- Idiosyncrasies of Automatically-sequenced Digital Computing Machines. Ida Rhodes, National Bureau of Standards.
- Problem Solving on Large-Scale Automatic Calculating Machines. W. D. Woo, Harvard University.
- 3. A Statistical Application of the UNIVAC. John Mauchly, Eckert-Mauchly Computer Corporation.

These papers were discussed by James McPherson, Bureau of the Census and Emil Schell, Office of the Air Comptroller.

Meetings of the Council were held on Tuesday, December 27, at 12:00 Noon, Professor Jerzy Neyman presiding and again on Thursday, December 29, at 12:00 Noon, Professor J. L. Doob presiding. The Business Meeting was held on Wednesday, December 28, Professor Jerzy Neyman presiding. The report of this meeting is given elsewhere in this issue.

S. B. LITTAUER,
Associate Secretary

MINUTES OF THE ANNUAL MEMBERSHIP MEETING, NEW YORK, DECEMBER 28, 1949

The meeting was called to order at 4:30 P.M. by President Jerzy Neyman. The annual reports of the President, Editor, and Secretary-Treasurer were read. They are printed elsewhere in this issue.

It was moved by Harold Hotelling that the front cover of the *Annals* in the future shall bear the additional notation that it was edited during the years 1938–1949 by S. S. Wilks. Motion was seconded and carried unanimously.

The tellers reported the election of the following officers:

President-Elect
Members of the Council for 1950–1952

P. S. Dwyer
David Blackwell
W. G. Madow
Frederick Mosteller
L. J. Savage

Meeting was adjourned at 5:15 P.M.

CARL H. FISCHER
Secretary

REPORT OF THE PRESIDENT OF THE INSTITUTE FOR 1949.

I wish to begin my Report by welcoming the newly elected Fellows, Doctors Z. W. Birnbaum, D. J. Finney, H. O. Hartley, Wassily Hoeffding, Michel Loève, Edward Paulson and S. N. Roy. In addition, a hearty welcome is due to Dr. G. W. Brown who was elected last year, but inadvertently omitted in the published list. The election to the fellowship is a mark of recognition on the part of the Institute. At the same time, I am sure the Institute has reason to be proud of having among its fellows such distinguished scholars as are now added to the list.

During the past year the intensity of the Institute's life grew markedly in many respects. In particular, a very considerable number of our members took part in various Committees. For the sake of brevity, the composition of all the Committees is given in a tabular form at the end of the Report. At this time I wish to express the indebtedness of the Institute to the Chairmen and to the Members of all the Committees.

Undoubtedly the most important function of the members of the Institute is research and the most important function of the Institute itself is the publication of the results of this research. In this respect the past year brought about a fundamental change: after a dozen years of hard and most fruitful work as Editor of the *Annals*, Professor S. S. Wilks resigned this year and the Council elected Professor T. W. Anderson as his successor. According to our present Constitution, the term of office of the Editor is three years.

About a decade ago I suggested and the Membership Meeting of the Institute approved that the cover of the *Annals* bear the name of its founder, Professor Harry Carver. Founded by Carver, the *Annals* were developed by Wilks and, now stand as the most important statistical journal in the world. Accordingly the Chair will welcome a motion to add Professor Wilks' name as a permanent feature of the cover of the *Annals of Mathematical Statistics*.

While being grateful to Wilks and regretting his withdrawal, we should extend a most hearty welcome to T. W. Anderson. Because of his scholarship, broad vision combined with broadmindedness and because of his energy, he is an excellent promise for the future of the *Annals*. It is a pleasure to express the gratitude of the Institute to Columbia University and, in particular, to Dr. Abraham Wald for providing the necessary facilities for the Editorial office of the *Annals*.

Prior to embarking on the election of the new Editor, the I.M.S. Council approved an important document prepared by a special Committee chaired by S. S. Wilks, formulating the editorial policy of the Institute.

Of the many fundamental parts of this document I wish to mention the following:

(i) "In establishing the editorial procedure, special care should be taken to avoid the danger of the Annals becoming a one-group journal rather than serving the Institute as a whole...the refusal to publish a paper on grounds of general policy (rather than because of some verifiable defects such as mistakes, triviality, lack of new material, etc.) shall be based on a unanimous agreement of the Editor and of all the Associate Editors."

The general idea behind these passages is, of course, that thus far, the *Annals* is the only journal published by the Institute and should provide facilities for all the different schools of thought. My understanding is that this includes the biostatistician Cochran and the econo-statistician Koopmans, the multivariate Hotelling and the tolerant Wilks, the quality-control-minded Shewhart and the dependently-limiting Loeve, the necessary- and sufficient-normal Feller and the minimax-gambler von Neumann, the relativistically-cybernetic Wiener and the general-sequential-decision-maker Wald. I should think that even our next

President, the stochastically-processed-Markovian Doob, is meant to have a chance to publish in the *Annals*, from time to time.

- (ii) Another interesting point in the same document concerns the proposed approximate distribution of space in the Annals:
 - (a) research papers on mathematical statistics proper—60 per cent;
 - (b) research papers in borderline fields, including applications—20 per cent;
 - (c) expository papers-15 per cent
 - (d) news, notices, etc.—5 per cent.

Since in the past there was too little expository material, the Council instituted the so-called Special Inivited Papers, to be presented from time to time on selected subjects. The text of these papers, accompanied by the prepared discussion, will be printed in the *Annals*. The program of the present meeting includes our first Special Invited Paper, by Michel Loève. It is hoped that the Special Invited Papers will satisfy the need for expository material now felt by the membership of the Institute. I am sure the Program Committees will appreciate suggestions of the Members regarding the sections of the theory requiring expository presentation.

The financial aspect of the publication program of the Institute was a continued worry of the Council. As is well known, the *Annals* is overloaded with papers and the cost of printing is growing constantly. In order to ease the situation somewhat, our new Constitution was amended to include the provision that the Universities and other institutions could become Institutional Members. There is already some additional income from this source and, if all the members of the Institute are energetic in urging their Departments to become Institutional Members, this income may be quite substantial.

It is conceivable that some potential sources of funds exist, not directly available for the *Annals*, which may be used for starting a new statistical journal. In order to investigate this possibility a special committee was appointed under the chairmanship of Professor Scheffé. This Committee did an excellent job in trying to find a solution of the tremendously difficult problem and there is now a reasonable hope that, in the not very distant future, our publication facilities will be increased.

Another deep change in the structure of the Institute occurred this year. Here I have in mind the resignation of Dr. Paul S. Dwyer, our long and hard working Secretary, and the taking over by Dr. Carl Fischer. Dr. Dwyer's resignation was announced last year at the meeting at Cleveland and we expressed to him our hearty thanks for his untiring work for the Institute. I wish to repeat these thanks now and to accompany them by the hearty congratulations on the excellent program he prepared for this meeting in his new capacity as the Chairman of the National Program Committee.

Until recently, there was a certain disequilibrium in the location of the meetings of the Institute. Practically all of the meetings were held in the East and the West Coast members could attend them only as a matter of exceptional luck. Later, regional meetings were organized, and this year we have functioning three

Regional Program Committees, one for the East, one for the West Coast and one for the Middle West. In addition, we have Program Committees for the two National Meetings of the Institute. In parallel with the redistribution of meetings, there was an increase in their number. This process was accompanied by the very efficient help on the part of the governmental organizations, of the Office of Naval Research, the Air Force, and the Army, for the members of the Institute to attend the meetings even if they are held at a considerable distance. As a combined result of these developments it now may seem that there are too many meetings. Undoubtedly, the number and the location of future meetings of the Institute will be seriously discussed and adjusted to the existing needs.

Naturally, the help of the Governmental institutions was not limited to help in travel. A considerable number of research projects in statistics are now in progress in many institutions with excellent results for science, for the younger people who are given the chance to make their first independent research work without undue worry about food and shelter and, thus, for the country as a whole. The first organization to support fundamental research in general, and in statistics, in particular, seems to be the office of Naval Research. Its broadmindedness and understanding of the spirit of research have established a very high standard which is also sustained by other institutions. If permitted to function as they do now, these institutions will mark an epoch in the development of scholarly work in this country.

The following persons have accepted the appointment to the Nominating Committee for the next year

Henry Scheffé—Chairman Albert W. Bowker Paul G. Hoel Leonid Hurwicz Herbert E. Robbins David F. Votaw, Jr.

Composition of the Committees of the Institute in 1949

- 1. Program Committees (P.C.)
 - (i) Eastern P.C. for the April 1949 meeting in New York
 Churchill Eisenhart, Chairman
 W. G. Cochran
 C. F. Kossack
 S. B. Littauer
 F. Mosteller
 - (iii) National P.C. for the Summer Meeting at Boulder, Colorado W. Feller, Chairman
- (ii) West Coast P. C. for June meeting in Berkeley
 M. A. Girshick, Chairman
 Z. W. Birnbaum
 W. J. Dixon
 J. L. Hodges, Jr.
 P. G. Hoel
 A. M. Mood
- (iv) Mid West P.C.
 - C. C. Craig. Chairman

J. L. Doob M. A. Girshick C. C. Hurd J. Wolfowitz

L. Hurwicz W. G. Madow K. May L. J. Savage D. R. Whitney

(v) National P.C. for the December meeting in New York P.S. Dwyer, Chairman

J. Berkson G. W. Brown C. Eisenhart Mark Kac H. Rubin (vi) Eastern P.C. for the Spring 1950 meeting in North Carolina.

H. Hotelling, Chairman

D. Blackwell
H. Geiringer
S. B. Littauer
D. F. Votaw, Jr.
S. S. Wilks

2. Committee for Special Invited Papers

J. W. Tukey, Program Coordinator, Chairman ex officio
C. C. Craig
W. Feller
P. S. Dwyer
M. A. Girshick
C. Eisenhart
H. Hotelling

C. Eisenhart
3. Committee on Editorial Policy (1948–1949)

S. S. Wilks, Chairman

W. G. Cochran

W. Feller

M. A. Girshick

P.S. Olmstead

J. Neyman

W. A. Wallis

J. Wolfowitz

4. Committee to Nominate Candidates for the Editor of the Annals

Harry C. Carver, *Chairman* David Blackwell

Howard Levene Frederick Mosteller Herbert E. Robbins

S. Lee Crump

Erich L. Lehmann

5. Committee on Tabulation

C. Eisenhart, Chairman C. I. Bliss F. W. Dresch H. H. Germond H. O. Hartley C. C. Hurd A. N. Lowan W. G. Madow H. G. Romig L. E. Simon

6. Committee on Directory John W. Tukey, Chairman

Churchill Eisenhart

7. Committee to Revive the Statistical Research Memoirs

Henry Scheffé, Chairman T. W. Anderson C. C. Hurd George Kuznets

Walter Bartky

8. Rietz Lectures Committee

The Chairmanship of this Committee was accepted by Abraham Wald, the first Rietz Lecturer, who undertook to make further appointments. These are:

C. C. Craig

W. Feller

- 9. Committee to Encourage Membership outside of the United States
 - T. W. Anderson, Chairman
 - C. C. Hurd
 - M. Loève
 - J. Marschak
- 10. Committee on Statisticians in the Government Service
 - W. E. Deming, Chairman
 - C. Eisenhart
- 11. Representative of the I.M.S. to the American Association for the Advancement of Science

Harold Hotelling

12. Representative of the I.M.S. to the National Research Council, Division of Physical Sciences

Walter Bartky (1948–1950)

- 13. Representative of the I.M.S. to the Mathematical Policy Committee S. S. Wilks
- 14. Representative of the I.M.S. to the Joint Committee for Development of Statistical Applications in Engineering and Manufacturing Benjamin Epstein
- 15. Representatives to the Inter-Society Cooperation on Mathematical Training of Social Scientists
 - T. W. Anderson
 - J. L. Doob
 - S. S. Wilks
- 16. Committee to Determine the Duties and Responsibilities of the Program Committees

Harold Hotelling, Chairman

M. A. Girshick

S. B. Littauer

J. NEYMAN
President

December 31, 1949

REPORT OF THE SECRETARY-TREASURER OF THE INSTITUTE FOR 1949

At the beginning of 1949 the Institute had 1101 members and during the period covered by this report 153 new members (8 of whom begin their membership with 1950) joined the Institute and two members were re-instated. During 1949 the Institute lost 87 members of which 27 were by resignation and 60 by