



Professional Communication Society Newsletter

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Letter from the Editor

This issue of PC's Newsletter is noteworthy for two reasons. First, it presents summaries of two communication conferences held during September 1981: the one, of INTECOM, the International Council for Technical Communication, in Vlaardingen, Holland; and the other, of IEEE/PCS in Arlington, Virginia, USA. These are large-scale indications of the increasing importance of communicating effectively, and of the increasing attention being given to all aspects of communication.

The second outstanding aspect of this issue is that it contains contributions from five individual PC-ers: Leland Anderson corrects a misrepresentation; Jack Friedman commends a PC speaker; Larry Kercheval submits a bad example; Harry Silver shows some good examples; William Rosborough points out a fallacy; and Marvin Neiditz presents new ideas.

Moreover, an encouraging letter came from PC-er Paul Wesling, who writes *Standards and Procedures* for Amdahl (Sunnyvale, CA). As a new Associate Newsletter Editor for the IEEE Components, Hybrids, and Manufacturing Technology Society, he is interested in such professional matters as "borrowing" from other newsletter & publishing "position available" ads. (many IEEE editors do both.)

A last acknowledgement goes to Jan Broer, an editor of the *Philips Technical Review* (Eindhoven, Holland). Although not a PC-er, he has sent us full and refreshingly personal accounts of two INTECOM meetings—the one held in 1980 in Lillehammer, Norway and the one held in 1981 in Amsterdam (this issue).

Thanks you, contributors and correspondents, from the editor and the Society.

AdCom Meeting

On September 17, in a brief session held in connection with PC's 1981 Conference, PC's Administrative Committee met in Arlington, Virginia.

The six nominees presented to Society members in the July Newsletter were elected for the three-year term, 1982-1985:

Ira M. Berman
William D. Bulloch
Craig Harkins
Lacy R. Martin
Della A. Whittaker
Robert M. Woelfle

The AdCom then elected Dan Rosich and Lois Thuss to the offices of President and Vice-President, respectively. They will serve for the year 1982.

Communication Conference

PC's first Conference in several years was held September 16-18 in Arlington, Virginia. Its purpose, to provide a forum for meaningful exchange of information for and among communicators, was accomplished through the presentation of papers, workshops, and poster sessions by knowledgeable authorities.

Those who attended received Conference Proceedings that they could take away to read, but they also received the intangible, and in many ways inspiring, benefits of seeing and hearing good examples of communication. A third value of the Conference lay in the fact it made possible a

variety of personal conversations and discussions on the subject of communication—informal, small-group meetings that underscored the importance of quality in engineers' writing and speech.

Altogether, the Conference very practically supported the ideas and encouraged the efforts of those present who were convinced, or even not quite convinced, that engineers can and should develop communication skills as well as the ability to calculate and analyze.

Everyone at the Conference, and indeed PC'ers in general owe thanks and congratulations to Dave Dobson, Dan Rosich, Lois Thuss, and Della Whittaker, who made it all possible.

PC Editor Speaks to Educators

On October 20, 1981, Rudy Joenk, Editor of PC's *Transactions*, spoke as a panel member at the Frontiers in Education Conference held in Rapid City, South Dakota, by the IEEE Education Society and the American Society for Engineering Education.

In his presentation, "Talk First, Write Later," Rudy discussed how the disciplines that can help students become successful public speakers can also help them become successful writers. He further pointed out the advantages of teaching—and learning—communication skills in undergraduate engineering schools.

Jack Friedman of RCA (Moorestown, NJ), a PC-er and also a member of the Education Society, wrote to the editor of this Newsletter in acknowledgment and appreciation of Rudy's contribution to the success of the academic conference.

New PC-ers, July–September 1981

Welcome to 62 new members of IEEE/PC—28 in the United States and 34 in other countries.

Argentina	Canada	England
Greco, M. A.	Lee, T. R.	Jallo, W. D.
Hevia, O. P.	Paterson, J. T.	Pednekar, S.
Australia	Young, S. O.	Wong, N. F.
Davis, B. W.		Finland
Mank, Q. D.	Chile	Likantola, R. Y.
Belgium	Araneda, M. A.	France
Cheek, G. C.	Moreno, W. J.	Chaste, R. G.
Bolivia	Colombia	Hong Kong
Suarez, R. C.	Alvaro, R. C.	Li, R. C. K.
Brazil	Ecuador	Ireland
Kortz, P. A.	Rodriguez, P. H.	Deignan, J. T.

Israel	Capp, G. H.	Michigan
Elbaz, M.	Dolan, R. A.	Lockerby, R. C.
Nelkenboun, Y.	Lambert, J. B.	Minnesota
Korea	Gonzalez, A. H.	Lohse, T. C.
Park, B-S.	McQuillin, R. R.	New Jersey
Yang, S.	Rogers, A. B.	Lundy, R. A.
Libya	Wilson, T. H.	Meloni, A. F.
Eddeif, M. M.	Zepell, N.	New York
New Zealand	District of Columbia	Beckwith, M. A.
McQueen, P. J.	Bryson, W. C., Jr.	Buchalter, N. S.
Tang, N. K.	Illinois	Wilkening, D. E.
Nigeria	Barrett, E. W.	Ohio
Ajilogba, A. A.	Woods, L. D.	Mastrocola, A. R.
Spain	Maryland	Texas
Flores, J. J.	Hibbard, W. D., Jr.	Sedky, A. M.
Sweden	Moses, H. C.	Yusuf, Z.
Gazdik, I.	Massachusetts	Washington
Larsson, S-G.	Frevold, W. R., Jr.	Floathe, M. L.
Venezuela	Greif, I.	Wisconsin
Buitrago, H. J.	John, A. W.	Havey, M. R.
United States		
California	Mexico	
Amato, A. A.	Fernandez, G. R.	

Topical Issues Available

Two topical issues of the *Transactions* may be ordered in single copy or quantity: "Making Information Usable," PC-24/1, March 1981, \$5 each, from R. M. Woelfle, E-Systems, Inc., P.O. Box 1056, Greenville, TX 75401; and "Public Speaking for Engineers and Scientists," PC-23/1, March 1980, \$5 each, from the Editor. Other back issues can also be obtained from the Editor. Please make checks payable to the IEEE Professional Communication Society and send to R. J. Joenk, IBM Corp., Dept. 588/022, P.O. Box 1900, Boulder, CO 80302, Telephone: (303) 447-5764.

Patents

A primer for engineers and scientists on patents and patenting will be available about February 1, 1982. This 100-page collection is an *enlarged* reprint of the June 1979 issue of the IEEE/PCS *Transactions*. The new edition includes new articles on patenting man-made life forms and how to protect against and cope with patent infringement, with an update on Supreme Court decisions about inventions involving software. It is not written in legalese.

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Not only are patents a protective mechanism but they are also an underused source of technical information. The 1979 issue was widely used in both industry and the legal profession to take the mystique out of patenting and to educate and encourage would-be inventors. Our stock of that issue ran out a few months ago.

The contents of the 1982 collection are listed below. This is *not* a subscription issue of the *Transactions*.

Collection of Papers on Patents

- Patents: Incentive to Innovate and Communicate—An Introduction
- Historical Aspects of Patent Systems
- The Plight of the Independent Inventor
- Patents and the Engineer
- The Business Value of Patents
- Management Criteria for Effective Innovation
- The Right Way to Keep Laboratory Notebooks
- Good Habits Before Filing a Patent Application
- Publication, Public Use, and Sale as Bars to Patenting
- Patenting Inventions Based on Algorithms II
- The U.S. Patent Classification System
- Patents as Technical Literature
- Writing an Invention Disclosure
- Guide for Patent Drawings
- How to Read Inventions Abroad
- Patenting U.S. Inventions Abroad
- Trade Secret vs Patent Protection
- How the Courts Interpret Patent Claims
- How to Obtain Court-Enforceable Patent Rights
- Fighting Patent Infringement
- Patentability of Man-Made Life Forms

Copies may be ordered from the Editor at \$6.50 each (quantity prices available). Please make checks payable to IEEE Professional Communication Society and send to R. J. Joenk IBM Corp., Dept. 588/022, P. O. Box 1900, Boulder, CO 80302. Telephone: 303-447-5764.

Society on Social Implications of Technology

The Executive Committee of the IEEE has approved the formation of a Society on Social Implications of Technology (SSIT). The Society will supersede the Committee on Social Implications of Technology and is now enrolling members for 1982. It will work with the other Societies of the IEEE with the objective of providing:

- An open forum for the interchange of ideas related to the technology/society interface.
 - A mechanism for focusing relevant ideas developed by members of IEEE.
 - Means to encourage and support social responsibility and a professional approach to the practice of engineering.
- The Society will:
- Develop programs to explain technology to society through its publication, and through its Chapter and na-

tional level meetings.

- Foster communication among engineers and between engineers and society on needs and concerns of society and responsibility of technology.
- Encourage and publish articles related to the social implications of technology.
- Recognize service in the public interest in the profession by the establishment of appropriate awards.

SSIT intends to publish scholarly articles on the subject of engineering ethics. It is not, however, the sole IEEE body given responsibility for the development of ethical standards for electrical and electronics engineers or for IEEE members. Positions taken by SSIT will be submitted to the IEEE Technical Activities Board (TAB) and other major Boards under existing policies and procedures for approval as IEEE position papers.

Joining the SSIT provides you with the opportunity of participating in, as well as keeping abreast of, the ever expanding society/technology relationship. You can join this important new Society by enrolling with your 1982 dues payment; the SSIT fee is six dollars. If you can become active by serving on one of the committees on either a Chapter or a national level, or if you would like more information, please send your name, address, and telephone number to:

IEEE Technical Activities
Attention: SSIT Interim AdCom
345 East 47th Street
New York, NY 10017

INTECOM Meets in Holland

Jan W. Broer

On September 23 and 24, 1981, the International Council for Technical Communication held its 13th Council and General Assembly Meeting at Vlaardingen, Holland. INTECOM, and international association of technical communication societies—IEEE/PCS is an affiliate member—tries to establish a worldwide understanding of the importance of technical communication. Supporting the founding of new societies and fostering the international acceptance of good standards for verbal, oral, and graphic communication in science and technology form are the major means the association has to reach its purpose. The association was constituted in 1970 by ISTC, STI (now STIC), FTI, and STC, communication societies in Great Britain, The Netherlands, Sweden, and the United States of America, respectively. The "I" and "C" in these abbreviations stand for information and communication, of course. Only the Dutch ever confessed publicly that you have to grow from information to communication. After the first 15 years they added the communication "C" to their society's logo.

This brings me to the good reason why INTECOM met in Holland this time: the Dutch society had entered its 21st

year of existence. The jubilee was celebrated by hosting the INTECOM Board of Directors and its Executive Committee (Officers) during their annual meeting, and by organizing a floating symposium the next day, with the INTECOM brass and STIC people braving the waves on board "Kaptein Kok," the last Dutch paddle steamer. Until the early 1930's the ship sailed regularly, transporting market goods, cattle, second-class passengers (men and women) and even some first-class ones. Fortunately she did not put out to sea this time, her captain continually revising course to remain on the Y (say that in Dutch!)—the wide waters of Amsterdam harbor. All day on September 25 this boatload of technical communicators enjoyed the international get-together, supported by both water and "genever"—but do not mix them, as the Dutch hosts taught convincingly.



Fig. 1. Dr. David L. Carson leaving paddle steamer "Kaptein Kok" in Amsterdam harbor after presenting his speech.

In the morning Dr. David L. Carson, who normally directs Master's Programs in Technical Writing and Communication at Rensselaer, balanced himself carefully midship in the first-class lounge and offered a first-class opening address on the status of scientific and technical communication in America. Professor Carson estimated the number of those active in the field at 100,000 to 125,000 for the U.S.A. alone, but nobody knows for sure. Apart from explaining some sound "mechanics" for good technical writing, he sketched the main lines of career-related information pertinent to the U.S.A., as revealed by a survey of the STC-membership in 1979 (originally published by K. Clark Davis in *Technical Communication*, Vol. 27 (No. 3), p. 13, 1980). About 60 Dutch communicators—out of the 110 that form STIC—with some guests, were captured right from the beginning, because Professor Carson, treating them as a class of his own students, managed to "utter his mind in plain words and tell it orderly without going about the bush." We Europeans were pleased to find that old Thomas Wilson's words (*The Arte of Rhetorique*, 1553) had thus come home again, via

America, via Rensselaer, via our good friend David Carson.

In the afternoon Dr. Anne van der Meiden, weekday Professor of public relations and mass communication (University of Utrecht, The Netherlands) and Sunday minister of the Dutch Reformed Church, lectured on recent thinking about communication. She elaborated on the cloud of definitions for the word "communication" in a mildly humorous way that certainly befitted the occasion. With their perfect communication—at-a-distance, modern media have brought on the paralyzing reality of "unreality" in our lives. Television kills tele-action. Likewise, technical communicators are liable to kill communication. Our hide-and-seek with words should be played the human way. (All day STIC did just that, and apparently to everybody's satisfaction) The human way was also clearly present in the warm words and special gifts—an *anthology* and the *Pittsburgh ITCC Proceedings*; the technical drawings of a Viking ship; a gun of the Vasa, the Dutch designed man-of-war that capsized in Stockholm harbor on its maiden trip (1628). The gifts were from the American, Norwegian, and Swedish sister societies.

I continue this story with an informal report on the INTECOM meeting itself, which dealt with about 20 points of business in three laborious half-day sessions, chaired by tireless President Mary Schaefer (STC, U.S.A.) with able assistance from her British Secretary-General/Treasurer Ted White (ISTC) and her Norwegian Vice-President Kjell Eriksmoen (NFTI), in the absence of both the Immediate Past President and the Public Relations Officer. The first, Lars Forsslund, was unable to leave his Swedish affairs in communication, unfortunately; the second, the PR-officer, did not show up for the simple and sad reason that INTECOM has been living without a Public Relations Officer since John Kirkman from Great Britain had to leave the office in 1979, when his compatriot took the Secretary's seat. It was the unfortunate outcome of a generally good rule for an international body: no two elected officers can have the same nationality. Democracy and communication—INTECOM sticks to basics; that's what I like about them, to (mis) quote Goosemyer's dog.

The delegates present were Lars Linden (FTI, Sweden); Dennis Reeder (ISTC, United Kingdom); Erik Visser (STIC, The Netherlands); David Carson, who represented ATTW, the Association of Teachers of Technical Writing (U.S.A.), the newest member organization. In fact, ATTW was admitted under Item 12 on the agenda of the present meeting, together with JSTC and i.s.t.c. (ISTC's confusingly perfect twin logo), which stand for the newly established Japan Society for Technical Communication and the veteran (since 1966) Israeli Society for Technical Communication.

The Israeli Society, whose address is POB 32170, Tel Aviv, 61321 Israel, has a current membership of over 100. They are really pioneers; as early as 1968, when they existed as Israel Chapter of STWP (a predecessor of STC), they planned and hosted an international conference, the First International Technical Communications Sym-

posium. The 400-odd pages of the proceedings of that first truly international meeting contain 42 papers, many by now illustrious names in the field. If you happen to have a copy on the shelf, open it up again and enjoy your piece of quality antique. Much of it is very readable, even surprisingly relevant. One could easily slip a Martin Buber-based old-timer like "Editing by Dialogue" into STC's 1981 special on editing (Technical Communication, fourth quarter 1981); hardly anybody would spot the anachronism. A harmonious blend like that makes one think.

The other new member, JSTC, also reveals a highly distinguished blend; just look at this:

Their General Secretary is a Director of JMA (Japan Management Association); their second Executive Director, a Senior Executive Vice-President of JMA; their first Executive Director, a professor of Waseda University (Tokyo); their second Vice-President, the President of JMA; their first Vice-President, the President of the Sony Corporation; and finally, their President is the President of Waseda University. Another Japan Incorporated—or where do we stand when management and academe annex the field? They have already launched volume 1 of their new and good-looking quarterly Journal of English Technical Communication. Their address is Kyoritsu Bldg, 1-22 Shiba Park 3-Chome, Minato-Ku, Tokyo, 105 Japan. Both new member organizations have placed contacts with overseas organizations high on their list of objectives.

An application for membership received from the Institute of Technical Communicators of Southern Africa (ITCSA) was delayed by the Board to enable the Secretary-General to obtain further information and report on that to the next General Assembly Meeting.

The Board was of the opinion that a possible liaison with UNESCO, already proposed some years ago, should be investigated promptly by the French, ACT being closest to Paris and having already agreed to act as envoy in this matter.



Fig. 2. Delegates from Great Britain, Holland, Norway, and Sweden with INTECOM President Mary Schaefer.

On the negative side of the membership list figure both Canada and Australia; not having answered any mail from the Secretary-General for a long time, they lost their membership for default in payment of dues. A sad situation. When communication among our own crowd is required, we professionals seem to quickly get the knack of noncommunicating. By the way, how can you be sure of being a noncommunicator when you do not communicate? Pondering this logical dilemma, Canada and Australia are consoling themselves.

The statement on the finances of INTECOM given at this meeting looks reassuring if one considers the modest level of present-day activities. Nevertheless, some reinforcement is certainly desirable when plans like officially registering INTECOM's logo, handing out membership certificates, promoting international exchange programs as discussed in this meeting are to be realized. At the time of the statement the French Organization (ACT) and also IEEE/PCS had not yet paid their 1981 dues.

The various delegates reported on the ins and outs of technical communication in their home countries. Their figures concerning membership and activities appear to indicate stability to even slight growth. In some way or other, difficult economics and self-confident technical communication march together. FORUM'80 at Lillehammer, highly praised by everybody present, has inspired the Norwegians (NFTI) ever since and left them with a negative income, as Kjell Eriksmoen said. He also had an interesting observation for language teachers. In some lower-grade technical schools in Norway only 10 percent of the pupils used to join a class of Norwegian, but this figure jumped to 90 percent when recently the subject was changed to technical communication. The same teachers taught it, after some retraining (by busy Immediate Past President Lars Forsslund).

The English (ISTC) have almost 2000 members; the meetings in London are well attended, but meetings elsewhere usually form a problem. They cooperate with the Department of Education and the Institute of Quality Insurance. Three schools teach technical writing in high-intensity courses of three months duration to second-career groups in the 40-to 50-years age-bracket. The British government intends to make 1982 Information Technology Year, and, for the year after, ISTC plans FORUM'83, to be held in Bristol either May 29 - June 4 or one week earlier. "Technical Communication with the Third World" is seen as a major theme for the meeting. They are looking for other organizations to participate in the event by setting up seminars, etc. Somebody suggested interesting China; they might need a lot of technical communication in the coming years.

The Americans (STC) reported a record attendance of 940 people at their last ITCC, in Pittsburgh. Their next conference will be in Boston, May 5-8, 1982. They have an active committee (Professors Carson, Hammet, Rubens) looking into all educational programs that involve technical communication. For the last five years, research in technical communication has received considerably more weight all over the country.

By sending out brochures to various industries, the Swedes (FTI) are trying to present a new image; getting more relations with big technical companies like Saab Scania and maintaining contacts with a university have helped much to keep the members interested. Like the Norwegians, they recommended the "umbrella" set-up; that is, technical communicators, particularly in the smaller societies, benefit greatly from some liege bond between their own organization and a much bigger technical or governmental institution on the national level—which must sound familiar to IEEE/PCS people.

The Dutch (STIC) reported some increase in membership and a 20-to-30 percent attendance at their five meetings throughout the year. They complained about the lack of understanding that management and other higher echelons show regarding the professional aspects of modern technical communication. A successful medium-level course in technical writing, originally planned and pushed by their society, was transferred to an educational foundation interested in professional publicity and marketing.

Enough to end here the, I hope, continuing story of Technical Writing in Europe. Alas, this time not a word from France, neither from Western Germany nor Italy. Really, now distant is the Third World?

The Officers in session were all at the end of their first two-year term. The required voting produced the unanimous reelection of the President, the Vice-President, and the Secretary-General/Treasurer. A candidacy for Public Relations Officer had to be postponed. The Board decided to have its next meeting at the Boston ITCC in May 1982.

The Board recommended that the various member societies exchange their newsletters, journals, etc. There is a language problem here, of course; local editors were urged to ensure that at least the highlights or summaries of their publications be in English. Technical communicators like to collect good ideas, as Kjell Eriksmoen emphasized. And how could most of us when they appear in, for example, Hebrew or Japanese only?

Again the Board recommended that everybody strengthen relations with other national organizations in our wide field; for example, organizations in graphic arts, associations of industrial film makers, special editor or journalist groups, etc.

Indeed, such fraternal links at home can be a good foundation; the good roof for communication, however, cannot only be worldwide. Going home from this international meeting everybody must have so felt, and after all, that is INTECOM's communication: Communicate well!

PCS Conference, 1981

Six PC-ers are responsible for the success of the IEEE/PCS Conference on Communication with/for/by Government,

held September 16-18, 1981 in Arlington, Virginia:

Dan Rosich, *Chairman*

Della Whittaker, *Program*

Lois Thuss, *Publications and Publicity*

Dave Dobson, *Proceedings and Arrangements*

John Phillips, *Finance*

Arne Aukland, *Registration*

Brief summaries of some Conference presentations follow.

The Engineer as a Communicator

Robert Fischell, The Johns Hopkins University Applied Physics Laboratory, Laurel, MD

Good communication leads to cost effectiveness and efficient productivity; these stimulate technical vitality, and new techniques make better communication possible. Examples of new communication techniques: word processing; video teleconferencing; electronic voice-recognition and synthetic speech; magnetic bubble memory; programmed implantable medical systems whereby a patient can control an artificial pancreas, for example, according to a doctor's program and the doctor can communicate directly with the implanted organ according to verbal reports of the patient's "condition."



Robert Fischell, Johns Hopkins University Applied Physics Laboratory, keynote speaker at PCS Conference, 1981.

Selecting the Right Visuals for the Audience

Deborah C. Andrews, Drexel University, Philadelphia, PA

Use visuals to establish a thesis, emphasize a point, clarify a concept, provide continuity, increase interest. When designing visuals, keep them simple, avoid inappropriate redundancy, be consistent, use parallelism (that is, express like ideas in like structures), check arithmetic and spelling.

Humor in Technical Publications

James P. Gleason, IBM, Lexington, KY

Humor can be used in many ways to lighten heavy

technical material: odd names for companies (Acme Widget, Fly-by-Night Freight); unusual approaches to instruction ("finger practice" at the computer terminal, text-editing exercises like "Thus is my fist typing experience"); *How to Keep Your Volkswagen Alive* and *Poor Richard's Rabbit Book*; *The Journal of Irreproducible Results*.

Satellites as Communication Media

Lawrence P. Grayson, National Institute of Education, Washington, DC

One effect of satellites has been to make us think not only about the why and how of communication but also about the when, where, and to whom. Aspects to consider are the use of satellites in "standard" broadcasting, telephoning, and cable television; satellite networks (for business, religion, education, etc.); "private" direct-broadcast satellite used for video-teleconferencing and data transmission.

Protection of Private Satellite Communications

Edward Henneberry of Howery & Simon, Washington, DC

Consider legal protection for "creative" communication. Laws made in the 1930's are being used—unsatisfactorily—to protect satellite communicators. Now-available dish antennas can receive private as well as public signals. Therefore, if you use a satellite, be careful.

Engineering Models Enforce the Message

James Mahoney, Smithsonian Institution (Exhibits), Washington, DC

Thought and decision-making are involved in the production of Smithsonian models made as prototypes for practical projects as well as illustrative display. Among recent models are those of the lunar excursion vehicle, the Saturn probe camera, a synthetic swiss-cheese-on-rye sandwich for a food display, and a 6-foot pterosauria, forerunner of the 40-foot reconstruction that now hangs from the ceiling in the National Museum of Natural History.

Communication in Three Dimensions

Bernard S. Finn, Smithsonian Institution (History of Science and Technology) Washington, DC

Objects provide direct physical evidence, functional or

aesthetic, and provoke emotional response. An object used as a vehicle for communication should relate in some way to what is familiar to the viewer and at the same time should embody some element of "newness" to stimulate interest and curiosity. Words are also necessary, however—information and description that will enable the viewer to understand the object's complete message.

New Technologies in Communication

John Cox, National Society of Professional Engineers, Washington, DC

So far in this century, the period from introduction to full public acceptance of communication technologies has been about 13 years: consider the cinema—black-and-white, color, sound; or radio, and television. This lag may decrease, however, because of recent exponential technical growth. We receive more information in a day than our grandparents received in a month, and it comes to us in forms unknown to our parents: news by television and cable systems, filmless cameras, technical services and corporate information in video, fiber optics, "electronic magazines."

Patents and Inventions

Kenneth E. Krosin, (Howrey & Simon), and Kenneth R. Allen, (Townsend & Townsend)

Krosin: To protect themselves, engineers and scientists should understand patent laws and communicate with patent lawyers. They should know what types of things are patentable and what are not, and they should know what kind of information patent applications must contain.

Allen: How to lose patent rights—ignore the law and legal advice; neglect new developments; don't discuss your work or record anything about it; ignore the contributions of others and disregard your audience; force your attorney to work; publish or sell your invention before you apply for a patent; use long words and confusing language in your application; delay taking any action as long as possible.

Ownership of Copyright

Patricia H. Penick, IEEE Public Administration Services, New York, NY

Papers published in technical journals are most useful when their copyrights are held by the journal publisher. He can maintain consistent reprint and republication policies, make possible legitimate copying that would otherwise be prohibited, and collect copying fees as appropriate.

Patent Classification in the U.S.

Kendall J. Dood, U.S. Department of Commerce, Washington DC

Engineers in the U.S. Patent and Trademark Office classify patents for storage and retrieval according to function rather than structure and in decreasing order of comprehensiveness. Patents are grouped and coded into subclasses that are carefully defined and listed in "schedules."

Political Influence Starts at Home

Benjamin J. Leon, University of Kentucky

There are three paths to political influence—be part of the organization, be known, and be present. These paths are useful whether you want to take part in professional lobbying for a group, in public demonstrations, or in efforts to influence elected officials through personal contact. In any case, start at home, on a "grass-roots" level.

How Engineers Can Affect Legislation

William G. Harrold, IEEE Public Affairs, New York, NY

The ability of an organization to influence the U.S. Congress can be expressed by an equation:

$\text{Power} = (\text{Resources} \times \text{ability to use them}) - \text{resistance}$.

The resources of an organization are its money, size, nature and characteristics, and level of staff involved. The organization's ability to use its resources depends on its internal decision-making and the intensity of its commitment. Resistance can be of two kinds: internal (pressure from other interest groups, existence of federal agencies, Congressional opinion) and external (size of groups involved, lack of interest, bureaucratic decision-making).

Enhancing Communication Among the Technical and Engineering Staff

P. L. Morowetz, EMPI, Inc; J. Hartlaub and F. Wibel, Medtronic, Inc.

In a high-technology firm characterized by geographical and organizational dispersion of technical personnel, cost-effective self-governing technical communication association has been operating successfully for three years. Independent of management but compatible with management goals, it provides a forum for discussion, learning, and recognition of accomplishment.

How to Communicate with Your Resume

Richard J. Backe, Sperry Systems Management, Greenbelt, MD

Design your resume as an advocacy tool for getting an interview. Don't write an archival document, biography, inventory of skills, or proposal for contract. Do give information about academic degrees, experience, present position, geographic preference, citizenship, present salary, and job goals. Stress your strong points; save details for later.

Planning Documents to Make Information Retrievable

Robin Battison, Janice Reddish, and Joanne Landeswan, American Institutes for Research

Reading and writing are engineering problems that involve assessment, planning, and integration. Writing, especially, is a process for which purpose and action must be defined before work is begun. That is, before you write a document, be sensitive to what readers will have to do to read it—consider their needs and circumstances.

Documentation should involve three steps:

1. *Pre-design*

Consider scope, purpose, nature of audience, desired audience action, and constraints of documentation.

2. *Design*

Consider content, organization, language, and graphics.

3. *Post-design*

Review, revise, edit, evaluate, re-design if necessary.

Preparing Effective Proposals

H. Lee Shimberg, Communications Consultant, Arlington, VA

Slant proposals to the associated requests. Use a matrix to identify personnel responsible for functions and sections of the proposal document. In the proposal,

1. State the problem to be solved or describe the service to be provided.
2. Explain how you can solve the problem or provide the service.
3. Show that you are qualified to do what you are proposing.
4. Rewrite, professional resumes specifically and consistently for each proposal.
5. Present the entire proposal, including resumes, professionally and flawlessly—error-free typing, easy-to-read type, impeccable spelling, consistent punctuation, easy-

- on-the-eye format.
6. Write an executive summary last and place it first.

Public Relations and the Engineer

Ronald M. Beurey, Westinghouse Electric Corporation

Engineers in large corporations can advance their careers in three ways:

1. Produce documents that show their technical competence—informal memo to superiors, paper delivered at IEEE Section meeting, etc.
2. Write bylined articles for trade magazines.
3. Obtain and act on information about the corporation's problems and objectives.

Writing for Audiences in County and City Governments

Robert W. Kelton, North Carolina State University

Government personnel who receive technical reports are intermediates. They must translate engineers' information into terms acceptable to administrators and commissions. Therefore engineers who write for government should understand the translator's position and try to simplify his problems: first, be familiar with Consent Item, Agenda Report, and Resolution (the basic forms of local government report writing); and second, write prose that is in keeping with the spirit of the Plain English Movement.

Writing Journal Articles for the Hungry Engineer

Robert W. Garver, U.S. Army Harry Diamond Laboratories

Busy engineers use high-speed scan methods to choose articles for study. Authors should structure papers that are easy to scan and attractive to scanners:

1. Short titles with key words.
2. Clear, informative figures.
3. Short, exact abstract.
4. Smooth-flowing text.

Do Professional Associations *Really* Talk to Their Members?

Charles E. Waterman, Hampton, Bates and Associates, Arlington, VA

Five barriers to communication:

1. Overlooking or forgetting the needs, attitudes, or circumstances of the reader-audience.
2. Sending a multiplicity of messages.
3. Sending the same message over and over again.
4. Copying others—not being original.
5. Not using the best words and illustrations for a particular purpose.

Press Releases with Punch

Gerre Jones, Gerre Jones Associates, Washington DC

News releases must be timely, local, brief, informative, and written according to high standards of usage. Steps in organizing:

1. Outline.
2. Write 35- to 50-word paragraphs.
3. Check spelling and figures carefully.
4. Be sure the lead sentence is short and "catchy."

The Engineer as a Communicator on Public Policy Issues

Milton F. Lunch, National Society of Professional Engineers

Engineers can influence legislation and public policy through direct personal contact with lawmakers, preparation of sound testimony, careful explanation of issues and positions to professional associates, "grass-roots" follow-up, use of print media to expound positions and gain understanding of goals.

The Engineer and Public Policy on Technology

Leo Young, Naval Research Laboratory, Washington, DC

Engineers, as engineers, should attempt to influence public policy. They should

1. State issues clearly.
2. Be well informed.
3. Speak to the audience's point of view.
4. Be frank, truthful, considerate, constructive.
5. Present alternatives, not advice.
6. Present facts, not solutions.
7. Remember that even engineers can be mistaken.

Conducting an Effective Technical Meeting

Annette Shelby, Georgetown University, Washington, DC

Conducting an effective meeting is a matter of process rather than content. The leader should define the purpose of the meeting and plan accordingly. Is the meeting being held to give or to get information, to solve problems, or to obtain reaction? How can group cohesiveness be developed? How can leadership style and strategy change to meet specific situations? The leader should also create an atmosphere that will encourage constructive participation and provide honest feedback.

Improving the Effectiveness of Business Meetings

Ron S. Blicq, Red River Community College, Winnipeg, Manitoba

Participants as well as leaders should contribute effectively to office meetings. Leaders should prepare an agenda, preside at the meeting, manage and sum up discussions. Members should come prepared, speak briefly, keep quiet. Secretaries should record important facts, results, conclusions, and decisions; exact wording of important motions and names of proposers; what is to be done and who is to do it.

Bulldogging the Mavericks—Managing the Engineering Writing Process

James W. Hill, HRB-Singer, State College, PA

Engineering writing is a process that involves the author, his supervisor, higher management, communication professionals, and "outside groups." Above all, management should constantly reaffirm its commitment to good communications, through words and actions.

How to Prepare a Management Presentation

Donna Pond, AHRD Associates

Prepare a presentation in four critical steps:

1. Analyze your audience.
2. Establish your purpose.
3. Do your homework.
4. Organize your notes.

Your purpose in making a management presentation will probably not be to entertain. Decide on one of the other three traditional purposes and choose a single approach, with its appropriate format, as your "leading card":

<i>Purpose</i>	<i>Approach</i>	<i>Format</i>
inform	ethos (credibility)	impromptu
convince	pathos (emotion)	extempore
inspire	logos (logic)	oratorical

Use one element of guidance from each column to develop an interplay of purpose, approach, and format that will make your presentation effective for a particular audience. Then—you are the expert!—organize your material into Introduction, Body, and Conclusion; develop professional visual aids and rehearse the "act;" and speak in full control of the situation.

What Times What Equals What?

by
William C. Rosborough

In reading magazines and newspapers, I find a significant number of articles containing statements equivalent to saying that a certain value is some number of times greater than another value. A general example is: *A* is *Y* times greater than *B*. As I see it, if *A* is *Y* times greater than *B*, then $A = B(Y + 1)$. Thus, if *A* is 7 times greater than *B*, then $A = B(7 + 1)$, or *A* is 8 times as great as *B*.

This same kind of information is broadcast by news commentators, and by one in particular, whose newscast starts at noon, six days per week, through one of our local radio stations. He invariably avers that *A* is *Y* times greater than *B*.

An interesting example appeared several years ago in a magazine article about a federal energy research and development budget. One statement said, "This legislative enthusiasm has been translated into an energy R & D budget of nearly \$3 billion this fiscal year, a figure five times higher than five years ago."

Now, if we consider much smaller dollar amounts, \$200 is *one time greater* (or higher) than \$100, as I see it. But \$200 is *two times as great* (or as high) as \$100. Then, when we are looking at billions of dollars, if \$3 billion is "five times greater (or higher) than the level of five years ago," the five-years-ago amount must be \$500 million or 1/6 of \$3 billion. But, if the author of the article meant what I correctly guessed he meant, then the five-years-ago amount is 1/5 of \$3 billion, or \$600 million. The difference between \$600 million and \$500 million is too much money to be uncertain about, even for a DOE budget, at least where my tax money is involved.

I believe that, in almost every case, the person who says or writes that a given value (*A*) is a certain number of times (*Y*) greater than some other value (*B*), intends to mean that *A* is *Y* times as great as *B*. Any doubt as to the intended meaning can be removed by saying that *A* is a certain number of times as great as *B*, or simply by stating the actual numerical values for *A* and *B*.

To some readers this entire matter may seem to be of no import. But, if the foregoing example of a \$100 million difference in possible meaning is considered, then maybe this little essay has some merit.

A bulletin received by mail just a few days ago contains the following: "New line of copper shingles can be installed up to four times faster than a conventional standing-seam copper roof." Does this mean up to four times as fast, or up to five times as fast? It probably means that the copper shingles can be installed in one-fourth the time required for installation of a conventional standing-seam copper roof.

Another advertisement says that a certain manufacturer's light bulbs have "4 to 6 times longer life." What should the purchaser think? What does the vendor mean?

Tesla vs. Marconi

Leland Anderson, a Senior Member of IEEE, formerly associated with the Colorado School of Mines Research Institute and now an independent consultant, sends the following comments on the article about Marconi and wireless telegraphy that appeared in the April 1981 issue of PC's Newsletter:

One would think that by this time the myth of Marconi should long since have passed, but it has not, despite the fact that a U.S. Supreme Court decision of 1943 stripped Marconi of the "fundamental radio patent" claim. The piece in the Newsletter contains a lot of tender reminiscences that are rather out of place.

Let me quote from the Transcript of Record, Supreme Court of the United States, October Term, 1943, Marconi Wireless Telegraph Company of America vs. United States (deposition taken June 17, 1913):

Q.: "In your patent 627,650, you say, at page 1, line 32: 'It is desirable that the induction coil should be in tune or syntony with the electrical oscillation transmitted.' 'Notice the words 'the induction coil in tune or syntony.' What does that mean, except that the two members of the induction have the same time period?"

A. (Marconi): "It does not mean that there, at least I do not think it does, because I didn't know it at the time that this specification was filed."

Q.: "What is that date?"

A. (Marconi): "That date was the 5th of January, 1899."

Q.: "In 1899 you didn't know it?"

A. (Marconi): "I didn't know that it was necessary to tune the two circuits of the receiver or transmitter in order to attain those effects."

With regard to the letter S, let me acquaint you with two interesting observations:

In the *Wireless World* for April 1974, W. J. Baker writes (after a careful examination and laboratory testing of identically constructed devices and apparatus that Marconi used):

"Now, after over 70 years of speculation comes a startling theory, namely that Marconi did, after all, receive the Poldhu signals; not as he believed, on the fundamental frequency, but via a harmonic at H. F. This is a theory which, to my knowledge, has been privately expounded for some years by Mr. G. R. M. Garratt, formerly of the Science Museum and a well-known authority on telecommunications history."

Robert H. Marriott, first President of the IRE remarked (in a deposition taken March 26, 1925):

"Insofar as Marconi's claim of getting the letter S across the Atlantic, which, I believe, was the first incident claimed, I have always been more (or) less lost as to what to think about it, because (at) very nearly the same time I made daily experiments with the coherer receiver on the Atlantic coast, and got such multitudes of dot-letters, letter S by the hundreds, two-dot letters in greater numbers, and one-dot letters in still greater numbers."

In spite of all this, some continue to revere Marconi because of his commercial success. Now, what are we honoring—technical creativity or commercial exploitation? Tesla did not successfully commercialize radio, but I do not believe that brilliant creativity must necessarily also be expected to embrace political cunning and business ruthlessness.

A new biography of Tesla is soon to appear (Prentice-Hall, Inc., Oct. 1981) which includes an examination of the behind-the-scenes panoply of events in the drama of the invention of radio. I recommend it.

With these comments was a monograph prepared by Leland Anderson for the Antique Wireless Association. It closes by quoting this appreciations, written in 1917 by J. S. Stone, an early worker in the field of radio:

"Nikola Tesla's almost preternatural insight into alternating current phenomena enabled him...to revolutionize the art of electric power motor. [He] knew how to make resonance serve, not merely the role of a microscope, to make visible the electric oscillations, as Hertz had done, [but also] the role of a stereopticon...He did more to excite interest and create an intelligent understanding of these phenomena...than anyone else.

"It has been difficult to make any but unimportant improvements in the art of radio telegraphy without traveling, part of the way at least, along a trail blazed by this pioneer, who, though eminently ingenious, practical, and successful in the apparatus he devised and constructed, was so far ahead of his time that the best of us there mistook him for a dreamer."

Use of Communication Professionals in the Engineering Design Process

Marvin M. Neiditz

As increased computer use is changing many traditional engineering tasks, this new technology is changing the traditional roles of the technical documentation department to include new tasks. One development is the use of the communication professional in the design of computer-based systems.

Computer-based systems are defined as those devices that use a computer in their operation and require an operator. The computer may be as large as 360/370's in tandem or as small as single-chip microprocessor devices. Major-size systems are used in power, communications, process controls, avionics, and military or space technology. Commercial products include household appliances, office machines, industrial controls, medical/scientific equipment, and automobiles.

The traditional outputs of the documentation department include:

- proposals
- manufacturing documentation
- operation and maintenance manuals
- training programs
- advertising

form, fit, function, cost, etc., the choices of communicating devices are many. Analyzing the communication problem of *what* is to be presented by the system and to *whom* it will be presented can lead to results that make a superior product. As an example, an industrial process originally had a proposed VOLUME GAUGE. Upon analysis of exactly what the message was and to what level the operator was actually working on the equipment, the final design used a "TANK FULL" message in red LEDs.

Equipment names and control design or placement contain a basic communication task. The tech manual writer and the training specialist all too often are faced with the problem of making nonhuman engineered devices intelligible. Early use of their skills in the design process could result in superior products and cost-effective use of their time.

The message that the system presents to the operator is a direct area where the writer's skill can be used. Because of his direct application of the Reader Rule, the writer knows how to investigate and analyze who the reader will be, what the reader (operator) can comprehend, and what "buzz" words should be used in a particular application. Truck drivers talk differently than fighter pilots. The writer's skill in the Use Rule can confine the computer-based instructions to the main function without overlapping or confusing statements. His experience in Organization and Style will add to the design input to make the display intelligent. I have seen circumlocution, ambiguity and, yes, even verbosity in LED displays. These traditional documentation tasks can be broadly defined as TRANSLATION. The communication professional takes existing data and refines them into documents based on the needs of the user and written at the reading level of the user.

The communication professional can add substantial input to the design process of computer-based systems. The most important area is that of human-factor engineering. This can be most effective in projects where system operation utilizes operator input, system-to-operator displays, or automatic maintenance or fault localization procedures. The writer's professional training and experience in this particular facet of human-factor engineering—COMMUNICATION—can be an important resource in the

design process. The following paragraphs detail specific design problems.

Basic Design: Precise definitions, clarity, and good organization of proposals and functional specifications can result in software (programs) that does the intended job. Using the writer early in the design process also gives the writer an opportunity to better understand the system and also gives him time to research areas of interest.

System-To-Operator Communications: As previously mentioned, it is in this area of communications that the writer input can be most important in specifying equipment, within the engineering limits of Operator-To-System Communications. Again, the basic function—communication—should utilize the communication professional. Within the engineering parameters, the human factor of feedback may have a considerable input to equipment choice. I'm sure we all, at one time, have been upset using a simple hand calculator that had no tactile response. A question might be, "Does an operator at a console need a feedback from the value that he has just opened, located 4 miles away?" Is there really a need for a full keyboard or does the skill-and-training level of the operator demand lit function keys, switches, or even voice-controlled devices?

The operator response message needs to be tied to the communication Reader and Use rules. Is the device to be used by highly trained personnel or by the general public? Should the operator be able to check his response before actually reading it into the system (an ENTER key)? How will this new procedure differ from the procedure to which he was accustomed? In all of these communication areas, the writer's skills can be utilized early in the design process.

By using the writer in the design process, computer-based systems can be built with better human interface and can be more marketable and thus more profitable.

Consultants Needed

The MGI Management Institute, Larchmont, New York, is looking for consultants to develop a series of review questions to help prepare individuals for the Professional Engineering License Examination in civil, mechanical or electrical engineering. The questions will be used as part of three correspondence courses to be offered by the National Society of Professional Engineers.

Using existing review manuals as a guide, the consultant will prepare a series of review questions for the student to answer and send in for grading and comment. The consultant will also provide sample solutions for these questions. Payment terms to be negotiated.

For further information, write to Gerard Cunningham, Vice President, MGI Management Institute, 2 East Avenue, Larchmont, New York 10538.

Free-lance Writers

The MGI Management Institute, Larchmont, New York, is seeking writers/editors to develop continuing education correspondence courses for engineers and architects. Subjects range from managerial areas, such as project management, to highly technical subjects such as microprocessor software.

The writer will edit transcripts of live seminars or work with a content expert in recording course content on audio tape for transcribing and editing. Payment on a project basis.

For further details, write to Gerard Cunningham, Vice President, MGI Management Institute, 2 East Avenue, Larchmont, New York 10538.

The Loquacious Bookman

The following three letters are the last available from our friend, the too-friendly bookseller.

Be An Editor—VII

Again our friendly bookman "goes overboard." His wordiness is almost unbelievable.

To an author who wants to have his manuscript published:

I'm appreciative of your letter of Feb. 28th but regret to say that we're not a publisher in the full sense of the word and rarely if ever handle any publications from the original manuscript. Almost all of our publications are reproductions by offset from early governmental and other materials published many years ago.

Even this type of publishing has come almost to a halt over the past 3 years during which time we have moved three bookstores. We hope to get our publishing back moving again although we're still struggling from the financial problems of so large a move.

There are many publishers of agricultural books who I'm sure should be interested in your publication.

In order to give you a better idea of what we have been doing, I'm sending under separate cover a circular describing our line of publications. I also enclose a circ. describing our big move.

We appreciate your calling this matter to our attention and regret that we're unable to be of assistance.

Be An Editor VIII

What is our friend the garrulous bookman trying to say in this letter? He may have confused the lady so completely that she sought out another dealer.

To a lady who wants to sell her collection of old maps:

Far too much time has elapsed since my wife and I visited you and picked up your collection of old maps for appraisal and sale. One emergency after another has come up since then which has made it almost impossible to find the time to research and evaluate your maps.

We have been working with your maps lately and hope to have a report available soon as to their possibilities. Our financial position has improved somewhat since last fall, and since so much time has elapsed, we might at this time consider the possibility of buying your collection outright. While it is true that we might in the end realize more money for you over a six months to one year basis, getting money out of your maps immediately might appeal to you.

The most we would consider paying for your collection at this time would be \$850.00—spread over a long period it would no doubt be somewhat more.

Consignments do drag on. Some items move quickly, others fail to move. One large collection of maps has taken us three years to move and we still have 5 items left. Anyway, this does give you an alternative. If you are still desirous of the longer approach to their sale please advise.

Both my wife and I recall with pleasure our visit with you at your fine apartment. Again, I express my regret at the tardiness of this reply.

Be an Editor—IX

The garrulous bookman tries to collect a "bad debt." To a delinquent customer:

Our credit manager, Mr. Miller has called to my attention that you still owe us the sum of \$307.36 on which nothing has been paid since October.

Our bank continues to pressure us on all back-due accounts. We still owe a fearful amount of money due to the expense of our moving 3 bookstores over the past 2 years and hope that you will forward us your check promptly for this full amount.

Your patronage as a customer has always been appreciated. We must insist that accounts with us be kept current. Please let me hear from you at once.

Communicate!

Members of the scientific community and the engineering professions have failed to help the other 98 percent of the population who are nonspecialists to grasp the technical foundations of modern life and the associated threats to survival. Some of the difficulty arises from cultural isolation of the scientific and engineering communities.

One antidote lies in a more systematic exposure of the nontechnical majority to issues that concern society generally. Special attention should be given to persons whose lives seldom intersect those of the technical aristocracy, and whose consequently remote concerns and dreams are alien and expressed vicariously, if at all.

When the technical community recognizes that it must ad-

dress the stark questions of who wins, who loses, and how much is lost, it may also recognize that consideration of these questions of cultural, psychological, and operational effects requires a kaleidoscopic blend of technical with social knowledge.

This recognition surely will widen the perspective and enrich the sense of value needed to inform all judgments that the technical community is called upon to make on technology-intensive public policy.

—Edward Wenk, Jr., Professor of Engineering and Public Affairs, University of Washington. Adapted from IEEE/AESS Newsletter, September, 1980.

Designing Forms

"Strategy and Tactics in the Design of Forms," by Patricia Wright. *Visible Language* XIV, 2, pp. 151-193, 1980. One-year subscription, \$15.00; single copies \$3.00: Box 1972 CMA, Cleveland, Ohio 44106.

Patricia Wright, a psychologist at the Applied Psychology Unit of Britain's Medical Research Council, was one of the first language professionals to take a serious interest in research related to the design of public documents. Her recent article, "Strategy and Tactics in the Design of Forms," is the substance of a paper presented at the NATO conference on Visual Presentation of Information held in the Netherlands in September 1978.

This article surveys research literature that relates the design of the form to the difficulties that people have in filling out the form. Wright analyzes the complexities of the problem of designing adequate forms, discusses approaches to solving the problem, and proposes a cooperative interdisciplinary approach. Although specific research findings are summarized at length, the heart of this article is a philosophy of form design.

Wright sees two basic categories of form designs: those that are relevant to many kinds of form and those that are specific to particular kinds of form. The first category concerns formats, such as "yes/no" or "multiple choice," or different ways of recording answers, such as checking boxes, writing "yes" or "no," filling in blanks, and circling or deleting options. The second category concerns interpretation of terminology; for instance, what do terms like "income," "dependent," and "family" mean on a given form?

Wright also distinguishes between the "strategist" and the "tactician." By "strategist," she means people doing relatively theoretical research in fields like psychology and linguistics. By "tacticians," she means people who work with forms in "real-world" settings, who must respond to practical problems as they arise in relation to specific forms currently in use.

She points out that although there is much research of value to people who must design forms in government or private settings, designers must beware of using research findings as "recipes" for designing individual forms. They must

always be aware of contextual issues that may be specific to individual forms—realities that cannot be accounted for in laboratory settings. Examples of these are limitations in the budget for a form, or what the form-producing organization knows about the characteristics of the audience the form will address.

Wright points out that the "strategic researchers" tend to be psychologists, while the "tactical decision makers" tend to be graphic designers; the two groups do not always communicate adequately. She believes that the ideal solution to problems in form design lies in coordinating the skills of "multi-disciplinary teams" consisting of experts in subject matter, graphics, behavioral research, and writing. Although such teams can be expensive, she argues that they are ultimately cost-effective, because of the cost-savings involved in making forms more effective. The research that she discusses throughout the article supports this assertion.

She points out that in the United States, more than 500 million Federal forms are filled out every year. An error rate of 5% would mean that 25 million forms had mistakes on them

If good design can reduce an error rate from 5% to 3%, this may sound trivial in percentage terms but it represents 10 million forms which do not have to be mailed back to the form-filler for correction and then reprocessed when they are returned.

Many Federal forms have error rates much higher than 5%.

Wright's article includes many research findings and bibliographic references that are valuable to the working document designer—for example, Wright and Barnard's comparisons of the amount of time it took subjects to fill out a form with a certain layout and the amount of time they thought it would take. As a summary of the important research in document design up to 1977 that has particular relevance to forms design, and as a source of strategies for the future, Wright's article is extremely rich and valuable.

Reprinted from "Simply Stated" (May 1981), monthly newsletter of the Document Design Center, American Institutes for Research.

Eschew Obfuscation

PC-er Barry Kercheval of Plantronics Zehntel (California) sends a "horrendous description" of ATLAS, a computer language used to program tests of electronic equipment. He fears that this "deliberately contrived" monstrosity doesn't strictly qualify for the noun-cluster contest mentioned in a recent issue of this *Newsletter* but hopes that readers will find it amusing anyway.

No doubt they will. They will also find it astonishing, even if they stop after "reentrant processor," where the Fun begins to get Serious. Try it:

ATLAS is a binary digraph-driven, multi-table-structured, segmented reentrant processor utilizing multiple externally-

generated data bases, a hashed-symbol table mechanism and a dynamic virtual-storage allocation scheme lexically scanning non-recursive context-dependent procedural syntax and producing an algorithmically-derived macro-emitted object code residing in an automatically-configured, multi-volume, extended file system and executable via a master control file.

Apposition

PC-er Harry Silver of Data Rand Corporation sends a 71-word comment that appeared in the *Minneapolis Tribune* (October 21, 1981). As a sentence, it is far too long to be followed easily; but as a set of appositives, it is Great Stuff. Note

one of our senators, Rudy B.
Saudi Arabia, a country...
Anwar Sadat, one of...
Idi Amin, a dictator who

The whole specimen follows:

All Minnesotans can take pride in the fact that one of our senators, Rudy Boschwitz, has taken such a strong stand against our providing sophisticated military equipment to Saudi Arabia, a country whose government has refused to express regret over the death of President Anwar Sadat, one of the world's great men of peace, but has offered sanctuary to Idi Amin, a dictator who has murdered possibly thousands of his countrymen.

Style

Style: Ten Lessons in Clarity and Grace, by Joseph M. Williams. Scott, Foresman, and Company, Glenview, IL 1981. Hardbound, 238 pp., \$8.95.

Joseph Williams is a distinguished professor of English and linguistics at the University of Chicago who has done extensive research on clear and effective writing. For the past several years, he has also consulted about writing with government agencies, businesses, and academic institutions. These strands of interests and experience come together to inform *Style: Ten Lessons in Clarity and Grace*. The word "lesson" in the book's title is characteristically well-chosen and precise, for as Williams says in his Preface, "The tone of this book is strongly prescriptive. Its lessons will tell you in a straightforward way how to write clearly." By "you," he means those who write on the job, students, and teachers.

Aside from his opening lesson, in which he presents a brief analysis of the reasons for bad writing (the problem of an unnecessarily complex style) and the reasons for moving to a style that is direct, clear, and even a bit elegant, Williams organizes the lessons, he says, as if he were editing his own prose. In lesson 2, "The Grammar of Clarity," he concentrates on his "first principle": expressing actions in verbs and putting the agents of those actions in verbs and putting the agents of those actions in subjects. For Williams, this practice is the heart of a clear style and violating it accounts for the difficulties readers have with passives (in par-

ticular, the "institutional" passive), nominalizations, and compound noun phrases.

This lesson, as the others which follow, presents useful exercises for which Williams provides his version of "correct" answers in the back of the book. In Lesson 3, he addresses the sources of and solutions to wordiness. In Lesson 4, he discusses excessively long sentences, and in Lesson 5, he takes up the problem of making long sentences clear and fluent—the principles of emphasis and cohesion. Lesson 6 focuses on making sentences hang together, producing writing that is cohesive and coherent.

Lesson 7 reviews Lessons 2-6 in the context of two problems: writing for an audience that is able to understand only the clearest and simplest language, and writing on a subject so complex that even competent readers need a direct, explicit message. Lesson 8, "A Touch of Class," does not present rules for becoming a graceful writer, but instead describes some of the devices that writers with a bit of flair use: balance and symmetry; emphasis and rhythm; length and rhythm; and metaphor, simile, and imagery. Lesson 9, "Style and Usage," is a splendid discussion, with copious illustrations and comments, of rules and Rules; nonrules; real rules; optional rules; and betes noires. Lesson 10 addresses punctuation as a functional, "housekeeping" problem and lists guidelines for "reasonable" punctuation.

In *Style*, Williams makes assertions that are certain to disconcert some readers, but he makes them in the context of a theory about clear, direct writing, which makes his handbook unusual, to say the least. Moreover, although (or perhaps, because) Williams addresses only one major problem of composition—style—rather than attacking matters of intention, invention, and organization, his book is an important new resource in the field of document design.

—Reprinted from "Simply Stated" (May 1981), monthly newsletter of the Document Design Center, American Institutes for Research.

Understandable Language

Plain Talk: Clear Communication for International Development, by David Jarmul.

The book is available from VITA, 3706 Rhode Island Avenue, Mt. Rainier, MD 20822; 76 pp., \$4.95. VITA is a nonprofit organization that teaches people how to use technical and natural resources.

The path to international development is littered with projects that have failed because planners used language and pictures that others could not understand. Poor, semiliterate people in developing nations, who want to know how to repair tractors and generators, rarely know what "implement," "situation improvement," and "timeframe" mean. Yet many writers prepare their written plans and technical manuals with little regard for the "host

country nationals"—the local people who will have to read, understand, and follow their instructions.

David Jarmul, the chief editor at Volunteers in Technical Assistance (VITA), has written *Plain Talk* to show writers, program planners, field workers, and others how to write more effectively for ordinary people in developing countries. This illustrated handbook clearly shows some of the pitfalls in international communication and how they can be overcome.

Chapters containing guidelines for planning, writing, graphics, and testing are supplemented by chapters on how

to use (and how not to use) readability formulas and a chapter on how to convert development jargon into everyday English. Although *Plain Talk* was written specifically for workers in the field of international development, it will also benefit anyone who writes English in a multilingual or multicultural setting.

—Reprinted from "Simply Stated" (May 1981), monthly newsletter of the Document Design Center, American Institutes for Research.

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