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letters

funded already, I believe, by their equivalent of our NSF, to build a very long baseline intensity interferometer—basically a modern version of Hanbury-Brown's pioneering instrument. With 100-km baselines micro-arcsecond resolutions are possible, in principle.

Finally with the maiden voyage of the Space Shuttle, now history, it would be remiss not to mention the possibility of optical interferometry from space. Contrary to the statement at the very end of the Search and Discovery article that "Transcontinental radio interferometry is the only technique that can resolve [the cores of quasars and radio galaxies] in the foreseeable future," space interferometers could do the job quite nicely using Shuttle-compatible instrumentation.

BEN ZUCKERMAN

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4/81

Copyright Act

For physicists, the most important consequence of the Copyright Act is the effect it will have on the transfer of scientific information from author to user. For this reason, we believe that the position advocated by H. William Koch, director of the American Institute of Physics, in his Guest Comment (November 1980, page 9), is not in the best interest of physicists. Koch's views best represent the interests of publishers.

Sections 107 and 108 of the 1976 Copyright Act contain two important limitations on the rights of copyright owners, limitations which facilitate access to published information for scholarly purposes. Section 107, for instance, allows a research worker to make a single copy of a journal article for his own use. CONTU (Commission on New Technological Uses of Copyrighted Works) guidelines relating to Section 108 (g) (2) provide for interlibrary photocopying of up to five articles within a calendar year per periodical title published within the preceding 5 years. This "rule of five" has resulted in (1) unreasonable record-keeping costs and (2) frequent delays to researchers in need of vital references. The records of academic and government libraries demonstrate that, for a given periodical, the annual limit of five copies is seldom reached (only in 1-2% of the cases) and, when it is, it is rarely reached again in the following year. Hence, contrary to Koch's assertion, requests for photocopying are not being made in lieu of journal acquisitions, nor are librarians "severely limiting" the photocopying services to comply with fair use.

Academic and government research libraries are not, nor have they ever been, engaged in large-scale systematic multiple-reproduction of journals and books, as Koch implies. User's requests are almost exclusively for *single* copies for scholarly use. We also wish to make the following observations:

► Physicists, indeed most authors, want their work as widely disseminated as possible.

► The existing guidelines have created uncertainties and much inconvenience for users and for libraries. Keeping the records necessary to assure compliance has resulted in considerable costs to scientific research libraries at government and non-profit institutions. These costs far exceed any potential revenue to the publishers. This situation is particularly unfortunate, because publishers do not seem to be much concerned with the necessarily small payments for copies made beyond those permitted by the "rule of five" that might be provided by such libraries.

► Charging high rates for photocopying is detrimental to the promotion of arts and science. It is contrary to the spirit of the clause in the US Constitution which alone justifies the Copyright Act.

► Information has become a commodity exploited by many publishers, primarily for their own benefit (for example, by their insistence that an author transfer his copyright to them, frequently without any provisions for royalty payments.) The "rule of five" primarily benefits the publishers.

► If academic and federal research libraries were exempted from the provisions of the "rule of five," they could fulfill more adequately the needs of their users without becoming "secondary publishers," as advocated by Koch.

Unlike Koch, we believe that libraries, as well as users, accept that some library services cannot be free (such as on-line computer search). We find no evidence for Koch's assertion that a schism exists between publishers and librarians. We feel that librarians have done their best to ensure compliance with the Copyright Act of 1976 and that it is not the publishers but rather the users and the authors who have been most inconvenienced by some of its provisions.

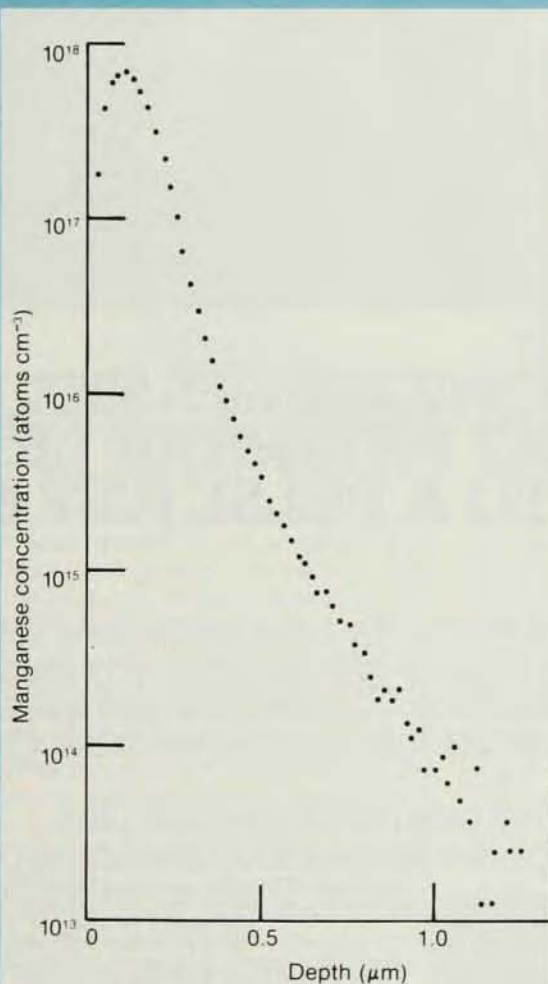
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