The current economic situation and its severest consequence – job losses – present numerous challenges for human factors/ergonomics professionals, as it does for people in most other professions. One strategy for coping is to set up an independent HF/E consultancy.

We recently asked some HFES consultant members about what they like and dislike about their experiences, and what advice they have for those who might follow in their footsteps. Below are their responses. Brief biographies follow the question-answer section.

What do you find to be the most rewarding aspect of being an independent consultant?

Stanley Caplan (SC): I like the freedom of being in control of my time. By that I mean the ability to better integrate my work life and my personal life.

Frank Foss (FF): I experience the same professional satisfactions and disappointments as my colleagues who work for large organizations: a feeling of pride when my designs or recommendations are incorporated into products. I find that my recommendations are more likely to be heeded than when I worked as an employee in corporate America. Having ideas adopted by clients is certainly rewarding, but the most rewarding aspect of being an independent consultant is the ability to control my own time and, to some extent, the assignments I accept. However, as a self-employed consultant, I cannot afford to turn down many assignments without severely impacting my income and my reputation as a can-do consultant. In addition, my clients’ schedules become my schedules.

Hal Hendrick (HH): (1) The autonomy it provides compared to a regular work schedule and assigned work; (2) the variety of work projects – always learning something new because I get involved in such a variety of industries, development projects, etc.

Rani Lueder (RL): (1) The challenge of working on a broad spectrum of projects and situations. (2) Each company is unique; finding a way to make a difference within those specific organizational dynamics. (3) The chance to analyze situations and provide independent feedback to a client that is less subject to the internal politics that employees face. (4) Developing strategies for attracting projects that interest me.

Nicholas Simonelli (NS): Schedule flexibility – not commuting to the same job endlessly.

Alison Vredenburgh (AV): I find being in control of company policies/practices rewarding. I can choose my projects and the people I enjoy working with. Customer relations are very important to me; I have known several of my clients for many years.

What are the most frustrating aspects of being an independent consultant?

SC: The fluctuation of workflow and the resulting uncertainty of cash flow make family and financial planning a bit difficult. It definitely requires a paradigm shift after getting used to a regular paycheck for many years.

FF: I mentioned earlier that my recommendations are more likely to be adopted as an independent consultant. The flip side to this is that it is much more difficult for an independent consultant to become involved in projects in the first place. As consultants we have to ferret out potential projects, identify the right person, and contact them before we can even begin to convince them that they should spend their money to purchase our expertise. This leads to one of my more annoying frustrations: Very few people know that the human factors profession exists, and if they’ve heard of us, they have no idea what we do. Consequently, I continually have to describe the field of human factors to prospective clients who have no interest in it, and usually don’t really care to learn. My greatest frustration and anger occurs when I examine a tragic accident that could easily have been avoided if a manufacturer had applied a few elementary human factors design principles, or merely tested the usability of their product.

HH: The inability to say “no.” It is very easy for me to get overloaded with work when I really want to cut back and have more free time.

RL: (1) The complexities of avoiding potential conflicts of interest that are implicit in consulting. Clients may try to influence report findings; manufacturers want data collected to portray their product in the best light, attorneys may try to direct expert testimony, etc. (2) Dealing with project overloads that may require 80-hour weeks (and problem-solving while I sleep), followed by the uncertainty when large projects end. (3) Working with third parties (e.g., serving as a subcontractor or using a contractors) that have different philosophies, values, or objectives. (4) Planning a vacation with a schedule in continual flux. (5) Dealing with quarterly business forms – particularly payroll tax forms every quarter.

NS: Chasing clients for payment.

AV: Wow, I can’t think of a downside! I do tend to go to my office 7 days a week, however.

What tip(s) would you offer people setting up a consulting practice (that you wish someone had told you about before you got started)?

SC: The importance of effective networking and nurturing relationships cannot be overstated. Patience and persistence are needed in the beginning. Finally, don’t entrust the marketing of your business to someone else. No one can do it as well as you can.

continued on page 4
Renew Your HFES Membership

By David L. Post, HFES President

If you haven’t yet renewed your membership, please consider these points.

You will save $174 by not having to subscribe to Human Factors, Ergonomics in Design, the HFES Bulletin, and the Directory and Yearbook. Add to these savings the discounts you receive on books, videos, and Annual Meeting registration fees, and the financial value of HFES is clear. Just as important are the other values that perhaps originally drew you to HFES: professional development, continuing education, networking, and leadership opportunities. Your support as a member also enables the Society to increase its outreach to government and business leaders, enhance the quality of HFES publications and meetings, and support your professional needs.

Although the Society had visible achievements this past year, we must continue to work to ensure that the profession remains strong and viable. I call on you to continue contributing your time and resources to help us realize the goals and mission of HFES and to strengthen our ability to advance the human factors/ergonomics profession.

To renew your membership, please contact the HFES central office at 310/394-1811.

MESA Receives Presidential Citation

The Maryland Mathematics, Engineering, and Science Achievement (MESA) program received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. In conjunction with the HFES Diversity Committee, MESA conducted a five-week summer camp for precollege students in 2001. Most camp activities were held at the Engineering School of Morgan State University in Baltimore. By expanding MESA’s previously established summer program to include human factors-related lectures, field experiences, demonstrations, and projects, the 2001 MESA and HFES Summer Institute encouraged students to take the prerequisite courses needed for successful university study in human factors. HFES will again support the summer camp program this year. View the presidential citation on line at http://www.jhuapl.edu/mesa/citation.htm.

Write to/or for the Bulletin

HFES welcomes responses to any articles published in the HFES Bulletin. We also invite all members to submit short news items on any issue pertaining to the human factors/ergonomics field. Examples include significant activities in institutions, regulatory agencies, or industries. Items should address topics of interest to a broad segment of the membership and may be up to 1000 words in length. Send your letters and article submissions to Lois Smith (lois@hfes.org).

Growth Opportunities Through Chapters

Today’s complex human factors environment is greatly affected by legislation, education, and political issues. A forum close to your home in which you can participate, voice your opinion, and make a difference is an important vehicle for every human factors/ergonomics (HF/E) professional. HFES chapters provide that forum.

The local and international chapters of HFES allow for the fulfillment of the Society’s mission by fostering collaboration, education, skill-building, and networking among professionals in a geographical area.

Value of Chapter Membership

HFES chapters provide the opportunity to interact with peers, to exchange information, to contribute to the local community, and to improve personal and leadership skills. Regional and local meetings, symposia, civic/community activities, and educational programs are the means by which members can enhance their professional skills.

In meetings and newsletters, the chapter can provide a forum for discussions and presentations of research, services, and products. Some chapters offer symposia and workshops to educate members about aspects of the HF/E field and the people who work in it. Chapters often invite recognized experts and leaders to speak on a variety of topics, organize tours of local facilities, and provide opportunities to members with special expertise to share their knowledge at chapter events.

Chapters can collaborate with HFES and other organizations to afford practitioners, researchers, and academics the opportunity to participate in cross-disciplinary professional meetings.

Chapters engage in programs to foster HF/E activities in their local areas. These activities can include promoting HF/E courses in local colleges and universities, judging at science fairs, and representing the field at career days. Chapters can also help raise the

continued on next page
The human factors/ergonomics and government standardization communities, along with those loyal to Peter Stuyvesant (NY) and Purdue University (IN), suffered a sad loss on October 20 when Gerry Chaikin unexpectedly died of cancer-related complications. He was a young 67. Gerry earned two B.S. degrees (mechanical and industrial engineering) from Purdue University in 1956. He worked for the U.S. Army at Aberdeen Proving Ground, Maryland. He then moved to Huntsville, Alabama, to work as chief of the Human Engineering Laboratory Detachment (which became part of the Army Research Laboratory) at the Missile Command (MICOM), where Gerry enjoyed most of his professional HF/E life. During his career Gerry made countless contributions to the HF/E field. He interacted with every military HF/E standard and specification during this period through his selfless dedication to the profession and his chairmanship of the Department of Defense Human Factors Engineering Technical Advisory Group Standardization entity from early 1977 through his retirement from the Army (the longest continuous chairmanship in this TAG’s history). After his retirement, Gerry maintained his presence in the TAG by joining the Technical Society/Industry SubTAG.

In this capacity, Gerry served as the simultaneous, official representative of more technical society/industrial bodies than any other member in the subTAG’s history. As a result, he was elected one of only six TAG emeritus members. As the HFES representative, Gerry had a special TAG attaché case (known to his close friends as the “field office”) – something that undoubtedly will be the subject of another story at another time. At the TAG you could always find Gerry – even when he wasn’t wearing one of his favorite red shirts. You just had to look for the largest huddle, and there he was in the center, meting out wisdom and advice. New TAG members were drawn to him as if he was the Pied Piper, whether due to his fatherly manner and wisdom or his deep understanding and memory of the TAG’s collective technology and history. Gerry loved the earth, sea, and sky; dogs and horses; and people (and they undoubtedly all loved him back). He is survived by his wife of 45 years, Cie; sister, Fran Hauser; daughter, Jamie (Mrs. Garry McArthur); son, Stewart; and two grandchildren, Jake and Callie. I shudder at the thought of how our universe will miss this multifaceted mensch.

—Mark Brauer

Support your professional growth and development, and establish valuable and long-lasting relationships through active participation in the largest multidisciplinary human factors/ergonomics organization in the world. Invest in your future! Join an HFES chapter today. For more information or to locate a chapter in your area, contact the HFES central office at 310/394-1811.

HFES Chapters

Chapters are an integral part of the Society’s visibility, success, and strategic plan. HFES supports chapters through the following activities:

- HFES provides the necessary documents to develop a viable organizational structure for its chapters.
- HFES facilitates the dissemination of chapter communications through a chapter president’s list server and sponsoring annual meetings for chapter presidents.
- HFES has a Chapter Affairs Committee that maintains regular communications with chapter leaders to help address issues and problems.
- HFES can help chapters identify volunteer speakers.
- HFES staff assists with local chapter membership marketing to ensure the chapter’s growth and influence.

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**Special Sections Invited**

Periodically *Human Factors* features a group of papers on a specific topic, called a special section. If you would like to propose a special section and perform the duties of guest editor, please send an inquiry to the HFES Communications Department (zack@hfes.org). Guidelines will be sent promptly.

**Style Guide**

HFES no longer requires authors to follow the 1984 edition of the HFES Authors’ Guide. Papers submitted to *Human Factors* (and other Society publications) should conform to guidelines set continued on next page
forth in the American Psychological Association’s Publication Manual. The 5th edition ($23.95, paperback, 400 pp.) is available from APA, Book Order Department, P.O. Box 92984, Washington, DC 20090-2984 USA; 800/374-2721 (in DC 202/336-5510), fax 202/336-5502.

Submitting a Paper

To expedite review, HFES encourages authors to submit an electronic version of their submissions. Please note:

- Send the electronic version on a diskette, zip disk, or CD-ROM with the text in one file and each figure in a separate file. Acceptable text formats are Word (97 or later) or WordPerfect (6.0 or later).
- A paper copy of the submission is still required; however, it is no longer necessary to send five copies. One original with clean prints of the figures is sufficient. (Electronic submissions cannot be considered unless accompanied by a paper copy.)
- Do not send electronic submissions via e-mail. Address submissions to Editor, Human Factors, Human Factors and Ergonomics Society, P.O. Box 1369, Santa Monica, CA 90406-1369 USA. Submissions for expedited delivery (e.g., via FedEx, UPS, DHL) should be sent to 1124 Montana Ave., Suite B, Santa Monica, CA 90403 USA.
- Because of their poor resolution (78 dots/inch, vs. the minimum requirement of 300 dpi), figures created in Microsoft PowerPoint cannot be accepted. Contact Lois Smith (lois@hfes.org) if you have any questions.

HFES is investigating the costs and feasibility of converting to an on-line system for submission and review of papers for Human Factors. Progress on this matter will be reported in future issues of the HFES Bulletin.

Seeking Reviewers

The editor welcomes anyone with expertise in any of a wide range of human factors-related areas to submit a curriculum vitae for consideration as a paper reviewer. Areas of particular need include driving behavior and performance, aging, virtual environments, haptics, and displays. Papers can be sent to reviewers electronically, and reviews (with comments and recommendations) are requested within four weeks. Send your inquiry and CV to HFES (zack@hfes.org, fax 310/394-2410).

Going Independent (continued from page 1)

FF: The one piece of advice I wish someone had given to me is “don’t try to go it alone.” It’s a lonely business; you have no coworkers to bounce ideas off, no one to commiserate with, and no “attaboys” from the boss. Independent consultants also have to carry out a lot of business functions that we neither enjoy nor are prepared to perform. For instance, we usually do our own marketing, contract management, recordkeeping, client billing and collections, and, frequently, even janitor service. If you can generate enough revenue, you might be able to contract for some services, or you might hire your own staff. If you contract the services, you have to monitor the contracts; if you hire staff, you have to supervise them and perform a host of personnel, payroll, and reporting tasks. My recommendation to prospective independent consultants is to join with one or two other professionals whom you know, have worked with, and respect. Together, you are more likely to have the professional and moral support that you need but won’t have if you try it alone.

HH: Getting started is difficult until you build up a reputation and your name gets around by word of mouth. Give excellent service – more than expected – and you will be successful.

RL: (1) Organizational skills are critical. You may as well start off right, don’t wait until you’re busy. Citation databases, contact management software, and a business accounting program is just the very first of many steps. And it never lets up – as your project demands increase, you will need mechanisms and strategies to help you use your time effectively. (2) Assume that you’ll need to pay your dues for a while. This means speaking at conferences, publishing, volunteering for your society, standards, etc., for no charge – seven years is a good amount of time. (3) You can’t charge the same rates at first, before you’re established. Focus on developing your support networks. (4) Keep thinking about ways to expand your services and to provide “value-added” benefits for your clients. Have patience. Projects snowball in time, but it often takes at least a year or so for business to start to take off.

NS: If you started because you had ready-made contacts and clients, don’t rest on them alone. Continue to network and get your name out there. At some point, you’ll need new contacts.

AV: It is very important to be self-motivated. There is no one to give you a due date or check on your progress. It is also important to get good legal and tax advice on the type of business you want to establish. Is a corporation right for you? Should your business lease you a car, lease a room from your house, etc.? What local, regional, or national sources of information for business owners have you tapped, and have these sources helped you?

SC: The New York State Small Business Development Center helped me develop a brochure. For support for business and administrative issues, I joined a local group of independent consultants called the Rochester Professional Consultants Network.

FF: I found the most helpful sources of information for business owners were my personal attorney and accountant and a local community college. In addition, the Internal Revenue Service offered several small business seminars that I found extremely helpful in understanding business reporting requirements.

HH: For me, by far the best source of information has come from talking with respected colleagues who have been successful in similar independent consultant work. In addition, I would suggest talking with a professional tax person.

RL: We have so many sources available to use, it’s hard to get too specific. Medline (now handled by the University of Michigan), Ergonomics Abstracts (Taylor & Francis), as well as federal information such as NIOSH Web site are a few. I use well over 100 sources
of information – some of them I pay for or subscribe to, others I just contact. I can’t imagine managing without Adobe Acrobat Exchange. It’s such a part of every aspect of my business. For example, instead of going on the Internet, I use Acrobat files with search screens to search on-line databases using their embedded pages capability.


AV: I haven’t used any such sources.

**What is your philosophy about marketing your consultancy?**

SC: Being a sole proprietor consultant, I have tried to establish long-term relationships with a small number of clients. I supplement that with efforts to gain exposure to new clients by networking, being involved with professional organizations, teaching, etc.

FF: I have never been very good at marketing. I’ve tried many approaches: advertising in professional publications, direct mail with and without telephone follow-up, participating in seminars and workshops, and just plain crossing my fingers and hoping. Unfortunately, when I started my business, I didn’t recognize or appreciate the skill and knowledge a professional marketer uses to identify and qualify prospective clients, and I certainly didn’t understand the magic marketers use to reach the right decision makers. I rely primarily on repeat customers, referrals, and word-of-mouth recommendations for new clients.

HH: I depend entirely on word of mouth and networking with colleagues at professional conferences. For someone starting out and wishing to do forensics work, taking out ads in state lawyer association publications will expedite getting cases as an expert witness. For other work (as well as for forensics), get listed in the HFES on-line consultants directory and get CPE certification (which gets you listed in the BCPE registry).

RL: I’ve tried everything (I think), but in the end nothing compares to word of mouth.

NS: Use professional society Web site consultant listings. Repeat e-mailings to your current clients.

AV: We are using the HFES consultants directory (one hit on Web site so far). We are also members of the San Diego Forensic Consultants Association. Eighty percent of our work comes from word of mouth.

**About Our Respondents**

Stanley Caplan, a consultant for the last four years, specializes in the design and evaluation of consumer and commercial products, including hardware and software components. Previously he worked for one company for 30 years, 27 of them in human factors/ergonomics.

Frank C. Foss has been consulting for 15 years and specializes in product design and safety (instructions and warning labels), product evaluation (including product hazard and risk analysis), and expert witness work. Prior to establishing an independent consultancy, he worked about 20 years in the defense and aerospace industries. He also worked in corporate America, taught college courses, and conducted front-end analyses, user interface designs, and usability testing for systems used in the insurance industry.

Hal W. Hendrick has been a consultant since becoming an emeritus professor in 1995. He worked as a practicing HF/E specialist in the aerospace industry before entering academia, where he stayed for 30 years. His specialties include industrial/organizational psychology, consumer product design, and industrial ergonomics and safety. He is also an expert witness in product liability and accident cases.

Rani Lueder began her consulting practice in 1982 after working as a permanent full-timer for about three years. She conducts ergonomic workplace evaluations; other specialties include prevention of work-related injuries, ergonomics training, product design (especially seating), physiological/biomechanics research, Americans with Disabilities Act, and ergonomics standards compliance.

Nicholas Simonelli became an independent consultant 9 years ago, after 14 years in full-time permanent employment. He specializes in focus groups and usability testing.

Alison Vredenburgh established her private practice in 1998 after working eight years for a larger consulting firm. Her areas of focus include forensics, warning design, industrial ergonomics, job hazard analysis, OSHA, and ADA.

**News**

**Washington Employers Sue Over Ergo Regs**

Washington Employers Concerned About Ergonomics Regulations, a coalition of industry groups and employers, filed a lawsuit against the state of Washington. The coalition contends that a new set of ergonomics rules created by the state Department of Labor and Industries are cost-prohibitive and ineffective. The rules will be incorporated over the next six years, beginning in July 2002. The Washington State Department of Labor and Industries has no plans to revise or rescind the regulations.


**OSHA's Top 10 Violations**

Safety and Health: The National Safety Council Magazine recently published its annual survey of OSHA’s top 10 violated standards. The top 10 standards violated in fiscal 2001, based on most serious citations are: (1) scaffolding—construction, (2) fall protection—construction, (3) hazard communication (HazCom), (4) lockout/tagout, (5) machine guarding—general, (6) respiratory protection, (7) electrical-wiring methods, components, and equipment, (8) mechanical power-transmission apparatus, (9) powered industrial trucks, and (10) excavations. The survey emphasized the most significant citations, defined as those involving “willful,” “serious,” and “repeat” abuses. The list includes citations issued through September 30, 2001.

OSHA’s enforcement efforts will increase in fiscal year 2002, with more inspections and a focus on workplaces where injury and illness rates are the highest and on industries where non-English-speaking workers are at the greatest risk.

continued on next page

Decade of Behavior: Year Two

The Decade of Behavior National Advisory Committee met in November 2001 in Washington D.C. to review the Decade’s first year of activities, plan for future years, and exchange ideas with representatives from the initiative’s 64 participating societies. The Decade’s current programs include a distinguished lecture series, policy seminars, and fund source (a Web search tool for locating funding opportunities in the behavioral and social sciences, http://www.decadeofbehavior.org/fundsource/). Plans for new programs include research awards and an interdisciplinary Web-based journal.

In January a meeting of the Coordinating Committee was held to enable the Decade of Behavior’s participating organizations (of which HFES is one) a chance to provide input on programs, discuss funding strategies, and target ways to include members in the initiative. Representing HFES was Fellow Marilyn Sue Bogner.

For more information about the Decade of Behavior, visit http://www.decadeofbehavior.org.
FLASH!

ANNUAL MEETING UPDATE!

The location and dates for the HFES 46th Annual Meeting have changed:

September 30–October 4, 2002, Baltimore, Maryland

Watch the HFES Web site and Bulletin for more updates!

Opinions expressed in BULLETIN articles are those of the authors and should not be considered as expressions of official policy by the Human Factors and Ergonomics Society.