

HAD / WGAH Assessment and Recommendations on *ApJ* Archive Policies

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Preamble: Historical significance of editorial correspondence.

As Michael Hoskin and Owen Gingerich have written, “The prime duty of the historian of astronomy is to illuminate his science as a creative human activity of the astronomical community of the time.” Such illumination must go beyond the published record to include, for example, instruments and institutions, but no part of the historical record better documents the sifting and winnowing of ideas and methods than the correspondence behind the published record. Only by penetrating beyond the published record could we understand, for example, the evolution of views on the nature of nebulae, the acceptance of William Huggins's early spectroscopic work into professional circles, or the extent of H. N. Russell's influence in shaping 20th-century astrophysics and its institutions.

Editorial correspondence is invaluable in understanding the development of the science embodied and conveyed by the *Astrophysical Journal*, not only because it documents how the printed record takes shape, but also because rejected contributions can be as important to the history as those that are eventually published. History of science concerns itself with far more than the contributions of individual scientists, and archival records offer primary source material and empirical data for many critical studies that do not require identification or direct quotation of referees, editors, or authors. Preservation of and access to this primary source is essential not only to historians but also to the astronomical community itself to understand its research achievements and challenges and to educate students in how astronomy is done.

1. Future editorial policy on confidential editorial correspondence

There are two motivations for modifying the current confidentiality guidelines for the *ApJ* and other journals of the AAS: First, to help find an archival site that will minimize future storage costs; and second, to provide appropriate access to future generations of scholars while protecting the rights and expectations of the reviewers, editors, and authors. Librarians and archivists are keenly aware of the expectation of confidentiality of academic editorial correspondents that must endure for some period. But, given their limited resources, archive managers must give priority to materials that will be of benefit to the current generation of scholars—researchers whose work is not in the distant future but justifies fund-raising today for the costs of maintenance and processing. This is especially true for large and varied collections (like *ApJ*), which require considerable labor to process and maintain. A typical restriction for scholarly journals today is 30 years, which is within that generational constraint. (For instance, the American Mathematical Society, the Mathematical Association of America, and the Smithsonian's National Museum of American History use 30 year restrictions.) NSF referee reports are deposited and legally available in the National Archives after only 15 years. AIP allows a maximum of 50 years (see Attachment A). Restriction periods in this range represent a large enough fraction of a typical academic career to preserve the freedom of frank referee reports, but are still short enough to offer utility to librarians, archivists, and contemporary scholars who have a unique responsibility to produce a “0th order” history of an era that they, and only they among all succeeding scholars, will experience. In the 1990s, at a conference devoted to the question of how Smithsonian scholars (in the humanities) might best serve future disciplines, it was strongly suggested that “0th order history” is essential for the identification and appreciation of the extreme complexities of modern science, to say nothing of the challenges that future scholars will face in interpreting it. “Zeroth order history” includes oral histories and the preservation of records. One cannot be done effectively without access to the other, and both will be essential to understand our present era. Archives therefore necessarily devote their limited energies to

those materials that can be accessed soon. This is why the current restriction of 75 years will make finding a home for the *ApJ* archives very difficult, and it is one of the reasons that such efforts have failed to date. (See below.)

WGPAH suggests that the Publications Board interpret the restriction on access and use of the editorial records in the following manner: “Access” means permission to read and abstract, but not to reproduce or cite in any form. Access in this sense is restricted to readers who are approved by the archive manager responsible for housing the records, in consultation, if necessary, with the present journal editor. “Use,” in contrast, means reproduction or citation. Use in this sense can be approved before the end of the restriction period only by the correspondent, or, if deceased, by spouse, executor, or first generation heir.

With these definitions in mind, WGPAH recommends the adoption of the modified Confidentiality Guidelines (Attachment B), which allow scholarly “use” and “access” after 30 years with earlier use or access only by specific permission of the *ApJ* editor or by the correspondents, e.g. the author and referee. It should be noted that even after the 30 year restriction ends, access and usage will be managed by professional archivists according to scholarly standards.

2. Abt-era archives

Here we have a specific instance of the more general discussion above. Motivations to take action on the Abt-era (1971 – 1999) editorial correspondence arise from the ongoing costs of the present storage (which is far from optimal from the archival point of view) and the need for scholarly access (which is currently non-existent). The Abt-era collection is relatively large (exceeding 600 linear feet), thus increasing the burden to potential archival partners. Moreover, the access restriction is complex: the default restriction was perpetual, but some correspondents accepted an option (on the report return form) to allow access after 50 years. Even the more liberal category is, at 50 years, extreme by current norms. Several professional archives (including the Huntington Library, the Library of Congress, University of Chicago, and Williams College) have declined to take the correspondence collection owing to its size, access restrictions, or both. Below are the options formulated by WGPAH for how the Publications Board might proceed. They are listed in rough order of decreasing preference.

Options for Apt-era editorial correspondence collection

A. Placement with a professional academic archive

Archivists might still be found to take the collection, and perhaps the entire series of *ApJ* editorial correspondence as it develops, if it can be made more attractive as a scholarly resource. This would require reaching a compromise (probably in the form of a written agreement) with the archival institution on access restrictions that specifies the obligations of confidentiality but allows scholarship at some controlled level. For example, direct quotation or identification of living scientists might be allowed only by permission, but other applications, by reputable scholars, would be allowed if consistent with current community standards as interpreted by the archivist, perhaps in consultation with the current editor as needed. (It is not unusual for archival collections to be closed by default and to grant access based on an applicant's credentials and intended project.) This approach recognizes that editorial confidentiality is not a matter of punctilious legalism. Rather, confidentiality is a social lubricant that eases the process of peer review, which is a vital part of modern academia. It is appropriate to protect that confidentiality long enough for it to serve its purpose, but it does not make sense to let an agreement, entered into long ago precisely to advance scholarship, to become instead an obstacle to legitimate research.

The size of the Abt-era collection presents another obstacle because of the considerable labor in processing the collection (i.e, the preparation of preliminary content lists, indices, and other usage aids).

A subvention to begin and advance this work, perhaps by employing trained, graduate students under academic guidance, might ease the burden enough to interest a worthy recipient.

B. Commercial archives

Private storage contractors, such as Iron Mountain (www.ironmountain.com) provide archival services and have been used satisfactorily by the Smithsonian and other federal agencies. The lowest cost option would be “cold storage,” which would be secure but without provision for access or processing. Obviously this will be a recurring cost. Higher levels of service for access or processing will, of course, cost more, but can be initiated periodically for review and assessment.

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PARI (www.pari.edu/contact/MCastelaz/mwcresearch/pari) is a non-profit research and archival facility that specializes in astronomical materials. PARI is operated by a private individual and is a relatively new organization. As such its institutional stability is unproven, and its record of service is short. Although PARI offers safe storage at present, WGAH has serious concerns about the status of the collection in the event of management or policy transitions at PARI. Access to the collection at PARI is, in theory, available, but even the most basic processing will cost extra. Further progress toward an agreement with PARI must be contingent on a thorough understanding of its legal structure and stability and the drawing up of a suitable legal agreement governing the status of any materials on deposit. Without doubt, PARI would have to agree to provide custodial services without any expectation of eventual ownership or intellectual control of the records.

D. Digitization & disposal

Scanning of the collection would convert the storage problem from that of physical materials to a more tractable data security problem. This is attractive because physical storage costs would taper off as scanning progresses and because the scanning process would be a logical opportunity for at least a rudimentary content listing. However, the cost of scanning would be high and the length of time required unknown. Proper indexing of the materials would still be desirable and would be an added cost. Access would presumably be via an online archive (imagine something like the SAO/NASA ADS system). Perhaps a project like this would be attractive to a private donor.

F. Do nothing

Leaving the Abt-era collection in its current state of storage is the least attractive option. Storage costs continue, of course, but because the storage conditions are far from ideal there is serious risk of loss or deterioration of the materials. In addition, there is obviously no access to the materials, no hope of even the most basic processing, and thus an on-going total loss to scholarship.

3. Conclusion

The members of the Working Group on the Preservation of Astronomical Heritage remain deeply concerned to assist the AAS Publications Board in constructing a long-term plan for editorial correspondence, past, present, and future. The importance of an appropriate plan for a journal of such historical significance as *ApJ* cannot be over emphasized. It should be noted that the efforts of investigating confidentiality policies, consulting on archival and editorial practices, visiting sites, and negotiating with archives and libraries, are thanks largely to the members of the WGAH, with special thanks to David DeVorkin, Steve McCluskey, Joe Anderson, and Virginia Trimble.

AIP Policy on Preservation of Journal Referee Files

The American Institute of Physics recognizes that review files of leading journals represent an important resource for historians and other scholars. They provide unique insights into the state of science at the time they were written, and they often illustrate contemporary issues and controversies. The reviews for rejected manuscripts can be of special value. Accordingly, AIP adopts the following policy for its own journals and further recommends the policy for AIP Member Society journals.

- Journal publishers are responsible for preserving the historically valuable records of their journals when feasible and should arrange to place their peer-review files at an appropriate archive (e.g., their home institution archives, the Library of Congress). The AIP Niels Bohr Library & Archives is one appropriate repository for the records of AIP and AIP Member Society journals, but shortages of space and funds make it impossible for AIP to save any but the most historically valuable files of leading journals. Library and History Center staff will help journal editorial boards find other appropriate repositories for files that AIP cannot accept, or if they prefer another repository. The Center and Library will also provide help and advice in placing records of Member Society journals that are not published by AIP, but they do not have the resources to house these records in the Niels Bohr Library & Archives
- Review files should be access-restricted for a period of 50 years from the date of creation. A restriction of this length provides for the privacy of reviewers during their active careers, and it makes the files available to the scholarly community within a reasonable amount of time. It also reflects general archival practice. For AIP journals, the current Editor and AIP Executive Director, acting jointly, may provide access to qualified researchers before the 50-year time period expires, at their discretion. Similarly, the current Editor and appropriate Member Society official, acting jointly, may provide earlier access to Member Society journal records stored in AIP's archives. In any case, permission must be sought where feasible from relevant parties (referees, editors, authors) if still living. Data analysis without individual identification would be permitted, subject to all basic policy requirements, before the expiration of the 50 year restriction.
- If resources permit, AIP further recommends that paper review files be digitized and/or microfilmed on an annual or other schedule to eliminate the need for permanently storing voluminous paper records. Materials already in digital format should be retained permanently by the appropriate repository if feasible. The AIP Center for History of Physics can provide advice on archival microfilming standards and on preserving digital files.

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PROFESSIONAL AND ETHICAL STANDARDS FOR THE AAS JOURNALS

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5. Confidentiality Guidelines

Except in cases where referees waive their anonymity with the concurrence of the editor, all AJ and ApJ peer reviews are conducted under conditions of strict confidentiality. ~~The~~Henceforth the journals and their editors will not reveal the identity of referees or the contents of peer review correspondence to individuals outside of the respective peer review process for a minimum period of ~~75~~30 years; access to earlier records of the peer review process will be restricted in accordance with the policy in effect at the time of their creation. The current editor and Publication Board chair, acting jointly, may provide access to qualified researchers before the period of confidentiality expires, at their discretion. In that case, permission must be sought where feasible from relevant parties (referees, editors, authors) if still living. Data analysis without individual identification would be permitted before the expiration of the restriction period. Referees are also bound by strict confidentiality; neither the manuscripts nor the contents of referee correspondence may be shared with other parties without written permission from the editor.

Strictly speaking, authors are not bound by similar confidentiality requirements (for example they may choose to consult with co-authors and colleagues when revising a paper in response to a referee report), but public dissemination of the contents of referee reports and editorial correspondence is inappropriate. Any author who does so forfeits their rights to confidentiality protection by the journals.