



The Dead Tree Strategy

It had to happen eventually, but it was still a surprise when it came. The School of Physics at Georgia Tech is adding more faculty members and there is a need for additional space. To help in this effort I am going to have to move my journals. For years I have lugged my issues of *Optical Engineering* and *Applied Optics* upstairs to a small lab where I had a scatterometer and a diffractive optics experiment. The *Applied Optics* collection goes back to Volume 10 (1971) and *Optical Engineering* starts in 1981. In addition, there are back issues of the *American Journal of Physics*, *Laser Focus World*, and *Photonics Spectra*. It's going to be quite a chore.

At this point, certain questions present themselves. Why should I keep journals over ten years old? Why should I keep any of them? The Georgia Tech library has all of the volumes in bound format. If I need a particular article, I can order it and have it in a day or two. Besides, the most recent volumes are on CD-ROM. Most recently, electronic versions of both journals have become accessible through the Web. Why not enter the brave new world of electronic information? Just ditch the whole lot? I can't!

Each year when I lug my next volume to my private stacks, I find a small pile of unfiled issues that have been pulled and used since the last time I attended to this duty. They represent a measure of my students' and my own needs for archived information. The issues can be retrieved immediately and they can be read anywhere. Also, it is nearly impossible for me to discard any journal or book. As for the newer acquisitions, I could opt to get my journals in an electronic format. After scanning the abstracts I could download in Adobe Acrobat (.pdf) format all the articles that I think would interest me. For those I want to examine in detail, I can print a copy. Thus, I get only the material I need in a form that suits my level of interest. What could be wrong with that?

Plenty. For one thing, I would not be presented with an opportunity of having to deal with the newest issue of the journal. Like the plop of a newspaper on the front stoop, the journal in my mailbox requires me to do something about it. Having announced itself, I will either drop it on

the storage pile immediately or, more likely, I will scan the table of contents. I can scan the contents just as easily electronically, but what I cannot do on-line is to put my thumb on the edge of the pages and slowly riffle through the issue. Then, serendipity, fortunate happenstance, permits me to see a figure, a phrase, or a table that strikes my interest and causes me to investigate an article that would be overlooked in an on-screen scan of the journal's contents. Perhaps when the speeds of computers and communications are sufficient, it will be possible to do an "electronic riffle." But not right now.

My electronic subscription provides me with near-instant access to the current journal and, at least in the case of SPIE, to all issues in the archive, which only goes back to the last issue of 1997, currently. But if I drop that subscription, or change to the print version, all electronic access to the journal disappears. I would have to purchase the information I could access in a previous year on a per article basis. In contrast, if I get the dead tree version, it is mine as long as I choose to keep it, provided there is space in my library.

Another possibility is that I could purchase the journal volume on a CD-ROM instead of keeping the paper copy. Both SPIE and OSA offer the previous year's journal collections on a compact disk. Thus, several pounds of journals can be replaced by a thin disk. But then the question arises: With the rapid change in computer technology, how long will I be able to retrieve those articles represented by that small pile of issues I must refile each year?

So there it is—several hundred pounds of paper waiting to be moved. My inclination is to move all the back issues into the *Optical Engineering* office that my student assistant, Maria Forrest, occupies. For one thing, the old dark blue bimonthly issues of this journal will give the office a sense of continuity with the current operation. As for the newer volumes of *Applied Optics* (I get all three sections) and *Optical Engineering*, I am inclined to let them go. I will depend on the CD-ROMs. As resource tools, the Editor and Associate Editors are given copies of the CD-ROM from the previous year. And as a result of this exercise, I have just put in my order with OSA for last year's CD-ROM.

But what should be a general strategy for managing one's personal research library? Certainly in the near fu-

ture we can choose the paper version of the journal and continue to fill our bookcases. But what if we would like to be environmentally responsible and untroubled by the search for additional shelf space by subscribing to the electronic version of the journal? To duplicate our current method of operation a few items need to be considered by SPIE publications as part of an overall strategy. I have proposed the following ideas to SPIE staff and they have agreed to implement all of these this year. Further information will be forthcoming in this journal.

1. Electronic announcements by e-mail describing the current contents of your electronic journals. This would replace the presence of a paper volume in your mailbox. OSA already has such an alerting service for its journals.
2. Downloadable pages of abstracts for a journal. It's not an "electronic riffle" at the present, but it would represent something better than just a table of contents scan. Something like this already exists in InCite, SPIE's searchable publications database. Perhaps, a listing of the appropriate URL could be given as part of Item 1.
3. Special pricing, or inclusive pricing, of CD-ROMs for those taking an electronic journal. This would

provide a "permanent" electronic record of the subscription, giving online subscribers long-term access to the content.

All of us have to manage a great deal of information these days. Formerly we could take a few hours in the periodical room of the library to look over the table of contents of our favorite journals and browse the current issues. Now with electronic journals, CD-ROMs, electronic preprints, it is a challenge to stay abreast in my field—or deal with that mountain of paper in my lab.

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Editor

In connection with the above thoughts, I would like to extend my congratulations to Joe Eberly, the editor of OSA's *Optics Express*. This all-electronic journal has just concluded its first year of publication. Featuring color graphics and animations, it represents an interesting experiment in rapid scientific information transfer. If you haven't visited its Web site yet, it can be found at: <http://epubs.osa.org/opticsexpress/>. I wish Joe and those at OSA continued success in this venture.