

AMERICAN ENGINEERTM

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In Honor Of The American Engineer

The week of **February 17, 2013** has been dedicated as National Engineers' Week and I would like to take this opportunity to congratulate and honor the members of the American Engineering Community. I commend you for your many accomplishments and contributions to our society and our great nation.

To those who have worked in the defense sector, we owe a special gratitude because your contributions have kept our country safe and free from aggression. Our cities and shores have been free from bombings and invasion because of our nation's technological strength and your engineering capabilities.

To those in the commercial sector, we thank you for your contributions in too many areas to mention. Your signature touches everything made by mankind, no matter how small and in every industry. I can visualize the engineering effort that not only developed a product, but the equipment used to manufacture and produce it. Your presence is everywhere.

You, the members of the engineering community, have made our lives safer, healthier, easier, more enjoyable, more efficient and more productive to say the very least. You have done this often under adverse conditions, through dedicated service and personal sacrifice, and for this, you also have our appreciation and our gratitude.

You are a unique breed; the better you do your work, the sooner you will be without a job, without an income and without a career. Knowing this, you always proceed and do your very best anyway. Your function is to design yourself out of a job. You have done this admirably. Engineers have not only won the wars, they have won the peace. The Cold War is over and communism, as a threat, is ended. I believe, very confidently, that our victory in the Persian Gulf, Afghanistan and Iraq were primarily due to the technology developed by our American Engineering Community and utilization by our skilled servicemen and women. I thank you all.

For many, 30 years, since NSF Engineer Shortage Propaganda, <http://www.aea.org/nsf.htm> you have been discarded and laid-off by the hundreds of thousands. Had you not done your job and our technologies failed in the Persian Gulf, Afghanistan and Iraq, had we, these United States, failed to show that we can back up our will with our engineering-developed might and capabilities; you would all still be in great demand. Had you failed, like so many others, Congress would shower the engineering community with money in the naive belief that money alone would breed success. The defense budget would increase and you would not suffer the pains of unemployment and under-utilization. However, I would not have it any other way. I am proud to be a member of the engineering community, knowing that we function to solve problems and move on to new challenges. I am proud, and you should also be proud, to be members of a profession that has performed so outstandingly.

We are still very much concerned about the crisis in engineering unemployment, the Engineering Surplus and under-utilization in the United States today. AEA will continue to tell others that our unemployed and under-utilized members of the engineering community must not be forgotten. We must continuously strive for a manpower balance that provides our engineers and young engineering graduates with the opportunity to pursue their careers and enhance their engineering skills and capabilities throughout a life of continued practice and professional service. We shall prevail in this endeavor.

We thank you for your efforts, dedication and achievements. We applaud you and will tell the rest of the world of your capabilities, willingness, readiness and desire to do even more. God bless you all, not only during National Engineers' Week, but throughout the year.

Think of a life without: Credit cards or Bar Code Readers and computers. How long would the lines be at the market just to ring up your order? How about the time and extra cost? Safe Automobiles, lubrication and tires. Trains, airplanes, RADAR, computers, highways, drinking water, ships, our military peace keeping capabilities

Think of a life without: solid state electronics or your TV system. No cell phones, Internet, portable radios, stereo, computerized cars or TV shows. How many people would be without jobs or careers?

Now, even the Stock Market has been driven by Technology. Members of the Engineering Community gave us these things and too many more to mention. We should honor them for just one week of the year. Feb. 17 - 23, 2013 is National Engineers' Week. Thank the engineers, programmers and other STEM professionals of our great nation, who made this all possible.

Dues for 2013 are due

Membership/Annual Fees

Member: \$30.00, Associate: \$30.00
Retired: \$20.00 ,Unemployed: \$20.00
Student: \$15.00 Full time only.

Member Information at:

<http://www.aea.org/membership.htm>

FREE AEA E-MAIL ADDRESS

Members can have an AEA Email address and get AEA recognition. Your email address should be Name@AEA.Org. Example: RJones@AEA.org This should impress your contacts and Representative.

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What Engineers Do?

Keeping this as simple as I know how I would say:
“ENGINEERS SOLVE PROBLEMS” AND WE DO IT
VERY WELL.

Considering all our Disciplines and Specialties,
Engineers are best suited to resolve America’s
problems and issues. I believe it is about time we
got started. Start with “Position Papers.”
GOTO <http://www.aea.org/positionPapers.htm>

**AEA’s Director of Legislative Affairs
AEA Legislative Activities**

We are forming a loose-knit, but passionate, AEA team to deliver important messages in person to the Aides for Key Senators and Congressional men and women on Capitol Hill. Key Senators, Congressmen, and women are those who are able to change the H-1B visa program. Team members would likely be within commuting distance of The Capitol. Typically, three to four appointments will be scheduled for one day on either the House or Senate side of The Hill. AEA members or associates, who are constituents from each State or Congressional District to be visited, will contact the respective offices prior to our Team’s appointments. The AEA members will ask that the AEA Team be well-received as the subject matter is important to the constituent. Interested in being a Team member? Contact: James McDonald with your-mail address, phone number and physical address. You will in turn be contacted to set up a group meeting at a convenient place. Worried that you don't have any lobbying experience? Don't be. We have team leaders with Capitol Hill experience. Team members who add physical presence are valuable and necessary. That could be you. <http://www.aea.org/currentNews.htm>
James McDonald
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SPECIAL ENGINEERS NEEDED

AEA would like to designate each month of the year to one Engineering Discipline. To do this we need an engineer or engineers to prepare an article dedicated to that discipline. The article is to honor the members of said discipline. It is never to late or too early to prepare an article. Remember, AEA is a Multi-discipline organization.

Prepare the article in MS-Word and attach to your submission.

CONGRESSIONAL REPRESENTATIVES ADDRESSES

At: www.house.gov/writerep/

National Engineers Week 2013

the Seduction of America's youth, While Importing Foreign Workers.

February 17th to 23rd. 2013 is National Engineers Week and the all out sales pitch to recruit our youth to the colleges. Why are we discussing this issue? No one else will. Spend your years and expense getting your college degree and education only to find your opportunities given to imported foreign workers, sent offshore to foreign companies and corporate downsizing. The scenario follows. Graduate and no job. Mom and Dad cite the conventional wisdom of Engineer and STEM labor shortages. With this degree and great education, why doesn't John or Jane get a job? They ask. Obviously you didn't study enough or are not smart enough. Is it really their fault? Enough! These students believe it is their fault. Who is telling them the truth? Who is giving them the facts? Academia will just sell them an advanced degree.

The colleges and universities all promise "come here get a job and secure your future". They promise you a job and career and cannot even guarantee you a good education. Here you will find Corporate America, our governments National Science Foundation, (NSF) and our College Empire at the root of our Engineering and STEM labor surplus. This Big Three are the same three spouting Engineer Shortage Propaganda (ESP), but buying cheap labor, destroying careers and loss of the American Dream.

Then, this same big three (Corporate America, our governments National Science Foundation, (NSF) and our College Empire) are promoting National Engineers Week recruiting, students to our engineering colleges while importing and using these H-1B foreign workers in place of our American graduates.

Congressional representatives can't handle this. They are too indebted to the Big Three to take this on. Engineers solve problems. We have left this problem up to our politicians for too long. It is time we got involved in the solution.

Use your mouse, more follows:

<http://www.eweek.org/Home.aspx>

<http://www.eweek.org/AboutEngineering/AboutEngineering.aspx>

<http://www.aea.org/LittleGirl.htm> National Engineer's Week Hey little girl – want a cookie????

[How not to hire a qualified American worker, see here. http://www.aea.org/employment.htm](http://www.aea.org/employment.htm)

<http://www.youtube.com/watch?v=Fx--jNQYNgA&feature=related>

Readers Write;

Note: I hold monthly meetings for the Professional Activities Committee for Engineers (PACE), North Jersey Section of the IEEE. These meetings are located in the Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011 . on the 2nd Wednesday of each month at 6:30 to 8:45 P.M. All are welcome to attend.

The following are a summary of comments from one of these meetings.

Richard F. Tax

Subject: Engineering Abuses

"There is no shortage of engineers. Companies are very picky about who they hire since they are looking for very specific skills and experience without having to train people. That way they save money and don't have to worry about the people they just trained leaving the company. In all honesty most engineering skills can be picked up without formal training given enough time and the right assignments, as well as mentoring by co-workers.

The worst part is that so many new tech graduates are unable to find jobs in areas close to what they majored in college. They have to borrow large amounts of money to pay the ever-increasing tuition and are then stuck with debt they can't pay off because they had to take low paying jobs in areas unrelated to their degrees. The longer a new graduate goes without finding a proper job, the harder it is to get hired because companies discriminate against people who have not been working in their field for more than a year or so. Eventually this will result in fewer young people going into tech fields in the USA, which will only increase the perception of a shortage.

There is also age discrimination against older engineers since long term experience is no longer valuable (only recent experience in the latest technology counts). Older people cost a lot more in salary and benefits and a younger person can do

most of the current engineering work just as well. If you are in a higher salary position, the companies want to push you into a more managerial role whether or not you want to do this kind of work.

Salaries have been almost flat the past few years. With little opportunity for people to leave and find better jobs elsewhere, the companies have an excuse to give very low raises or none at all. People don't complain because they are afraid to lose the jobs they already have. Those mortgages and college tuitions have to be paid.

The problem is not engineers coming from other countries and taking work away from US citizens. The bigger problem is that companies are either outsourcing to companies outside the US or setting up their own sites in "low cost" regions (also known as "high growth" areas.) They can pay much lower salaries and benefits, and can have two or more people do the work of one US person and still save money, even if they do have to train the non-US people. Most of the engineering hiring I am seeing is outside the US. It used to be that only non-defense work could be done outside the USA because of export restrictions, but apparently since many defense products are also sold by US contractors to foreign countries, they don't need to use US government funds to pay for this work. Much aerospace work these days is "commercial" (i.e. airliners) that the big companies want to sell overseas anyway,

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-so there is an advantage in doing the work closer to where the products are sold. Remember that Wall Street wants "growth" and the US market is getting saturated.

Even though most companies brag about how good their work-personal life balance is, they are still taking advantage of the bad economy to squeeze more work out of engineers including free overtime. At the same time benefits are being cut and medical insurance is getting more expensive while providing less coverage.

Engineers do not have the benefit of unions or big powerful organizations like the AMA which everyone in their field joins. The IEEE does not provide this service since they are more interested in supporting academia and the big corporations. I don't know anyone who wants to join the IEEE because the dues are high and provide little benefit to engineers working in industry. If the IEEE would lobby on behalf of working engineers and do a much better job selling themselves to those engineers, then maybe they would attract more members. Most engineers do not want unions since they think that the unions reduce the chance of the best people getting better salary growth (with unions, everyone gets pretty much the same pay and raises.). Also they are afraid they could lose their jobs if they even just discuss the idea of being organized.

Engineers, in general, express our concerns. However, more are needed to support and make a difference. These people did.

OLD BUT STILL RELEVANT

Dear Mr. Tax:

I recently had the opportunity to read your articles in the IEEE newsletter regarding unemployment among engineers in the local area, particularly unemployment among recent graduates.

American Imports from Slave Shops

Why American manufacturers cannot compete? We all know wages are lower in China, India and other countries; however, we should introduce legislation against importing products from sweatshops.

Recently, one company in India cost the lives of over one hundred workers trapped in a manufacturing facility fire. American companies, including Sears and others were buying products from this facility. We have to set comparable standards for these off shore facilities. Stop imports from those that cannot comply. We should begin with an AEA Position Paper opposing the importing of products from sweatshops and follow up with Legislation. Let's level the Playing field.

American Engineer® (*AE*); is the official publication of the American Engineering Association, Inc.

Objective: to get *AE* on the desk of every Congressional Representative. Everyone can do this. It would be better coming from a member with an AEA email address. You can do this.

Engineering, manufacturing companies, HR and employment recruiters have been contacting our Web site. These same groups will financially support our *AE* through their advertising. Off shore, entities also wish to satisfy their advertising needs in the U.S. through *AE*. This is what we have been receiving.

Membership information

One must be a citizen of the United States of America to qualify for membership in the American Engineering Association. In addition to being an American citizen, one must fulfill the following requirements for their grade of membership.

Membership information is strictly confidential and will not be released. See: <http://www.aea.org/membership.htm>.

I also find myself in that situation, as I graduated in May of xxxx from NJIT with a 3.15 GPA and I am currently working as a bookkeeper, a job which is totally unrelated to engineering. In fact, as if to add insult to injury, I was rejected for an electrical engineering officer position in the U.S. Air Force, as the military is apparently cutting back on its manpower.

One of the problems I have encountered in my job search is that many prospective employers scorn applicants who have been unemployed for long periods of time, and the longer one is out of work, the worse the situation gets. There is still a belief among the general public that an EE degree is a guaranteed ticket to a good job.

Also, there is a tendency for employers to categorize engineers according to specialty, even at the entry level. For instance, my senior year at NJIT I had to choose a two-semester "systems" sequence; I chose communications systems (which I now regret, as this field seems to be very dependent on defense spending). During my job search, I found that some employers classified me as a communications engineer and would not consider me for positions in other areas. I personally don't think it is fair to classify an individual into a particular specialty at that point in his or her career.

However, I would like to thank you for your articles, as I have gained a degree of moral strength in knowing that I am not alone in my predicament. I would also certainly welcome any useful information or advice that you may offer me. In closing I would like to say that we engineers in the North Jersey area are very fortunate to have a PACE committee chairman who is taking such a personal interest in the employment situation.

Sincerely yours,

Name withheld