

Primary Journals

The publication program of the Society is its largest venture, accounting, as has been noted, for three-quarters of the budget. The primary journals in the program may be viewed in three categories. The most significant, measured in Society expenditure and effort, consists of five journals edited and published by the Society. Less prominent in the budget are three journals with which the Society has cooperated in editorial matters and a handful of journals that the Society has subsidized.

The Bulletin, Transactions and Memoirs, and The Proceedings

The development of the *Bulletin* and of the *Transactions* should be discussed together, for there were problems that affected both. The *Bulletin* and the *Proceedings* are discussed together because the latter grew out of the former.

The *Bulletin of the New York Mathematical Society* was the first journal of the Society. It began publication in 1892. The initial character of the journal was defined in its subtitle *A Historical and Critical Review of Mathematical Science*, which was maintained through 1930. The name was changed to the *Bulletin of the American Mathematical Society* in 1894 after three volumes and the numbering was started again at one. The history of the earlier years is presented in detail in [A].

The volume 44 of 1938 was dedicated to its long-time editor Earle Raymond Hedrick. It contained reports of meetings, book reviews, notes on conferences, appointments, and deaths, abstracts of contributed papers, and research papers. There was a list of contributed papers (i.e. abstracts) with bibliographic information on subsequent publication, and an index. Finally, the list of officers and members, the bylaws and the report of the treasurer, were a part of the volume in a separate issue.

In 1930, the journal had been separated into gray issues, consisting exclusively of short papers, and green issues, consisting of everything else, though

the color differentiation of the cover did not appear until 1931. The supplement constituting the membership list was covered in a bright yellow.

With the appearance of *Mathematical Reviews*, the annual list of papers that had been a feature of the *Bulletin* was dropped.

Publication of the *Transactions* began with volume 1 in 1900 and continued at the rate of one volume per year (except two in 1922) through 1936. There were two per year through 1948.

After World War II, the volume of material offered for publication increased and so did the backlog of the two journals. The Society had a standing Committee on the Role of the Society in Mathematical Publication that considered the problem and expressed the opinion at the Council of 28 December 1948 that drastic action was needed. The initial recommendations were a limit on the length of papers in the *Transactions* and a limit on the backlog of both journals. Both of these policies were to be called to the attention of the journals subsidized by the Society. The possibility of publishing brief summary articles was considered. The new executive director was requested to seek sources of publication funds that did not involve increased dues or subscription prices and to explore the possibility of new journals to be published by other groups. All of this met with Council approval except the limitation of the backlog. However, Gordon Thomas Whyburn, speaking for the Editorial Committee of the *Transactions*, stated that the committee thought that a limit on length of papers would not accomplish the desired result and would have other adverse reactions. "Not only would we be prevented from publishing papers of high merit which exceeded the length limit, but also we would be effectively robbed of the power to insist on the compression of those manuscripts which fall below the limit. Hence we propose, as an alternative, to adopt a strenuous policy of compression on all manuscripts of whatever length submitted to the *Transactions*." The Council approved such a policy.

An Emergency Publication Committee consisting of Alan W. Tucker, chairman, R. P. Boas, Samuel Eilenberg, J. R. Kline, Rudolph E. Langer, and C. J. Rees was appointed. Tucker presented the report of the committee, previously approved by the Committee on the Role of the Society in Publication, at the Council of 30 April 1949. With some modification the report was adopted by the Council and the committee discharged. There were two sets of recommendations.

First, the gray issues of the *Bulletin* were to be published beginning in 1950 as a separate journal known as the *Proceedings of the American Mathematical Society*. The green issues were to continue as the entire content of the *Bulletin*. The mechanics of selecting editorial committees was established.

Second, a new publication called the *Memoirs of the American Mathematical Society* was to be created. The *Memoirs* was to contain long papers or

sets of cognate papers. It was to be a nonperiodical serial publication (i.e., a paperback book series) sold as separate volumes. The Editorial Committee of the *Transactions*, enlarged by another member, was to edit the *Memoirs*. The printing of the *Memoirs* was to be done by photo offset from author prepared copy, for which instructions were to be prepared. The *Memoirs* was to be started by transferring good long papers or sets of cognate papers, with the consent of the authors, from the backlog of the *Transactions*, costs of retyping to be borne by the Society. Finally, a grant from the Rockefeller Foundation or other source was to be solicited for start-up costs, though the series was to be self-supporting. The editors of the *Transactions* were asked to set higher standards for longer papers and not to accept papers in excess of 75 pages for the *Transactions* once the *Memoirs* was started. Initially the *Memoirs* was to have a separate editorial committee and the change in the bylaws was drafted to provide for it. However, an ad hoc Committee to Recommend Policies for a Separate Memoirs Editorial Committee, consisting of R. P. Boas, S. C. Kleene, and J. L. Doob, chairman, recommended to the Council of 28 December 1952 against the separation and in favor of close cooperation with the *Transactions*. The editorial supervision of the *Memoirs* was left with the Editorial Committee for the *Transactions*.

In September 1949 the Council voted that the invitation to deliver the Gibbs Lecture no longer carry with it the assurance that the lecture will be published and relieved the *Bulletin* of that obligation. In April 1952 this position was reversed. The invitation to give the lecture was to include an invitation to submit a manuscript for publication without being refereed.

The Council of September 1949 gave the *Bulletin* and *Transactions* editors the authority to give priority to papers of exceptional quality if they chose, rather than publish strictly in order of acceptance.

In the report for 1949, the *Bulletin* editors continued to decry the large backlog. The *Transactions* editors however, stated that the *Memoirs* had relieved its backlog problem but that the start-up costs of the *Memoirs* were larger than expected because of the costs of retyping the initial papers for photo offset.

With the year 1950, the gray issues of the *Bulletin* assumed independent identity as the journal *Proceedings of the American Mathematical Society*. Volume 55 from 1949 is the last volume of the *Bulletin* with the dual character. In 1950 the editors of the *Proceedings* reported that their backlog had been reduced but was still large and requested additional pages for the coming year. By the end of 1951, the *Bulletin*, the *Proceedings*, and the *Transactions* all stated that their backlogs were small.

“Blind Refereeing”, which is a procedure in which the referee works from a copy of a manuscript from which the name and institution of the author

are deleted, surfaced in the *Proceedings* in 1974 and aroused passionate responses. It is a procedure that had never been used in Society journals. At the Council of 22 January 1975, the issue was raised by Mary W. Gray. On a motion by John W. Milnor, the Council voted a two year trial of blind refereeing to be begun at the discretion of the editors and to be reported to the Council.

There were substantial reactions. One associate editor, Norman Blackburn, objected that he had not been consulted, that blind refereeing was contrary to the terms under which he had agreed to serve, and that he objected to it on principles that he delineated. On the other hand, he did not wish to resign and proposed to ignore the instruction to use blind refereeing.

When Saunders Mac Lane was asked to referee a paper under conditions of blind refereeing, he declined, arguing against blind refereeing at length on principle. Other potential referees declined to serve.

Peter L. Duren resigned as associate editor, stating his reasons.

A motion to abolish blind refereeing failed. A motion to instruct Professor Blackburn to institute blind refereeing was set aside in favor of a motion apologizing to him for having instituted the policy without consulting him and asking him to continue to serve under the ground rules in force when he was selected. That motion failed, leaving the matter unresolved. Professor Blackburn served the remainder of his term.

In April 1977 the Editorial Committee of the *Proceedings* (including associate editors) approved the following statement by a substantial majority:

Blind refereeing was a completely uncontrolled experiment and there is no way to evaluate it. We would be happy to drop it but not at the expense of dissention within the Society. It is not the editors' responsibility to remove internal evidence in places where it may appear such as the bibliography and introduction.

Some editors were unhappy with blind refereeing and wanted it to be optional. Editors were learning to live with blind refereeing but regarded it as a nuisance. Ronald G. Douglas, an editor, stated that the difference of opinion over its value was not held in the editorial committee with the degree of passion that appeared to rest with some members of the Council.

On a motion by Professor Gray, it was decided to continue blind refereeing. On a motion by Robert G. Bartle, it was agreed to solicit detailed factual experience of authors with blind refereeing in confidence through an announcement in the Notices. There were almost no returns.

In January 1979 on the recommendation of Joseph A. Wolf, speaking for the Editorial Committee of the *Proceedings* as its chairman, blind refereeing as a policy was abolished. At the same time, it was agreed that a paper

would receive blind refereeing if the author so requested and provided the additional blind copy.

Not all parties to the controversy were satisfied with this resolution. At the Council of 2 January 1980, Chandler Davis moved to restore the policy of blind refereeing. In the discussion it appeared that requests for blind refereeing had been rare. The motion was defeated. A motion by Murray H. Gerstenhaber to experiment by refereeing some papers twice, once blind, was ruled out of order as not on the written agenda. This appeared to close discussion of blind refereeing.

During the 1960s, for reasons noted in the section on political influences, the amount of published mathematics increased enormously. The government support of fellowships and the increased undergraduate enrollments that in turn supported more teaching assistants led to more Ph.D.s, with publication growing out of dissertations. The *Transactions* was a natural vehicle. There were twelve volumes with a total of 6497 pages in 1969 and the publication continued at almost that pace through the 70s and into the 80s. The *Proceedings* felt some of the burden as well.

The size of the *Transactions* has been governed in part by an attitude of the Council that it is the duty of the Society to provide a place for the members to publish research that meets a reasonable standard and by a policy of attempting to run the journal without a backlog. Efforts in the middle seventies to create a journal of superb quality by very strict standards of acceptance as opposed to a good journal with high but reasonable standards were resisted.

In part the size of the *Transactions* is dependent on its policy with respect to short and very long papers. There is an agreement between the *Proceedings* and the *Transactions* that the former takes only shorter papers and the latter only longer papers. The cut occurred for many years at about eight printed pages but this number has increased toward twelve. Very long papers, as noted, become *Memoirs*.

A periodical has an advantage over a book series in the continuing nature of a subscription. Effective in 1975, the *Memoirs* was converted for that reason to a journal, although individual volumes are also sold as a book series.

From the beginning the *Bulletin* was a privilege of membership although it had also a small paid subscription list among individuals. There was a movement in 1985–1986, spearheaded by Susan J. Friedlander, to amend the bylaws to allow individual dues-paying members to request not to receive the *Bulletin* and to have a reduction in dues to correspond. There was an opinion poll of the membership in 1986 that showed support for such a proposal although there was a segment of members of the Council who thought that an organization devoted to research in mathematics should distribute some of the product to every member. Close examination of costs

of production showed that the realistic dues reduction could be no more than five dollars (the marginal cost of a year of the *Bulletin* being \$2.93). Upon receipt of this information the Council of 4 August 1987 declined to recommend amendment of the bylaws to allow for a change in privilege of membership.

The character of the *Bulletin* has changed several times. A department called Research Problems began in 1954. The announcement read as follows:

The department of Research Problems will publish the statements of problems whose solution would make a significant contribution to mathematical research. Problems which are suitable for publication in the problem department of the American Mathematical Monthly will not be accepted for publication in Research Problems. Only problems whose solutions are unknown to the author should be submitted. Furthermore, the problems desired are those for which the solution will take the form of a research paper to be accepted on its merits and published in a research journal; since the *Bulletin* does not accept contributed papers, it will not publish the solution of its research problems. An attempt will be made, however, to publish references to papers which contain solutions.

The department was not represented in every issue. The desirability of the department was questioned. For example, a motion from the Editorial Committee to discontinue it was defeated in December 1956. The last occurrence of the department seems to have been in 1966.

The department of Research Announcements was established in 1958. The heading was the following:

The purpose of this department is to provide early announcement of significant new results, with some indications of proof. Although ordinarily a research announcement should be a brief summary of a paper to be published in full elsewhere, papers giving complete proofs of results of exceptional interest are also solicited.

The change was timed to coincide with the transfer of abstracts from the *Bulletin* to the *Notices*. Papers were to be submitted directly to members of the Council, who served as referees (or secured referees). The name of the Council member appeared with the notation "Submitted by". As a corollary, Council members had direct access.

With time, the Editorial Committee became dissatisfied with the system. The number of announcements increased and not all met the desideratum of "early announcement of significant results." The Council of 19 April 1968 passed a motion that papers be submitted to the editor in charge of the

department, who would use the Council members as a board of referees (a Council member could instead secure a referee). The name of the Council member accepting a paper was to appear with the legend "Submitted by."

This change did not suffice and in fact the system of submitting papers directly to Council members reappeared. In January 1971, the ad hoc Committee to Review Society Activities, consisting of M. Atiyah, Morton L. Curtis, Samuel Eilenberg, Paul R. Halmos, William LeVeque, and Calvin C. Moore, chairman, presented its final report. Among its recommendations was one "[t]hat efforts be made to markedly increase the average quality and to drastically decrease the number of Research Announcements in the *Bulletin* and that firm editorial control be exercised by the editor." The Executive Committee had concurred in strong terms as did the Committee to Monitor Problems in Communication. Key recommendations from these two bodies favored no more than ten or twelve announcements per issue and firm editorial control.

These strictures proved insufficient and the Bulletin Editorial Committee, through a letter from John L. Kelley, made very specific recommendations to the Council of 14 January 1974. As modified slightly by the Council, these were approved by the Council in the following form:

Research announcements are intended for rapid communication of outstanding results that are to appear elsewhere with complete proofs. It is only exceptionally that a paper containing complete proofs should appear as a research announcement. Generally, if a paper is acceptable to the *Proceedings* or similar journal it should not be accepted as a research announcement.

Each Council member who is a member of one of the Society's Editorial Committees has the privilege of submitting six (6) research announcements per year for publication in the *Bulletin*. Of these six research announcements, at most one may be a complete paper. The editors of the *Bulletin*, in notifying a Council member of receipt of a communication, will inform him, for example, that this is paper number 2 of the six papers he is permitted to communicate during the current year.

Each research announcement is normally limited to five (5) typed pages. More precisely, no research announcement is normally acceptable if it exceeds about 100 typed lines of 65 spaces each.

This was no more successful than previous efforts. At the Council of 11 April 1975, President Lipman Bers requested the Editorial Committee of the *Bulletin* to re-examine the procedure for handling research announcements and to report at the next meeting. At the meeting of 21 January 1976, a

proposal from the Editorial Committee to appoint associate editors in fields not well covered was defeated.

The *Bulletin* in its then current numbering terminated with volume 84 (1978), to be followed by *Bulletin, New Series* 1(1979). The plan for the reorganized journal was initiated by P. R. Halmos of the Editorial Committee with the approval of Olga Taussky-Todd and Hans Weinberger, the other two members. He proposed in January 1977 that the *Notices* be the journal of record of the Society, thus eliminating a variety of material from the *Bulletin*. This was approved in January 1977. He further proposed eliminating Research Announcements. Expository articles, some book reviews, and a few obituaries would make up the journal. There was no further action at the time. In April 1977, Duane Bailey, chairman of the Committee on Publication Problems, presented for the committee the following motion:

We recommend that the new expository journal created by the Board of Trustees be called *The Bulletin of the American Mathematical Society, New Series*, and that it contain research expository articles (chosen by a collegial board of Associate Editors) and book reviews.

The motion was approved. It was noted that by implication it eliminated research announcements. When the minute was circulated, there was substantial dissatisfaction. Although the issue had been considered by the Committee on Publication Problems, the Committee to Monitor Problems in Communication, and the Executive Committee, there were Council members who thought that they had not had sufficient opportunity for discussion. The Committee on Publication Problems reconsidered its position, maintained it, and suggested the appointment of a new committee to consider the problem further. A separate journal of research announcements was considered. A moratorium on research announcements was put in place temporarily.

An ad hoc Committee on Research Announcements consisting of Felix E. Browder, chairman, Hyman Bass, Philip T. Church, R. James Milgram, Richard S. Palais, Isadore M. Singer, and Olga Taussky-Todd was appointed. It reported to the Council of 13 January 1978 with a proposal put forward by Singer, who expressed willingness to carry out the task of initiating his plan by serving as executive editor of an editorial board set up for the purpose. The proposal in brief called for a board of associate editors who, by vote of the entire board, would accept for each issue a body of research announcements from those submitted. The Council approved. This procedure turned out to be effective.

The issues of research expository papers were easily settled. The Society secured a grant from the National Science Foundation that allowed the

payment of honoraria to select authors of research expository papers that somewhat facilitated the initial procurement of such articles.

The Editorial Committee of the *Bulletin, New Series*, was the committee already in place and consisted of F. E. Browder and a set of associate editors for research expository articles, P. R. Halmos for book reviews, and I. M. Singer with a set of associate editors for research announcements.

The editorial committees of the *Proceedings* and of the *Transactions* and *Memoirs* were initially small. Since 1967 members served for one term of four years but by convention were not eligible for re-election. (Prior to 1967 the term had been three years.) When additional editorial staff was needed, associate editors were appointed by the editorial committees. Associate editors had the same relation to the functioning of the journals as members of the editorial committees but were not Council members. The bylaws were amended, effective just after 1 January 1986, in such fashion that newly elected members of the editorial committees did not become members of the Council. At this point, editorial committees of the two journals were enlarged and all associate editors became members of the committees but not of the Council. In the steady state to obtain in 1990 (practically speaking in 1988), only the chairman of an editorial committee is a member of the Council. The title associate editor for these two journals then applies to an individual temporarily designated by an editorial committee to function as an editor until the Council has the opportunity to elect the person to the editorial committee in accord with the bylaws.

The Editorial Committee of the *Bulletin* continued as a committee of three, one member for each of research expository articles, research announcements, and book reviews, using boards of associate editors in the first two categories.

Members of editorial committees have always been chosen in uncontested elections. Here are the members for the *Bulletin* and *Bulletin, New Series*, for the *Proceedings*, and for the *Transactions* and *Memoirs* since 1938.

EDITORIAL COMMITTEE OF THE *Bulletin*

L. M. Graves	1/38–12/43
Paul A. Smith	1/38–12/45
Abraham Adrian Albert	1/39–12/42
Tomlinson Fort	1/39–12/44
Saunders Mac Lane	1/43–12/47
R. E. Langer	1/44–12/49
E. B. Stouffer	1/45–12/50
Deane Montgomery	1/46–12/49
G. Baley Price	1/50–12/57
W. Ted Martin	1/51–12/56

Ralph P. Boas	1/54–12/55
John C. Oxtoby	1/56–12/60
Billy Jo Pettis	1/57–12/59
Edwin E. Moise	1/58–12/63
Walter Rudin	1/60–12/65
Felix E. Browder	1/61–12/67
Edwin H. Spanier	1/64–12/66
Murray Gerstenhaber	1/66–12/71
Murray H. Protter	1/67–12/72
Gian-Carlo Rota	1/68–12/73
Hans F. Weinberger	1/71–12/77
John L. Kelley	1/73–12/75
Paul R. Halmos	1/74–12/79
Olga Taussky-Todd	1/76–12/78
Felix E. Browder	1/78–12/83
Isadore M. Singer	1/79–12/81
Meyer Jerison	1/80–12/85
Calvin C. Moore	1/82–8/85
Hyman Bass	1/84–12/86
Wu-chung Hsiang	8/85–12/87
Edgar Lee Stout	1/86–12/88
Morris W. Hirsch	1/87–
Roger E. Howe	1/88–

EDITORIAL COMMITTEE OF THE *Proceedings*

Nathan Jacobson ¹	1/50–12/53
G. A. Hedlund	1/50–12/54
A. C. Schaeffer	1/50–12/55
Richard Brauer	1/54–12/56
Shizuo Kakutani	1/55–12/57
S. S. Chern	1/56–12/56
Ralph P. Boas	1/56–12/61
Irving Kaplansky	1/57–12/59
Hans Samelson	1/57–12/60
Paul R. Halmos	1/58–12/63
Alex Rosenberg	1/60–12/65
Edwin H. Spanier	1/61–12/61
Fritz John	1/62–12/62
George Whaples	1/62–12/65
Eldon Dyer	1/62–12/67

1. Gerhard Hochschild served in place of Jacobson during 1952–53

Maurice H. Heins ²	1/62-12/67
W. R. Wasow	1/63-12/63
Fritz John	1/64-12/66
R. Creighton Buck	1/64-12/68
W. R. Wasow ³	1/67-12/70
William H. J. Fuchs ⁴	1/68-12/71
Irving L. Glicksberg	1/68-12/70
Ernest A. Michael	1/68-12/71
P. Emery Thomas	1/68-12/71
Joseph J. Rotman	1/70-12/73
George B. Seligman	1/70-12/73
Fred G. Brauer ⁵	1/71-12/74
Lee A. Rubel	1/72-12/72
Glen E. Bredon	1/71-12/75
Jacob Feldman ⁶	4/71-12/75
W. Wistar Comfort	1/72-12/75
Richard R. Goldberg	1/73-12/79
Robert M. Fossum	1/74-12/77
Barbara L. Osofsky	1/74-12/77
Chandler Davis	9/74-12/76
Richard K. Miller	9/74-12/78
Thomas A. Chapman	1/76-12/79
Joseph A. Wolf	1/76-12/79
Ronald G. Douglas	1/77-12/80
David Eisenbud	1/78-12/81
Robert R. Phelps	1/78-12/81
Lawrence A. Zalcman	1/79-12/82
William E. Kirwan II	1/80-12/83
David J. Lutzer	1/80-12/83
Reinhard E. Schultz	1/80-12/83
Thomas H. Brylawski	1/80-12/84
David M. Goldschmidt	1/82-12/83
J. Jerry Uhl, Jr.	1/82-12/85
George R. Sell	1/83-12/86
Richard R. Goldberg	1/84-10/87
Irwin Kra	1/84-12/88
Daniel W. Stroock	1/84-12/87
Andrew M. Odlyzko	1/84-
Donald S. Passman	1/85-12/88

2.W.H.J. Fuchs served in place of Heins 1-9/66

3.Fred Brauer served in place of Wasow from June 1969 through February 1970

4.M. H. Heins served in place of Fuchs in January 1968

5.Richard K. Miller took over from Brauer in September 1974

6.Chandler Davis served in place of Feldman in the fall of 1974 and in 1975

Doug Curtis	1/86-7/87
Dennis Burke	5/86-
John B. Conway	5/86-
William J. Davis	5/86-
David G. Ebin	5/86-12/87
Larry J. Goldstein	5/86-12/87
Thomas J. Jech	5/86-12/88
Walter Littman	5/86-12/87
R. Daniel Mauldin	5/86-
Haynes B. Miller	5/86-12/87
Paul S. Muhly	5/86-
Bhama Srinivasan	5/86-12/87
William D. Sudderth	1/87-
Kenneth R. Meyer	1/87-
Louis J. Ratliffe, Jr.	1/87-
J. Marshall Ash	11/87-
William W. Adams	1/88-
Frederick R. Cohen	1/88-
Barbara Lee Keyfitz	1/88-
George C. Papanicolaou	1/88-
Jonathan M. Rosenberg	1/88-
James E. West	1/88-
Warren J. Wong	1/88-

EDITORIAL COMMITTEE OF THE *Transactions*⁷

William Caspar Graustein

	1/36-12/40
Cyrus C. MacDuffee	1/37-12/42
Einar Hille	1/37-12/43
Oscar Zariski	1/41-12/47
A. A. Albert	1/43-12/48
Edward James McShane	1/44-12/46
Antoni Zygmund	1/47-12/49
G. T. Whyburn	1/48-12/52
Saunders Mac Lane ⁸	1/49-12/54
L. V. Ahlfors	1/50-12/55
J. L. Doob ⁹	1/50-12/55

⁷*Transactions* and *Memoirs* since 1950

⁸O.F.G. Schilling served in place of Mac Lane in the summer of 1954

⁹Mahlon M. Day served in place of Doob from June to November 1954

Herbert Busemann ¹⁰	1/53-12/56
Samuel Eilenberg ¹¹	1/55-12/59
A. H. Clifford	1/56-12/57
Mark Kac ¹²	1/56-12/58
Shiing-Shen Chern	1/57-12/58
G. P. Hochschild	1/58-12/60
Lipman Bers	1/59-5/64
Isadore M. Singer	1/59-12/65
W. S. Massey	1/60-12/65
Daniel Zelinsky	1/61-12/66
M. M. Loeve	1/61-12/66
Henry P. McKean	8/62-8/63
Louis Nirenberg ¹³	1/64-12/67
Dana S. Scott	1/65-12/71
Richard S. Palais	1/66-12/69
Franklin P. Peterson	1/66-12/69
David Buchsbaum	1/67-12/70
Henry P. McKean	1/67-12/70
Joseph J. Kohn	1/68-12/71
Steve Armentrout	1/70-12/73
Shlomo Sternberg	1/70-9/74
Harry Kesten	1/71-12/74
Dock S. Rim	1/71-12/74
Alistair H. Lachlan	1/72-12/75
François Trèves	1/72-12/75
Philip T. Church	1/74-12/77
Alexandra Ionescu	10/74-4/77
Tulcea [Alexandra Bellow]	
Stephen S. Shatz	1/75-12/78
Daniel W. Stroock	1/75-12/78
Solomon Feferman	1/76-12/79
Robert T. Seeley	1/76-12/79
W.A.J. Luxemburg	4/77-12/81
James D. Stasheff	1/78-12/81
Michael Artin	1/79-12/82
Steven Orey	1/79-12/82
R. O. Wells, Jr.	1/79-12/82
Paul H. Rabinowitz	1/80-8/82
Jan Mycielski	1/80-12/83

10. Leo Zippin served in place of Buseman in 1954

11. William S. Massey served in place of Eilenberg from June 1956 to September 1957

12. Joseph L. Doob served in place of Kac from January to June 1956

13. Jurgen K. Moser served in place of Nirenberg in the summer of 1965

William B. Johnson	1/82-12/85
Walter David Neumann	1/82-12/85
Joel A. Smoller	9/82-12/87
Donald L. Burkholder	1/83-12/85
Linda Preiss Rothschild	1/83-12/86
Lance W. Small	1/83-12/87
Tilla Klotz Milnor	1/84-12/87
Robert D. Edwards	1/86-4/87
Vaughan F. R. Jones	1/86-
James W. Cannon	4/87-
Ronald L. Graham	1/86-12/87
Peter W. Jones	1/86-12/88
Kenneth Kunen	1/86-12/87
Ralph L. Cohen	1/87-
Ronald Getoor	1/87-
Jerry L. Kazdan	1/87-
David J. Saltman	1/87-
Robert J. Zimmer	1/87-
James E. Baumgarten	1/88-
Roger D. Nussbaum	1/88-
Carl Pomerance	1/88-

Mathematics of Computation

Computation became of pressing importance with the advent of WWII. Computation was an art and repositories of the skills lay with diverse users, such as astronomers, actuaries, surveyors, and number theorists. There were government agencies such as Aberdeen Proving Ground (Army), Dahlgren Proving Ground (Navy), the Coast and Geodetic Survey, and the National Bureau of Standards where the art was practiced. Many mathematicians learned the skills and became interested in developing the theory.

Computation was done “by hand”. That is, an algorithm or program was in the mind or the private notes of the computer, who was a person, usually female with a male supervisor. (Sometimes the understanding of the supervisor surpassed that of the computer but the skill of the latter was frequently superior.) Work was done with pencil and paper records with the aid of a motor-driven mechanical calculator, usually Monroe or Marchant. The more automated calculation of the day was done on IBM punch card machines, with packs of cards carried from one machine to another, again according to a plan in the head of the operator.

Tables were an important part of calculation. Table look-up was then easier than computing whereas direct computation by a sub-routine is now the natural route.

The journal *Mathematical Tables and Other Aids to Computation* first appeared in 1943. It was a quarterly published by the National Research Council (NRC). R. C. Archibald was the editor of volume 1 but by volume 4 he no longer served. Volumes did not correspond to calendar years until volume 5 of 1955, which was published by the National Academy of Sciences-National Research Council (NAS-NRC). Volume 56 carries the imprint of NRC alone but then NAS-NRC reappears through volume 14 of 1960. It was in that year that the name was changed to *Mathematics of Computation* corresponding to the changing nature of the field.

The issue of Society sponsorship first appeared at the Council of 28 December 1955, when E. F. Beckenbach made such a recommendation for the Committee on Printing and Publishing. A committee to investigate was authorized. However, it developed that the Division of Mathematics of the NRC wished to continue publication. When this was reported to the Council of 20 April 1956, the Council withdrew the authorization of the committee.

J. Barkley Rosser, chairman of the division, appeared before the Council of 25 January 1961 to discuss arrangements that the division was trying to make to transfer all or part of the responsibility for publication of the journal. Again a committee to study the question was authorized but there is no record of it. Instead the Committee on Printing and Publishing recommended that the Society take over the publication but not the editing of the journal. The Council demurred and authorized a committee to study the scientific merits and general objectives of the journal and to report. It consisted of Will Feller, chairman, J. L. Doob, Derrick H. Lehmer, Abraham H. Taub, and S. S. Wilks. The report of that committee stated that:

Mathematics of Computation is a reputable research journal with high editorial standards. It is well on its way to becoming *the* journal in this country for publishing papers in numerical analysis and related topics.

On the basis of that report, the Planning Committee, consisting of R. Brauer, J. L. Doob, W. Feller, E. E. Floyd, J. W. Green, A. E. Meder, Jr., Lowell J. Paige, and S. Mac Lane, chairman, recommended that the Society act as publisher for the journal, with editorial responsibility remaining with the Division of Mathematics of the NRC. The recommendation carried a three year time limit. The Council of 29 August 1961 approved. The arrangement was in effect in 1961–1962. The chairman of the Editorial Committee was Harry Polachek.

At the meeting of 12 January 1964, the Council increased its operational support of the journal for the coming year and authorized a committee to study the problem of taking the journal over permanently. The Board of Trustees urged a prompt decision. The committee, consisting of A. H. Taub,

chairman, E. Dyer, Harry Polachek, L. Henkin, and J. D. Swift, reported at the Council of 24 April 1964. The committee was not in agreement but several of its members were willing to propose a three year extension of the interim agreement. The Council extended the agreement for one year to give the committee additional time to deliberate.

At the Council of 25 August the committee presented three positions without full support for any of them. They were

- I Permanent continuation of the interim arrangement.
- II Transfer of the journal to the Society.
- III Return of the journal to the NRC, with qualifications.

Proposal I was characterized as “best described by the statement that a bare majority did not object to it.” Opposition lay in the fact that the Society would be a mere business manager, even though the enterprise was worthy. The committee was three-to-two in favor of II, the argument against it being that it involved the Society in the publication of a specialized journal. Proposal III received the strongest support from the committee. The editors of the journal strongly favored proposal II and the Council recommended to the Trustees that it be adopted subject to the approval of the NAS-NRC.

The Board of Trustees of 17–18 December 1964 approved and so subsequently did the NAS-NRC. In 1965 the bylaws were amended in such fashion that effective 1 January 1966 *Mathematics of Computation* was an official journal of the Society and the members of the editorial committee were Council members. This journal has operated by design with a very small editorial committee, concerned with policy, and a large board of associate editors.

EDITORIAL COMMITTEE OF *Mathematics of Computation*

Eugene Isaacson	1/65–12/74
James Bramble	1/73–12/83
Alston S. Householder	1/73–12/76
John W. Wrench, Jr.	1/73–12/78
Walter Gautschi	1/76–12/86
Carl-Wilhelm de Boor	1/77–12/82
Daniel Shanks	1/78–12/84
Morris Newman	1/81–12/83
Hugh C. Williams	1/83–
Walter Gautschi	1/84–
John E. Osborn	1/84–12/86
Donald Goldfarb	1/85–

Journal of the American Mathematical Society

In 1978 the Trustees established a Committee on the Publication Program consisting of D. W. Anderson, E. Pitcher, and W. J. LeVeque, to whom were soon added M. Gerstenhaber, C. Moler, and R. J. Milgram. Following initial activity, it was relatively inactive until a rejuvenation in 1984. At a conference telephone call on 1 March 1985, the committee recommended “[t]hat a new journal be instituted, having significantly higher standards of acceptance than the *Transactions* and *Proceedings*.” The membership of the committee at the time was M. Gerstenhaber, chairman, S. Armentrout, W. E. Kirwan II, W. J. LeVeque, E. Pitcher, Hugo Rossi, and Elias M. Stein. B. Janson, who was head of the publication division in the Providence office, was consultant. All but Stein were able to participate in the call. The proposal was approved by the Executive Committee and Board of Trustees with some reservations about the claim to an elite status. It was referred to Committee to Monitor Problems in Communication for study. That committee supported the idea of another inexpensive outlet for high quality papers and “agreed that the new journal could establish a very high standard only with the committed effort of one or two prestigious chief editors.” The executive director was commissioned to explore the possibilities of securing editors with some persons whose names were suggested and reported favorably. The Executive Committee and Board of Trustees of 21–23 November 1985 authorized the project in principle and recommended it to the Council with the provisional title *The Journal of the American Mathematical Society*. The Council of 6 January 1986 authorized the journal with the centennial year 1988 as the date of initial publication.

The Council authorized President Irving Kaplansky to consult distinguished mathematicians about who the editors should be. The group assembled through this consultative process consisted of Michael Artin (1991) chairman, H. Blaine Lawson, Jr. (1990), Richard B. Melrose (1989), Wilfried Schmid (1989), and Robert E. Tarjan (1991). The initial terms were set to end in December of the year in parentheses but were not established until April 1987, when the group had been at work for some time and had already gathered the papers for the first issue of 1988.

The initial set of associate editors consisted of James G. Arthur, Peter J. Bickel, Gerd Faltings, Charles L. Fefferman, Michael H. Freedman, Daniel Friedan, Ronald L. Graham, Joseph Daniel Harris, H. W. Lenstra, Jr., Andrew Majda, Hugh L. Montgomery, Paul H. Rabinowitz, Karen Uhlenbeck and W. Hugh Woodin.

The recommendation from the Executive Committee and Board of Trustees to establish the journal carried with it the recommendation that there be no page charges and that recommendation was approved. This disturbed

the editors of the *Proceedings* and of the *Transactions*, especially the latter. Both of these journals had page charges and had been asking to have them eliminated. The editors expressed the view that the difference in page charges could affect their journals adversely. The Trustees had previously been reluctant to eliminate page charges despite repeated requests because voluntary page charges payable from grants were the mechanism through which the National Science Foundation had agreed to support journals. The income from page charges amounted to \$81,000 in 1986. The Council of 6 January 1986 had requested that page charges on all Society journals be eliminated and at its meeting of May 1987 the Trustees, with the advice of the Executive Committee, agreed.

The American Journal

There are three journals with which the Society has been involved in editorial matters, namely the *American Journal*, of which the Society was for a time joint publisher, the *Duke Mathematical Journal*, and the *Annals of Mathematics*.

The *American Journal of Mathematics* was established by Johns Hopkins University in 1878 shortly after the founding of the university itself in 1876. J. J. Sylvester was professor of mathematics at Hopkins from 1876 to 1883.

As the Society began to feel the need for a research journal in the late nineties (the *Bulletin* was then its only journal), it was concerned about the effect that a new journal might have on the already thriving *American Journal*. Thus the Society considered the possibility of acquiring the journal or participating in publication. The offer made in 1898 was one of joint publication and editing, with a financial contribution from the Society. The offer was not accepted, the difficulty, according to recollections of William Fogg Osgood, lying both with the acceptance of papers by a board of editors not under full control of the university and with the prospect of the name of the Society on the title page.

However, the *American Journal* had financial difficulties in the twenties and had shrunk greatly so that a very similar offer was accepted by the university in 1926. Joint publication began in 1927 with a board of five editors, two appointed by Johns Hopkins University and three by the Society, and with a contribution of \$2500 per year by the Society.

Part of the financial arrangement with the university was that the Society had a half interest in back numbers beginning with 1927.

The *Journal* was substantially enlarged almost immediately and ran a surplus. This was an embarrassment to the Society in that the Society was subsidizing the *American Journal* and was in turn receiving a publication subsidy from the National Academy of Sciences in its role of dispensing funds of the

General Education Board. The *Journal* was then further enlarged. The study in the Council minutes of September 1945 recommended continuation of the subsidy.

In 1947 the Trustees requested a reduction of its subsidy to the *American Journal*, noting that it exceeded that of Johns Hopkins and that the journal was accumulating a surplus. President Isiah Bowman replied that the subsidy from the university was larger than it appeared in that the accounting showed neither the overhead nor the services of a part time secretary. The university both itemized the subsidy and increased it and the annual subsidy from the university and from the Society was set at \$2000 for three years. It was agreed that the reserve of \$5000 that had built up would be depleted. Continued Society support was conditioned on an increase in volume of publication, which had decreased from pre-WWII levels.

In 1950 the executive director reported negotiations toward a “fifty-fifty basis” with two editors each appointed by the university and the Society.

On 6 June 1950, a new agreement was made between the Society and The Johns Hopkins University. It provided among other things for ownership by the university, joint publication, at most six editors, half appointed by each participant, and business management by The Johns Hopkins University Press. The financial arrangement in the contract took account of the fact that the Society had just established institutional memberships. The dues of an institutional member were related to the amount of research published in a number of journals including the *American Journal*. The contract provided for recovery by the *American Journal* of that portion of institutional dues “to which the Journal is entitled” and, following that, a subsidy equally by the university and the Society of an amount equal to the deficit or \$4000, whichever was less. There was a minor revision of the contract in 1953. The Society was also paying an annual subvention of \$1500, increased in 1953 to \$1650.

In 1972 the Executive Committee and Board of Trustees recommended renegotiation with a view that the Society make no financial contribution. It was the Society position that it was contributing to a journal that was running at an annual surplus while it was the position of The Johns Hopkins University that the state of affairs would change with an inevitable change of compositor and printer. The Council recommended that the agreement with The Johns Hopkins University be terminated but rescinded that action at its next meeting. However, at this point the university took over full financial responsibility.

The agreement of 1975 provides for two editors appointed by the Society subject to approval by the editor-in-chief. The *Journal* is published “with the editorial cooperation of the American Mathematical Society.”

As a matter of procedure, the secretary has been securing the approval of candidates proposed by the Nominating Committee prior to their nomination by the Council as candidates in an uncontested election.

Here are the representatives of the Society on the Editorial Committee of the *American Journal* since 1938:

T. H. Hildebrandt	1/38–12/42	G. A. Hunt	1/62–12/64
Raymond Louis Wilder	1/37–12/43	George Daniel Mostow	1/63–12/68
G. D. Birkhoff	1/43–12/44	Stephen Smale	1/65–12/70
Hassler Whitney	1/44–12/49	Raoul H. Bott	1/69–12/71
L. M. Graves	1/46–12/50	Hyman Bass	1/71–5/77
Samuel Eilenberg	1/50–12/54	Isadore M. Singer	1/71–12/77
Reinhold Baer	1/51–12/56	Richard G. Swan	5/77–12/82
André Weil	1/55–4/58	Victor W. Guillemin	1/78–12/83
Harish-Chandra	1/57–4/58	Spencer J. Bloch	1/83–12/88
J. A. Dieudonné	4/58–12/61	Richard B. Melrose	1/84–12/87
Andrew M. Gleason	4/58–12/62	M. Salah Baouendi	1/88–

Duke Mathematical Journal

In 1927 and again in 1931 the Society encouraged Duke University to found a mathematics journal, noting the need for an additional periodical and the strategic position of Duke to proceed. The university did begin publication of the *Duke Mathematical Journal* in 1935. See [A], p. 17. Duke requested the Society to appoint two editors to the journal, which the Society did for forty years.

The Society did not subsidize the *Duke Journal* as it later did some other journals. In fact, the *Duke Journal* did not request a subsidy and at the same time did not plan to receive a portion of the institutional dues in the Society based on its proportional part of the page count of publication by institutional members as had the *American Journal*. Instead, the *Duke Journal* instituted a page charge of its own about 1953.

When the Society selected its editors for the *Duke Journal* in 1976 and so notified the editors and the journal, the secretary was informed that the journal wished to terminate the arrangement. The Executive Committee endorsed the response that “[t]he officers of the Society rejoice that the *Duke Journal* finds itself in a position of such strength that it no longer needs the support of the Society in supplying editors and are happy to be relieved of the obligation.”

The Society representatives on the editorial board of the *Duke Mathematical Journal* since 1938 were the following:

Ø. Ore	1/38–12/40	R. H. Fox	1/56–12/58
G. T. Whyburn	1/38–12/40	Irving E. Segal	1/56–12/58
F. J. Murray	1/41–12/46	Alfred T. Brauer	1/59–12/61
Morgan Ward	1/41–12/46	Alexander D. Wallace	1/59–12/61
Gordon Pall	1/47–12/49	Richard Arens	1/61–12/64
D. J. Struik	1/47–12/49	F. B. Wright	1/61–12/64
Carl B. Allendoerfer	1/50–12/52	R. T. Prosser	1/65–12/70
R. P. Boas, Jr.	1/50–12/52	Frank L. Spitzer	1/65–12/70
R. H. Cameron	1/53–12/55	Steven Orey	1/71–12/75
S. S. Chern	1/53–12/55	Seth L. Warner	1/71–12/75

The dates given above do not represent the full term of service of these persons on the editorial board but only the years in which they represented the Society.

The Annals of Mathematics

Beginning in 1927, at the request of the editors of the *Annals*, the Society appointed associate editors, usually three at a time, for the journal. Moreover, the Society subsidized the journal in the interval 1947–1965. The subsidy began at an annual level of \$1000 but increased with time to \$3500. In January 1965, the editors of the *Annals* requested that the subsidy be suspended and the secretary was instructed to extend the Society's appreciation to the *Annals*. Beyond that time the Society no longer named any editors.

The Society representatives on the editorial board of the *Annals of Mathematics* since 1938 were the following:

Theophil Henry Hildebrandt	1/40–12/45	J. L. Doob	1/49–12/53
Saunders Mac Lane	1/40–12/42	Charles Loewner	1/55–12/57
G. T. Whyburn	1/39–12/45	A. M. Gleason	1/55–12/60
Hassler Whitney	1/43–12/45	J. L. Kelley	1/55–12/60
Kurt O. Friederichs	1/46–12/48	Lars V. Ahlfors	1/58–12/60
Norman Levinson	1/46–12/53	Hans Samelson	1/61–12/66
R. L. Wilder	1/46–12/83	I. E. Segal	1/61–12/66
		Daniel Zelinsky	1/61–12/66

These dates do not represent the full service of these individuals to the *Annals* but only the term during which they represented the Society. Society records show Richard Arens and Loewner as representatives in 1952–1954 but the journal does not. The inconsistencies are unresolved.

THE SUBSIDIZED JOURNALS

The initial years of a new journal are a financial drain on the publisher in that the journal must be produced and a number of copies printed equal to the estimated minimum number of subscriptions in the steady state, all before more than a handful of subscriptions have been sold. The Society has been approached repeatedly to contribute to start-up costs of new journals and also to contribute to journals in temporary financial difficulties. It has acceded to the first kind of request when the concept of the journal appeared good and the space available for publication seemed constricted. With respect to the second kind, it has been reluctant.

The subsidies to the *American Journal*, of which the Society was joint publisher for a time, and to the *Annals* have been detailed.

Other journals subsidized by the Society during various intervals between 1946 and 1976 include:

Canadian Journal of Mathematics

Historia Mathematica

Houston Journal of Mathematics

Illinois Journal of Mathematics

Journal of the Society for Industrial and Applied Mathematics

The Journal of Symbolic Logic

Michigan Mathematical Journal

Pacific Journal of Mathematics

The Rocky Mountain Journal of Mathematics

Some of these subsidies lasted only a year or two and others for nearly thirty. Since 1976 there have been none.