

# Panel: Systems Engineering Degrees and Certificates ~ What Is The Right Mix for Industry and Government

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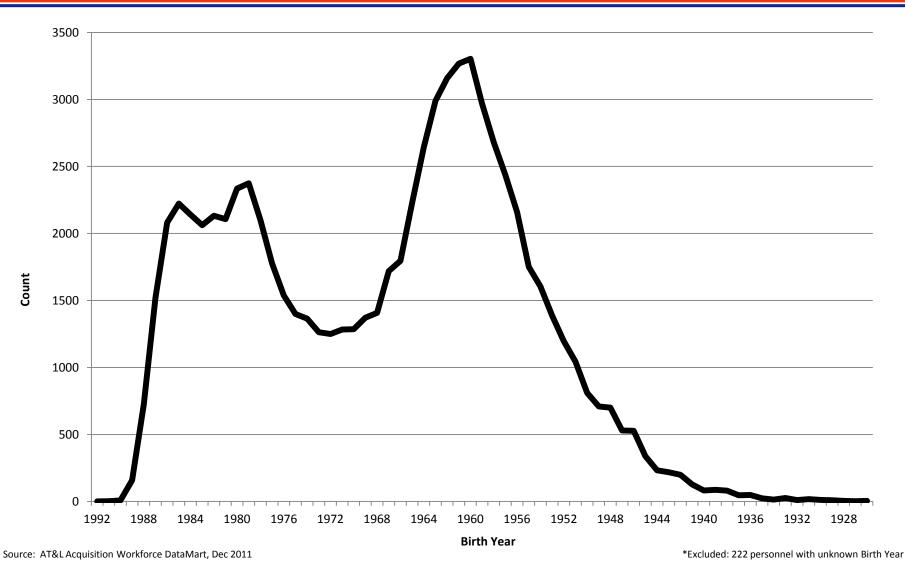
Office of the Deputy Assistant Secretary of Defense for Systems Engineering

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## Systems Engineering Acquisition Workforce\* by Birth Year







### **Growing Great Engineers**



#### Depth

 Extensive expertise and experiences in one or more engineering disciplines and in one or more product domains

#### Breadth

- Awareness of and appreciation for other functional areas
- Understanding of system life cycle and processes
- Knowledge of other engineering disciplines and how they integrate into a system solution
- Knowledge of product domains

#### Leadership

- Ability to motivate and inspire individuals and teams
- Comfort in dealing with complexity
- Focus on underpinning decisions with data
- Capability to make tough technical decisions



### Four Distinct Generations Across the SPRDE-SE/PSE Acquisition Workforce\*

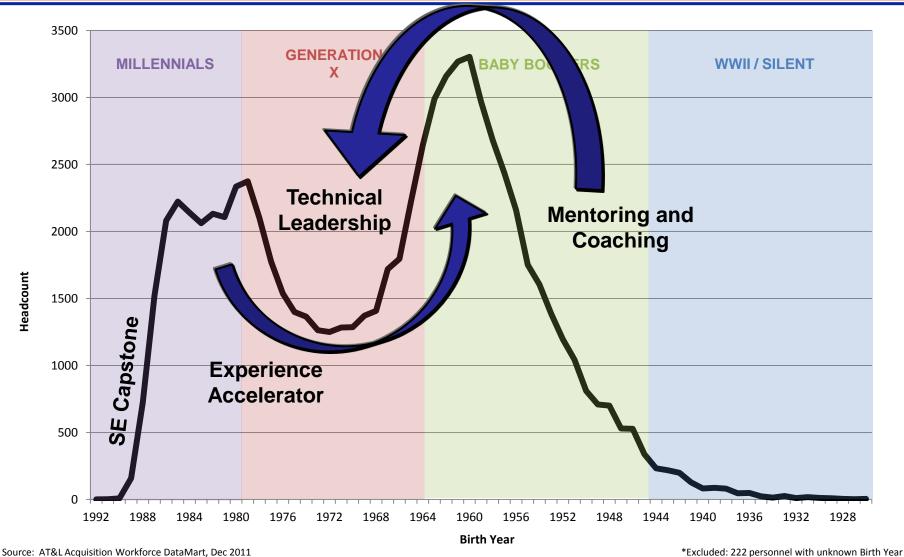


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	MILLENNIALS	GENERATION X	BABY BOOMERS	WWII / SILENT
ļ	20-31 yrs old	32-47 yrs old	48-66 yrs old	67 yrs and older
	WORK CULTURE TO THRIVE IN:			
3000 -	- Positive, Flexible, Collaborative,	- Flexible, Results-oriented, efficient, informal/fun, opportunities for development	- Advancement, Recognition, Team Orientation, Vision/Mission, Non- hierarchy	- Stable, Secure, Respectful, Clearly Defined Roles, Clear Direction
YOU W	J'LL BE CHALLENGED HILE HAVING FUN! - Connect acts personal goals	FORGET THE RULES! DO IT YOUR WAY!	YOU ARE VALUED & NEEDED  - Seeing how to make a difference	YOUR EXPERIENCE  IS RESPECTED  connect actions to the overall good of the organization
2000 -	- Opportunities for professional growth - Personal satisfaction	- Good Schedule - Time off	- Making a difference	- Loyalty to employer/ customer - Good schedule/ reasonable hours
Ŝ	DE-MOTIVATORS:			
1500 -	<ul> <li>Job doesn't meet</li> <li>expectations</li> <li>Lack of development</li> <li>opportunities</li> </ul>	<ul> <li>Inability to get ahead w/out becoming managers</li> <li>Lack of development opportunities</li> </ul>	<ul> <li>Burnout</li> <li>Not feeling like a contributor</li> <li>Lack of interest in them</li> <li>Political incorrectness</li> </ul>	- Physical demands - Disorganization - Inconsistent enforcement of policies/procedures
1000 -	<ul> <li>Repetitive/Boring job</li> <li>Inadequate IT work</li> <li>environment</li> <li>Condescension</li> </ul>	<ul> <li>High Stress environments</li> <li>Schmoozing / Incompetence</li> <li>Acronyms/corporate speak</li> <li>Inefficiencies</li> </ul>	- Sports/war metaphors	- Lack of respect for tradition - Disrespect for experience
500	HOW TO REWARD:			
0 -	- Awards/Certificates - Tangible evidence of credibility	<ul><li>Free Time</li><li>Upgraded Resources</li><li>Development Opportunities</li><li>Results for their resumes</li></ul>	<ul><li>Personal Appreciation</li><li>Promotion</li><li>Recognition</li><li>Status Symbols</li></ul>	- Tangible symbols of loyalty, commitment and service
1992 1988 1984 1980 1976 1972 1968 1964 1960 1956 1952 1948 1944 1940 1936 1932 1928				
Source: AT&L Acquisition Workforce DataMart, Dec 2011			Birth Year	*Excluded: 222 personnel with unknown Birth Year



### **Systems Engineering Challenges**

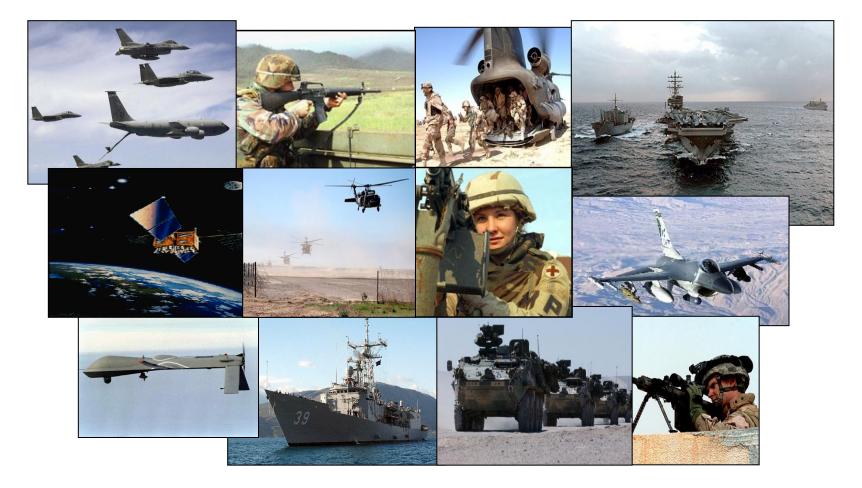






# **Systems Engineering:**Critical to Program Success





Innovation, Speed, and Agility

http://www.acq.osd.mil/se