

The American Institute of Physics Supports the *Fair Copyright in Research Works Act*

Written Statement Submitted for the Record
House Judiciary Subcommittee on Courts, the Internet, and Intellectual Property
Hearing on: *H.R. 6845, Fair Copyright in Research Works Act*
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The American Institute of Physics (AIP) is a 501(c)(3) not-for-profit membership corporation created for the purpose of promoting the advancement and diffusion of the knowledge of physics and its application to human welfare. AIP was founded 76 years ago by five of the current 10 Member Societies to combine resources for common activities such as publishing for the physical science community. Today, AIP is one of the world's largest publishers of physics journals, and it provides publishing services for a multitude of journals of physics societies and societies in allied areas of science and engineering. AIP also provides unique products and expertise in education and student services, media and government relations, magazine publishing, employment services for science and engineering professionals, statistical research, industrial outreach, and the history of physics.

The *Fair Copyright in Research Works Act* upholds the established legal means whereby the United States protects intellectual property. The legislation is good for science, good for the U.S. economy, and it makes good legal sense.

The legislation seeks to ensure fairness in copyright protection for research works. For nearly a century, copyright protection has provided the incentive for publishers to invest in the peer-review of research prior to publication and in the infrastructure necessary to publish and distribute scientific journal articles about the latest government-funded research. Publishers have depended on copyright law to protect these works, which has aided in the advancement and integrity of science and contributed to substantial gains in medical research and other knowledge.

The legislation will prevent the federal government from diminishing copyright protections for works that are based on research funded by the federal government where a non-governmental entity has provided substantial funding or contributed a meaningful added value. The legislation will prohibit the government from conditioning a research funding agreement on the requirement that the grantee agree to make a peer-reviewed article about that research available to the public. While the government may fund the research, the government should not claim fundamental rights to the research works that have been peer-reviewed, a value-added process paid for and administered by publishers. Thus, the act ensures that the government does not undermine the copyright interests of scientific publishers, such as AIP. At the same time, the act protects the government's legitimate interest in using research that it has commissioned from an author.

For nearly a century, scientific publishers have promoted the advancement of science and the widespread distribution of scientific ideas. Every year, publishers spend hundreds of millions of dollars publishing millions of scientific articles. Scientific publishers identify, from thousands of competing manuscripts, those works that truly reflect scientific advancement. Once identified, scientific publishers incur substantial additional costs bringing draft articles into their final published forms. These costs include peer review, copy editing, layout, and design. Scientific publishers largely recoup their costs through subscription fees.

In performing these services for the scientific community, scientific publishers perform a vital service to the public. They ensure the integrity and advancement of science, identify and disseminate significant scientific findings, and manage the scientific record. Publishers inspire confidence in American research, and help contribute to our 21st century economy.

Copyright protection for publishers has been eroded due to recent government mandates, which require authors receiving federal funding to make available to the public free of charge any journal articles arising from that funding. The *Fair Copyright in Research Works Act* ensures that scientific publishers, such as AIP, enjoy the same rights to their works as film companies do to their movies, music companies do to their records, and literary publishers do to their novels. The well-established system of scientific publishing, which is based in substantial part on copyright protection, is central to the process by which scientific research is developed, communicated, disseminated, and ultimately accepted by the scientific community.

Scientific Publishers Facilitate the Creation and Dissemination of Scientific Knowledge

Scientific publishers manage peer review, as well as produce, disseminate and archive final journal articles. Peer review is the screening process used to evaluate new research proposals and drafts of articles submitted for publication. Experts in the field are used to provide feedback on proposed articles. Peer review encourages authors to meet the accepted standards of their discipline and helps to prevent the dissemination of unsubstantiated scientific claims, unacceptable interpretations, and personal opinions. Peer review specifically identifies weaknesses in scientific papers and ensures that the content of a scientific paper is both novel and substantial.

Peer review preserves scientific credibility. In fact, approximately half of all papers submitted for publication are rejected because they are not sufficiently novel and substantial. It is almost universally accepted among scientists that peer review aids the scientific process. A recent global study commissioned by the Publishing Research Consortium found that 85% of scientists believe that peer review greatly helps scientific communication, while 93% of them believe peer review is necessary.

The scientific publishing process is enormous. It includes:

- managing peer review and the editorial process;
- overseeing page layout and production;

- publishing articles in print and online;
- distributing journals to libraries and other subscribers; and
- maintaining digital versions of the articles over the coming decades.

Whether an article is read online or in print, high-quality page composition, copy editing, and the listing and linking of bibliographic and reference data must be managed. Moreover, maintaining and protecting a fully-digital archive for an academic journal requires substantial resources. Furthermore, peer review rests on a complex underlying system. AIP's journals review nearly 50,000 papers every year, with help from tens of thousands of referees. Managing this effort requires large and sophisticated electronic resources (databases of referees, their areas of expertise and current assignments, the status of papers under review, etc.), associated support personnel, and many paid editors, nearly all Ph.D. physicists (more than 150 at present).

In 2007 alone, AIP published 354,000 pages of scientific articles. Throughout the process, AIP always maintained the independence, rigor, trust, and transparency that made its journals reliable filters of information. AIP, like many nonprofit publishers, reinvests the revenue from journals in science, including scholarships, scientific meetings, grants, educational outreach, advocacy for research funding, the free dissemination of information for the public, and in technological and other improvements to scientific publishing.

Copyright Protection for Scientific Publishers Benefits the U. S. Economy

The well-established system of scientific publishing (based on copyright protection) has contributed to the prestige of American science. Within the U.S. market, science, technology and medical publishing is managed by more than 2,000 publishers who annually produce 1.2 million peer-reviewed articles. If this volume is impressive, so too is the quality of research and the impact that these publications have on society. Top-tier journals inspire confidence and spur the advancement of knowledge and its translation to applications.

The value that science brings to the U.S. economy is considerable. According to the National Science Foundation (http://www.nsf.gov/news/news_summ.jsp?cntn_id=110139), U.S. investment in research and development accounted for 5 percent of real GDP growth between 1959 and 2004, and 7 percent between 1995 and 2004. American research drives our 21st century economy, and publishing is a cornerstone of that effort.

Scientific publishers, such as AIP, rely on the reputation of their journals to compete in the marketplace. Copyright protection reinforces the motivation for sustaining managed peer review thereby protecting a journal's reputation. Publishers continue to develop options for innovative pricing, product delivery and access to meet the market's increasing demand for easily accessible, high-quality information. The emergence of new journals, publishers and publishing models signal a healthy competitive marketplace.

Scientific publishing creates jobs. AIP alone spends more than \$22 million annually on editing, producing, printing, shipping, and online hosting of its nine archival journals. We employ some

300 staff at our Melville, New York publishing center as well as more than 70 editors. Copyright protects AIP's investment in the American workers.

Copyright Protection for Scientific Publishers is Legally Sensible

The Copyright clause of the U.S. Constitution (Article I, Section 8) grants Congress power "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Investors the exclusive Right to their respective Writings and Discoveries." The *Fair Copyright in Research Works Act* upholds copyright law by ensuring that scientific publishers enjoy the same intellectual property rights as film companies, literary publishing houses and any other copyright claimants in the United States. The legislation prevents the government from taking action that would effectively amend the Copyright Act to truncate the term of copyright in scientific journal articles or effectively create an exception from copyright in such works. The legislation reaffirms the policy set forth in section 201(e) of the Copyright Act, which prevents the government from seizing a copyright that has not been voluntarily transferred.