

# AMERICAN ENGINEER<sup>TM</sup>

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## Silent Knowledge

Our Engineers are among the most knowledgeable and experienced people in the world. Still, who comes to engineers for advice? Who receives the visibility? Most significantly, Engineers cannot influence their Representatives or legislation needing our engineering knowledge. Yet, engineers can automatically spot potential problems, faults, accidents and solutions before they happen. One goal of a qualified engineering organization should be to provide engineers with the opportunity and visibility to address these issues. We, AEA, will have to make this happen.

The news media reaches college professors and congressional representatives for answers. Government Representatives go to Universities for advice. Neither group has the hands-on experience of engineers in fault isolation and problem solution. Engineers have the In-Depth knowledge and experience for problem resolution, but are seldom consulted.

An engineering education is not enough. It is only the beginning. It touches the surface and teaches engineers how to think. It is the engineers, cultured by years of experience, who are the capable problem solvers. That is what engineers do. Still, we are silent and seldom heard.

## The Future for Engineering

Ok! We have a future for Engineers and the Engineering profession. Either way, we have a future – Good or bad. This is entirely up to the members of the profession. We, have to provide the ways and means to influence the future and protect our profession. AEA can provide the means, but engineers have to provide the input and support. Can you do this?

For too many years, we have been embarking on the most significant design and development program of our entire career: This is building AEA to provide qualified support and representation for the members of our American Engineering community.

We have the structure for AEA, with by-laws and goals.<sup>1</sup> AEA is not cast in concrete and growth may require some revisions, however, our dedication to the profession and our engineering membership is firm. Our web site is an example of facts and information no where else to be found. Most is contrary to convention wisdom. Still the information is based on facts and history. Our web is a picture of the issues influencing the profession. Engineers can continue as before and ignore their obligation to themselves and their profession or wake up and fight to build the only multidiscipline engineering organization dedicated to support engineers and the profession.

Many American Engineers do not see the benefits of AEA, but foreign engineers do. Our engineering neighbors from the rest of the world, Iraq included, are requesting AEA membership. Companies are seeking AEA membership. Cannot happen! Membership is for individuals and they must qualify to join.<sup>2</sup>

The history, old and still relevant, is pretty much defined by the following: *Why an AEA.*<sup>3</sup>

Notes:

1. [www.aea.org/AEA\\_BY\\_LAWS.DOC](http://www.aea.org/AEA_BY_LAWS.DOC)
2. <http://www.aea.org/membership.htm>
3. [http://www.aea.org/documents/tax/why\\_an\\_aea.pdf](http://www.aea.org/documents/tax/why_an_aea.pdf)

## Obama Cuts NASA/Military budgets and Engineering Jobs

President Obama cut funding from, both, the Military and NASA budgets. These cuts will further compound the engineering and STEM employment crisis and cut, manufacturing and engineering design and development and support programs. This will reduce job opportunities in the private sector from the top down. Management, Engineering, (every discipline) programmers, factory maintenance, electricians, union and non-union support jobs will disappear. Component manufacturers will shut down and cost us material availability. Then we will have to face the collateral damage as local business, depending on these workers, shut down. The National Science Foundation enjoys a \$6.7 billion dollar budget and Obama gave them an additional \$3 billion dollar Stimulus Package. The increased funding to support NSF and public sector programs will subsidize foreign student programs, increase degree production and deprive U.S. students of jobs and opportunity. This activity increases the work force unbalance (Supply/Demand Ratio) and deprives more engineers and STEM professionals of jobs and an opportunity to enhance their skills.

Can you imagine President Obama as an engineer at a Program Design review? What is the value of (X)? Has he ever answered a question with a direct answer? I can hear security coming to escort him to the door. “You can pick up your personal belongings in the Visitors Reception room tomorrow.”

**Sounds like one of our Engineering Institutions.** In 1990 Testimony from the IEEE-USA Aerospace R&D Committee lobbied on the FY 1991 Budgets to cut funding for the National Aeronautics and Space Administration’s (NASA) Space Station Freedom and send the money to the National Science Foundation, for the Subcommittee on VA, HUD & Independent Agencies House Committee on appropriations, May 3, 1990. This would cut engineering and STEM labor-intensive jobs. Is Obama or IEEE good for practicing engineers or the profession? Any questions?

**LIFE INSURANCE** for AEA members.

Programs and providers for Member Life insurance will be introduced in 2013. California Members report reduced Auto insurance rates for AEA Members.

Late winter/early spring is the goal for a Members Group Life insurance program

**FREE AEA E-MAIL ADDRESS**

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

**CONGRESSIONAL REPRESENTATIVES ADDRESSES**

At: [www.house.gov/writerep/](http://www.house.gov/writerep/)

**THE AMERICAN  
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INC**

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Via. AEA@AEA.ORG*

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**AEA's Director of Legislative Affairs**

Jim McDonald is a Purdue Graduate, finishing first in his class with a Civil Engineering degree in 1968. He continued his education at UC Berkley earning his MSCE in 1969. He also holds a Juris Doctor degree (1996) from George Mason University in Virginia. He is a member of Member Chi Epsilon (Civil Engineering Honorary) and Tau Beta Pi (Engineering Honorary) as well as being a Member of the Virginia Commonwealth Bar. (39726)

He holds Professional Civil Engineer and Professional Geotechnical Engineer licenses in California and is a California Patent Attorney.

Among Jim's many accomplishments are having served two years in North Yemen designing water supply systems with the World Health Organization.

He has been involved in immigration issues for over a decade, both in California and Virginia. He has also served four years as a Legal Advisor at the California Headquarters of the USDA Forest Service on Grants and agreements. Jim served for several months determining Forest Service compliance with the Legal Framework Indicators of the Montreal Process. The legal framework indicators, was to determine whether US laws guiding the Forest Service comply or follow the criterion set up by the United Nations at Montreal. He solely-authored and submitted an Amicus Curiae brief in *Asgrow v. Winterboerr*, United States Supreme Court, the most important intellectual property law case of the October 1993 Term. The brief was on the winning side of an 8-1 decision.

**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  
AEA, Director Legislative Affairs  
[jgmcd45@netscape.net](mailto:jgmcd45@netscape.net)

## AEA's Director of Membership

My name is Paul (Paul E. Ward) and I have just taken on the responsibility as AEA's Membership Director. AEA's President, Richard F. Tax, asked me to take on this assignment to maintain membership records and improve AEA's communication capabilities.

I retired ten (10) years ago and there after worked as a part-time substitute teacher with a Learning Disabilities (LD) High School until eighteen months ago, and had a lot of fun with these High School level students "feeling their Cheerios".

Before retirement, I had the honor and privilege of working for many different organizations in the Northern New Jersey area, such as: Associated Testing Laboratories, Dialogic (later to be purchased by Intel), Kearfott Aeronautics, Bell Labs, and Monsanto Electronics. The most challenging work was with Bell Labs in Whippany, NJ; "I am not a 'rocket scientist' really", just had the right background in electronics and environmental testing at the right time. While working there I earned a B.S. in CS (Computer Science) with a Math minor. After graduating, I was assigned to build a Data Acquisition System (DAS) for an Accelerated Life test lab, testing various types of Printed Circuit boards, with approximately Two Thousand (2000) test points, using an existing infrastructure. This assignment consisted of buying the computer equipment and writing the software. A must requirement was that this DAS be able to communicate with a Unix OS used for Data storage and analysis by the engineers and scientists working to develop printed circuit boards and connectors.

Next assignment was to put together a Departmental Computer System that would be used by over a Hundred (100) Dept. members for general computing and data analysis.

I have an IT background and in looking over the details of our membership, I concluded what is required is a good database system (dBs), as opposed to the Excel system presently in use. After some consultation with others, I decided to use MS Office 2010's Access10, which would be the best for a number of issues.

Now my background in this application is very limited and in an effort to expedite this project more rapidly, I ask if you have some background in this suite's application, I would appreciate your expertise and input. Please Contact me at the following email address: [PWard1130@aol.com](mailto:PWard1130@aol.com).

With regards, Paul (E. Ward)

## EDITORS NOTE

This issue of the *AMERICAN ENGINEER* includes subjects brought to my attention by readers, members and friends. More input would be helpful. I am sure many of you have concerns and interests not covered here, but I also believe your concerns and interests are important to other readers. The *AMERICAN ENGINEER*, (AE), [www.aea.org](http://www.aea.org) and <http://www.aea.org/CMS> provide you with the opportunity to share your thoughts and interests with others.

*I feel like a comedian who just laid an egg. Please, help me out. No applause - just join in.*

While addressing web sites I remind you that *AMERICAN ENGINEER*. Is more than just a few pages of text. This is an invitation.

As you read the *AMERICAN ENGINEER* and learn more about us, please note that we have a mission to enhance the profession. Unlike other engineering societies before us, others will not change our mission. You can help by keeping us strong and bullet proof. Some would like to control our AEA and thus, the future for engineers. We cannot let this happen.

Look at SWE, the Society of Women Engineers: Once a group organized "by women engineers, for women engineers" and now: <http://societyofwomenengineers.swe.org/> would you like this to happen to our American Engineering Association? Think about the future, be an American Engineer.

**AMERICAN ENGINEER can be distributed** by **E-copy** to others. You can help by sending this to your associates and increase our visibility. You can also help by joining AEA. Just got the invoice for approx. \$2200 for our Liability Insurance. For a \$30/year membership, you can go on line at [www.aea.org](http://www.aea.org) for more information. **Donate**, by check **To AEA**, c/o Harold Ruchelman, 533 Waterside Blvd. Monroe Twp. NJ 08831.

With your help and thoughts, we will see you soon.

## MEMBERS, FRIENDS AND SUPPORT

We have to maintain a positive approach, look at AEA ([www.aea.org](http://www.aea.org)) and plan for 2013. When viewing our AEA it is obvious, we need to increase membership. We have to maintain a positive approach and keep AEA in our daily thoughts and activities. In every way we can, spread the word about AEA and try to reach others. We need a staff and office near Washington, D.C. One hundred thousand members will provide this.

Our membership potential is easily 400,000. Remember we are a Multi Discipline Engineering Organization. AEA needs your help and the help of the Engineering Community to reach influential numbers. Let us all give it a shot. Only when we try, will we get there.

**Group Life Insurance:** We need interested members to get our Group insurance.

**REMEMBER:** AEA membership is CONFIDENTIAL. We are funded by membership dues and do not distribute, sell or disclose membership information to any other party under any circumstance. Maximum annual dues is only \$30  
The following information should be helpful to increase visibility.

Please post and distribute this single page AEA introduction to your associates. <http://www.aea.org/aeaGlancePrint.pdf>

Here is an introduction to AEA Membership Grades and Requirements: <http://www.aea.org/membership.htm>

One must be a citizen of the United States to qualify.

Maximum Annual dues for 2013 are only \$30. Fees are reduced for the unemployed and retired. We need your support. Please use the information provided and act today. Engineers need qualified support. I doubt you will find it anywhere else.

Introduce [WWW.AEA.ORG](http://WWW.AEA.ORG) to your associates. You will be glad you did...

**Make it happen!**

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

Objective: to get *AE* on the desk of every Congressional Representative.

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**

MEMBER: Member must have graduated from an ABET accredited college or university in an engineering curriculum approved and accepted by AEA, or eight (8) years of engineering experience and is supportive of the goals of the AEA.

ASSOCIATE MEMBER : Anyone with training or interest in Engineering, Programming, Mathematics Technology the Physical (STEM) sciences and is supportive of the goals of the AEA.

STUDENT MEMBER : Any, full time, student enrolled in an Engineering or Technical curriculum approved by the AEA and is supportive of the goals of the AEA.

ACADEMIC: Affiliate, academic, professor, teacher or employee of any school, college, university or educational institution and is supportive of the goals of the AEA.

Military Personnel: Fees are waived for members of the military stationed in Iraq, Afghanistan or other combat zones and are supportive of the goals of the AEA.

#### **WHAT ABOUT AEA?**

It is all on one single page. Send it to an associate

<http://www.aea.org/glance.doc>

**AEA** is dedicated to the enhancement of the engineering profession and U.S. engineering, development and manufacturing capabilities.

**AEA** is a nonprofit corporation with members in virtually every high-tech center and industry in the United States.

**AEA** members are from all disciplines including, electrical and electronics, civil, mechanical, industrial, aerospace, chemical and software to list a few.

**AEA** members are involved from microcircuits to transmission lines, go-carts to moon shots, energy conversion to energy conservation and from the ocean depths to outer space.

**AEA** members are from ALL industries, branches and specialties of the engineering profession.

**AEA** is the only engineering association dedicated exclusively to professional needs and concerns of the U.S. Engineering and High Tech Community

#### **AEA - Sharing Common Concerns:**

Age Discrimination and lifelong career.

Loss of U.S. Manufacturing, Engineering and High Tech jobs.

Reduction in U.S. productivity, Under-utilization of engineers,

Life insurance programs for Members, Portable pensions, Skill development. Salary compression and unpaid overtime.

Importation of foreign engineers, programmers, High Tech workers and recruitment of foreign students. Tax incentives for U.S. corporations. Engineer and High Tech Manpower Shortage Propaganda.

#### **ENGINEERS NEEDED**

AEA needs 100,000 Members to fund an office in Washington DC and reach their Representatives. The office and staff will maintain AEA membership records, support volunteer and lobbying efforts. Members will present our concerns to their Congressional Representatives. We need to make an impression.

Focus will be on Engineering employment, opportunities and a future for our members. We support the employment of American Engineers first and deplore the Engineer Shortage Propaganda disseminated by the U.S. Government, College Empire and Corporate America. Our Position is:  
[http://www.aea.org/pdf/AEA\\_POSITION\\_Workforce.pdf](http://www.aea.org/pdf/AEA_POSITION_Workforce.pdf)

#### **Our Plans Include**

Forming Local Chapters and Reps. starting in high engineer density locations. Since AEA is a multi discipline engineering organization, we will need Chapter Chairs, and Representatives for each Engineering Discipline. Volunteers can step forward.

***JOIN! And, Reach across the table to cultured engineers with a variety of disciplines and experience.***

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.