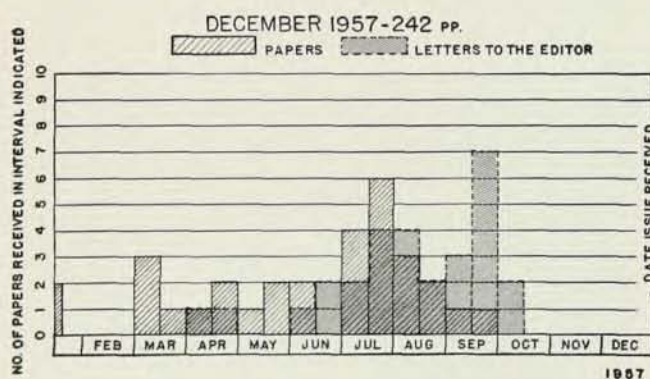


Fig. 3. Chart of typical publication delays of papers and letters submitted to an AIP journal.

of Naval Research, plans for starting *The Physics of Fluids* in January 1958 got under way. Dr. François N. Frenkiel was appointed editor, and an editorial board was set up. Because of the overload at the Lancaster Press, this journal is being printed by the Wm. Byrd Press in Richmond, Virginia. Initially, *The Physics of Fluids* will be published bimonthly, but will become a monthly as soon as justified by the amount of material submitted for publication. The initial domestic subscription price is \$8 for members, \$10 for nonmembers, and the per page publication charge is \$25.

In anticipation of support from the National Science Foundation, plans are being laid for the initiation of two new translated journals early in 1958. These are the USSR journal of crystallography and the USSR astronomical journal. In this case, the AIP is undertaking these translations at the request of the American Crystallographic Association and the American Astronomical Society. These new translations as well as the four journals now being translated are under the general supervision of the AIP Advisory Committee on Russian Translations, with Professor Robert T. Beyer as chairman.

A request for funds to assist in initiating a new journal to be entitled *Journal of Mathematical Physics* has been made. No action has yet been reported upon this proposal.

2. Research on Publishing Problems

PUBLISHING activities of the Institute in 1957 reached the one million dollar mark. With this large volume of activity, many new problems have arisen which were not present in the early days of the Institute. As has already been mentioned, the monotype-

setting capacity of Lancaster Press has become completely saturated, and the schedules for the printing of journals have gradually lengthened until it now takes almost twice as long to print a journal as it did two or three decades ago. Physicists themselves have become swamped with the constantly increasing size of the older journals and with the many new journals which have been introduced. Prices have continued to rise, and it is only as a result of an increasing circulation and a fairly large page charge that the journals have been kept in the black. It seems appropriate that with a volume of publishing business as large as that of the Institute, continuous research should be undertaken on ways and means of publishing journals more quickly and more economically, and of devising means to assist physicists in keeping abreast of the tremendous amount of material that is being published. A broad program of research in this area has been prepared for consideration of the Committee to Study Publishing Problems in Physics, headed by Dr. E. U. Condon, with the expectation that support may be obtained from one of the large foundations for an initial three-year period. A grant covering meetings of the Committee and for some preliminary staff work has already been provided by the Atomic Energy Commission in view of the growing volume of unclassified papers in nuclear physics.

Part of the delay in the publishing of new research arises from the inadequate maintenance of schedules. To insure better control over schedules, the Institute has undertaken a program of detailed time records so that we will know more quickly if schedules are not being met and if a backlog of papers is building up. Under funds provided by the National Science Foundation, the staff is also carrying out a study of the back number demand and supply to determine the most economical print order that will provide enough copies of our journals for present subscribers and, at the same time, provide a reasonable overprint for additional subscriptions expected during the remainder of the year, plus back number sales for a future limited period.

Funds were requested and have been provided by the National Science Foundation to revise the *AIP Style Manual*. This revision is being prepared by the staff under the general supervision of the AIP Publication Board with Dr. Thomas H. Osgood as chairman.

3. Relations with the Public

IN recent years, it has become increasingly evident that the contributions and the role of the physicist in society, to be fully effective, need greater understanding from the public. Whether it involves support for basic research, opportunity for exchange of information, or provision for talented youth to choose physics as a profession, recognition of the vital role of physics is essential.

To this end, an Office of Public Relations has functioned during the past few years as an integral part of the Institute. Techniques and procedures have been developed to provide information to the press and

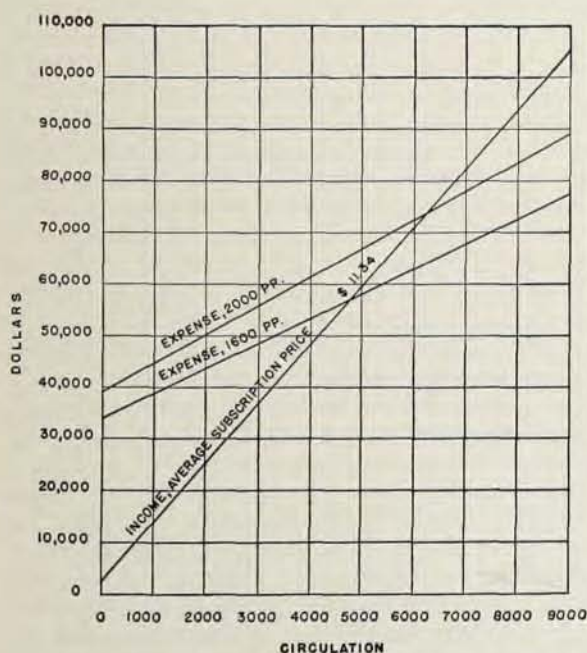


Fig. 4. Typical expense and income of an AIP journal as a function of circulation.

other media. Most significant activities in this area have been the establishment of press room functions at meetings of Member Societies, and the setting up of procedures to provide prompt and sound answers to queries from various sources on physicists and their work.

The public press is accustomed to expect news releases from meetings where reports are given. In the Institute office, conventional public relations techniques have been adapted for interpreting significant developments in physics so that they can be communicated to the public in easily understandable terms. Coverage of recent meetings in New York and elsewhere by newspapers and wire services indicates the soundness of the Institute's activities in this field but it is clear that still more needs to be done.

A major activity undertaken by the Institute's Office of Public Relations has been a public information program in support of the Visiting Scientists Program, sponsored by the National Science Foundation (see Section 4). Here again, adapting the well-developed techniques of bringing special events to the attention of localized media has resulted in effective communication.

Still another activity of the Office of Public Relations has been the supply of vocational literature. From July 23, 1956, to December 31, 1957, the office distributed 14 871 copies of the booklet, "Physics as a Career", in response to 3420 requests. This distribution is at the rate of 10 000 a year, and is increasing.

During the same 17-month period, this office sent out 3542 copies of "List of Colleges Teaching Undergraduate Physics" in response to a total of 2748 requests, and 4245 copies of "List of Universities and Colleges Teaching Graduate Physics", in response to 3428 requests. These requests are at an all-time high.

The increased public interest in the realm of scientific research and science education in past months has led the Institute to consider broadening its program by engaging outside counsel to develop further its activities in this field. Lack of understanding of the roles of technology and science in the field of research and confusion over the distinction being made in the public press between the humanities and the sciences in a liberal education require a more effective public information program on the part of the Institute and other scientific groups.

The first step expected under the Institute's expanded activity is to undertake an appraisal of the actual climate of public opinion as it relates to physicists in order to formulate a program in line with current public relations practice, which will define recommended areas of activity designed to achieve specified objectives. This will involve determining, as far as possible, what can be said effectively to government officials, industry, allied professions, schools, and the public, and how it is to be said. Paramount in the Institute's planning at the current stage is the recognition that the program must function both on a national level and on a community level wherever physi-

cists are engaged in education, industry, or government. It is envisioned that a sound program will call for establishing public relations committees of the Institute to provide policy and operational guidance in implementing the Institute's program.

Because of the characteristic independence of thought of physicists which provides the very strength of physics, the difficulties inherent in implementing an effective public relations program are not minimized. However, the experience available from past efforts in industry, universities, and allied professions, can be adapted to the needs of the Institute's program. Among the objectives tentatively defined are increased recognition of the role of basic research in a technological society and greater support for basic research on the part of industry, government, foundations, universities, and others. Another aim is to increase the enrollment in physics classes in high schools and colleges, as well as to strengthen physics instruction by making the importance of physics in modern society apparent to members of school boards, administrators, and teacher-training colleges. Various media will be used to reach the segments of the public concerned. The program will involve preparation of material to be used on both the national and community levels, in accordance with obtainable funds and an approved budget.

4. Education and Manpower

DURING 1957, the educational activities of the American Institute of Physics increased many fold. The Institute is cooperating with the American Association of Physics Teachers and with many other agencies in improving the teaching of physics at high-school, college, and graduate school levels. With the aid of grants from the Fund for the Advancement of Education, Ford Foundation, and the National Science Foundation, we have on our staff two visiting physicists who are on a year's leave from their regular academic positions to assist in this work. They are Professor William C. Kelly, from the University of Pittsburgh, and Professor Grant O. Gale, from Grinnell College. The work being done at the Institute includes assisting various AAPT, APS, and AIP committees working in education. An important part of the activity is an evaluation being made of the feasibility of teaching effectively large numbers of students with few teachers by television and color movies. Quantitative estimates are being made of the present supply of trained physicists and of the future need for physicists, and for greater education in the field of physics. A monthly newsletter summarizing the AIP educational activities is distributed to all who are interested.

Under a grant from the National Science Foundation and with the joint sponsorship of the American Association of Physics Teachers, the Institute has organized a Visiting Scientists Program that has as its major purpose the bringing of distinguished physicists to colleges which ordinarily do not have contact with these physicists. Each visiting physicist is expected to stay several days so that he may give lectures, talk with

students, and assist faculty members with curricula and research problems. The Visiting Scientists Program has met with an immediate and enthusiastic response from both colleges and visitors.

The AIP Advisory Committee on Education, under the Chairmanship of Professor Vernet E. Eaton, has met several times during the year to formulate a program for strengthening physics education at all levels, which will, it is hoped, lead to grants which may enable the Institute and the AAPT to take a more active role in the many areas in which improvements are needed.

Student Sections of the AIP provide an opportunity for student groups to obtain official status in the American Institute of Physics, and to establish their members as part of the physics profession. The Sections make it easily possible for students with like interests to get together to discuss common problems and aspirations. They are urged to join one of the Member Societies of the Institute as soon as they are eligible. Membership in Student Sections has increased during the past few years, as shown by the following statistics:

<i>Fiscal Year</i>	<i>Number of Sections</i>	<i>Total Membership</i>
1955-1956	32	775
1956-1957	33	978
1957-1958	37	1075

Recently, four new sections have been added at the Illinois Institute of Technology, Linfield College (Oregon), the Ohio State University, and Wayne University. Since the fall of 1957, copies of *Physics Today* have been sent individually to each member of each Student Section. An AIP emblem pin has been designed, and is being distributed to Student Section Members to help identify them among their student colleagues as members of a student physics organization. The growing volume of correspondence concerning Student Sections is handled by the Student Section Secretary.

The Placement Service continues to assist organizations using physicists in finding competent personnel and in assisting physicists in finding suitable openings. Nearly 1000 openings in industrial, academic, and governmental organizations were listed in 1957, and some 3300 interviews were scheduled. At large meetings of the Member Societies, extensive hotel space has been used to provide interviewing rooms for employers. A quarterly booklet is issued that contains reproductions of the qualification sheets submitted by all active applicants. This booklet is available to prospective employers at cost.

Every spring, as part of the Physics Register Project, a request is sent to physics department heads for the names and permanent addresses of graduating students. Material concerning the various societies in physics is sent to each of these students. At the end of two years, a follow-up is made as part of the Register to determine if they have remained in physics. It is interesting to note that of the 1641 graduates contacted in 1955, 1325 (80%) replied by the end of 1957. Of these, 1168 replied that they had remained in

physics, 106 were not in physics but in related fields, and 51 were in military service or in nontechnical fields.

5. General Services

FOR several years, the Institute has been collecting membership dues for the American Physical Society, the American Association of Physics Teachers, and the Society of Rheology. During 1957, the Optical Society requested this same service, and the Institute collected dues for that Society for the calendar year 1958. A joint dues and subscription bill was prepared by the Institute for all Societies except the Acoustical Society, thus making it possible for most physicists to pay their dues and subscriptions to all Institute journals with a single check.

During 1957, the Institute continued to provide an increasing variety of miscellaneous services for the Secretaries and Treasurers of Member Societies. These included the mailing of meeting notices and ballots, and the furnishing of various information on membership and financial matters.

The promotion of the circulation of nonmember subscriptions to Society journals has long been a service delegated to the Institute by Member Societies and the number of nonmember subscriptions continued to expand in 1957. The revenue from these nonmember subscriptions is a substantial help to each Member Society in meeting the cost of publishing its journals.

The Institute acts as an agent for the Acoustical Society and the American Association of Physics Teachers in selling and publishing advertising in the journals of these Societies. The net revenue to the Societies from such advertising is not large, but it does help meet the cost of publication and can probably be expanded in future years.

The office of the Institute receives numerous requests for information about membership in Member Societies, and refers these to the appropriate Secretaries. During the last two years, our Physics Register Project traced over 450 new Society members to inquiries that had been referred to the Societies from the Institute office. Many inquiries about Society membership are collected during the course of exhibits sponsored by the Institute and are referred to Member Societies.

6. AIP Development Fund Campaign

AS mentioned in last year's annual report, the Institute has been conducting a campaign for additional funds to provide greater working space and to expand its publishing and other services to physicists. The goal sought was \$500 000 divided as follows:

Increased working space (new headquarters)	\$250 000
Expansion of publishing activities	200 000
Problems of physics education	50 000
TOTAL	\$500 000

The Campaign officially closed at the end of 1957, although small amounts were still coming in and some

pledges remained yet to be paid. We are very happy to report that the Campaign has gone "over the top", and as of March 18, 1958, the following amounts have been received:

From industry	\$207 235.00
From members and Member Societies	86 564.81
From foundations and government agencies to support publication and education projects	210 540.00
TOTAL	\$504 339.81

Since the first two items are essentially un-earmarked, we see that the funds required for each of the needs have been obtained. In addition, a generous gift was made to endow the Karl Taylor Compton Award for distinguished statesmanship in physics. We acknowledge with deep gratitude our indebtedness to the large number of physicists and others who have contributed in the Campaign.

The Development Fund Campaign was conducted under the leadership of Dr. Paul E. Klopsteg with the aid of a large committee of distinguished physicists. Our hearty thanks and congratulations are due to the chairman and his committee members.

7. Corporate Associates

WITH increased activity in publication research, public relations, and education, and with the increasing circulation of *Physics Today*, which is sent free to all members of Member Societies, the problem of obtaining adequate annual operating funds becomes more acute. The principal sources of income for these general operations are advertising, a percentage of Member Society dues, and the Corporate Associate dues. Practical limits to the possible income from the first two items emphasize the necessity of building up the last named source. During 1957, the number of Corporate Associates rose to ninety-six. Effective in 1958, the dues have been set at \$350 per year, which includes free subscriptions to all American journals published by the Institute. During the Development Fund Campaign, several companies indicated their willingness to help support the Institute on an annual basis by becoming Corporate Associates. Further support of this kind is needed, and suggestions of interested companies or individuals will be gratefully received by the Institute officers.

8. Acknowledgments

SINCERE appreciation is expressed to all members of the Institute staff who, in spite of moving of the offices and many special assignments during 1957, have kept the journals and other publications of the Institute coming out with a minimum of delay. Appreciation is also due the large number of physicists who have served on committees and who have aided the Institute in many ways during 1957.

The Institute particularly appreciates the services of the following members of the Governing Board who now retire: Messrs. A. V. Astin, H. A. Bethe, F. D.

Dexter, H. S. Knowles, W. F. Meggers, R. F. Paton, and M. W. Zemansky.

The Institute also takes pleasure in welcoming to the Board the following members: Messrs. J. W. Buchta, J. H. Dillon, V. E. Eaton, H. A. Erf, G. E. Pake, John Strong, and G. E. Uhlenbeck.

AMERICAN INSTITUTE OF PHYSICS, INC.

Balance Sheet, December 31, 1957

Assets	
<i>Operating Fund</i>	
Cash	\$165 718.98
Investment in United States Government securities	189 097.00
Due from societies:	
American Physical Society	\$ 20 240.68
Optical Society of America	7 099.37
Acoustical Society of America	6 182.02
	33 522.07
Sundry debtors	68 481.24
Deposits	425.00
Deferred charges:	
Contribution to employees' retirement plan applicable to year 1958	\$ 15 203.42
Engraving costs applicable to year 1958	12 747.58
Prepaid insurance	4 186.98
	32 137.98
Mortgage receivable	200 000.00
	\$ 689 382.27
<i>Special Purpose Funds</i>	
Cash	213 291.35
<i>Building and Equipment Fund</i>	
Land and building	\$695 869.15
Less: Accumulated depreciation thereon	15 757.25
	\$680 111.90
Furniture and fixtures	\$ 18 621.87
Less: Accumulated depreciation thereon	931.04
	17 690.83
	697 802.73
	<u>\$1 600 476.35</u>
Liabilities	
<i>Operating Fund</i>	
Trade accounts payable	\$125 976.13
Commissions payable	4 750.61
Due to societies:	
American Association of Physics Teachers	\$ 10 384.56
Society of Rheology	4 656.09
	15 040.65
Sundry creditors	20 347.96
Deferred credits:	
Subscriptions received applicable to issues of journals to be published subsequent to December 31, 1957	\$262 750.95
Dues—corporate and associate—year 1958	11 527.00
Sundry receipts—re 1958 activities	6 895.84
National Science Foundation grant for elimination of publication backlog	29 634.10
	310 807.89
Accumulated income	212 459.03
	<u>\$ 689 382.27</u>

Special Purpose Funds

Karl Taylor Compton Fund	\$ 11 944.95	
Fund for Future Physicists	30 000.00	
Amounts received for special projects for account of others (net after expenditures thereon)	155 589.15	
Building replacement reserve	15 757.25	
		213 291.35
<i>Building and Equipment Fund</i>		
Mortgage payable	\$117 583.12	
Building and Equipment Capital	351 906.72	
Contributions received to December 31, 1957 from campaign still in progress, for building fund, less amounts expended incident thereto	228 312.89	
		697 802.73
		<u>\$1 600 476.35</u>

AMERICAN INSTITUTE OF PHYSICS, INC.*Summary Statement of Operations**Including Activities Carried on for Account of Member Societies**Year Ended December 31, 1957*

	Total	American Institute of Physics, Inc.	For Account of Member Societies
<i>Income:</i>			
Subscriptions to journals	\$ 486 683.89	\$234 911.36	\$251 772.53
Publication charges and reprint sales	319 238.22	114 234.31	205 003.91
Grant	5 365.90	5 365.90	—
Back number sales	56 237.52	23 075.85	33 161.67
Advertising	249 314.91	216 194.27	33 120.64
Special projects	227 099.66	227 099.66	—
Contributions from member societies	26 387.38	26 387.38	—
Dues from associate members and corporations	11 892.22	11 892.22	—
Income from investments, mortgage, and rent	24 700.69	24 700.69	—
Miscellaneous income	5 587.32	5 587.32	—
Receipts for account of member societies	386 003.21	—	386 003.21
<i>Total income</i>	<u>\$1 798 510.92</u>	<u>\$889 448.96</u>	<u>\$909 061.96</u>
<i>Expense:</i>			
Printing, engraving, and mailing journals	\$ 666 154.94	\$235 666.18	\$430 488.76
Printing and mailing reprints	54 139.36	21 412.56	32 726.80
Handling publication charges and reprint sales	18 733.41	7 742.43	10 990.98
Back number handling and distribution	25 549.34	10 075.85	15 473.49
Advertising printing, distribution, and selling	134 922.01	114 610.70	20 311.31
Administrative and organizational services	139 446.58	139 446.58	—
Editorial and editorial mechanics	130 227.63	93 205.05	37 022.58
Circulation handling	67 378.34	30 427.65	36 950.69
Special projects	200 679.75	200 679.75	—
Disbursements for account of member societies	46 132.54	—	46 132.54
<i>Total expense</i>	<u>\$1 483 363.90</u>	<u>\$853 266.75</u>	<u>\$630 097.15</u>
Net paid to member societies to balance accounts	278 964.81	—	278 964.81
	<u>\$1 762 328.71</u>	<u>\$853 266.75</u>	<u>\$909 061.96</u>
<i>Net income</i>	<u>\$ 36 182.21</u>	<u>\$ 36 182.21</u>	<u>—</u>

SOVIET PHYSICS TRANSLATIONS

Published with the cooperation and support of the National Science Foundation.

Soviet Physics—Technical Physics

A translation of the "Journal of Technical Physics" of the Academy of Sciences of the U.S.S.R. 12 issues per year, Vol. 2 begins July 1957, approximately 3,000 Russian pages. Vol. 3 begins July 1958. Annually, \$90.00 domestic, \$95.00 foreign. Single copy—\$10.00.

Soviet Physics—Acoustics

A translation of the "Journal of Acoustics" of the Academy of Sciences of the U.S.S.R. Four issues per year, approximately 400 Russian pages. Annually, \$12.00 domestic, \$14.00 foreign. Vol. 4 begins July 1958. Single copies \$4.00.

Soviet Physics—Doklady

A translation of the "Physics Section" of the Proceedings of the Academy of Sciences of the U.S.S.R. Six issues per year, approximately 800 Russian pages. Vol. 3 begins July 1958. Annually, \$25.00 domestic, \$27.50 foreign. Single copies \$5.00.

Soviet Physics—JETP

A translation of the "Journal of Experimental and Theoretical Physics" of the Academy of Sciences of the U.S.S.R. Twelve issues per year, approximately 3,700 Russian pages. Vol. 7 begins July 1958. Annually \$75.00 domestic, \$79.00 foreign. Single copies \$8.00.

Back issues are available, either in complete sets or single copies.

All journals are complete translations of their Russian counterparts. The number of pages to be published (as stated above) represents the best estimate based on all available information now at hand.

Translated by competent, qualified scientists, the publications provide all research laboratories and libraries with accurate and up-to-date information of the results of research in the U.S.S.R.

AMERICAN INSTITUTE OF PHYSICS**335 East 45 Street****New York 17, N. Y.**