

# AMERICAN ENGINEER<sup>TM</sup>

A PUBLICATION OF THE AMERICAN ENGINEERING ASSOCIATION

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## AEA On The Internet

The American Engineering Association has established the *AEA Information Center* on the Internet for the dissemination of information on professional issues for engineers and scientists.

The purpose of the *AEA Information Center* is to exchange information on professional issues within the engineering community and to exchange views and proposed solutions to the problems facing all US engineers and scientists.

The information center will also serve as our "call to action" for those issues which have proposed legislation that affects the engineering community. We urge you to let us know of legislation and regulations which are important to the engineering community if you do not find them posted here.

AEA President Bill Reed said "AEA will be the only engineering organization with an Internet connection dedicated exclusively to discussing and disseminating information on professional issues.

"We will start out with an e-mail connection and hope to have Gopher and WWW servers up and running by the time this publication reaches our members" said Reed. "You can receive information about AEA and participate in e-mail discussion groups now. We will have postings of 'calls to action', opinion surveys, text of current legislation (as available) and much more.

"This is not a technical forum, we want to provide a forum for individual engineers and scientists to discuss, suggest solutions to and communicate with each other on the professional issues we all face" Reed said. "We need and encourage the participation of all technical professionals, regardless of their discipline or job level." Included in the information to be posted will be:

- Lists of Members of the US Senate and the House of Representatives including their telephone and fax numbers. We will add e-mail addresses as they become available. We will have lists of Committees and Subcommittees relevant to our issues.

- You will find "Legislative Alerts" seeking specific action on critical issues when it is appropriate.

- We will post the text of bills of interest to the engineering community as they become available.

- We will have occasional opinion polls on issues, the results of which may be forwarded to Congress.

- We will occasionally petition Congress for action on certain issues critical to the engineering community.

- We will have past issues of the "American Engineer", the publication of the American Engineering Association to give you some insight into the issues.

All of this information and more will be in files which may be downloaded so that you may make hard copies to share with your co-workers, families and friends. This is our opportunity to bring together information from around the nation on our issues. We urge each engineer with an e-mail or an Internet connection to participate. The success of this venture depends on you!

To check the *AEA Information Center* out, e-mail to AEA-INFO@AEA.ORG and you will receive an automatic reply with information on the system and how to take part in the discussion groups and receive information about AEA. Also you may send e-mail to any AEA official at "AEA@AEA.ORG".

## Many Thanks!

Our very special thanks go to Mr. Joe Cossette and the good people at Systems Integration Technologies, Inc. for their expertise and help in setting up the Internet connection for AEA. They have donated many hours and who knows what else to get AEA up and running.

Not only are they technically very capable, they are very patient individuals to be able to work with an Internet illiterate such as myself. We could not have established our connection without them.

For those of you who are interested in a similar setup you may e-mail to them at Joec@Infoark.com or Fax to: (305) 968-4605. Voice number is the same as the fax number.

A job well done and you have our deep appreciation.

*Bill Reed, President, AEA*

## Editor's Column

### ILLUSORY JOB ADS

The Mar. '93, Dec. '93 Feb. '94 June '94 and Sept. '94 issues of AE carried examples of what I called "illusory job ads." They were ads that purported to offer jobs to the most qualified applicants, but were so detailed that they were really biographies of the applicant the firm intended to hire in the first place. Also they offered such low salaries that no one other than the intended applicant (and an unemployed engineer) would even bother to apply. This smacks of immigrant recruiting. Besides that, the ads listed only a state employment service, and the employer remained unidentified, so that his reputation would not be affected by the ad. Below is a long winded example of an illusory job ad, which is so egregious, that I wrote the Secretary of Labor about it. You might consider doing the same: Secy. of Labor, U.S. Labor Dept., 200 Constitution Ave., Washington, DC 20210. The person placing the ad is from the Alien Labor Unit in Madison WI. Can it be any plainer? Also see Dr. Hohns letter in the Reader's Voice column.

Software Engineer (Associate Engineer): Milwaukee, WI manufacturer of automated process controls seeks individual to work as member of Controls Group. Duties include: Design and develop computer software for Facility Management Systems, applying techniques of computer science, engineering, mathematical analysis; monitor/evaluate existing products and systems to ensure reliability, efficiency, performance to established standards; conduct research/testing and prepare results, analyze data, apply standard engineering principles, develop logical conclusions, explain significance of data gathered; make preliminary selections or adaptations of engineering alternatives working on less complicated designs of components or process or simpler phases of smaller projects, within

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(Editor's Col.... continued)

budgetary/time constraints; prepare preliminary cost estimates for new or revised products and systems to support management decisions; analyze limitation of products or operations, including ability to meet customer and contractual demands, prepare findings, specifications for management review; prepare documentation and operator/laboratory instructions, review product literature for accuracy and completeness; if required, work up to 50 hrs. per week including w/ends, and travel to customer sites at 24-hr. notice. Requires: B.S. Computer Science or Electrical Engineering plus following special requirements (may be satisfied during pursuit of degree): 3-month full-time internship or equivalent professional experience in software design/development, including use of "C" programming language, DOS operating system, IBM PCs or compatibles; 1 college-level course each: compiler design and language syntax, linear and digital controls, analytical and computational methods in engineering, software engineering methodology; 2 college-level course in data base application design and programming; college-level coursework in Graphical User Interface (GUI) design and development of Windows-based applications, real-time software design, real-time scheduling and message queue handling. Salary \$37,260/yr; 40hr/wk: M-F. Send 2 copies of resume to: Rose Saldivar at Alien Labor Unit, 201 E. Washington Avenue, Rm. 211X, Madison, Wisconsin 53702 for Case No. 940187.

#### "FACE UP TO PERMANENT JOBLESSNESS"

is the title of a column by Alexander Cockburn (a staff writer for *The Nation*) that appeared in the 3/15/94 issue of *Los Angeles Times*. I'm just catching up with a backlog of articles mailed to me, and this one is just as timely now as in March, when it was published. It states in part that Germany has all the elements for what Robert Reich (Secretary of Labor) sees as the recipe for good jobs at high wages: training or retraining to produce skilled and productive workers. But the connection between training, productivity and employment just isn't working in Germany. Their unemployment rate was over 10% in Jan. '94. It doesn't seem to work here either.

There's an older economic analysis developed by Karl Marx, called the 'reserve army of unemployed.' It goes like this: Unemployed labor in a capitalist economy acts as the employer's weapon. It's held over the heads of workers asking for higher wages, better working conditions, job security or benefits. There's someone available who'll work for less. Now the notion has gone global. This editor doesn't subscribe to Communist philosophy, but Karl Marx hit some bulls eyes with his descriptions of the potential problems with the capitalist system. Now globalization has made these potential problems into real ones.

Companies looking for higher productivity and lower costs have been slashing their workforces and exporting jobs. This produces a temporary jump in their stock values and large numbers of people living off the government. Eric Greenburg of the American Management Association has this comment: "In the aggregate, companies have been firing their customers." David Roche of Morgan Stanley in London puts it this way. "Investors love long dole queues, as long as they're reducing costs and not damaging demand. But there's a certain length of a dole queue which causes a reversal of this perception." Economist Keynes pointed out 60 years ago that high unemployment and stagnant wages produce declines in consumption, which ushers in deflation. Globalization results in the 4 billion new skilled workers in China, India and Brazil being ready, willing and able to do the work of workers in North America and Europe at 10% of the wages.

Percy Barnevik, the head of Sweden's ABB, the world's largest power-engineering group, also has comments on this topic. He predicted that by the end of the century, the proportion of the European labor force employed in manufacturing and business services will fall from 35% to 25%, and to 15% a decade later. He asks where they'll go, and answers "Out, ...because we don't need them. If anyone tells me... there will be a hell of a demand for labor, I say, tell me where... We end up with permanent unemployment or two classes of differently paid people. Both are social dynamite." See "Workforce 2000" by Edith Holliman in the 9/94 issue of AE. This states the problem well.

Why am I telling you all this? Because engineers who have some organization are a potential influence on a deaf government. AEA is

an organization. After you reread the Holliman article, do something. What? Get people to join AEA or other organizations that exert pressure on our government to do something economically beneficial for the electorate. Sitting and griping does not compute.

#### "FAIR WAGES AND (WORK) STANDARDS SPUR GROWTH"

That's the title of another eye-catching article in the 4/14/94 issue of *Los Angeles Times*. It tells how President Clinton is insisting that developing nations enforce rights to unionization, minimum-wage and child-labor limitations as part of the forthcoming GATT agreement. This initiative, which was barely covered in U.S. press, caused a furor in Europe and the third world. Trade minister Sir Leon Brittan of the European Union denounced it as "protectionism," and India led the resistance to such a notion, when its GATT ambassador contended that restrictions on labor exploitation could undo seven years of world trade progress.

India's largest export industry is handwoven carpets, produced by 300K children from 6 to 15 years old, who are often mortgaged by their parents to employers. Indian parents seldom redeem the mortgages, because their debt mounts, as the factory supplies amphetamines to the children to enable them to work well into the night. India's carpet industry grew, when the Shah of Iran prohibited Iranian child labor in 1970. Neighboring Pakistan has some of the carpet boom, where about half of the children working in carpet factories die from malnutrition before age 12. And this is only one industry in two countries. I bring this up, because AEA came out against NAFTA and GATT. Regrettably NAFTA passed Congress, but NAFTA covers only North America, while GATT covers much of the world. If you wish the U.S. entangled in a world trade pact that undercuts decades of worker progress, then do nothing to stop GATT. But if you think that U.S. Sovereignty should not be sold out by an agreement that (like NAFTA) is really a treaty, then write your Congresspersons to VOTE NO. I hear the vote may be in November.

#### "MEXICAN CONVICTS HAVE AN UNUSUAL OPTION"

That's the title of an article in the 9/21/94 issue of the *San Jose Mercury*. It tells how approximately 20K convicted felons who are undocumented immigrants have an option in California prisons that other illegal immigrants in prison don't have. They can refuse to be sent back home. Apparently a treaty with Mexico guarantees the right of refusal to Mexican nationals, convicted of felonies who serve terms in U.S. prisons. The California Board of Prison Terms held hearings and sought suggestions to modify the U.S.-Mexico Prisoner Transfer Treaty, which calls for prisoner consent. State Senator Dan McCorquodale (D-Modesto) stated "An undocumented person discovered by INS has no right to refuse deportation... Yet a convicted felon must consent (to deportation), under federal treaties. That's outrageous." Chairman Jim Nielsen of the prison terms board said the problem is getting worse, as the number of convicted illegals rose 2% over the past five months. State officials say the cost of illegal immigrant inmates runs \$400M annually. Nielsen stated "...even if you return inmates to their own countries, you're not sure they'll serve their sentences. Prison systems work differently in other countries. People can be released very quickly and come right back to the U.S." Nielsen, McCorquodale and other state officials said the federal government should renegotiate this treaty with Mexico. Meanwhile McCorquodale has written a new law permitting the state Corrections Department to offer a foreign country up to \$2K per year to accept an inmate. Mexico is known to spend \$500 to \$1.5K per annum to keep an inmate.

#### NATIONAL EXECUTIVE SERVICE CORPS (NESC)

mailed me a letter to acquaint me with their program. It consists of recruiting volunteers to help enrich the science and math programs in several elementary and intermediate public schools in New York City. Volunteers who participate will commit to a minimum of four sessions a semester. They'll contribute their time, talent and experience in "...building a new generation of engineers, scientists and mathematicians!" NESC is at 257 Park Ave. South, New York, NY 10010. This gives me a warm feeling.

Robert Bruce, AE Editor

# IEEE ENTITY ENDORSES AEA LETTER TO PRESIDENT CLINTON

The President  
The White House, Washington, DC  
May 30, 1994

Dear Mr. President:

This is an endorsement of the attached letter (see May issue "IEEE Newsletter" page 6) written by the Vice President of the American Engineer's Association (AEA), with some additional comments of my own, on behalf of the Executive Committee of the North Jersey Section of the IEEE (Institute of Electrical and Electronics Engineers). Our section numbers about 4500 members, out of 320,000 worldwide.

I think you'll agree that history will mark the era from 1940 to 1990 as the 50 year flowering of the American Republic, when all the world looked to the USA for safety, leadership and stability. We were able to provide this only because of a pre-eminent position as the world's military powerhouse. The might of America's military during that interval was based on the will and character of its armed forces and the intellectual power of our defense technologists—America's engineers!

World dominance based on force multiplication by technology, enabled the US to lead the world's people into a set of moral and spiritual values that will last for centuries. More and more people of once hostile nations now believe in free enterprise, the inherent human dignity in capitalism, and the natural balance that can be achieved with individual development. America's technologists played a large part in this adoption of the American way by others.

And now, Mr. President, we, the technologists need your help. Unprotected by (or from) powerful lobbies, laid off by the profit conscious corporations that once flourished satisfying defense needs, and the object of censure by the self-serving moralists, America's defense engineers are being discarded like fast food trash—because military procurement is in "free-fall." This in spite of the dangers facing our country and our friends by the rogue nations of the world. The fact of the matter is, we aren't doing very well in defending our jobs, as we're just not very political by our nature.

Mr. President, it is time for action. But most defense engineers are quiet, some say "nerdy," middle class, non-violent, slow moving salt-of-the-earth types that believe in hard work, obeying the law, trusting the government, and working cooperatively. The engineers are not wealthy or glamorous, but they are reliable. We ask you to encourage programs that will perpetuate and promote the employment of one of this country's most valuable resources, the American engineer, particularly, the American defense engineer.

You can regain for our nation its traditional role as technological leader through a combination of expansion of research and development, growth of our science and space programs, expansion of the "Information Highway", and as a last resort, defense conversion. I phrase this last item just so, because it is essential that we keep our defense engineering capability well above the skeletal level. History has shown that peace is, sadly, only temporary.

In closing, we request that regular dialog be established between our engineering community and the administration, at whatever level you decide. Thank you.

Sincerely,

Melvin A. Lewis, Secretary  
North Jersey Section, IEEE  
18 Walnut St., Oakland, NJ 07436

## Reply To Melvin A. Lewis

July 28, 1994

Dear Melvin:

Thank you for sharing with me your views regarding American engineers.

Our country owes a great deal to its engineers. They provided the innovations in military technology that allowed us to win the Cold War, and they are a steady source of scientific advancement that will keep our economy strong for many years to come. Engineers turn our dreams for tomorrow into realities, consistently providing Americans with new discoveries that directly improve the ways we live and work.

My Administration is committed to ensuring that those who have worked so hard for our country's success are rewarded for their labors. Our efforts to advance defense conversion, to promote high-tech exports, to invest in high-priority transportation projects, and to create a National Information Infrastructure are all helping to ensure a reliable source of rewarding jobs for our engineers.

I appreciate your concern over this important issue, and I assure you that I'll keep your thoughts in mind in the weeks and months to come. I'm glad you took the time to write.

Sincerely,

Bill Clinton  
The White House  
Washington, DC

(Reprinted with permission from the 9/94 issue of "The IEEE Newsletter" a publication of the North Jersey Section IEEE.)

## MEMBERSHIP APPLICATION

(Please Print Legibly)

I am concerned about my career and U.S. Engineering Capabilities.

New Member  Please Renew My Membership

Please enroll me as a member of AEA at the following level:

SPONSORING MEMBER: \$100  SUPPORTING MEMBER: \$50  MEMBER: \$30

Please make checks payable to "AEA" and mail to: PO Box 820473, Ft. Worth, TX 76182-0473

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(Difference in membership level reflects the individual commitment to the issues only.)

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DISCIPLINE: \_\_\_\_\_ INDUSTRY: \_\_\_\_\_

Dues in the American Engineering Association are tax deductible if you itemize deductions.  
Annual membership begins on the date of receipt of Application.



"Taxpayers are subsidizing businesses by paying [benefits] for illegal aliens..." — Robert Kuziara, Assistant Division Chief/Finance, County of Los Angeles.

This cartoon reprinted with permission from the Nov. '92 issue of "Border Watch," a publication of the American Immigration Control Foundation.

## Professional Pipeline

### PROTECTING JOBS

Right now, in corporate suites around the United States, accountants and MBAs are crunching numbers on engineering R&D, and telling Jack the CEO he can save 50 percent by shipping R&D offshore. You can hear the argument now: "It's the trend, Jack," says the MBA, smoothing down his Armani suit. "Satellites, CD-ROMs, networks. They make it really easy, Jack, to do business over there."

"Bottom line," adds the accountant, peering at his computer printouts, "you save XXX dollars by getting Hong Kong to do it. Let's see, at \$10 an hour..."

"They speak English, Jack," the MBA jumps in. "So Marketing will be able to talk with them. They're U.S.-educated, many of them. Besides, they have a new PhD-only university, and it's staffed with all U.S. brains." The MBA then goes in for the kill. "XYZ went to Hong Kong on its smart-TV project, turned it around for half of its original projected cost, undercutting MNO in the marketplace. And you know where MNO is now, today, Jack? In the soup. Deep soup."

If this project stays in the United States, it will probably be due more to inertia—the fact that Jack has an engineering staff in place in San Diego and Austin, Texas—than to cold, hard numbers.

Who's telling Jack that he's shooting himself in the foot? That going offshore with design leaves him vulnerable to intellectual property theft? Or that, bottom line, with no engineers in-house, his applications idea pool will dry up?

Do you see anyone pleading the American engineers' case?

Your VP of engineering? Maybe, if he or she has daily access to the CEO, a somewhat dubious assumption.

Your human resources department? Dream on.

Your technical society? Witness the global IEEE's flaccid response to NAFTA. It couldn't reach a consensus.

You don't want a consensus. You want advocates, ones who can force an image campaign. Corporations banded together and formed something called USA\*NAFTA that put Bill Gates in front of

a camera, and argued for its passage.

Engineers need a sophisticated PR campaign that says, "American engineers: Fast track to profits," or whatever. The campaign should feature white papers, articles, spokesmen, speeches at shows and business conferences.

The battle for the CEO's mind share needs to be fought not only inside the executive suites but outside them. In *Harvard Business Review*. In *Business Week*. In the business administration departments at Harvard and Yale. In a sense, you'd be fighting for jobs that probably aren't in any immediate danger. There's no wholesale exportation of R&D jobs now. But you may have noticed TV ads from civil service unions touting the advantages of a permanent civil service work force vs. those from a commercial company. The privatization of jails, schools and garbage collection is but a trickle today, but the unions recognize the need to act now, before it becomes a torrent.

A PR campaign would not be all image. Engineers have to develop a strategy for countering the best bullet in the MBA's arsenal: labor cost. If, indeed, Delhi, Hong Kong, or Moscow delivers it for half of what the U.S. team can do, then engineers need to come to grips with that, and get competitive. I'm not sure what "get competitive" means. Salary cuts? Sure, I'm going to sit here and argue that you should get a salary cut. I'd save an office call to Dr. Kevorkian by advocating that. My best guess is to push productivity, America's traditional ace in the hole. Shattering market windows with blazing turnarounds would shrivel the MBA's argument.

But first: Grab corporate mind share.

By Bob Bellinger

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## Reader's Voice

This column in the "American Engineer" is for readers to voice an opinion about issues that affect the professional life of an engineer or other technical professional. Readers are encouraged to write AEA with their professional concerns. Each submission should include the name, address and phone number of the writer. Except for short excerpts, we'll publish the writer's name, city and state (unless the writer requests anonymity). In that case, we'll publish initials, city and state. Let's hear from you.

**From Dr. S. Hohs, San Jose, CA:** - You are to be complimented on your efforts to educate and destroy the scientist shortage myth. I have written letters since 1991 to professional organizations, called up government organizations—(NSF, Department of Labor etc.) and have become quite cynical. I don't think the powers that be want equilibrium in the supply of engineers.

Regarding the granting of permanent visas, this is how it is done:

1. A foreigner is hired "temporarily"—up to 6 years under the H1B program (with an H1B visa for temporary employment.)
2. Employer runs a 3-day ad, typically Tue. through Thurs. for an engineer and hopes no qualified American responds.
3. Since employer is allowed to define job requirements (including skills learned during the "temporary" assignment) the only qualified applicant is the present foreign employee.
4. A permanent visa is granted to the present foreign employee.

**From R. Strohm of Austin, TX:** - I quote from the article "NAFTA paying dividends along U.S.-Mexico border," published in the 9/1/94 issue of the Austin America Statesman. "Scheduled to open in Oct. '94, NADBank is designed to work in conjunction with the Juarez-based Border Environmental Cooperation Commission, also created by NAFTA. It is expected to provide up to \$3B for projects related to NAFTA... In addition, the World Bank has approved \$918M in loans for environmental projects along the U.S.-Mexican border." The author of this article, Jorge Haynes, is a Senior Vice President of the International Bank of Commerce in Laredo and Executive Director of Texans for NAFTA.

El Paso has a population of 600K. They have a sewage disposal system. South of the border, Ciudad-Juarez has an estimated population of 2M. They don't have a sewage plant—yet. Raw sewage and plant wastes are dumped into "The Ditch" which in turn dumps into the Rio Grande. During the growing season, water is pumped out of the "Ditch" and used to irrigate crops which are sold in the U.S. But any fruits or vegetables are carefully checked, to make sure that Mexican growers did not spray them with improper insecticides.

Texas, for several years, has offered to pay 90% of the cost of providing water and sewer services to Hispanic areas (called Barrios) in the suburbs of large cities like El Paso or Austin. There are few takers, since the Barrio citizens can not raise the other 10%. Starting in October, anyone who can promise to deliver a water or sewer system can borrow a few million dollars. If they default on the bank loans, the U.S. government will cover the debt, which means you and me (taxpayers). In conclusion, everyone favors NAFTA, except (reading from top to bottom) Canadians, Americans and Mexican Citizens. Who'll pay? We will.

**From Dr. J. Densler, Auberndale, MA:** - This fall, I'm teaching as adjunct faculty at a local college—enough to keep me busy, but not professional employment at a "Living Wage." This year's engineering graduates are having a hard job finding jobs. My alumni magazine reported, "As of this issue, about a third of the class of '94 is still looking for work. With corporate downsizing, realignments, and the continuing economic shocks of the recent recession, starting a career has become a far more challenging and uncertain task for graduates of engineering and science programs."

Despite the well-proven non-shortage of engineers, the Educators are still heavily recruiting women and minorities to engineering programs. In the Feb. '94 issue of *IEEE Transactions on Education*, Rachelle S. Heller and C. Dianne Martin talk about the need to recruit women and minorities. Their article starts with, "The work

force in the year 2000 will require many more scientists, engineers, and mathematicians. New jobs that require a highly-trained, technical work force are being created at the same time that the engineering and science work force is aging. Compounding the increased need is the fact that there is a diminishing interest in science and engineering among the traditional talent pool." Apparently they still believe the National Science Foundation (NSF) forecast!

In the *Wall Street Journal* (9/8/94), Hank Rowan, President of Inductotherm has an advertisement with the headline, "This country doesn't just need more engineers, we need more great engineers." He still believes the Engineering Shortage Propaganda (ESP) from NSF. I believe we could use more "great" engineers, but the present system is not working. An article by Eugene S. Ferguson in the Winter '93 issue of *Invention and Technology* states, "Engineering students have been taught to rely far too completely on computer models, and their lack of old-fashioned, direct hands-on experience can be disastrous." There are articles in the Summer '94 issue of *The Bridge* and February *IEEE Transactions on Education* indicating problems in our present educational system. Educators do not recognize that the profession has been ruined as a career by overproduction and immigration. Gene Nelson's article from the 9/94 issue of *American Engineer* indicates there will be hearings on the Science & Engineer (S&E) supply glut and immigration in the fall of '94.

**From R. Fawcett of Diamond Bar, CA:** - The "illusory job ad" problem can be attacked in several ways. The most effective would be to have a file of resumes to fire off in response to these ads. First, the employer would have to grant an interview or risk exposing the scheme. Second, if a qualified applicant doesn't get a job offer, then that can also hold up the process. Finally, if the job offer is too low, that can be used to show low-balling.

Accordingly, I would like to investigate the possibility of setting up a 'service' where members would send in resumes and copies of 'low-ball' ads so we can be sure that a U.S. citizen responds to each of these ads. Otherwise, the immigration attorney who writes these ads is able to argue that there are no qualified applicants, since no one answers the ad (except the alien).

*Editor: Any readers want to submit resumes for AEA to mail to the writers of illusory job ads? I have a collection of such ads. Any readers want to correspond with Mr. Fawcett about this scheme? Mail letters to me, and I'll forward them to Mr. Fawcett.*

*Robert Bruce, AE Editor*

*Box 620726, Little Neck, NY 11362*

## Reach Out

Reach Out to the active volunteers that are making this publication possible. Tell them what you like or what you dislike. Provide them with questions, answers and information or just a hand written note of appreciation. Believe me when I tell you that it is important to let your volunteers know that you care.

Reach Out to the following:

**Bill Reed, AEA President**

P.O. Box 820473, Fort Worth, TX 76182-0473

**Richard Tax, AEA VP, General Information**

PO Box 2012, River Vale, NJ 07675

(201) 664-0803

**Robert Bruce**

"American Engineer" publication and related issues

P.O. Box 620726, Little Neck, NY 11362

**Dr. David C. Lewis, Immigration**

609 Sideling Court, Vienna, VA 22180

**Richard Plummer, Anti-Discrimination**

P.O. Box 326, Valley Forge, PA 19481

**Robert Rivers, Manpower**

P.O. Box 129, Union, NH 03887

**R.T. Pinkerton, Staff Cartoonist**

Ideas and subjects for new cartoons

P.O. Box 820473, Ft. Worth, TX 76182-0473

# Stop E.S.P.

Help AEA stop **Engineer Shortage PROPAGANDA**.  
Professor D. Allan Bromley was quoted in  
*DESIGN NEWS* magazine (2/24/92).



Reprinted from the June 1992 issue of the *AMERICAN ENGINEER*.

## AMERICAN ENGINEERING ASSOCIATION

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# The "Stealth" S&E Job Program

The *Spirit of Texas* is an amazing aircraft, designed by hundreds of scientists, and engineers (S&Es), built by thousands of dedicated and highly skilled workers, and funded by taxpayers for billions of dollars. Unfortunately, the reward for around 600 Vought employees will be the elimination of their jobs here. As was reported in the 9/23/94 *Dallas Morning News*, page 3D, Northrop is to eliminate 9,000 of its 47,500 person workforce by the end of 1995. These cuts are part of an ongoing pattern that has been happening since the mid 60s. Until people complain more, this elimination of S&E jobs will continue, reducing the ability of the U.S. to compete in the world marketplace. Silence is assent. Here are some people that need to hear from you: 1. The Honorable Edward M. Kennedy, Chairman - Subcommittee on Immigration & Refugee Affairs, United States Senate - SD 520, Washington DC 20510 - 6284, (202) 224 - 7878 or 224 - 4543 FAX: (202) 224 - 2417. Senator Kennedy can help to stem the tide of S&E immigration, which was boosted in 1990 from a ceiling of 55,000 a year to 140,000 a year, when record numbers of S&Es were either unemployed or underemployed. 2. The Honorable George E. Brown Jr., Chairman - House Space, Science, and Technology Subcommittee, U.S. House of Representatives, Washington DC 20515, Phone: (202) 225 - 6161 FAX: (202) 225 - 8671. Representative Brown needs to hear from you about these employment problems. He is the influential chairman of a very important subcommittee. 3. Dr. Neal Lane - Director, National Science Foundation (NSF), 4201 Wilson Blvd. - Suite 1205, Arlington VA 22230, (703) 306 - 1000 FAX: (703) 306 - 0109 email: nlane@nsf.org. He needs to hear about these problems because the NSF is still publishing information about a phony "S&E shortfall" of 700,000 by the year 2010. The reality is there is a huge shortage of S&E jobs. Some analyses show that there are around six S&E graduates for every projected S&E position out to the year 2005. Gene A. Nelson, Ph.D., 1820 E. Peters Colony Road #5004, Carrollton TX 75007 - 3726, (214) 394 - 3880, gene.nelson@u2u.com

## Editorial:

### Executive Salaries Are Becoming A National Scandal

At a recent annual meeting of a major aerospace corporation, an employee stockholder entered a motion from the floor. He moved that, in view of the downsizing and cutbacks the company had undergone, all further incentive payments to management be suspended.

He pointed out that bonuses of up to 85% were being paid on top of what were already high executive salaries. He said this was hurting employee morale and giving the impression that management was feathering its nest while everyone else was hurting.

Evidently he struck a responsive chord in the audience because his motion was the only part of the meeting that evoked applause. The response was perhaps indicative of the popular resentment welling up against what more and more people see as brazen avarice on mahogany row. Top management increasingly seems to view itself as a group of demigods entitled to dwell in the financial pantheon once reserved for nobility.

In the face of massive layoffs and hardship inflicted on the work force in general, corporate management is on an upward spiral of greed that seemingly has no bounds. Even business magazines, typically admirers of corporate gall and perennial cheerleaders for executive superstars, are registering mild protests. They tactfully refer to today's compensation structure as "skewed," acknowledging that pay within corporations is "becoming increasingly unequal."

Figures from 20 years ago show that chief executives of large companies typically were paid 35 times as much as the rank-and-file employees in their firms. Today, the chiefs typically earn 150 times as much. The winner of the paycheck derby last year made more than \$556,000 a day, and that is assuming he worked a 365-day year. The second-place finisher was substantially behind, pulling down a mere \$144,000 per day.

In a rare display of good sense, the federal government has tried to impose some reason on this loony state of affairs by putting a limit of 1 million dollars on the amount a company can deduct for taxes as executive compensation. But this has somewhat exacerbated the problem. Many corporate boards now accept the million-dollar figure as sort of a minimum wage for CEOs. Some top executives who weren't making that much were promptly pushed up to the limit.

In addition, any compensation tied to performance doesn't count

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toward the million dollars. So managers are devising end runs to beat the federal limit. Frequently, "performance" is being judged on the basis of delivering good quarterly profits. And the easiest way to do that is to fire people. More than 3,000 employees are biting the dust every day, and that is just from firms which announce their firings publicly. If the Big Man gets rid of 10,000 or 20,000 people, he puts maybe another million bucks in his pocket. Sorry, no hard feelings, but that is what it takes to "perform."

Incidentally, despite the applause, the proposal to limit executive pay at the aerospace company was defeated.

By Ronald Khol, Editor

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### Dissident Engineer's Bookshelf

#### "The Overworked American: The Unexpected Decline of Leisure,"

by Juliet B. Schor, 1991, 247 pages.

One of the paradoxes of engineering is that two of the greatest afflictions of the profession, underwork (unemployment and underemployment) and overwork (heavy uncompensated overtime), often occur at the same time. This book helps explain this paradox. For example, the book notes (page 39), "The trend toward underemployment and unemployment signals a disturbing failure of the labor market: the U.S. economy is increasingly unable to provide work for its population. It is all the more noticeable that growing idleness is occurring at a time when those who are fully employed are at their workplaces for ever longer hours. Like long hours, the growth of unemployment stems from the basic structure of the economy. Capitalist systems such as our own do not operate to provide employment. Their guiding principle is the pursuit of profitability. If profitability results in high employment, that is a happy coincidence for those who want jobs.... In the last twenty years, full employment has become ever more elusive as a result of high interest rates, declining investment, sluggish productivity, takeovers and mergers, increased market uncertainty, and stiffer foreign competition. At the same time, Washington has abdicated its responsibility for maintaining jobs. The 'golden age' of Western Capitalism is over, and with it went the promise of high employment.... Rather than hire new people, and pay the extra benefits they would entail, many firms have just demanded more from their existing workforces. They have sped up the pace of work and lengthened time on the job. In an atmosphere of high unemployment and weak unions, workers have found it difficult to refuse. The result has been a labor market characterized by a glaring inequity."

*Dissident Engineer*

## Strategy:

# To Reform Welfare, Reform Immigration

All welfare reform proposals have the same goal: to get people off of public assistance and into jobs. But the U.S. Department of Health and Human Services estimates that 2.3 million net new jobs would be needed to absorb present welfare recipients into the active work force. A commitment to creating these jobs would cost billions of dollars. A more efficient strategy is to dry up a principal source of unskilled labor.

Welfare reform can be linked, cheaply and fairly, to immigration control. In 1992, the U.S. Immigration and Naturalization Service issued 1.3 million work authorizations, and the U.S. census Bureau estimates that another 300,000 aliens entered the United States illegally. The economy created nearly 2 million net new jobs, a vast improvement over recent net job losses, but with an annual net increment of about 900,000 native-born Americans entering the labor force, the demand for jobs still exceeded supply.

The Americans most directly harmed by immigration are the poor. This is nothing new. A century ago, Booker T. Washington exhorted the people to rise up against immigration on grounds that blacks were passed over for jobs in favor of immigrants. Today's depressed neighborhoods in high-immigration cities show how little has changed. Demographer William Frey of the University of Michigan documents an outflow of unskilled native-born blacks and whites from California, where they have been displaced from jobs, schooling and other opportunities. Americans have been displaced in the janitorial, restaurant, motel/hotel, construction, meatpacking and service station industries. A consensus is developing among economists that one unskilled American worker's job is lost for every six or seven immigrants who enter.

A labor force that grows too rapidly also debases jobs, seen in the Third World's disregard for worker safety and shown historically by the effect on wages. In 19th-century England, for example, one study showed that a 10 percent rise in the labor supply led to a 19 percent wage decline. Economist Claudia Goldin of Harvard finds that our last great surge of immigration, from 1890 to 1920, caused wages in immigration-impacted cities to rise 1 to 4 percent less than they would have done in the absence of immigration. And in economic recessions, she writes, "wages were distinctly depressed in cities having an increase in the percentage of their populations that was foreign born.... A 1 percentage point increase decreased wages by about 1.5 to 2 percent." During the past 15 years of heavy

immigration, Americans' real disposable personal income has again been declining.

Labor surplus, not shortage, is the abiding issue at every educational level. As of March 1993, 13 percent of Ph.D. mathematicians remained unemployed. Until the better prospects of 1994, college graduates and engineers faced underemployment even as the economy recovered. High school graduates are bumped downward and, in turn, bump those below them. The United States' rapidly expanding labor force, driven by the most immigration this country has ever seen, continues to diminish prospects that all young Americans and their children will enjoy the American Dream.

Immigration accounts for nearly half of U.S. population growth, and births to post-1970 immigrants, who have significantly more children per woman than the national average, add more. The population of the United States is growing by 58,000 people a week. The Census Bureau's most recent projection suggests a population of 400 million by 2050.

Facing demographic trends of this magnitude, no administration or government program and no foreseeable private investment can provide enough jobs to implement welfare reform humanely. The choice will be rising unemployment/underemployment or more people on the welfare rolls as both native-born Americans and those who have already immigrated to this country contend against incoming job-seekers.

A pause in immigration would let welfare reform proceed smoothly. The market could absorb the unemployed, reengage the discouraged worker and relieve the welfare burden. A genuine labor shortage, if it materialized, would encourage a substitution of technology for labor, enhancing productivity and leaving room for noninflationary wage raises.

These benefits are realizable from a time-out on immigration aiming in the long term for an annual flow of 200,000. This approximates a "replacement level" number, where those entering the country are balanced by others leaving. Paralleled by two-child-per-couple fertility, this reform of immigration policy would gradually stabilize the U.S. population, again making all of the people stakeholders in their communities and in the national enterprise, America.

By Virginia D. Abernethy

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