Wishful thinking on my part, but you may recall that in my last column I asked: Who needs to study, review, or update technical writing skills? You may also recall my answer: We all do, from the novice to the oft-published writer. Paraphrasing the great American baseball player and master of the malapropism, Yogi Berra: Technical writing is 90% perspiration, and the other half is inspiration. Let’s work on the perspiration.

If in my previous columns I failed to inspire you to examine your writing, recognize your pitfalls, and want to do something about them, then take a moment right now and answer these questions instinctively. Better yet, ask a friend or colleague who knows your writing to answer these questions about your writing.

Is your writing clear? Do you discuss all the needed topics completely? Do you write with a well-defined plan or simply sit down and write? (One way to assess this is to weigh your discussions: Are they heavy, that is, extensive, when discussing recent work and light for work done in the past, despite the complexity of the material?) Are your explanations quantitative, accurate, unbiased, and straightforward? (Or, do you indulge in qualitative discussions and sweeping generalities, such as unsubstantiated claims about the universality of your method.)

Do you write with the reader in mind? (Are you paying careful attention to logic, sequence, and usefulness?) Do you begin documents by clearly defining the problem to which you direct your work and your writing? (Or is your writing a progress report in which you leave it up to the reader to identify that which you are pursuing?)

Are your English language skills acceptable? If the honest answers arc positive, you’re excused and can read another article. If you are not sure or bravely admit some shortcomings, you should consider a tune-up.

[Aside: Before any further discussion of ways to tune-up your technical writing, I would like to briefly address the delicate subject of authors to whom English is not their first language. Beyond the suggestions I offer in my columns, writing in a language other than one’s own presents obvious additional challenges, especially a language with the oddities and nuances of English. I have thought about this a lot and have discussed it with many people. There is no easy answer, but there is a simple solution: Seek help from a native English-speaker, preferably one who is familiar with your work. Too often, as an associate editor for GEOPHYSICS, I have seen manuscripts in which the syntax and grammar had been adequately reworked, perhaps by an English teacher who, in the process, massaged the concepts. If reliable help is unavailable, then I suggest contacting the prospective journal, describing the situation, and asking for guidance. With the increase in international authorship, I would like to believe that journals are considering ways to assist non-English-speaking authors. One suggestion is to try to enlist the expertise of retired members.]

Because you have read this far, I assume that either you’ve read the rest of this issue and the plane hasn’t landed yet or perhaps you do indeed recognize that your writing skills could be tuned up. I cannot offer you a repair manual or quick tips that will have you writing like Faulkner. Let me remind you, 90% is sweat. So what can you do?

One option is to have your company call in an expert to conduct an in-house short course. I endorse this wholeheartedly and not just because I’m available. Consider also that some professional societies, such as the SEG, offer short courses at their annual meetings (perhaps this column will spark renewed interest in the SEG’s short course, which you recall has been canceling due to insufficient enrollment). Another option is to take a scheduled writing course at a local college or institution. Writing courses have become a popular offering for night schools, although caveat emptor. Those that are labeled technical usually concentrate on how to produce computer and software manuals, engineering reports, technical product advertising, and other topics of limited application for you and me. If a scheduled writing class is your choice, then I suggest contacting the Society of Technical Communication (home page: http://stc.org) or the National Association of Science Writers (http://www.nasw.org) to get their recommendations.

However, my cynical side tells me that while you may be all fired up now, you may not actually enroll or complete a course on writing. Let us, therefore, move on to Plan B, the more-convenient-not-too-disruptive-of-work-and-personal-schedule-and-easily-resumed-when-you-must-stop plan. As I see it, that leaves two resources: the Internet and books.

Ah, the (ubiquitous) Internet: The information superhighway, the supermarket of frequently poor, often atrocious, rarely edited writing a topic that I just may have to discuss in a future column. Actually I should say, Ah! The Internet: That invaluable resource for the writer looking for help, including the resources for finding someone who will examine your manuscript and give you an honest and unbiased opinion.

Because space prevents me from going into detail, I will leave it to you and your favorite search engine to cruise the Net. However, here is a short list of sites that I garnered from a wonderful book, Writer’s Internet Sourcebook, by Michael Levin (No Starch Press):

- The Craft of Scientific Writing (http://darkstar.engr.wisc.edu/alley/). A multitude of resources including a self-study course. Levin describes it as A superlative site. I agree.

- Internet Resources for Technical Communicators (http://www.interlog.com/~soltys/techcomm.html). Ample resources including online help and lists of newsgroups and discussion groups (may be a good place for the non-English-speaking author to find help).

- Technical Writing Page (http://trochwriting.miningco.com). An outstanding introduction to technical writing, many links to technical and scientific Web sites for technical writers, a resource list that includes help systems, tutorials, advice, etc. Also recommended by Levin.

Other sites that belong in your Bookmarks include:
Call me old-fashioned, but my personal choice is still books: Convenient, inexpensive, without power requirements, portable, pleasant to the touch, and they never, ever crash. Some models are still working after 500 years in use. And you can take them to the reading room (try taking your computer to the reading room and see the looks you get). I like books for self-teaching because they allow easy access to their full volume. Once read, a book is forever a resource.

For all my high praise, finding the right books may not be the easiest option. I recently strolled into a local branch of a large national bookstore chain to check out books on technical writing. I was surprised to find a paucity of choices; there were, however, a gazillion texts on writing software manuals.

Later that day I tried the Internet, specifically Amazon.com (http://www.amazon.com), a de facto search engine for texts. Doing searches on "technical writing," "scientific writing," and "scientific editing" produced more than 700 texts. This was wonderful except that I don't buy before I try.

I like to spot read, examine the index and table of contents, etc. Internet purchasing precludes that, so if you are also a try-before-you-buy person, let me save you some trouble and recommend the following favorites from my book shelf.

At the punctuation, grammatical, and syntactical levels of writing, I have three texts. First is The Elements of Style, by W. Strunk Jr. and E. B. White (Macmillan); it's renowned as simply The Classic. The New York Times calls Strunk and White "as timeless as a book can be in our age of volubility." Enough said! My other two books for these levels are The Well-Tempered Sentence—A Punctuation Handbook for the Innocent, the Eager, and the Doomed and The Transitive Vampire—A Handbook of Grammar for the Innocent, the Eager, and the Doomed. Both are by K. E. Gorden. All three books are wonderful references for those "lie-or-lay," "comma-no-comma," "what is a gerund, anyway?" questions.

At the planning-organizing-writing level, I refer to four texts. All are quite complete, dealing with the full range of topics in technical writing (e.g., text, tables, and graphics). Despite some individual weaknesses, I highly recommend them all.

First on my list is How to Write & Publish a Scientific Paper by R. S. Day (Oryx Press). Professor Day teaches technical and scientific writing at the University of Delaware. This book has been around for a long time (first edition is 1979). I like this book because the chapters are short and direct to their point. Next is From Research to Printout: Creating Effective Technical Documents, by J. H. White (The American Society of Mechanical Engineers Press). This text is the most complete of my books spanning, as the title indicates, information generation to final product. It is also the most up-to-date, including many discussions on computer software options and utilizations to aid the writer. This text also offers many illustrative examples. Number three is Technical Writing, by J. M. Lannon (Addison Wesley Longman). Like White's text, this book is ripe with examples. I like this book because its style of writing seems directed toward maintaining writing awareness in the writer. This is exemplified by the 44-item Checklist for Revising the Document given within the front cover. My last text is The Craft of Scientific Writing, by M. Alley (Springer-Verlag). Of all these texts, this is the most readable; I particularly enjoy the pithy quotation on writing that opens each chapter. Of all four, this text is the best airplane reading.

Finally, I recommend two more texts: Guide to Technical Editing Discussion, Dictionary & Exercise, by A. Eisenberg (Oxford University Press), and Rewrite Right! How to Revise Your Way to Better Writing, by J. Venolia (Ten Speed Press/Periwinkle Press). In my opinion, the real cornerstone of good writing is good self-editing—again, a possible topic for a later column. Writing gets the information on the paper or in the computer, but editing makes the document readable. These texts point out ways, means, and pitfalls of editing your document.

Well, this ends my three-article harangue on self-evaluation and self-help. In the next columns we will change directions. My feedback indicates the first two installments have been favorably received. If you have any topics that you would like me to address in future columns, contact me, and I will see what I can do.