

## FEATURE

# AAEOY Award Keynote Speech

By Heidi Shyu

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**T**hank you for the opportunity to speak to such a distinguished crowd of Asian American Engineer of the Year awardees. First of all, congratulations to each and every one of you! I am honored to be here with you. 13 years ago, I was one of the awardees sitting in the audience so I know just how much work you have dedicated to your career to become one of the awardees.

Your intellect, innovation, dedication, and absolute passion for your career made you a role model among your peers. I have no doubt that each and every one of you will continue to excel in your career.

As I reflect upon my career, I would like to share what I have learned:

With 4 technical degrees under my belt, I was very comfortable doing technical work. But I decided to branch out into project management and program management because I felt that there were more opportunities for career growth.

After 11 years at Hughes Aircraft Company, a company that I loved, I left for career grow. I took on very challenging project management assignments and learned a tremendous amount. After a stint at Grumman and Litton, I went back to Hughes. I continued to expand my experience by taking on very different assignments: new business, project manager of research & development programs, laboratory manager of the antenna organization, program manager of a new Active Electronically Scanned Array (AESA), program manager of Joint Strike Fighter, VP of Unmanned & Reconnaissance Systems, and Corporate VP of Technology & Research. Each position was a building block for



increasing my breadth of knowledge and career growth.

The success that I had in leading the next generation AESA design and development in record time caught the eyes of the Air Force Scientific Advisory Board. The SAB is an independent Advisory Board to the Chief of Staff of the Air Force & the Secretary of the Air Force. The SAB gave me additional breadth and insight into problems that senior Air Force leaders cared about. It gave me a big picture perspective. In my 10 years on the SAB, I went from a member to Vice Chair to the Chairman.

In 2010, I received a phone call from the White House, asking me if I was interested in being the Principal Deputy Assistant Secretary of the Army for Acquisition, Logistics & Technology. The 2nd most senior position in Army Acquisition. I told them that all of my career experience was working with the Air Force & Navy and I had no experience whatsoever in the Army! The learning curve would be vertical! On top of that I would be taking an 80% cut in my compensation!

After a lot of thinking and discussions with my sisters, I decided to take the challenge. You can just imagine the telephone call with my mom! “*Mom, I am joining the Army but have to take an 80% pay-cut!*” There was dead silence at the other end of the telephone then my mom said you know, Heidi, most people change jobs because they get a *raise!*” I replied “where is the challenge in that?”

I then called my grandmother in Taiwan and told her the same thing. My grandmother couldn't believe her ears and kept saying my hearing is not very good, can you repeat that? Since she couldn't believe what she was hearing! She finally asked “*aren't you too old to join the Army?*” “ I had to explain to her, that I am not going into boot-camp as a private, my position will be a 3-star equivalent.

I will tell you that 5 years and a quarter in the pentagon was the most grueling job that I ever had. I had to learn about the Army, the culture and how they do business. I was the Principal Deputy for 7 month and my boss, the Assistant Secretary of the Army for Acquisition, Logistics & Technology, ASA(ALT), left due to health reasons. All of a sudden I found myself doing 2 jobs and working 13 to 14 hrs a day. The best way of describing that job is that “*you are juggling 10,000 balls while being shot at!*” *The key to success is to have a positive attitude, enormous patience, an ability to juggle a multitude of demands with a smile, be a team-player, and never stop learning.*

After doing that for 6 months, I was nominated by President Obama to be the next Assistant Secretary of the Army. That meant filling out endless amount of paperwork and getting ready to be vetted. Army legal went through all of my piles of paperwork, then it went up to Office of Secretary of Defense lawyers, after they are satisfied, it then went to the White House. After being vetted by White House Lawyers, it went to the FBI to do background investigations. After that, it went to the Senate. Each step of the way, meant more documents and

answering more questions. Then I went thru 3 murder-boards to prepare for the hearing. Once the hearing was scheduled with the Senate Armed Services Committee (SASC), I had to answer even more questions. Then the waiting game begins because any Senator can put a hold on you and block your nomination. Well, I did get two holds on my nomination, even though it was nothing to do with me personally, and went through 6 more months of painful agony before I got confirmed. *Lessons Learned: don't take things personal and continue to do your job.*

In the meantime, there are 12 Program Executive Offices reporting to me that's responsible for designing, developing, and delivering weapon systems ranging from helicopters, tanks, combat vehicles, trucks, to missiles, missile defense systems, radios, command & control systems, ammunitions, intelligence & electronic warfare systems, chemical & biological defense systems, enterprise software systems, to everything that the soldier wears and carries. ASA(ALT) also has the oversight responsibility for over 400,000 contracting actions per year and oversight of the \$2.2B Army S&T portfolio. During this time, we were retrograding our equipment out of Iraq and moving them into Afghanistan. All of this in the midst of two wars.

The budget was declining and it was painful to lose \$10B out of the RDTE& Procurement budget (from \$33B to \$23B) and have to juggle the cuts. On an annual basis, we went through Continuing Resolution (CR) when Congress failed to pass a budget on Oct 1st. CR means that you can't start any new programs, can't ramp up production, can't spend more than what you had last year.

The ASA(ALT)'s responsibility was to make sure that the programs were executing, supporting the commanders in theater, keeping the Secretary of the Army, Undersecretary of Defense, and the Hill informed of issues, giving press conferences, giving numerous keynote speeches at conferences within the US and at our

partner nations, visiting our staff in Afghanistan, Kuwait, Iraq, and Germany and interfacing with the Defense Industry.

Despite the long hours, lack of sleep and endless stress, I will tell you that I don't regret it. Why? Because of the dedicated, extraordinary Soldiers and Government civilians that I had the opportunity to work with. They will do absolutely anything you ask, without any complaints. Our Soldiers put their lives on the line for you & I, every single day. So, I focused my job on doing the very best I can for the Soldier. I was tough but always fair. I treated everyone with respect. I was a team-player. I always lead from the front according to my 3-star military deputy. In return, I received enormous amount of respect from Soldiers to Generals. I have had many Generals telling me that they will be happy to follow me anywhere. This is an experience that I will never forget.

In closing, I encourage you to continue to take risks, get out of your comfort zone, and grow with each opportunity. This country provides endless opportunities to excel. Only you can limit yourself.

I hope that each and every one of you will end up achieving what you cannot imagine today...and in the process, don't forget to mentor others.

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*The Honorable Heidi Shyu, is the Chairman of the Board for Roboteam North America, member of the Board of Trustees for Aerospace Corporation, and member of the Board for Carnegie Mellon University Advanced Robotic Manufacturing Institute, National Academies of Sciences Intelligence Community Studies Board, Software Engineering Technical Advisory Group. She is the CEO of Heidi Shyu Inc. and consults for several companies.*

*Previously, she was the Assistant Secretary of the Army for Acquisition, Logistics and Technology, ASA(ALT), from Sept. 2012 to Jan. 2016.*

*Heidi holds a BSc. Degree in Mathematics from the University of New Brunswick in Canada, a Master of Science (MS) Degree in Mathematics from the University of*

*Toronto, MS Degree in System Science (Electrical Eng) from the University of California, Los Angeles (UCLA), and the Engineer Degree from UCLA. She is also a graduate of the UCLA Executive Management Program and the University of Chicago Business Leadership Pgm.*