



Name in English: Heidi Shyu

Name in Chinese: 徐若冰

Name in Pinyin: Xú Ruòbīng

Gender: Female

Birth Year: 1953

Birth Place: Taiwan

Government Official, Research Engineer

Profession (s): Electrical engineer, technology and research development leader

Education: B.S., Mathematics, University of New Brunswick; M.S., Mathematics, University of Toronto; M.S., Electrical Engineering, University of California-Los Angeles; Executive Management Course, University of California- Los Angeles; Business Leadership Program, University of Chicago

Award(s): 2008, “Women Worth Watching in 2009,” Profiles in Diversity Journal - September/October 2008; 2007, Chinese-American Engineers and Scientists Association of Southern California (CESASC) Achievement Award; 2004, Chinese Institute of Engineers -USA (CIE-USA) Asian-American Engineer of the Year Award; Raytheon’s Hero Award; Excellence in Technology Award; Hughes Fellowship; University of Toronto Fellowship; New Brunswick Post-Graduate Scholarship; Atlantic Provinces Inter-University Committee Scholarship; N. Myles Brown Science Award; University Special Undergraduate Scholarship

Contribution(s): In October 2012, Heidi Shyu was sworn in as Assistant Secretary of the Army, Acquisition, Logistics and Technology (ASAALT) after holding the position of Principal Deputy for the organization since 2010 and temporary head of the organization since June 2011. Shyu is in charge of supplying the US Army and also serves as the science advisor to the Secretary of the Army as well as being the Army’s senior research and development official. Her job includes managing 42,000 people and the leadership of 13 offices tasked with developing technologies and managing acquisition programs. Upon her appointment she stated, “I would like to thank my grandmother who turned 103 last month. She taught me the value of tenacity and the value of never giving up.” Heidi Shyu has come a long way from her difficult childhood as a new immigrant to the United States.

Soon after the age of 10, Heidi Shyu, emigrated from her native Taiwan to the United States without knowing any words of English. In her own words she was a horrible student in Taiwan who hated rote learning and only learned to speak up, disagree, be noticed, and love school in America. Her affinity for math and science led her to pursue multiple degrees in mathematics and electrical engineering. She has worked for Raytheon Company for over 20 years and led a number of significant US Air Force projects including the Joint Strike Fighter and the development of other manned and unmanned aircraft systems. As Vice President of Corporate Technology and Research for Raytheon she was responsible for determining the direction of the company’s research efforts. At a time the US was facing two overseas wars, unprecedented terrorist

threats, and the greatest increase in defense spending since the 1980s, Heidi Shyu was selected as Chair of the USAF Scientific Board in 2005 and held the position until 2008. That a Chinese American woman was selected for such a position is a testament to her skills and the respect with which she is viewed by the US Government, the military, and her scientific peers..

In many of her interviews she cites a situation in 1997 when she managed a large team of mainly men charged with the impossible task of designing a lighter version of a 325-pound electronically scanned antenna to beat out a competitor's design. Shyu lightened the mood with a challenge to design it to her weight. After much work and an endlessly available supply of food and treats offered by the engineers, the team delivered a model three months ahead of schedule weighing 112 pounds. "People can do extraordinary things that will exceed their expectations," she said.

In 2007, Ms. Shyu wrote an article titled "America's New Deficit: A Shortage of Technology Specialists" in which she called on American youth, especially women and minorities, to become engineers and scientists.

Among her innovations as Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) since 2011, Heidi Shyu has changed the army over from its traditional five year planning to a thirty year planning cycle to take into account how long weapons systems are actually used in the US Army. By planning over a longer term they can take into account when weapons and other systems will become obsolete and target emerging technologies for additional funding and attention to replace them.

External Links:

http://www.raytheon.com/newsroom/feature/stellent/groups/public/documents/content/heidis_hyu_bio.pdf

http://www.imdiversity.com/Villages/Careers/dialogue_opinion_letters/shyu_technology_short_age_0807.asp

<http://www.asianloop.com/writings/view.htm?id=57>

http://asc.army.mil/news/headlines/20101118_NOVLead_Shyu.cfm

http://www.army.mil/article/88611/Shyu_sworn_in_as_assistant_secretary_of_Army

<http://usarmy.vo.llnwd.net/e2/c/downloads/267108.pdf>

<http://www.politico.com/news/stories/1012/82776.html>

https://www.alt.army.mil/portal/page/portal/oasaalt/Bio_PRINCIPAL_DEP