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— By Engineers and For Engineers —

A Blast From the Past

This issue of the American Engineer will be a “we told you so” kind of effort. We will highlight some articles from past issues relevant to today’s events. Had Congress paid attention to AEA’s warnings, perhaps some of the problems we face today could have been avoided.

AEA News

September 1985

AEA Requests Visa Denials

In a letter dated August 11, 1985 the American Engineering Association has requested that Secretary of State, George Shultz, instruct U.S. embassies to deny any new student visa applications from those countries termed the “Designated Countries”, formerly called the “Communist Block” countries, or any country who has committed acts of terrorism against the United States.

An AEA investigation into the foreign student aspects of the problems facing American working engineers has turned up the following facts.

There are over thirty-four thousand foreign students here from those countries termed the “Designated Countries”. Nearly half of those studying engineering, science, mathematics or computer science. These are the same fields of study “exempted” from the return home provisions of most of the current immigration legislation.

Any person holding a security clearance in the United States **MUST** report any contact with any individual from one of the designated countries. The Department of Defense **OBVIOUSLY CONSIDERS THESE PEOPLE A THREAT.**

These numbers **DO NOT** include members of the radical Shiite or Sikh terrorists or any of the other equally radical terrorists groups who are from other than the designated countries.

The “students” from the designated countries were much more concentrated in the sciences than foreign students as a whole. 49.35% of students from the designated countries vs. 37.6% of all foreign students. It seems apparent from

these statistics that they want our technology much more than the “average” foreign student.

Despite Jimmy Carter’s pledge to the American People to send all of the Iranian students home after the “hostage crisis”, there are still (1981/1982 school year) over 21,000 Iranian students in this country. The number has dropped to 20,360 for the 1983/1984 school year.

It appears that the “leveling off” of the number of foreign students in this country can be directly attributed to the decline of the students from Iran. The population of Iranian students peaked in the 1979/1980 school year at 51,310 and has declined steadily since the hostage crisis. There obviously are still several thousand Iranians allowed to enter the country each year as students.

These discovery’s raise more questions than we will ever have time or space to address in this newsletter. Many of these questions do not directly affect engineering as a profession, but do affect all Americans. . .

Why, for example, are we making available the best technical education in the world to our sworn enemies? To some of us “old folks”, this seems almost a treasonous act. We have no obligation to help our enemies at all.

Who is allowing these students to come here for their education? Is it the government, industry or academia? I’m not sure of the role, if any, that industry plays in this facet of the foreign student problem, but certainly both the government and academia has the ability to deny entrance to study. Why don’t they?

What happens to these students upon graduation, are they allowed to stay to be assimilated into our society? Are they required to return home and take out technology with them? Are they handled any differently than any other foreign student?

How much of these students tuition is being picked up by the United States taxpayer? Typically, between one half and two thirds of the cost of education of a foreign student is born by the taxpayer. It varies from state to state, but in most states, foreign students pay only “out of state” tuition. If the foreign graduate student is working for the university as a “teaching assistant” or “research assistant”, he may pay only “resident tuition” or less. In many other states,

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the foreign student may acquire "resident status" even though he or she is a citizen of another country.

Typically foreign students are older than their citizen counterparts. Many, in fact, serve in their countries military before being allowed to study abroad. Have these people received espionage or terrorists training there? The answer must be that at least some of them have.

Does the State Department screen foreign students visa applications before approving them? Typically, they spend about three minutes per visa application to determine whether they will approve it or not. That amount of time hardly lends itself to an extensive background investigation.

Witness to that fact is the case of the Dallas mass murderer who had over twenty items in his record that would have been reason for exclusion. He was admitted to the United States and killed six people in a Dallas nightclub. The policies of the State Department and INS allowed this individual to enter the country. Will they check student visa applications any closer? I doubt it.

What affect would the adoption of AEA's proposals have on our country, our profession and engineering education? There would be many, they would be far reaching and they would ALL BE POSITIVE.

First and of primary interest to the nation as a whole, our proposals would DRASTICALLY REDUCE THE POTENTIAL FOR ESPIONAGE AND TERRORISM from foreign nationals within the borders of this country.

Our proposals would "create" between fifteen and twenty thousand openings in our "overcrowded" colleges and universities. This would allow many of the U.S. citizens that have been denied an education in engineering (mostly our underprivileged and minorities) to get one.

This would also drastically reduce the workload and presumably relieve the "shortage" of engineering faculty somewhat at those overcrowded universities.

It would relieve the workload at both the State Department and the Immigration and Nationalization Service. Perhaps they could have four minutes per visa application.

It would relieve the workload at the Department of Labor's Alien Certification Units. They might even have time to reject a few requests. Over ninety percent of all certification requests are granted.

It would save American taxpayers millions of dollars each year in each of the above areas and relieve us of the responsibility of funding potential foreign espionage and terrorism within our borders.

CURRENT immigration law provides for the exclusion of aliens who are "ANARCHISTS" OR WHO ARE

AFFILIATED WITH THE COMMUNIST PARTY or any totalitarian party of the United States or... of any foreign state.”

As with any program, “preventive maintenance” is much cheaper, easier and effective than any actions taken after the fact. Write to your Representative and Senator and ask them to support and help implement AEA’s proposals. These proposals are reasonable, they will be effective and they will pay for themselves.

To write to your Representative or Senator use the following addresses:

Hon. (Name)
U.S. House of Representatives
Washington, D.C. 20515

Or

Hon. (Name)
United States Senate
Washington, D.C. 20510

Each rational letter one of the elected officials receives represents hundreds or thousands of opinions from those he or she represents. This can be a very effective tool. Please help us and get your co-workers and friends to help.

AEA News
January 1986

The State Department Replies

The American Engineering Association requested that the United States State Department deny student visa request from those countries termed the “designated countries” (See AEA News for September) (1985)

These countries are the old communist block countries and are at best very hostile to the United States. In addition AEA requested that student visas not to be issued for countries with a history of terrorism against the United States or its citizens.

Our requests, as expected, have fallen on deaf ears. The reply states in part: “Under immigration law, VISAS CANNOT BE DENIED to nationals of any country on the basis of nationality alone, EVEN THOUGH THEIR GOVERNMENTS MIGHT BE CONSIDERED TO BE HOSTILE.”

EDITORS NOTE: President Reagan has since denied Libyans entry to the U.S. on the basis of nationality alone, for the exact reasons we asked the State Department to do so. (i.e.-The threat of terrorism.)

The letter goes on to state “You will note that each applicant must present a properly completed Form I-20, Certificate of Eligibility, SIGNED BY THE DESIGNATED OFFICIAL

OF THE EDUCATIONAL INSTITUTION HE OR SHE PLANS TO ATTEND. EACH EDUCATIONAL INSTITUTION ISSUING THE FORM I-20 DECIDES WHICH FOREIGN STUDENTS IT WILL ACCEPT, AS WELL AS HOW MANY ARE TO BE ACCEPTED FROM EACH COUNTRY.”

Many I-20 forms have been pre-signed, given to recruiting firms who have in turn taken them overseas and SOLD THEM TO FOREIGN STUDENTS. We understand that recruiters commonly receive about 15% of the first year’s tuition as a fee for their services. The otherwise blank forms with the signature of the admissions officer at the school are commonly sold for about \$500 each.

A prime example of what we are letting ourselves in for are the current tensions with Libya. LIBYAN OFFICIALS HAVE PUBLICALLY STATED THAT THEY HAVE “HIT SQUADS” IN PLACE IN THE UNITED STATES.

Libya, in the 1983/1984 school year, had 1,710 students reported in the United States. (Institute of International Education – Profiles 1983/1984) Typical of immigration statistics, no one really knows how many are here. USA today reports that the FBI has some 3,000 Libyan students under surveillance along with another 6,000 Libyan nationals who are in this country.

Of those Libyan students who are in this country, 41.9% were studying engineering, 15.5% computer science and mathematics and 12.2% were studying physical science. These fields of study are the ones being exempted from returning home after graduation.

The universities, you will recall, were within a period of a very few weeks, lobbying Congress for funds to increase the size of our nations engineering schools, allow foreign students to remain here upon graduation and RECRUITING foreign students to fill the vacancies left by the “post baby boom decline in citizen students.” I’M SURE WE CAN DEPEND ON THEM TO DO THE RIGHT THING. (You may note a little sarcasm.)

The H-1b Cartel

Cartel: A combination of independent businesses formed to regulate production, pricing, and marketing of goods by the members. (Webster’s II New Riverside University Dictionary)

The Information Technology Association of America (ITAA), the American Electronics Association (AEA), the American Immigration Lawyers Association (AILA), the National Science Foundation (NSF), the National Research Council (NRC), many members of Congress, the academic community as well as many other organizations are the loosely bound coalition which we define as the “H-1b Cartel”.

The movie *The Formula* with George C. Scott and Marlon Brando had Brando’s character making this statement “The sole function of any international cartel is to ensure

political harmony." This statement obviously refers to keeping the politicians happy and in line.

The H-1b Cartel did just that in the last session of Congress with a huge amount of success with only one casualty – that being Senator Spencer Abraham of Michigan. That was a small price for the H-1b Cartel to pay for such a resounding victory in passage of the H-1b legislation.

The Formula is a story about the formula the Germans had during World War II to produce gasoline from coal. It is a murder mystery and in this writer's opinion a very good and prophetic movie.

Consider the following facts:

Just last year Congress increased the number of H-1b visa limits from 115,000 to 195,000 and included various exemptions which will increase the total to many more than the statutory 195,000. This was after an increase from 65,000 to the 115,000 just the year before.

Just three months later, these same companies who fought so hard and spent so much to get the increase began to layoff workers by the thousands.

The six-month total for this year is already 15% higher than the total of 677,795 job cuts announced in 1998, which was the biggest job cut year of the last decade, the report said. (1)

U.S. layoffs totaled 124,852 in June, up 56% from May, according to the Challenger, Gray & Christmas monthly report of job cuts. Job cuts have now exceeded 100,000 six out of the last seven months, with the six-month total for this year at 770,362 compared with 223,421 during the same period last year, the report said. (2)

On a year-over-year basis, layoff announcements were up 624% in June compared with 17,241 job cut announcements during the same month last year. (2)

Out of all the major industries, telecommunications led the group with 27,446 job cut announcements, bringing its six-month total to 130,442. This total is 49% higher than the second ranked auto industry's 87,613 job cut announcements this year. (2)

The other industries with a high number of job cut announcements are computer with 74,723, industrial goods with 59,496 and electronics with 59,181, the report said. (2)

Among the U.S. telecom companies announcing recent layoffs are Motorola, WorldCom, Lucent, Cisco, JDS Uniphase and Corning. (3)

The first four months of 2001 have been particularly brutal in the Internet sector, with a total of 51,564 job cuts, and the cuts are beginning to affect so-called "Old Economy" companies with an Internet presence as well as so-called "New Economy" companies. (4)

It should be noted these are the exact same industries and companies who lobbied so vigorously to get the H-1b increase approved.

Kris Lakshmikanth, of the Bangalore-based Head Hunters recruitment agency, said that many US-based Indians were now turning up in Britain on tourist visas hoping to get work. (5)

The bubble has burst, he said. There are at least 50,000 Indians in the US without jobs, and many of them are very worried. (5)

Internet message boards lament the way they have been treated; like prostitutes with Aids expected to go back to our village, complains one programmer. They treated us like kings when they needed us and like Untouchables when they don't. (5)

During the boom, tech companies lobbied to hire more foreign workers. Now that many are losing their jobs, the industry is turning its back. (8)

"Immigration has to be part of the solution," testified Harris Miller, president of the Information Technology Association of America, at a 1998 Senate hearing. Backed by Microsoft, Sun Microsystems and other tech heavyweights, the ITAA denounced limits on H-1B visas as a drag on prosperity. (8)

Miller got what he wanted. Congress last year raised the annual H-1B quota by 70 percent. (8)

The workers' plight, however, is eliciting little sympathy from the very companies that spent years pressuring Congress to let them immigrate. (8)

"They see their H-1B as an 'ally-ally-in-free' card, which it is not," Miller says now. "We're not going to make the argument that they should be allowed to hang around the United States as long as they want." (8)

It is amazing to this writer that the captains of industry are able to forecast their need three to five years ahead for new H-1b's, but are unable to tell three months in advance they are going to layoff citizens and permanent residents.

Temporary visas are contracts in which the recipients signature on the paperwork indicates they understand they are expected to return to their homeland upon completion of their assignment for which they receive the visa.

Our children and grandchildren are being denied good jobs that are created in the United States, based on technological advances made mostly by American citizens, just for the sake of cheap foreign labor and higher profits.

Many students went through job interviews last fall, receiving and often accepting offers for jobs starting later this year. But in the intervening months, the slowing

economy has led a number of companies to reduce or even undo hiring, leaving students out in the cold. (6)

Intel would not specify the amount of the payment, but said it would vary with the job and the salary offered. If new graduates come to Intel anyway, they may not end up in the position they were initially promised, a company spokesman said. (6)

Cisco has rescinded offers to about 25 percent of the college students who received job offers, but has tried to soften the impact by offering a consolation package consisting of 12 weeks' salary and assistance finding a job elsewhere. (6)

Nearly 30 unemployed tech workers are among the 100 men at the Montgomery Street Inn and other shelters in San Jose run by InnVision, said Robbie Reinhart, director of the nonprofit organization. (7)

Dot-com failures sent San Francisco's unemployment rate up to 4.2 percent in May from a rock-bottom 2.6 percent a year ago -- with 18,000 people added, according to a state report. (7)

In Santa Clara County, the heart of Silicon Valley, layoffs in electronic equipment manufacturing and business services rose for the fifth straight month, contributing to a 3.2 percent unemployment rate in May. (7)

They've worked up to 110 hours per week and slept on the conference room floor," said Ilene Philipson, a clinical psychologist at the Center for Working Families at the University of California at Berkeley. "People have given up all sorts of things to give to their job, and when there's a layoff there's no other support for them." (7)

In light of all of the evidence presented to this point it would seem the "crisis" in technical workers would be over. Not so say the Captains of industry.

The technology industry has slowed from its earlier breakneck speeds, but tech leaders say the need for foreign workers has not. (9)

Instead, the drive to recruit from the world's work force seems even stronger as companies hunt for the best and brightest just to stay alive. (9)

As a result, the federal program to bring foreign professionals to the country for temporary jobs, the H-1B visa program, is busier than ever. (9)

George C. Scott's character in *The Formula* states the cartel is "Trading lives and dignity for profit." Can we not see that in the picture painted above?

(1) BridgeNews – July 5, 2001

(2) BridgeNews - July 5, 2001

(3) CBS.MarketWatch.com - May 3, 2001

(4) CNNfn - April 27, 2001

(5) London Times - May 15 2001

(6) New York Times - May 4, 2001

(7) The Associated Press - June 15, 2001

(8) The Industry Standard - May 31, 2001

(9) The Virginian-Pilot - May 7, 2001

The Ideal Gift

The Holiday Season is up on us and many of you will be wondering what to give that son or daughter or grandson or granddaughter who is off to college. They are often so hard to shop for.

Perhaps you are wondering whether you should donate to you alma mater this year, but with the economy so up in the air, you don't want to spend a lot when you may need it later.

You may have a recently graduated engineer, computer scientist, scientist or math major who will be starting their career soon and in a very few years facing the same problems you see in the professions today.

May we suggest a membership in AEA as an appropriate gift? Student membership at \$15.00 per year (A four year package might fit the need.), a gift subscription to the American Engineer for the school library at \$30.00 per year or a membership for your brand new graduate at any level.

This would not only get your student or recent grad off to a good start in understanding the world they face, but a gift to the college library could also help spread the word.

AEA News January 1986

What Can We Say???

On January 16th, the ABC News Program, 20/20, devoted one segment to the threat of terrorism within the borders of the United States.

While a portion of that segment was focused on the weapons of terrorism, the major focus of the program was the terrorists themselves. One discussion was of the number of Libyan students in California and New York. The number they quoted was about 600 total for the two states.

They included tapes made of an FBI "sting" operation in Pennsylvania where the FBI sold automatic weapons to Libyan "students" They indicated they wanted to buy thousands of weapons and spare parts for U.S. made aircraft.

This program only reinforces what we have been saying all along, THE BEST METHOD OF ENTERING THE UNITED STATES IS WITH A FOREIGN STUDENT VISA.

Dr. David C. Lewis Resigns

David Lewis, a member of the AEA Board of Directors has resigned. David indicated health reasons for his resignation.

Dave has been active for many years on immigration and other professional issues with AEA and prior to that with IEEE-USA. He has been our point person on the immigration issue.

I first met Dave in 1983 when we were both on the same panel testifying on foreign students before the House Immigration Subcommittee. Dave was testifying for the IEEE's United States Activity Board as I remember. He and Irwin Feerst and myself were representing engineers in opposition to the American Electronics Association, a foreign students organization and another group I don't recall now.

I was very impressed with David's thoughtful presentation and his quiet, but firm manner in making the presentation. It was just a matter of days after the hearing that IEEE denied that Dave spoke for them and rebuked his testimony. Shortly after that he resigned his position with IEEE. That had to be one of the most telling and shameful episodes in IEEE history.

Dave, thanks for your help over the years. While we were not in contact as often as we should have been, we want you to know you and your efforts on behalf of the engineering profession were appreciated by all of AEA.

We wish you the very best in everything!

Bill Reed

Quote of The Day

"I hold it, that a little rebellion, now and then, is a good thing, and as necessary in the political world as storms in the physical."

Thomas Jefferson

ROBERT A. RIVERS APPOINTED TO AEA BOARD OF DIRECTORS

Mr. Rivers is graduate of MIT with a BS degree in Electrical Engineering and he is a registered Professional Engineer in New Hampshire. Since 1954 he has been President of Aircorn, Inc. where he designs and manufactures microwave components in Orange, Massachusetts. He is a Fellow of the Institute of Electrical and Electronic Engineering, (IEEE) and a Member of AEA.

Rivers' engineering practice began in 1953 with the development of a microwave telemetering equipment for

missile use. He continued through Aircorn, Inc. in technical consulting on a RADAR course, design of Microwave Oscillators, Sweep Signal Generators, Slow Wave Structures, missile antennas, and a multiplicity of microwave components.

In the early 1950's Bob began his professional leadership role as Vice Chairman of the MIT Student Chapter of the Institute of Radio Engineers (IRE) now known as the Institute of Electrical and Electronic Engineers (IEEE). He continued his Technical Society involvement with the Boston Chapter of the IRE Microwave Theory and Techniques (MTT) Chapter serving through the Chairs, as Secretary Treasurer, Chairman. He was elected to the National MTT committee and served as Secretary Treasurer, Vice President and President 1973-1974.

At the onset of the 1971 recession Robert Rivers recognized the need for a professional response to the dislocations caused by economic problems and he organized a Professional Action Committee within IEEE. These efforts resulted in the formation of IEEE's United States Activity Committee (USAC) and their initial action in professional programs. He was elected to the IEEE Board of Directors where he promoted professional activities within IEEE-USA.

He subsequently served on and led IEEE-USA committees and task forces on Manpower issues with contributions on forecasting Engineering unemployment specifically for the 1991-1992 recession. Continuing his efforts to enhance the profession he attempted to force the IEEE-USA Manpower Committee to respond to the Information Technology Association of America (ITAA) promotion of increasing quotas to import more foreign engineers. He was shortly removed from committee membership.

However, Bob, finding IEEE-USA unable to stand by its Engineering members and having seen the inaction of the IEEE, he organized the American Engineering Association's (AEA) Manpower Committee to respond to the ITAA. This AEA Committee did respond with papers, critiques letters to editors, and submissions to Congress through 1997 and 1998. Our efforts did not make it easy for the promoters of expansion but in the final analysis, political contributions carried the day.

His involvement and contributions on behalf of the members of the Engineering Community are much too extensive to include herein, but know well he has made a difference. Robert's experience, dedication and participation make him an excellent addition to AEA's Board of Directors.

Ask your friends and associates to check out the AEA website at www.aea.org. Also get your AEA e-mail address by sending your user name and password to billr@aea.org.

American Engineering Association

Membership Application

Mail to: American Engineering Association
P.O. box 820473
Ft. Worth, Texas 76182-0473

The American Engineering Association is a National, non-profit corporation dedicated to the enhancement of the engineering and scientific professions and our nation's continued technical leadership. Our members are from virtually all disciplines of the nation's technical community.

If you are concerned with the direction of the technical professions, we urge you to join with us in working to improve the professional lives of the nation's technical professionals.

You must be a citizen or permanent resident alien to qualify for membership in the American Engineering Association.

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Please check our website often for issue updates and action required. www.aea.org

Thank you for your desire to leave a better profession for our children and grandchildren than you came into.

AEA is Looking For a Few Good Men and Women

AEA is seeking members of the Engineering Community who are concerned with the direction the technical professions have taken over the last few years and who want to make a difference in their profession.

We want volunteers to assume a leadership roll in our organization, but you must be dedicated to the issues and just as important, we want people who finish what they start. Perhaps the most important attributes are good communication skills, has a positive attitude, has good common sense and a burning desire to leave the profession better than when you came into it.

We would like candidates with engineering design and development experience since we believe they have a realistic, in-depth knowledge and understanding of the engineering profession/business.

AEA wants members from each of the core engineering disciplines to act as representatives of their discipline. It is our intention to include all engineering disciplines on the AEA Board of Directors to provide them with a voice in AEA. These people will be drawn from those who have a history of activity and leadership and enthusiasm.

If interested, contact Bill Reed (billr@aea.org) or Richard Tax (rtax@bellatlantic.net).

SPREAD THE WORD: Tell your associates about AEA and www.aea.org.

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