

## Information to Authors about Standards and Procedures for Handling of Papers

The new editorial staff of the *Journal of Applied Meteorology* has served for 12 months and several interesting facts and needs have become apparent. These have relevance to authors of potential papers for the *Journal of Applied Meteorology*. This is the first of four editorials resulting from one year of experience. Authors, reviewers and readers of JAM are encouraged to read these:

The existence of the multi-editor system within JAM demands as much objectivity in standards of quality and in the handling of papers as is possible within the recognized uncertainties of scientific journalism. As one means for seeking such objectivity, the Chief Editor has developed a set of special instructions and special forms for reviewers of papers submitted to JAM. Through such mechanisms, we seek a degree of uniformity in the quality of scientific papers that address a wide variety of scientific and technical subject matter considered in the JOURNAL.

One lesson we have learned is that many authors who contribute papers to the JOURNAL are not well informed about the standards expected for papers and the vigorous evaluation procedure used in judging papers. After we assumed editorship of JAM in January 1977, we implemented a computerized recordkeeping of all submitted papers, and these records show that 20% of all authors are not members of the American Meteorological Society and approximately 25% of all reviewers have not been members of the Society. We also suspect that many authors also have not been reviewers of JAM articles, at least those authors of papers submitted in the past 12 months. Hence, lack of knowledge of what standards are expected and what evaluation procedures are employed is not surprising.

Therefore, we believe a description of our charge to reviewers concerning the judgment of papers will reveal the standards of quality we desire. Such a description should be useful, both to authors who should read it as a guide for their potential contributions to JAM, and to the readers of JAM who may wish to know how quality control is being exercised in what they read.

A second part of this editorial describes the procedures we have devised for the handling of papers, beginning from the time of their receipt by the Chief Editor until the papers are rejected or published. Such a description should help authors understand better the location of their paper within the editorial and publication scheme of the JOURNAL.

### 1. Evaluation of papers

Highlights of the JAM Editors' charge to our reviewers are presented to demonstrate the quality sought and the specific basis of the evaluation. The review of any paper submitted to JAM is considered a vital part of the total process of communicating research ideas, accomplishments and progress in the atmospheric sciences.

An evaluation form was devised and is given to each reviewer to assist them in judging a paper suitable for the JOURNAL. The form also assists the Editor who handles the paper in making an ultimate decision involving comments from several reviewers. The format helps furnish objectivity when four editors are involved in deciding on papers acceptable for JAM.

The Editors of JAM do not expect reviewers to re-write a paper. A clear distinction is to be made by the reviewers between errors on the part of the author and differences of opinion between author and the reviewers. It is extremely important that authors follow the JAM guidelines for paper formats and SI units that are published in each issue. The reviewers are often critical of papers with non-standard formats or units. Papers submitted in poor English will be returned to authors for rewriting.

The specific comments which may be transmitted to the author by the Editor are listed by the reviewer on a portion of the standard form given to each reviewer. Comments which the reviewer may not want forwarded to the author may be included in a letter of transmittal to the Editor.

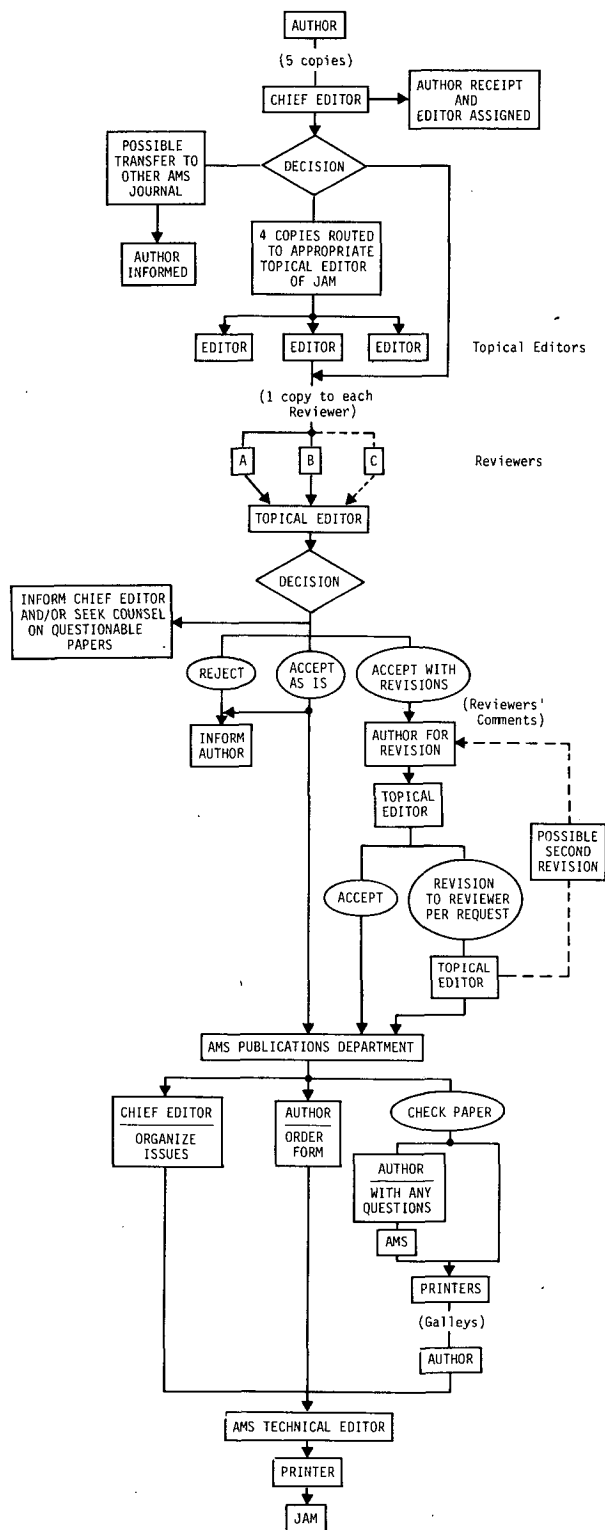
In attempting to determine the suitability of a manuscript for publication, the reviewer (and the author when he writes a paper) should consider, in particular, the following questions:

- 1) Is the study an original contribution in its field?
- 2) Does the author make errors in inference, interpretation or in mathematical analysis?
- 3) Does the material lend itself to application in its field?
- 4) Is the presentation clear, concise and well-organized?
- 5) Is the abstract informative, giving the essence of the research in clear and sufficient terms?
- 6) Does the paper follow the AMS policy on the use of SI units?

The reviewer is asked to consider all these questions to determine the suitability of the paper for JAM. He is provided a summary rating matrix on the standard form and is asked to make one of four possible judgments (excellent, good, fair or poor) to four key aspects of the paper (originality, technical quality, clarity, significance). Such a matrix is designed to be helpful to the reviewers in their objective recommendation about the final disposition of the paper. The five possible recommendations asked of each reviewer are listed below:

- 1) Acceptance.
- 2) Accept after revision by the author, and the reviewer does not wish to see it after revision. This indicates the manuscript should not be accepted in its present form. Subject to author revision to accommodate the reviewer's criticisms, it may then be accepted by the Editor. The revisions may necessitate rewording

ROUTE OF PAPERS SUBMITTED TO JOURNAL OF APPLIED METEOROLOGY



for clarity, reducing length, and other factors according to the reviewer's discretion.

3) Accept with revision, but the reviewer *wishes* to see the paper after it has been revised. This category is similar to number 2, but reflects the fact that the

reviewer wished to see the revision himself, rather than let the Editor judge the revision.

4) Reject.

5) Submit the paper elsewhere. The Chief Editor makes an initial decision as to the paper's suitability for JAM, but the reviewer is allowed to suggest another view.

## 2. Procedure for handling papers

A flow diagram showing the procedure for the handling of papers submitted to JAM for consideration appears with this editorial. Basically, it follows a chronological order. The editors hope to get the entire review and decision process for each paper done within three months. A paper accepted for publication, including its handling and checking at the AMS Headquarters and at the printers including galley reviews, typically requires another three months before the paper appears in print.

Although the flow diagram is basically self-explanatory, a few comments are in order. After receiving the paper, the Chief Editor examines the subject matter of the paper and decides either to send the paper to another AMS journal, or if appropriate for JAM the Chief Editor chooses the appropriate "topical" Editor, one of three persons, for processing the paper through the review, revision and publication (rejection) steps. The three subject areas of JAM are 1) the effect of weather and climate on man and the biosphere, 2) the effect of man on the atmosphere and 3) operational meteorology.

After this decision, the topical Editor chosen to handle the paper performs most of the remaining editorial chores. However, on some papers, as shown in the flow diagram, the Chief Editor handles a paper through the review process and by-passes the topical Editors.

When a paper is accepted for publication, the copyright transfer or certification form, which must be signed by the author and in the possession of the AMS prior to publication of the paper, will be sent by the Editor to the author. The author(s) must sign the appropriate form and mail it to the Editor who has been handling the paper. The Editor will send the form to the Society Headquarters. In the future the signed form must accompany the original manuscript when it is sent to the Chief Editor. A copy of the form is reproduced in this and other January 1978 issues of AMS journals for the convenience of the author.

One other point of explanation. The Editor typically chooses two reviewers, labeled as A and B on the flow chart. However, for certain papers treating controversial issues, a third reviewer (C) is chosen. Also, occasionally one of the two original reviewers chosen (A or B) does not wish to review the paper or is tardy and a third reviewer (C) is chosen.

Editorials in subsequent issues of JAM address other information issues for potential authors and readers. Please read these.

Stanley A. Changnon, Jr.