THE AIP IN 1967

A reorganization, a committee on physics and society, a national information system, publications delays, a new student society, surveys, new documents in science, a science-writing award, a new computer—These were some of the features of the past year.

JOHN JOHNSRUD

In 1967 the American Institute of Physics took some important steps into the future.

The institute streamlined its operations with a reorganization into three branches: publishing and information, general activities, and fiscal operations.

It stepped into the question of the critical problems facing physics and society today with the establishment of COMPAS, the Committee on Physics and Society.

It set up a unified information division and requested government funds to prepare for the establishment of a national physics-information system.

In weathering a serious publications crisis, which caused delays of up to 60 days in the appearance of some journals, it set the stage for improved publication methods.

It approved the union of Sigma Pi Sigma, the national physics honor society, with the AIP Student Sections.

It began a survey to explain why students once committed to physics leave the field.

It added to its archives of source material in the history of physics and started new projects to acquire and preserve the basic documents of science.

It inaugurated a science-writing award to stimulate distinguished reporting of scientific advances.

It ordered a computer to handle the massive subscription-fulfillment task and planned eventually to turn over accounting, directory-preparation and some information chores to the computer.

In his introduction to the AIP annual report, recently approved by the governing board, H. William Koch calls his first year as director "a year of learning and exploration." It was a year spent "attempting to develop guidelines for the institute in meeting the requirements of the physics societies, of the physicists that make up their membership, of the disciplines dependent on physics, and of society as a whole."

Reorganization

The organizational plan of the institute was changed during 1967 to meet changing needs and to provide a second chain of command (PHYSICS TODAY, June 1967, page 66). In March the governing board approved the establishment of three main branches, and the structure was refined toward the close of year as the institute prepared to expand its information operations to handle development of a national physics-information system. Appointments in 1967 included that of Lewis Slack, who joined the staff on 1 July as associate director for general activities. He was formerly assistant executive secretary of the physical sciences division of the National Academy of Sciences–National Research Council. Franz L. Alt came to AIP on 1 Aug. to direct computer operations. He is deputy director of the information division.

In addition to organizational changes, proposed changes in the institute's constitution and its service contracts with member societies were approved for submission to the member societies by the governing board in October. The principal changes concern the method of supporting AIP activities by the member societies, service charges to them, and the status of the board chairman and director with re-

spect to the governing board and its executive committee.

Attention was also given to the function of committees in institute activities. Committees were classified by functions as advisory to the governing board, advisory to management, or operating. The major new committees appointed were the Advisory Committee on the AIP Information Program and the Committee on Physics and Society (COMPAS). The Advisory Committee on Education and Manpower was reorganized with the formation of subcommittees each concerned with a phase of the activity.

COMPAS was set up to help the institute and member societies appraise the role of physics in solving the critical problems facing science and society today. As a start COMPAS set up subcommittees to study the image of physics, physics in industry and technology, the mechanism of physics support, and physics teaching and education. One subcommittee commissioned a study of the effects on cutbacks in government funds on academic physics research. Another planned to document the story of how physics gets done in universities, industry and government. COMPAS issued two major statements. One identified the recruitment of high-school physics teachers as one of the most pressing problems facing the profession today. The other supported deferment of graduate students in physics and astronomy in the event that graduate students are to be deferred on the basis of field of study.

Information activities

Near the end of 1967 a unified information division was formed to coördinate the institute's physics-information programs. The first task of the new division was to formulate a basis for a national information system for physics. The institute information programs have been funded by a number of National Science Foundation grants and one grant from the Atomic Energy Commission. (Early in 1968 the NSF awarded AIP the first installment of a $1.18-million, two-year grant to proceed with the development of this important system.)

In preparing for the information-system study, the institute communicated extensively with the physics community. Its advisory committee on the information program, representing the member societies, met at the beginning and end of the year and formed subcommittees to bring additional physicists as well as representatives of other disciplines into the study. Involvement with physicists was further broadened through a system of information correspondents nominated by the committee.

The first version of a classification scheme for all physics documents was issued in the fall. Developed as part of the information-retrieval program, this classification is based on labeling documents by their related fields of study. The addition of a series of free-language indexing terms to describe detailed content will make possible retrieval of document references by various search strategies. An extensive program to evaluate and improve the classification was started with the help of physicists specializing in various subfields, and a large group of papers from significant journals was indexed and classified to test the scheme.

Work continued on computer-retrieval experiments in chemical physics. This project has served as a preliminary model of an information system and as a basis for exploring compatibility of interest with the Chemical Abstracts Service. One experiment tested the relevance of references retrieved by a computer search of AIP and CAS indexing files for a group of 1000 papers from the *Journal of Chemical Physics*.

A study of the feasibility of preprint distribution, supported by AEC, was completed in August as part of the system-development program, and further refinement of results was begun under NSF sponsorship. Replies to a questionnaire sent out to high-energy physicists in making this study will be used to determine certain differences between theoretical and experimental physicists by a group at Johns Hopkins University, under an AIP contract.

The AIP computer-store program was expanded by an agreement with MIT and NSF under which AIP will assume responsibility in 1968 for continued updating of the physics-literature file in the MIT Technical Informational Program. Classification numbers and indexing terms for physics papers will be added continually as soon as they become available. The file, which now covers more than 30 journals and extends over the past five years, has already been used as a "citation index" and for title and author searches.

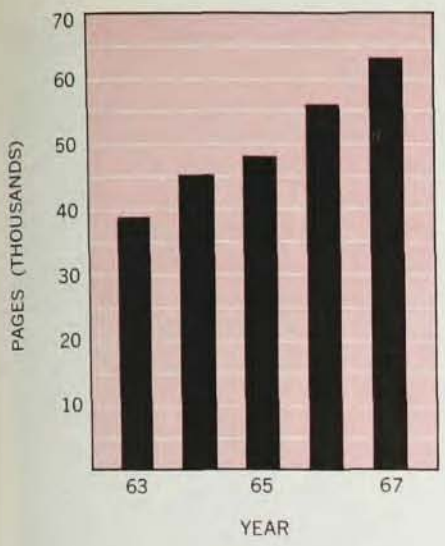
A pilot project for computer composition of primary journals was started under an NSF grant. This system produces punched paper tape along with the regular typewriter copy. A computer combines this tape with additional coding for format and special characters to turn out a magnetic-tape master that operates a photo-typesetting machine. Work was concentrated on coding and programming for identification of article elements and special characters. A useful by-product will be journal articles in machine-readable form. This means that the relevant indexing and bibliographic material can be automatically entered into the information store. Close liaison was maintained with the British Institution of Electrical Engineers, publishers of *Physics Abstracts*, which is working on a similar system to produce their secondary publications.

Other programs under way or completed during 1967 were an analysis of the journal literature covered in the 1965 *Physics Abstracts*, joint studies with IEE on the current-awareness requirements of the physics community in the US and the UK, a study of the nature and extent of selective scientific-information dissemination programs now in use, and an AIP-sponsored project to produce a file of universal decimal-classification headings on magnetic tape and as printed copy. In addition a seminar program was begun with NSF support to bring experts on scientific information to address the staff and other interested specialists.

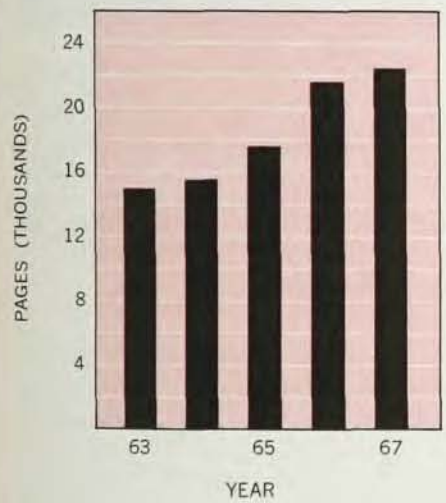
Publishing activities

The staggering volume of research publication in AIP and its member society journals expanded further in 1967. The institute published 60 465 text pages and 2798 advertising pages in 16 journals and three bulletins and programs, exclusive of translations. Both text pages and total pages were up from the 1966 figures of 53 040 text pages and 56 020 total pages.

The translation program also grew, with the publication of translations of 21 950 pages from 13 Russian journals and 580 pages from 1966 issues of one Chinese journal. In 1966, translation of 21 750 pages were published. AIP added the *Soviet Journal of Optical Technology*, the organ of the Vavilov Optical Research Institute, to the pro-



PAGES PUBLISHED in AIP and member society journals rose in 1967, totaled 63 263 pages. Russian and Chinese translation journals added 22 530 pages.



gram in 1967, publishing it for the Optical Society of America.

The annual report also noted interesting changes in the institute nonarchival publication PHYSICS TODAY. A new department, "State and Society," combined several older departments and contained all nontechnical news. The "We Hear That . . ." department was expanded to contain all "people" news. A new vehicle for stories about the magazine, bits of humor and other short items was started under the name "Phimsy." Three special issues covered introductory physics education, instrumentation and a memorial to Robert Oppenheimer. The magazine contained 773 text pages and 873 advertising pages for a total of 1646. This compares with 811 text pages and 939 advertising pages, a total of 1750, in 1966. The report said "the pages are being limited in order to keep the magazine at an optimum size."

To cope with the ever-increasing journal volume and the serious publication delays that resulted in 1967, the institute turned to new sources for composition, engraving and printing with work handled by 19 firms. Peak delays of two months for several of the journals were reduced to two weeks at year end for most issues. However, the *Journal of Mathematical Physics*, for which the pace of overseas composition and production of reproduction proofs was disappointing, and the *Journal of Chemical Physics*, twice-monthly 600-page issues of which overtaxed the copy-editing staff, continued to lag. A production manager of publications was added to the staff; additional copy editors were budgeted for 1968, and a study of current editorial procedures was started with a view to improvement.

A new relationship evolved in distribution of the IEE publications *Physics Abstracts* and *Current Papers in Physics*. AIP now acts as distribution agent for the western hemisphere, soliciting subscriptions and mailing out copies, which are shipped in bulk by air freight from London.

Work got under way on the third edition of the *American Institute of Physics Handbook* for publication by McGraw-Hill.

Education and manpower

On 1 June 1967 AIP received a new NSF grant for a detailed study of why students abandon physics. The manpower-statistics section began preparing questionnaires to be sent to every individual who dropped out of a physics educational program or who received a physics degree and then accepted nonphysics employment. Understanding why persons once committed to physics later leave the field may lead to more effective procedures for attracting bright students to physics and keeping them satisfied. A second new study concentrated on detailed understanding of the balance of employees at all levels who contribute to the output of research laboratories as well as the relationship of employee training to job levels and duties.

An exciting prospect in 1967 for the future undergraduate physics student was the approval of a new Society of Physics Students. This society (officially founded in April 1968—PHYSICS TODAY, April, page 89) promised to combine the best features of its two parent organizations, Sigma Pi Sigma and the AIP Student Sections. AIP will arrange office space and management for the new society, which will have a physicist as full-time director. Membership will be open to all students interested in physics, but initiation into Sigma Pi Sigma will be reserved for students with high academic achievements. The union was approved during 1967 by the AIP Governing Board and by two thirds of the Sigma Pi Sigma chapters, and constitutions were prepared for final acceptance.

The secondary-school physics program continued to contribute to preparing college graduates for such teaching and to increasing the competance of those already teaching. The director of the education and manpower division participated in a summer workshop, sponsored by the Commission on College Physics, that designed a model teacher-preparation curriculum and developed guidelines for implementing the curriculum through student and faculty recruiting. The AIP staff also helped a group of Illinois educators plan a regional program of institutes, conferences and other activities to benefit the area's physics teachers. The division continued its college-physics program, which assists physicists at two- and four-year colleges in academic-program improvement. One project in 1967 helped the Kentucky regional counselor in stimulating local interest in a consortium of colleges, the physics faculties of which plan to coöperate in a series of teaching-improvement programs. During 1967 the Visiting Scientists Program completed its tenth year under the auspicies of the American Association of Physics Teachers and AIP, with support from NSF. During the 1966–67 academic year 175 prominent research physicists visited 280 institutions.

As part of the National-Register project, work was started on a multidimensional system for classifying physics specialties in the 1968 questionnaire. For the first time astronomy departments were included in a directory of physics faculties, which listed 1800 departments and more than 12 000 faculty members.

The placement service served 1309

AIP GOVERNING BOARD FOR 1968 was photographed at meeting in March. Executive committee, in front row, includes (left to right) S. A. Goudsmit, S. L. Quimby, W. W. Havens Jr, Ralph A. Sawyer, Mary E. Warga and Vincent E. Parker. R. Bruce Lindsay, also on the committee, was absent. Other governing board members are, in middle row, Clarence Zener, Stanley S. Ballard, Robert G. Sachs, Herbert I. Fusfeld, H. Richard Crane, Robert S. Shankland, A. I. Mahan and Thor L. Smith. In back row are Wallace Waterfall, A. Francis Turner, Paul M. Routly, Elizabeth A. Wood, Arnold B. Arons, Karl G. Kessler and Ronald Geballe. Absent were Luis W. Alvarez, John Bardeen, Edward C. Creutz, Isadore Rudnick, Frederick Seitz and A. E. Whitford. Governing board members completing their terms early in 1968 were Robert S. Marvin, Melba Phillips, John A. Sanderson and Charles H. Townes. Since this photograph was made, J. E. Goldman has replaced Creutz.

registrants and listed 883 specific positions. Registers were set up at the APS meetings in New York City and Washington, and 4229 interviews were scheduled through the service.

New special-purpose publications included, *Research Specialties of Doctoral Programs in Physics*, *Directory of Physics Research Support for Academic Institutions*, and a new *Physics Resources Directory* was begun.

History and philosophy

The Center for History and Philosophy of Physics concluded a long-range planning study supported by the Ford Foundation. Physicists, historians, sociologists, philosophers, librarians and archivists assisted in the study. The results affirmed the need for the center's programs and research resources located at AIP and indicated that the center plays a unique role as a link between the physics community and the scholars who explore the development of modern science. To fulfill the study's recommendations for expansion of the center's activities, the center would promote periodic seminars bringing together physicists and scholars in related studies, undertake staff research on the historical and sociological development of the subfields of contemporary physics, issue a series of publications identifying and relating source material to significant historical problems, and encourage the preservation of source materials and personal papers of physicists and the creation of source material through oral history interviews.

As part of a joint project with the American Academy of Arts and Sciences the center organized an Exploratory Conference on the History of Nuclear Physics, held at the Academy in May 1967. Interviews with 14 nuclear physicists had been conducted in the project, and the tapes and transcripts have become part of the center's oral-history collection. This collection has also grown with tapes deposited by others. 52 physicists have been interviewed in the oral-history program, supported in part by NSF.

The Niels Bohr Library acquired the personal papers of the late William F. Meggers, head of the National Bureau of Standards spectroscopy section. Additions were made to the papers of the late Richard Sutton regarding physics education and the AAPT and to the papers of Richard von Mises. Scientific correspondence of Eugene P. Wigner from 1958 to 1961 were deposited as was correspondence between 1939 and 1957 from the files of *Journal of Chemical Physics*.

In 1967 the Friends of the Niels Bohr Library contributed $5870, making possible the purchase of more than 500 books. The center's staff prepared and coördinated an exhibit commemorating the 100th anniversary of the death of Michael Faraday as part of the American Association for the Advancement of Science annual meeting.

Assisted by an NSF grant, the staff continued to advise physicists, their families, institutions and societies in preservation of documents. During the year the center helped catalog Arthur H. Compton's research notebooks preserved at Washington University and available in photocopy at the Niels Bohr Library.

Visitors from more than 30 uni-

American Institute of Physics Committees and Regional Counselors for 1967

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Committee to Nominate Chairman, Executive Committee & Director-at-Large for 1968

R. Bruce Lindsay, Charles H. Townes, Arnold B. Arons

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Subcommittee on Studies in Communication Patterns in Physics

Philip M. Morse (Chairman), Jay L. Hirshfield, Arthur H. Rosenfeld

Subcommittee on Liaison with Related Disciplines and Missions

Sanborn C. Brown (Chairman), Edward J. Brunenkant, Conyers Herring, Elliot A. Kearsley, Richard L. Kenyon, Thomas Lauritsen, Gordon L. Walker, F. Karl Willenbrock

Subcommittee on Publications

Edward E. David Jr (Chairman), F. G. Brickwedde, Guy T. Emery, David W. McCall, Marshal H. Wrubel

Subcommittee on Information Retrieval

Lucien Biberman (Chairman), Sanborn C. Brown, Paul Cross

Subcommittee on Reviews and Compilations

Conyers Herring (Chairman), Robinson Burbank, Thomas Lauritsen, Howard N. Reiss, Galen B. Schubauer, K. Way

Advisory Committee on PHYSICS TODAY

Dale T. Teaney (Chairman), J. V. Bouyoucos, Wallace R. Brode, H. Richard Crane, W. W. Havens Jr, E. H. Lee, Paul M. Routly, Lewis Slack, Elizabeth A. Wood

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Subcommittee on Visiting Scientists

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Subcommittee on Liaison

Gerald Holton, Charles Gillispie, Robert K. Merton, Ernest Nagel, John A. Wheeler

Advisory Committee on Corporate Associates

Edward C. Creutz (Chairman), Norman D. Coggeshall, Herbert I. Fusfeld, John A. Hipple, H. R. Johnson, David M. McQueen, S. Millman

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Pension Committee

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Personnel Committee

G. F. Gilbert (ex officio), H. W. Koch (ex officio), Wallace Waterfall (ex officio), Joyce Bravos (Secretary)

Committee on Exhibits at APS-AAPT Meetings

W. W. Havens Jr (APS), H. W. Koch (AIP), Theodore Vorburger (AIP), Wallace Waterfall (AIP), Mark W. Zemansky (AAPT)

JOINT COMMITTEES WITH OTHER ORGANIZATIONS

Joint American Academy-AIP Exploratory Conferences on History of Contemporary Physics

I. Bernard Cohen, Oscar Handlin, Gerald Holton, Robert K. Merton, Philip Morrison, Cyril Stanley Smith, Victor Weisskopf

AIP Appointees to Magnetics Conference Advisory Committee

L. R. Bickford Jr, Joseph F. Dillon Jr, William D. Doyle, Vincent J. Folen, Arthur J. Freeman, John B. Goodenough, Julius Hastings, Alan J. Heeger, Israel S. Jacobs, Howard S. Jarrett, Robert Nathans, George T. Rado, Jan Smit, E. G. Spencer, Robert L. White, H. C. Wolfe (Headquarters Representative)

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L. K. Akers (Tenn.), Stanley S. Ballard (Fla.), Paul F. Bartunek (Colo.), F. A. Benedetto, S. J. (La.), Ulrich Bents [Acting] (Ariz.), Clarence E. Bennett (Me.), R. J. Bessey (Wyo.), Robert T. Beyer (R. I.), James J. Brady (Ore.), Charles Burmeister (Tex.), P. R. Byerly Jr (Neb.), Alexander Calandra (Mo.), Howard Carr (Alab.), R. L. Childers (S. C.), C. Dewey Cooper (Ga.), S. Winston Cram (Kan.), A. D. Crowell (Vt.), Ralph Dressel (N. M.), Fletcher Gabbard (Ky.), Grant O. Gale (Iowa), Charles B. Galloway (Miss.), W. Thomas Joyner (Va.), Allen L. King (N. H.), Donald D. Kerlee (Wash.), Nathaniel J. Kutzman (Mont.), Howard Laster (Md.), Ralph W. Lefler (Ind.), Peter Lindenfeld (N. J.), Stefan Machlup (Ohio), E. B. McNeil (Ill.), Richard Mara (Penn.), David P. Marsh (Nev.), Donald C. Martin (W. Va.), Jose Medina-Hernandez (P. R.), V. R. Nelson (S. D.), Katashi Nose (Haw.), Leonard O. Olsen (Calif.), R. Ronald Palmer (Wisc.), Thomas J. Parmley (Utah), Edson R. Peck (Ida.), Anna Joyce Reardon (N. C.), Eugene J. Saletan (Mass.), Robert St. John (Okla.), Kenneth W. Saunders (Mich.), Robert L. Sells (N. Y.), Paul C. Sharrah (Ark.), M. J. Walker (Conn.), Bernard B. Watson (D. C.), Wilbur O. Weisser (N. D.), Ferd E. Williams (Del.), William S. Wilson (Alas.), Philip Youngner (Minn.)

*By invitation

versities, eight foreign institutions and several industrial and government laboratories used the collections, and an increased number of telephone and mail inquiries came to the center's reference and referral services.

Public information

To stimulate distinguished reporting of advances in physics and astronomy, the institute established in 1967 the AIP–United States Steel Foundation Science Writing Award in Physics and Astronomy. The award honors the best article or program about physics or astronomy prepared during 1967 for any mass-communication medium. The basic criteria for the $1500 prize, awarded by a panel of judges, include skill and originality in describing research, clarity and accuracy of interpretation of data, and significance of the material presented.

To aid the science writer, the public-relations division continued its seminars for science writers, sponsored jointly with the National Association of Science Writers with NSF support. The 25th seminar, on magnetism, was held in Boston. Two others held during the year were on relativistic astrophysics and noise pollution. Glossaries of terms in each field were prepared.

The backbone of the publicity operation continued to be the press release, of which about 250 were prepared and distributed to report visits by physicists to small colleges, appointment of new regional counselors, and information on new AIP staff and undertakings. A study of the effectiveness of the joint monthly news-kit service to weekly newspapers showed that the material was being used. The American Association for the Advancement of Science, the American Chemical Society and the American Institute of Biological Sciences have joined AIP in this service. The division also maintained its press conference program to bring physicists and science writers together at major society meetings. In addition a special press conference was held at AIP headquarters in coöperation with the Acoustical Society of America and the Acoustical Materials Association to promote a film on "Noise—the New Pollutant," a production of the National Educational Television network.

The division disseminated career and general information about physics. The number of career booklets, sup-

Summary Statement of Operations Year Ended 31 December 1967

Income	*Total*	*American Institute of Physics*	*For account of member organizations*
Subscriptions	$2 344 857.83	$1 481 754.81	$ 863 103.02
Contributions for the dissemination of research information	2 519 969.77	1 062 593.70	1 457 376.07
Reprint sales	232 543.23	108 577.27	123 965.96
Back number sales	197 129.69	113 225.30	83 904.39
Advertising	902 172.83	661 698.21	240 474.62
Contributions from member societies	75 259.93	75 259.93	
Corporate Associates dues	153 755.00	153 755.00	
Interest earned on investments	19 574.68	19 574.68	
Grant and contract activities, royalties, exhibits and other income	870 417.98	870 417.98	
Miscellaneous income	30 119.48	30 119.48	
Receipts for accounts of member organizations	1 167 964.83		1 167 964.83
Total Income	$8 513 765.25	$4 576 976.36	$3 936 788.89
Expense			
Composition, printing, engraving, and mailing journals	$3 186 305.75	$1 371 801.02	$1 814 504.73
Printing and mailing reprints	115 238.03	53 280.61	61 957.42
Handling costs—reprint sales	21 865.05	9 364.60	12 500.45
Expense re dissemination of research information	159 084.79	76 578.80	82 505.99
Back numbers, reprinting, handling and distribution	59 004.94	33 334.10	25 670.84
Translations, composition, printing and mailing Soviet journals	571 860.71	513 408.93	58 451.78
Advertising—printing, mailing and selling	340 159.75	228 370.28	111 789.47
Editorial and editorial mechanics	755 902.09	502 704.38	253 197.71
Circulation promotion	26 200.66	17 398.35	8 802.31
Corporate Associates expenses	34 080.49	34 080.49	
Subscription handling	276 349.76	136 969.70	139 380.06
Administrative and organizational services	714 419.00	714 419.00	
Special projects	771 182.33	771 182.33	
Disbursements on behalf of member organizations	347 209.78		347 209.78
Total Expense	7 378 863.13	$4 462 892.59	$2 915 970.54
Net charge to organizations to balance accounts	$1 020 818.35		1 020 818.35
	$8 399 681.48	$4 462 892.59	$3 936 788.89
Net income transferred to accumulated income	$ 114 083.77	$ 114 083.77	

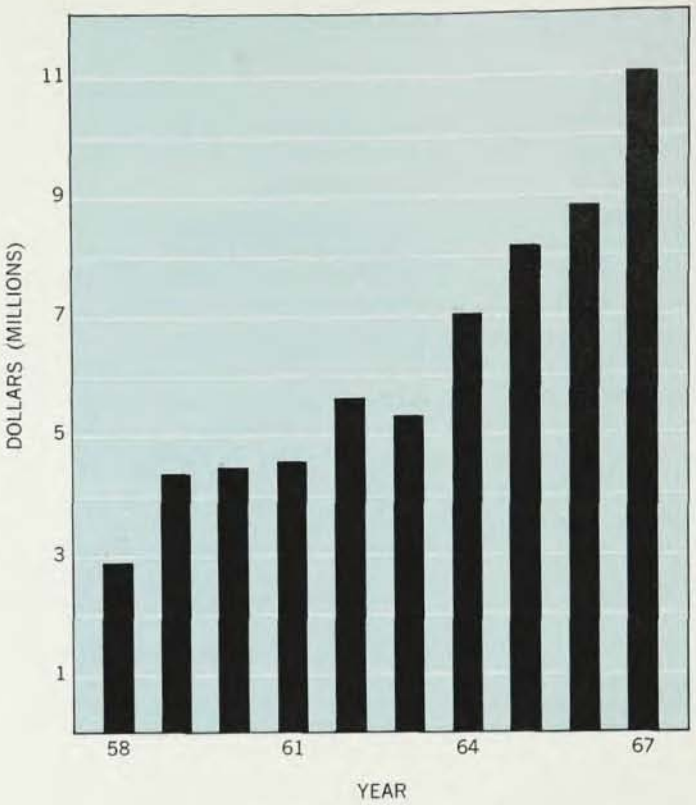
American Institute of Physics Inc. Balance Sheet 31 December 1967

ASSETS

Operating fund	
Cash in banks and on hand	$ 690 055.26
Fixed time deposits	500 000.00
Add: Accrued interest receivable thereon	2 482.00
Other time deposits	16 242.83
Due from member societies:	
Acoustical Society of America	27 933.93
American Association of Physics Teachers	11 993.17
American Astronomical Society	8 463.87
American Crystallographic Association	6 036.86
Sundry debtors	1 575 967.76
Deposits	725.00
Deferred charges:	
Engraving costs applicable to 1968	42 773.45
Printing costs applicable to 1968	14 960.93
Translation costs applicable to 1968	17 419.50
Computer installation expense	18 127.54
Stationery, office and printing supplies inventory	11 581.83
Prepaid insurance	7 079.70
Prepaid postage	3 442.98
Other	27 383.89
Total operating fund	$2 977 670.50
Special purpose funds	
Karl Taylor Compton Fund: Savings Account	799.61
Investments—mutual fund	11 003.94
John T. Tate Memorial Fund: Investments—mutual fund	16 622.13
Albert A. Michelson Memorial Fund: Savings Account	1 116.31
The Meggers Coin Collection (appraised value)	17 939.00
Less: Expenses of coin collection (due to operating fund)	(3 061.39)
The Meggers Memorial Fund—Savings Account	2 623.17
Friends of the Niels Bohr Library Fund—Savings Account	8 843.30
Less: due to operating fund	(1 273.41)
National Science Foundation—funded projects—cash	2 199.10
Investments—at cost (market value $556 505.92)	432 969.06
Cash—Investment Advisory Account—net	2 792.45
Amounts due for funds expended for special projects for accounts of others	40 548.67
Due from operating fund	59 572.87
Total special purpose fund	$ 592 694.81
Property and equipment fund	
Land	$ 266 535.36
Building	1 331 503.70
Less: Accumulated depreciation thereon	(383 580.00)
Furniture and fixtures	229 124.91
Less: Accumulated depreciation thereon	(111 855.05)
Total property and equipment fund	$1 331 728.92
	$4 902 094.23

LIABILITIES

Operating fund	
Trade accounts payable	$ 705 677.20
Commissions payable	23 146.41
Accrued interest payable	2 475.09
Advertising rebates payable	791.19
Sundry creditors	34 428.70
Due to member societies:	
The American Physical Society	96 031.34
Optical Society of America	15 901.33
Society of Rheology	13 259.02
Due to affiliated societies:	
American Vacuum Society	25 182.73
Society for Applied Spectroscopy	526.53
Deferred credits:	
Subscriptions received applicable to journal issues published after 31 Dec. 1967	1 626 985.70
Corporate Associate dues received applicable to 1968	82 138.00
Student Section dues received applicable to 1968	8 623.00
Sundry receipts—re 1968 activities	90 362.50
Due to special purpose funds	55 238.07
Accumulated income	196 903.69
Total operating fund	$2 977 670.50
Special purpose funds	
Karl Taylor Compton Fund	$ 11 803.55
John T. Tate Memorial Fund	16 622.13
Albert A. Michelson Memorial Fund	1 116.31
The Meggers Fund	14 877.61
The Meggers Memorial Fund	2 623.17
Friends of the Niels Bohr Library Fund	7 569.89
National Science Foundation—funded projects	2 199.10
Amounts received for special projects for accounts of others (net after expenditures thereon)	140 329.94
Reserve for replacement of building	395 553.11
Total special purpose fund	$ 592 694.81
Property and equipment fund	
Mortgage payable, 5⅝%, due 1 Nov. 1977 Amortization quarterly	$ 264 009.45
Property and equipment capital	1 067 719.47
Total property and equipment fund	$1 331 728.92
	$4 902 094.23



AIP CASH DISBURSEMENTS rose to $11 million last year from $8.85 million in 1966, nearly four times the 1958 level.

plied on request to colleges and high-school teachers and students, reached almost 90 000. The division also sought support for a motion picture on physics and physicists. The film, for distribution on educational television, would be aimed at youngsters and their parents to encourage the study of physics.

Organization and special activities

The total AIP staff numbered 200 in four locations. The property committee continued to search for a suitable location for a headquarters to bring all New York City activities back under one roof. The American Physical Society and the American Association of Physics Teachers moved into AIP headquarters, joining the Acoustical Society of America. The Washington office moved to new quarters leased from the National Academy of Sciences.

AIP continued to serve seven member societies. The number of affiliated societies grew to 19 with the addition of the American Association of Physicists in Medicine and the Nuclear Science Group of the Institute of Electrical and Electronic Engineers. Corporate associates numbered 157, and their tenth annual meeting in October brought together 150 leaders from industry and education. A review of classes of membership was begun to provide a definitive statement of the criteria, privileges and responsibilities of the various classes.

Two awards were made during the year. The Dannie Heineman Prize for Mathematical Physics was awarded to Gian Carlo Wick for work in quantum field theory, particle scattering and symmetry principles. The Karl Taylor Compton Medal for outstanding statesmanship in science went to Alan T. Waterman, who died less than two months after the presentation.

Service operations

In 1967 a new system for fast magnetic-tape handling of subscription fulfillment was designed, based on a Univac 9300 computer. When installed this system will help the fiscal branch meet its rapidly growing needs. In just five years total circulation figures rose from 176 736 subscriptions to 224 359. Mailing labels for publications alone in 1967 reached about 3-450 000 as the branch handled subscription services for 37 publications.

Billings and dues-collection work increased as members of the American Physical Society divisions were billed for divisional dues for the first time. About 46 000 joint member renewal bills were processed in 1967, and nonmember renewal notices numbered 21 000. About 15 000 orders for 90 812 back copies of publications were also handled.

The accounting division processed disbursements of $11 013 945, up almost 25% over 1966. Accounts are maintained for nine societies, 49 publications, 16 grants and 17 special projects, with about 13 000 checks and 900 statements issued during the year. A number of operations are being reviewed for eventual computer handling. The publication-charge and reprint section processed about 12 000 orders and billed more than $2.5 million. Office services handled 800 000 pieces of outgoing mail and printed about 6.5 million impressions.

Special Society Services, a big user of the fiscal branch continued its wide variety of activities, including society mailings and administrative arrangements for meetings. Among the latter were group-travel arrangements for the January 1968 meeting in Chicago and planning for the 1969 session of the International Congress of Crystallography.

Finances

Income for 1967 totaled $8 513 765 and expenses were $8 399 681, giving a net income of $144 084. This net income was set aside to meet anticipated operations expansion and future building requirements. These figures include income and expenses of $3 936 789 for activities carried on for member societies. In 1966 income of $7 432 576 and expenses of $7 367 271 resulted in a net income of $65 305. Activities carried on for member societies represented an income and an expense of $3 386 667 that year.

Of each dollar spent on AIP-sponsored activities, 72.6 cents went into publishing activities. That figure includes AIP-owned archival publications and translations, PHYSICS TODAY and the advertising operation. The archival publications and translations were the leading source of revenue, contributing 63.7 cents of each income dollar. PHYSICS TODAY added 0.7 cents from paid subscriptions and advertising and exhibits added another 17.6 cents, for a total of 82 cents of each income dollar. Support from grants came to 11.3 cents. □