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To: Jule L. Sigall

Associate Register for Policy & International Affairs

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From: Craig E. DeForest

## Comment:

I am an astrophysicist. I study our Sun. I frequently run across references to scientific journals -- sometimes from as recently as the 1970s -- that no longer exist. It is exceedingly difficult to get reprints from such journals, especially if none of my colleagues happens to have a copy from "back then".

Such works often embody important advances in human knowledge, but current copyright law prevents their dissemination. When scientific journals close, there is no way to know whether the copyright on the articles is released into the public domain, or transferred to someone with a genuine interest. As a result, if I (say) uploaded the article to an online reprint server (such as the ArXiv) to preserve it, I would be a criminal under current law. That is ludicrous: copyright law should enable the creation and dissemination of human knowledge, not stifle it.

This is not a hypothetical case. Recently I have had a difficult time finding reference ultraviolet spectra of the Sun. Many were collected in the 1970s using sounding rocket flights and Skylab data, and published in journals of the time --but it is difficult to find new copies today.

Similarly, I have sought (and now own a pirated copy of) the famous "Kelly finding list", a comprehensive list of calculated atomic emission lines in the ultraviolet part of the spectrum. The full title of the book is "Atomic and Ionic Spectrum Lines below 2000 Angstroms: Hydrogen through Krypton, part III (Finding List)", and it was published in the Journal of Physical and Chemical Reference Data through the American Chemical Society and the American Institute of Physics in 1987. The Kelly finding list is invaluable for identifying ultraviolet spectral lines from stars and the Sun, and is a key primary reference used by astrophysicists, atomic physicists, and anyone interested in UV spectroscopy.

The ACS no longer offers reprints of that journal, referring all requests to the AIP. The AIP doesn't offer reprints of J Phys Chem Ref D from dates earlier than 1997. There is no way to obtain a copy of this important primary reference material (a ~300 page book) without borrowing someone else's copy and photocopying it.

The Kelly finding list is a good example of a very important, if infrequently used, reference work that appears to be in danger of disappearing because its copyright appears to have been abandoned and it is illegal to create and disseminate more copies.