



Special Insert to the *AAS Newsletter* Electronic Publishing in Astronomy; Project and Plans of the AAS

The Journals of the AAS: Our President's Perspective

J. Craig Wheeler, President

Over the last year the Society had to strike a balance between a long-standing, revered tradition and a business-like due diligence. The issue was the publisher of our journals, *The Astrophysical Journal* and *The Astronomical Journal*, the premier astronomical journals in the world in terms of scientific content and editorial quality. The *Astrophysical Journal* has been published by the University of Chicago Press (UCP) for a century, spanning the storied editorship of Chandrasekhar. We had worked in partnership with UCP to take the journals, and UCP, into the electronic age. That sort of history and partnership is not abandoned lightly. On the other side, the publishing game has changed immensely in the last decade, and the Society had not put the contract for publishing our journals out for competitive review, a prudent step in any circumstance.

All this came to a head in the Fall of 2006 when UCP proposed substantial changes in our business plan. Costs were proposed to increase, but this was not the major driver of our reconsideration. Rather UCP proposed changes that would have given them more control over our subscription and page charges. That would reduce our ability to manage the financial affairs of the journals with the goal of keeping page charges and subscriptions rates balanced and modest. In addition, UCP proposed to outsource much of the work on the journals, thereby preventing the close collaboration we had maintained with UCP as we moved to electronic publishing and continued to plan evolution and improvement. Taken

together, these proposed changes forced the decision to go out for proposals to sample the competitive environment to publish our journals.

We had a very professional process to issue a Request for Proposals to publish the *Astrophysical Journal* and the *Astronomical Journal*, to evaluate the proposals, and to select a vendor. The Institute of Physics Publishing (IOP) was selected on the basis of a number of criteria, among them cost, which will go down, service, which will go up, and the promise of a close and energetic partnership that will lead to constructive evolution of our journals in the globally-connected electronic age.

Our Society owes a debt of gratitude, to which I certainly add my own personal thanks, to the people who accomplished this. Special commendation goes to our Executive Officer, Kevin Marvel, who oversaw the process in a highly professional way, and to our editors, Ethan Vishniac and Jay Gallagher, and Pub Board Chair Mike A'Hearn, who were deeply engaged in this effort. Appreciation also goes to our consultants, especially to Bob Milkey, our most recent Executive Officer.

We have come to realize that we should have had an evaluation of our publisher at regular intervals in the past. We will have such a review again in a reasonable amount of time to ensure we are getting the best service for our membership at the most reasonable costs.

Future of the AAS Journals

Michael F. A'Hearn, Publications Board Chairman

During the current year, our president, Craig Wheeler, has asked the Publications Board to take a broad look at the future of the AAS Journals. We have begun this effort and ran a lunchtime session for feedback from the membership at the June meeting in Honolulu. We will be providing other methods of feedback in the near future. One of the key factors in our discussions has been the switch of publishers from UCP to IOP. We are enthusiastic about this change – we look at the “crisis” driven by the UCP request to change our business model as an opportunity to rethink the nature of the journals. As mentioned elsewhere by Kevin Marvel, it is clear that we will be moving to a model of print on demand, with most subscribers getting the electronic version only but with selected subscribers getting print copies of a slightly lower quality than

at present. This slightly lower quality of the printed edition is offset by the huge possibilities for electronic linking, an area in which we think that IOP offers us tremendous promise. The only question about the move to print on demand is the question of how quickly we do it.

As best we can tell thus far, there is remarkably little sentiment for staying with the classical, printed versions and this suggests that we should move to print-on-demand as quickly as makes sense from a practical viewpoint. An experiment by the Royal Astronomical Society (RAS) with print-on-demand for the *Letters* section of MNRAS (Monthly Notices of the Royal Astronomical Society) has resulted in only a single subscription to the print-on-demand version. The Pub Board

would welcome input on this issue from the membership (for now send it to me – ma@astro.umd.edu), but we will soon set up an electronic feedback system. There are, of course, issues that need to be ironed out. The most significant issue from my personal point of view is the question of ensuring a long-term, permanent archive. This implies copies at distributed geographic locations that can outlive any individual publisher or even outlive the AAS itself, as well as surviving natural disasters (except possibly a really large killer asteroid). Again, thoughts on this issue are welcome.

We are also looking forward to hosting the Astronomy Education Review (AER) as an official AAS journal that is E-only. This move was approved by the AAS Council, but with the caveat that the Executive Officer, Kevin Marvel, come up with a viable business model for this journal. As many of the members know, the AAS journals are self-supporting entities.

On the Selection of our New Journal Publisher

Kevin B. Marvel, Executive Officer

[The following is an edited version of a summary report I presented to the AAS Council on the selection of our new journals publisher. I have edited out confidential business details and shortened the piece for publication in this *Newsletter* insert. – kbm]

How we got here...

At the Fall 2006 AAS Executive Committee Meeting, the University of Chicago Press, presented a revised model for our publishing relationship. Significantly, the proposal included a change from the extant fee-for-service arrangement to one in which UCP would share in any profits and have some influence on the setting of subscription prices and page charges. The decision timeline for accepting this proposal was quite fast, with a letter of understanding sought by 31 October 2006 (only a few weeks after the executive committee meeting), and a new contract to be in place by 31 March 2007, with a five-year term.

The Executive Committee voted to decline the proposed change and directed me to make this clear to UCP. Additionally, they directed me to move forward with the development and possible execution of a Request for Proposals (RFP) for the production of our journals.

I informed UCP of the Executive Committee's decision and formed a Request for Proposals (RFP) Development Committee composed of Martin Blume, recently retired Editor-in-Chief for the American Physical Society (APS) journals; Bob Milkey, former Executive Officer of the AAS; Evan Owens, of Portico (longtime employee at UCP and key worker in the development of our journal's technical functionality); Judy Luther, president of the Society of Scholarly Publishing and principal of the InformedStrategies consultants, Maureen Kelly, also of InformedStrategies;

The society neither subsidizes them nor derives revenue from them. This model is different from that of most other learned journals. Thus the AER must somehow become self-supporting. We think this is possible, particularly in light of our new agreements with IOP, and we look forward to hosting the journal when the business model is developed.

Finally, I would like to reiterate with rephrasing a statement that I made during the election for the chairmanship of the Publications Board. The health of the journals is most dependent on the quality of the editors and the role of the Publications Board should be to choose and retain the best editors and to provide them the best support and advice that we can. We have no desire to micromanage the journals, but we want to be sure that the editors know what the membership wants from its journals.

Ethan Vishniac, editor of the *ApJ*; Jay Gallagher, editor of the *AJ*; and myself. This group met four times by phone call, exchanged large numbers of emails and draft versions of the RFP and ultimately produced the RFP for the production of our journals.

I also formed an RFP Assessment Team composed of Michael A'Hearn, Publications Board Chair, Peter Stockman, AAS Treasurer; Tom McIlwrath, retiring American Physical Society CFO; Judy Luther, president of the Society of Scholarly Publishing and principal of the InformedStrategies consultants, Maureen Kelly, also of InformedStrategies; Ethan Vishniac, editor of the *ApJ*; Jay Gallagher, editor of the *AJ*; and myself. This team met just prior to the release of the RFP.

At the first meeting of each of these committees, a formal request for statements of conflicts of interest took place. No conflicts of any kind were stated. Some members of the committee had refereed for publications produced by various bidders and several had been authors in publications produced by one or more of the bidders. Judy Luther of InformedStrategies had been retained by one of the bidders in the past to undertake a research project unrelated to publication services.

The RFP was released to a pool of eight possible service providers on 5 February 2007, including the American Institute of Physics, Cambridge University Press, Elsevier, Springer, Wiley/Blackwells, Institute of Physics Press, Nature Publishing Group and University of Chicago Press. This set of vendors was selected after extensive research of the capabilities of a wide range of scientific and technical publishers. The eight selected to receive the RFP publish refereed journals similar in volume and level of technical complexity to the AAS journals. We included some vendors that do not have a major presence in the physical sciences and also only included vendors capable of handling all the functional requirements outlined in the RFP.

On 12 December 2006, UCP presented a revised proposal for a change in our business relationship, but not substantially different in philosophy from their initial proposal. After considering the details and ramifications of the proposal, the Executive Committee voted to terminate the publishing contracts with UCP and issue the RFP for a new publishing services provider. I recommended that we do so before the end of calendar year 2006 because of the differing contracts between the *AJ* and the *ApJ*, which stipulate that contract termination had to be given one calendar year before termination of services for the *AJ* and twenty-four months in advance for the *ApJ*. If we had waited until after 31 December 2006, we would not be able to move the *AJ* until 1 January 2009, meaning we would have to migrate all journals simultaneously.

On 29 December, I delivered the termination letters (drafted in consultation with our lawyers) to UCP, ending a very long and productive partnership with the founding institution for the *Astrophysical Journal* and responsible publisher of the *Astronomical Journal*.

The Request for Proposals (RFP)

Central to our RFP was a fee-for-service financial structure and the philosophy that the AAS seeks to produce the lowest-cost, highest-quality journals for the astronomy community. Specifically, we included the following list of critical requirements:

- a) Maintain high quality of print and online version of journals
- b) Maintain high level of interaction with all parties during copyediting/production process
- c) Expand the cutting-edge online presentation of journals
- d) Maintain high impact factors of journals
- e) Maintain low cost to authors and subscribers
- f) Process manuscript submissions in a timely manner.

The final RFP was 61 pages in length with all of the details related to the publication of our journals. The due date for responses to the RFP was 9 March 2007. Electronic responses were delivered to the assessment committee on 9 March, while hardcopy versions were distributed the following Tuesday, 13 March. A bidders phone conference was held on 16 March to allow all bidders to ask questions to clarify portions of the RFP or the RFP process. Additional questions submitted by email were answered and all answers (including a detailed listing of the answers provided during the phone conference) were distributed to all bidders as they were received. No additional interaction with the bidders took place between any representative of the RFP development or assessment committee.

Shortly before the deadline, one of the eight bidders notified me that they would not be submitting a response as they felt our publication volume would significantly alter their business structure and take focus from their core business. This resulted in seven final bidders.

Assessment of the Responses to the RFP

The assessment committee met once by teleconference prior to the RFP response deadline (26 February 2007), once shortly after the proposals were received (20 March) and in a face-to-face meeting at AAS Headquarters (27 March). Further, a subset of the committee (Marvel, Milkey, Stockman) held a phone conference (6 March) to discuss the financial analysis procedure, reviewed the financial data submitted, and developed a summary spreadsheet comparing costs of the various bidders.

During the 20 March phone conference, four finalists were selected based purely on technical merit. The finance assessment subcommittee revised the cost spreadsheet in preparation for the 27 March face-to-face meeting to include only the pricing information of the four finalists and prepared graphs comparing the costs from the bidders.

At the 27 March meeting, two finalists were selected after five hours of intensive discussions of the response of each finalist to each section of the RFP. However, the committee felt that more extensive meetings with the two finalists would be required to ultimately decide between the two. A subcommittee was chosen (Vishniac, Gallagher, Marvel, A'Hearn) to undertake meetings with the two finalists and delegated the responsibility for the final recommendation. It was further decided that AAS Journals Staff Scientist Greg Schwarz should participate in this final assessment due to his experience with the technical production and past technological developments of our journals. These visits took place on 3 April and 4 April.

Visiting the Finalists

The subcommittee felt that the differences between the responses of the two organizations could be grouped into three key areas, which are of great importance to the future of the AAS journals. Both finalists were deemed capable of producing our journals at the same level of quality as UCP. These areas of difference were:

- a) global reach/international engagement,
- b) responsiveness, and
- c) organizational size.

Each finalist had strengths and weaknesses or characteristics in each area, which will impact the future of the AAS journals. The visits to the two finalists were structured to try and probe each publisher on these issues.

Global Reach/International Engagement

The editors believe that the future for the AAS journals is in the international arena. Already roughly one-half of our authors are from outside the United States, while our subscriber base is not deeply international. Gauging the current state and commitment to internationalization and the current state of internationalization of each finalist was deemed vital.

Organizational Size

The size of the organization producing our journals has a variety of implications. In the hands of a large organization, it could be difficult to drive technology development. In the hands of a small organization, we risk swamping their production systems. In the hands of a large organization, we have a degree of safety and security as we know economies and systems of scale will secure the regular publication of our journals. In the hands of a small organization, we can drive innovation and lead our journals in new directions more easily. The editors and Publications Board Chair A'Hearn were particularly keen on testing their perceptions of the organizations from their submitted proposals with direct meetings and through asking tough questions.

The Conclusion of the Process

At the end of the two days of direct meetings, the subcommittee was unanimous in recommending that the Institute of Physics Publishing be selected as the publisher for our journals. They convinced the visitation group that they could best fulfill the three key areas outlined above and serve our journals best over the longer term.

I prepared a summary description of the process for the AAS Council and during a phone conference on April 16, 2007 the Council endorsed the RFP process and the recommendation of the RFP Assessment committee. This vote began the process of transition to our new publisher that is now ongoing.

The View from the *AJ*

The *AJ* Editorial Team:

Jay Gallagher, Editor-in-Chief
Margaret Hanson, Associate Editor-in-Chief
Anita Makuluni, Managing Editor

Changing publishers for *The Astronomical Journal* presents challenges and opportunities. The opportunities will come from working in a cooperative partnership with a publisher who supports ongoing innovation. The methods and tools of scientific communication are rapidly changing, and we want the AAS journals to remain in leadership positions by offering our community excellent ways to present their results. Unfortunately, we have had to put on hold any plans to implement additional options for presenting data in the *AJ* while publishing arrangements are being worked out. By the middle of next year, however, we plan to be back on track with efforts to make the *AJ* more cost effective while also building new tools to take fuller advantage of the capabilities of electronic publishing.

Another area of opportunity relates to the international nature of the AAS journals. Our *AJ* readers, authors, and referees

On 1 January 2008, IOP will take on full responsibility for the publication of the *Astronomical Journal* and on 1 January 2009 the responsibility for the publication of the *Astrophysical Journal* and *Astrophysical Journal Supplement Series*. The AAS has retained a Journals Manager [Chris Biemesderfer] to help with this transition and navigate the future development of our journals in partnership with our editors and publications board.

I am honored and excited to be serving the AAS as Executive Officer during this time of change. I believe we will enhance the quality of our journals over time, while being able to reduce page charges and minimize subscription rate increases. IOP has shown themselves to be a capable and dynamic organization. Manuscripts are now being accepted through IOP for the *Astronomical Journal* at [<http://authors.iop.org/aj>].

If you have any problems with our journals during this time of change, do not hesitate to contact me immediately. A special email address journals.transition@aaas.org has been established to expedite messages of concern from our author, subscriber and librarian communities. Only by hearing from you can we be sure the transition is smooth for all. Please let me hear from you.

come from around the globe and reflect the healthy growth of astronomy and astrophysics as an international endeavor. IOP already has an international base, and our partnership with them will help us maintain and increase the high quality of our journals by attracting the best science independent of where it comes from. Great ideas and new insights are not limited to one part of our planet.

Most of the challenges lie in the short term as we work to make a smooth transition from UCP to IOP. This process has multiple facets, and it will take some time before all aspects of the new system are completely smooth. While most of these issues will be "hidden under the hood" and should not affect our authors or referees, some steps in the publishing process might require a bit of extra time to complete while we are in transition. For the remainder of 2007, for example, the *AJ* editorial office will be processing revised papers at UCP and

new papers at IOP. At the beginning of 2008 we will switch over entirely to IOP. Once we are fully up and running with IOP Publishing, publication times should be further reduced from what we achieved this year at UCP.

We have received excellent service during the ten years that the *AJ* has been published by UCP. We thank the many dedicated people at UCP who contributed to astronomy through their efforts to maintain quality in the production of our journals.

Now we anticipate a partnership with IOP that will see us through a time when our scientific journals will become an organized set of information that extends well beyond the printed page. We look forward to the opportunities presented by this new venture, and as in the past with our journals we intend to make good use of new capabilities without changing our fundamental commitments to quality and service to the astronomical community.

Stellar achievement for UK physics publisher – IOP Publishing wins American Astronomical Society contract

The following is the text of a press release announcing the new AAS-IOP Partnership.

IOP Publishing, the UK-based publishing company owned by the Institute of Physics, is celebrating winning a contract to publish the flagship research journals of the American Astronomical Society (AAS).

IOP was appointed as publisher after an intensive selection process beating off strong competition from major, global STM publishers for the contract to publish the titles. The win emphasizes physics' essential underlying role in astronomy. It also demonstrates the high regard in which British STM (Science, Technology and Medicine) academic publishing is held worldwide.

Kevin Marvel, AAS Executive Officer said, "IOP will be a great partner for the publication of the AAS journals. I look forward to working with IOP to truly enhance the usability and value of our journals to the research community. It should be easier to access and use the data that our authors present in our journals. IOP will work with us to expand the functionality of the journals while maintaining their high quality."

The Institute of Physics is a learned society and professional body—as is the AAS—which means that the two organizations share the similar values of service to their scientific communities and of working for a fee-based rather than a profit-driven motive.

Ken Lillywhite, business director of IOP said, "The American Astronomical Society's journals are a crucial and well-respected resource for astronomers worldwide; I am particularly pleased that the Institute of Physics' publishing company has been awarded this contract. I feel sure that this will lead to a long and fruitful relationship between our organizations."



Top photo: EO Kevin Marvel and Director of IOPP, Ken Lillywhite, sign the publishing contract for the AAS journals.

Bottom photo: The *AJ* editorial team meets with IOP staff to plan the transition and understand the *AJ* workflow at a meeting in Chicago in April of 2007.