

# **Ethical Standards for Publication of Aeronautics and Astronautics Research**

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## **I. Preface/Introduction**

The American Institute of Aeronautics and Astronautics (AIAA) serves the engineering and scientific aerospace communities and society at large in several ways, including the publication of journals that present the results of original scientific and engineering research and the publication of books that synthesize the results of scientific and engineering research, educate the next generation of aerospace scientists and engineers as well as document aerospace industry developments, history, and trends. As a publisher AIAA has the responsibility to protect those who contribute their original work to the Institute, as well as those who use AIAA publications to further their own understanding or research. As a publisher of peer-reviewed scientific, scholarly content, AIAA sets and maintain a high ethical standard for its books and journals. One way it does this is by developing and communicating standards of ethical behavior for editors, reviewers, and authors.

## **II. AIAA Ethical Standards**

### **A. Ethical Standard for AIAA Journals**

The Editor-in-Chief of a journal of the AIAA has the responsibility to maintain the AIAA ethical standards for reviewing and accepting papers submitted to that journal. These ethical standards derive from the AIAA definition of the scope of the journal and from the community perception of standards of quality for scientific and engineering work and its presentation. The following ethical standards reflect the conviction that the observance of high ethical standards is so vital to the whole engineering and scientific enterprise that a definition of those standards should be brought to the attention of all concerned.

#### **1. *Obligations of Editors-in-Chief and Associate Editors***

*[Note: Throughout Section II.A, the term "Editor," when used alone, applies to both Editors-in-Chief and Associate Editors. When one or the other bears the specific responsibility, the full title is used.]*

- a. The Editor-in-Chief has complete responsibility and authority to accept a submitted paper for publication or to reject it. The Editor-in-Chief may delegate this responsibility to Associate Editors, who may confer with reviewers for an evaluation to use in making this decision.
- b. The Editor will give unbiased and impartial consideration to all manuscripts offered for publication, judging each on its scientific and engineering merits without regard to race, gender, religious belief, ethnic origin, citizenship, or political philosophy of the author(s).
- c. The Editor should process manuscripts promptly.
- d. The Editor and the editorial staff will not disclose any information about a manuscript under consideration or its disposition to anyone other than those from whom professional advice is sought. The names of reviewers will not be released without the reviewers' permission.
- e. The Editor will respect the intellectual independence of authors.
- f. Editorial responsibility and authority for any manuscript authored by an Editor-in-Chief and submitted to the journal must be delegated to some other qualified person, such as an Associate Editor of that journal. When it is an Associate Editor participating in the debate, the Editor-in-Chief should either assume the responsibility or delegate it to another Associate Editor. Editors should avoid situations of real or perceived conflicts of interest. If an Editor chooses to partici-

pate in an ongoing scientific debate within the journal, the Editor should arrange for some other qualified person to take editorial responsibility.

g. Unpublished information, arguments, or interpretations disclosed in a submitted manuscript must not be used in the research of an Editor-in-Chief, Associate Editor, or reviewer except with the consent of the author.

h. If an Editor is presented with convincing evidence that the main substance or conclusions of a paper published in the journal are erroneous, the Editor must facilitate publication of an appropriate paper or technical comment pointing out the error and, if possible, correcting it.

## **2. *Obligations of Authors***

a. An author's central obligation is to present a concise, accurate account of the research performed as well as an objective discussion of its significance.

b. A paper should contain sufficient detail and reference to public sources of information such that the author's peers could repeat the work.

c. An author should cite those publications that have been influential in determining the nature of the reported work and that will guide the reader quickly to the earlier work that is essential for understanding the present investigation. An author should ensure that the paper is free of plagiarism, i.e., that it does not appropriate the composition or ideas of another and claim them as original work of the present author(s). Plagiarism in any form is unacceptable and is considered a serious breach of professional conduct, with potentially severe ethical and legal consequences. Information obtained privately, as in conversation, correspondence, or discussion with third parties, should not be used or reported in the author's work without explicit permission from the investigator with whom the information originated. Information obtained in the course of confidential services, such as refereeing manuscripts or grant applications, should be treated similarly.

d. Fragmentation of research papers should be avoided. A scientist who has done extensive work on a system or group of related systems should organize publication so that each paper gives a complete account of a particular aspect of the general study.

e. It is inappropriate for an author to submit manuscripts describing essentially the same research to more than one journal of primary publication. Simultaneous submission to more than one journal may result in the suspension of publication rights for the author(s) in any AIAA journal.

f. An accurate, nontrivial criticism of the content of a published paper is justified; however, in no case is personal criticism considered to be appropriate.

g. To protect the integrity of authorship, only persons who have significantly contributed to the research and paper presentation should be listed as authors. The corresponding author attests to the fact that any others named as authors have seen the final version of the paper and have agreed to its submission for publication. Deceased persons who meet the criterion for co-authorship should be included, with a footnote reporting date of death. No fictitious name should be listed as an author or co-author. The author who submits a manuscript for publication accepts the responsibility of having included as co-authors all persons appropriate and none inappropriate.

h. It is inappropriate to submit manuscripts with an obvious marketing orientation.

i. It is the responsibility of the author to obtain any required government or company reviews and/or clearances of their papers prior to submission, as well as any necessary reprinting permissions.

### **3. Obligations of Reviewers of Manuscripts**

a. Inasmuch as the reviewing of manuscripts is an essential step in the publication process, every publishing engineer and scientist has an obligation to do a fair share of reviewing. On the average, an author should expect to review twice as many papers as an author writes.

b. A chosen reviewer who feels inadequately qualified or lacks the time to judge the research reported in a manuscript should return it promptly to the Editor.

c. A reviewer of a manuscript should judge the quality of the manuscript objectively and respect the intellectual independence of the authors. In no case is personal criticism appropriate.

d. A reviewer should be sensitive even to the appearance of a conflict of interest. If in doubt, the reviewer should return the manuscript promptly without review, advising the Editor of the conflict of interest or bias.

e. A reviewer should not evaluate a manuscript authored or co-authored by a person with whom the reviewer has a personal or professional connection if the relationship would bias judgment of the manuscript.

f. A reviewer should treat a manuscript sent for review as a confidential document. Its contents, as well as the reviewers' recommendations, should neither be shown to nor discussed with others except, in special cases, to persons from whom specific advice may be sought; in that event, the identities of those consulted should be disclosed to the Editor.

g. A reviewer should explain and support judgments adequately so that Editors and authors may understand the basis of the comments. Any statement that an observation, derivation, or argument had been previously reported should be accompanied by the relevant citation.

h. A reviewer should be alert to failure of authors to cite relevant work by other scientists. A reviewer should call to the Editor's attention any substantial similarity between the manuscript under consideration and the references or any published paper or any manuscript submitted concurrently to another journal.

i. A reviewer should not use or disclose unpublished information, arguments, or interpretations contained in a manuscript under consideration, except with the consent of the author.

## **B. Ethical Standards for AIAA Books**

The Editor-in-Chief of a book series of the AIAA has the responsibility to maintain the AIAA ethical standards for reviewing and accepting proposals and manuscripts submitted to that book series. These ethical standards derive from the AIAA definition of the scope of the book series and from the community perception of standards of quality for scientific and engineering work and its presentation. The following ethical standards reflect the conviction that the observance of high ethical standards is so vital to the whole engineering and scientific enterprise that a definition of those standards should be brought to the attention of all concerned.

### **1. Obligations of Editors-in-Chief and Editorial Advisory Boards**

*[Note: Throughout Section II.B, the term "Editor," when used alone, applies to both Editors-in-Chief and Editorial Advisory Board members. When one or the other bears the specific responsibility, the full title is used.]*

a. The Editor-in-Chief, in concert with appropriate AIAA staff, has responsibility and authority to accept a submitted proposal or manuscript for publication or to reject it. The Editor-in-Chief may delegate this responsibility to an Editorial Advisory Board member, who may confer with reviewers for an evaluation to use in making this decision.

b. The Editor will give unbiased and impartial consideration to all manuscripts offered for publication, judging each on its scientific and engineering merits or its general interest to the AIAA membership without regard to race, gender, religious belief, ethnic origin, citizenship, or political philosophy of the author(s).

c. The Editor should process book proposals and manuscripts promptly.

d. The Editor and the editorial staff will not disclose any information about a manuscript under consideration or its disposition to anyone other than those from whom professional advice is sought. The names of reviewers will not be released without the reviewers' permission.

e. The Editor will respect the intellectual independence of authors.

f. Editorial responsibility and authority for any proposal or manuscript authored or edited by an Editor-in-Chief and submitted to the book series must be delegated to some other qualified person, such as an Editorial Advisory Board member for that series.

g. Unpublished information, arguments, or interpretations disclosed in a submitted manuscript must not be used in the research of an Editor-in-Chief, Editorial Advisory Board member, or reviewer except with the consent of the author.

h. If an Editor is presented with convincing evidence that the main substance or conclusions published in a book are erroneous, the Editor must facilitate appropriate recognition and publication of an appropriate response pointing out the error and, if possible, correcting it.

## **2. *Obligations of Authors and Contributors to Edited Works***

a. An author should cite those publications that have been influential in determining the nature of the reported work and that will guide the reader quickly to the earlier work that is essential for understanding the present investigation. An author should ensure that the book is free of plagiarism, i.e., that it does not appropriate the composition or ideas of another and claim them as original work of the present author(s). Plagiarism in any form is unacceptable and is considered a serious breach of professional conduct, with potentially severe ethical and legal consequences. Information obtained privately, as in conversation, correspondence, or discussion with third parties, should not be used or reported in the author's work without explicit permission from the investigator with whom the information originated. Information obtained in the course of confidential services, such as refereeing manuscripts or grant applications, should be treated similarly.

b. To protect the integrity of authorship, only persons who have significantly contributed to the research and to the manuscript should be listed as authors. All authors must attest to the fact those named as authors have seen the final version of the manuscript and have agreed to its submission for publication. Deceased persons who meet the criterion for co-authorship should be included, with an acknowledgment of the death including its date in the preface of the book. No fictitious name should be listed as an author or co-author. The author who submits a manuscript for publication accepts the responsibility of having included as co-authors all persons appropriate and none inappropriate.

c. Fragmentation of individual contributions to edited works should be avoided. A scientist who has done extensive work on a system or group of related systems should organize publication so that each contribution gives a complete account of a particular aspect of the general study.

d. For works reporting research results or for edited works, a contributor's central obligation is to present a concise, accurate account of the research performed as well as an objective discussion of its significance.

e. For works reporting research results, a book or chapter should contain sufficient detail and reference to public sources of information such that the author's peers could repeat the work.

- f. It is inappropriate to submit manuscripts with an obvious marketing orientation.
- g. It is the responsibility of the author to obtain any required government or company reviews and/or clearances of their papers prior to submission, as well as any necessary reprinting permissions.

### **3. *Obligations of Reviewers of Manuscripts***

- a. A chosen reviewer who feels inadequately qualified or lacks the time to judge the research reported in a manuscript should return it promptly to the Editor.
- b. A reviewer of a manuscript should judge the quality of the manuscript objectively and respect the intellectual independence of the authors. In no case is personal criticism appropriate.
- c. A reviewer should be sensitive even to the appearance of a conflict of interest. If in doubt, the reviewer should return the manuscript promptly without review, advising the Editor of the conflict of interest or bias.
- d. A reviewer should not evaluate a manuscript authored or co-authored by a person with whom the reviewer has a personal or professional connection if the relationship would bias judgment of the manuscript.
- e. A reviewer should treat a proposal and/or manuscript sent for review as a confidential document. Its contents, as well as the reviewers' recommendations, should neither be shown to nor discussed with others except, in special cases, to persons from whom specific advice may be sought; in that event, the identities of those consulted should be disclosed to the Editor and AIAA Staff prior to the disclosure.
- f. A reviewer should explain and support judgments adequately so that Editors and authors may understand the basis of the comments. Any statement that an observation, derivation, or argument had been previously reported should be accompanied by the relevant citation.
- g. A reviewer should be alert to failure of authors to cite relevant work by other scientists or authors. A reviewer should call to the Editor's attention any substantial similarity between the manuscript under consideration and the references or any published or unpublished work without proper citation thereof or any manuscript submitted concurrently to another publication, series, or publisher.
- h. A reviewer should not use or disclose unpublished information, arguments, or interpretations contained in a manuscript under consideration, except with the consent of the author.
- i. Inasmuch as the reviewing of manuscripts is an essential step in the publication process, every publishing engineer and scientist has an obligation to do a fair share of reviewing.

## **III. Publications Committee Policies for Ethical Standards Violations**

### **A. Importance of Compliance**

AIAA publications are among the most important and recognizable services provided by the Institute to the aerospace profession. AIAA's archival journals and books are of lasting value to the scientific and technical community, and thus their quality and reputation must be carefully and continually safeguarded. Ethical violations, including plagiarism, do occur. The continuing increase in ethical violations may be at least partly due to the rapidly expanding worldwide accessibility of electronic information storage and distribution. Thus, the AIAA Publications Committee developed and promulgated straightforward policies and procedures that specify ethical violations involving AIAA publications and clarify their fair and uniform handling.

## **B. Plagiarism**

Plagiarism is the most serious violation of ethical standards. Cases of authors taking the ideas or writings from another author and using them as their own are referred to the Publication Ethical Standards Subcommittee (an authorized Subcommittee of the full AIAA Publications Committee). Upon the Subcommittee's recommendation to the Vice President–Publications, the following sanctions may be applied:

1. All current submissions to AIAA journals and/or books by any of the authors may be withdrawn.
2. The Vice President–Publications may request and publish letters of apology from the offending authors.
3. A limited or permanent ban from publication in AIAA journals and books may apply to each individual author, as well as in combination with new authors.
4. If an author is an AIAA member and the Publication Ethical Standards Subcommittee believes that additional sanctions are warranted, then the Subcommittee may ask the AIAA Ethics Committee to impose further penalties, up to and including possible revocation of AIAA membership.

## **C. Other Ethical Violations**

Ethical violations not involving plagiarism may be handled by the respective journal or book Editor-in-Chief (and possibly the Associate Editor or other volunteer involved in processing the manuscript). These ethical violations include, but are not limited to, the following:

1. Listing authors who did not significantly contribute to the technical work, omitting those who did contribute, or providing false contact information.
2. Failing to correctly state company or government clearance information.
3. Failing to correctly state the copyright status of parts or all of the submission.
4. Submitting the current or a closely related work to another publication or organization while it is under consideration or review by AIAA (multiple submissions).
5. Failing to provide, at time of submittal, the complete publication/presentation history of the current work or any closely related work by the authors. This also includes information on prior or current related presentations or submissions to any non-AIAA organizations.
6. Other violations, including but not limited to improper referencing and authorship issues that may not surface until the work has been published.

For any of the ethical violations listed in Section III.C, the Editors-in-Chief have the authority to reject the submission, to institute up to a two-year ban from publishing in AIAA journals or books, and to inform any other publishing organization involved with the submission about the sanctions. Repeat violators can expect the Editor-in-Chief to place a permanent ban on future publication in AIAA journals or books. The Editor-in-Chief has the right to request additional actions by the Publication Ethical Standards Subcommittee and/or the Vice President–Publications. Authors guilty of any publication ethical violations will be noted in the journal manuscript tracking system and the book database such that details of previous violations will be available to all AIAA editors at the time of any new submission.

## **IV. Procedures for Ethics Violations**

### **A. Publication Ethical Standards Subcommittee-Led Investigations**

#### **1. Receipt of Complaint**

Complaints of plagiarism or other publication ethical violations may be brought to the Subcommittee by an author, an editor, a reviewer, or any other party who believes that misrepresentation or wrongdoing has occurred.

All complaints must be accompanied by evidence of the alleged wrongdoing. For allegations of plagiarism, for example, the following documentation would be required: a) copies of both the original document and the alleged plagiarized version, with relevant passages highlighted; b) full publication details of both documents; C) a written description of the alleged violation; and d) copies of any and all communications the complainant may already have had with the accused author(s).

#### **2. Investigation**

The Subcommittee then follows these procedures:

a. They evaluate the evidence submitted to make an initial determination of the validity of the complaint. If they believe that more evidence is required, they will notify the complainant of that need.

b. If the complaint appears to be valid and the evidence is complete, the Subcommittee drafts a letter to the accused author informing him/her of the complaint and requesting a response, including an explanation of any special circumstances. The letter is signed by the Vice President–Publications, and a deadline is given for a response by the author (generally four–six weeks).

c. If the author responds, the Subcommittee considers the content of that response before making a final determination in the case. This evaluation may also include additional communication with the complainant. If the author does not respond, the Subcommittee proceeds without his/her input.

d. If the Subcommittee concludes that the original complaint was valid, they draft a letter (to be signed by the Vice President–Publications) informing the author any coauthors of their findings and notifying him/her of the consequences (as outlined in Section I.B). If the Subcommittee finds the original complaint to be invalid, they draft a letter so informing the author. At the same time, they notify the complainant of the final resolution of the case.

#### **3. Appeals by the Author**

If, after the resolution of the case by the Subcommittee, the author appeals the decision, the Subcommittee may revisit the procedures followed and decisions made. They may choose to take no further action if their original findings are validated by the review. If there is any question, however, of either validity or bias, then the Subcommittee may refer the appeal (along with all related documents and correspondence) to the Vice President–Publications for final review and disposition.

## **B. Publication Ethical Standards for Editor-Led Investigations**

### ***1. Pre- or Post-Publication***

Because violations falling in this category are generally a result of authors making false statements during the submittal process, and those statements are fully documented, formal investigations are seldom required. All authors are required to verify items such as valid authorship, copyright, manuscript history, etc., at the time of submission. If the Editor knows any of these assertions to be false, then he/she may immediately invoke any of the sanctions described in Section III.C. If suspected violations are not discovered by the Editor until a manuscript has already been published, the Editor can still apply the same sanctions as in Section III.C. The Editor always has the right to request additional actions by the Publication Ethical Standards Subcommittee and/or the Vice President–Publications.

### ***2. Appeals by the Author***

If, after a decision by the Editor, the author wishes to appeal the decision, the Editor shall review his decision with the author. If the author then wishes a further review of the decision, he may appeal to the Vice President–Publications for a final review and disposition.

## **Acknowledgments**

The ethical standards embodied in Sections II.A and II.B were revised and approved by the AIAA Publications Committee in January 2006 and January 2007 and are endorsed by the AIAA Editors-in-Chief. These standards are adapted from those published by the American Geophysical Union and are used with their permission. The procedures and sanction described in Sections III and IV were authorized by Publications Committee and the AIAA Board of Directors as embodied in Section 5.4.20 of the AIAA Bylaws in May 2007.