



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

Mr. Nicholas M. Torelli

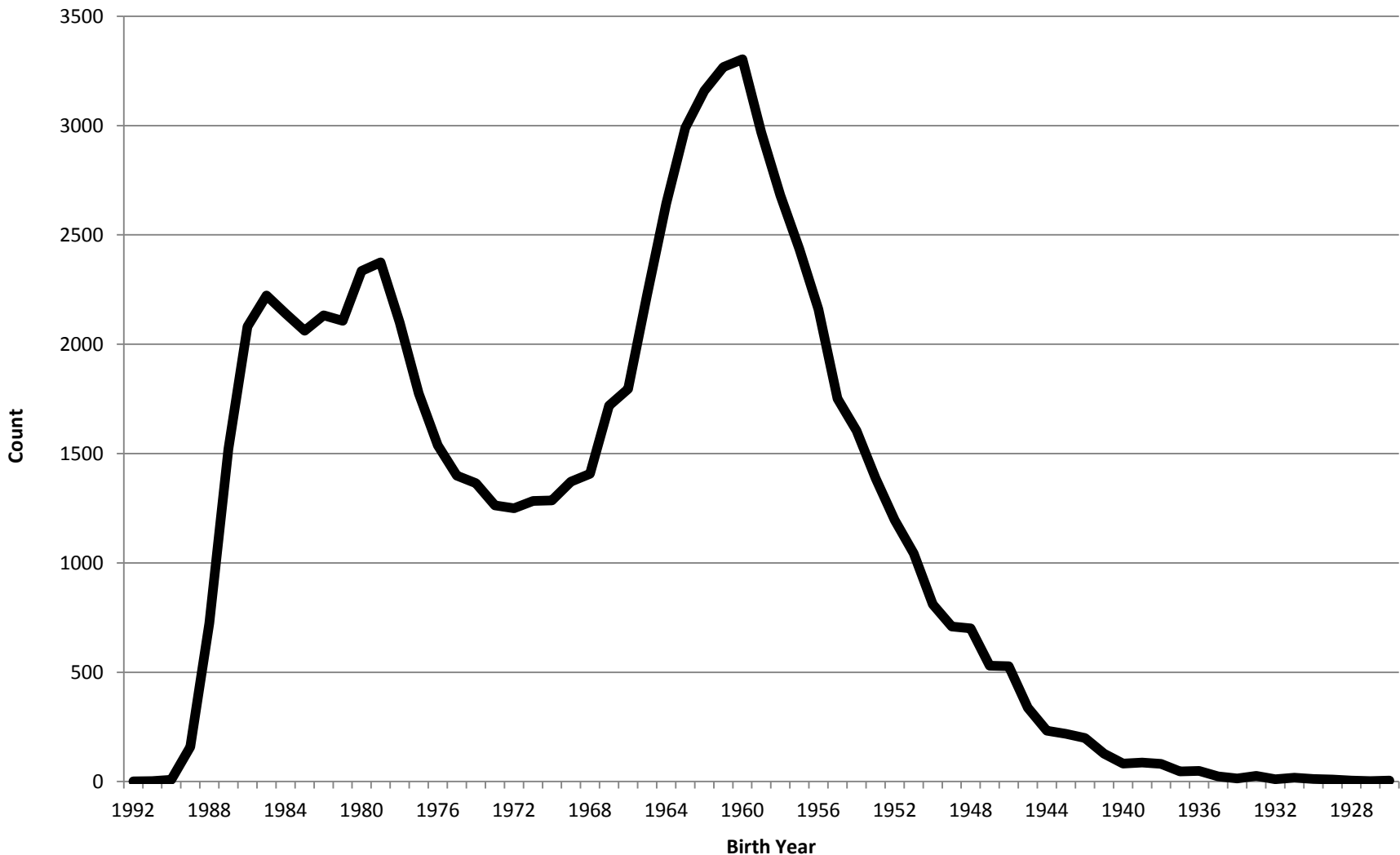
Director, Mission Assurance

**Office of the Deputy Assistant Secretary of Defense
for Systems Engineering**

**15th Annual NDIA Systems Engineering Conference
San Diego, CA | October 24, 2012**



Systems Engineering Acquisition Workforce* by Birth Year



Source: AT&L Acquisition Workforce DataMart, Dec 2011

*Excluded: 222 personnel with unknown Birth Year



Growing Great Engineers



- **Depth**

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

- **Breadth**

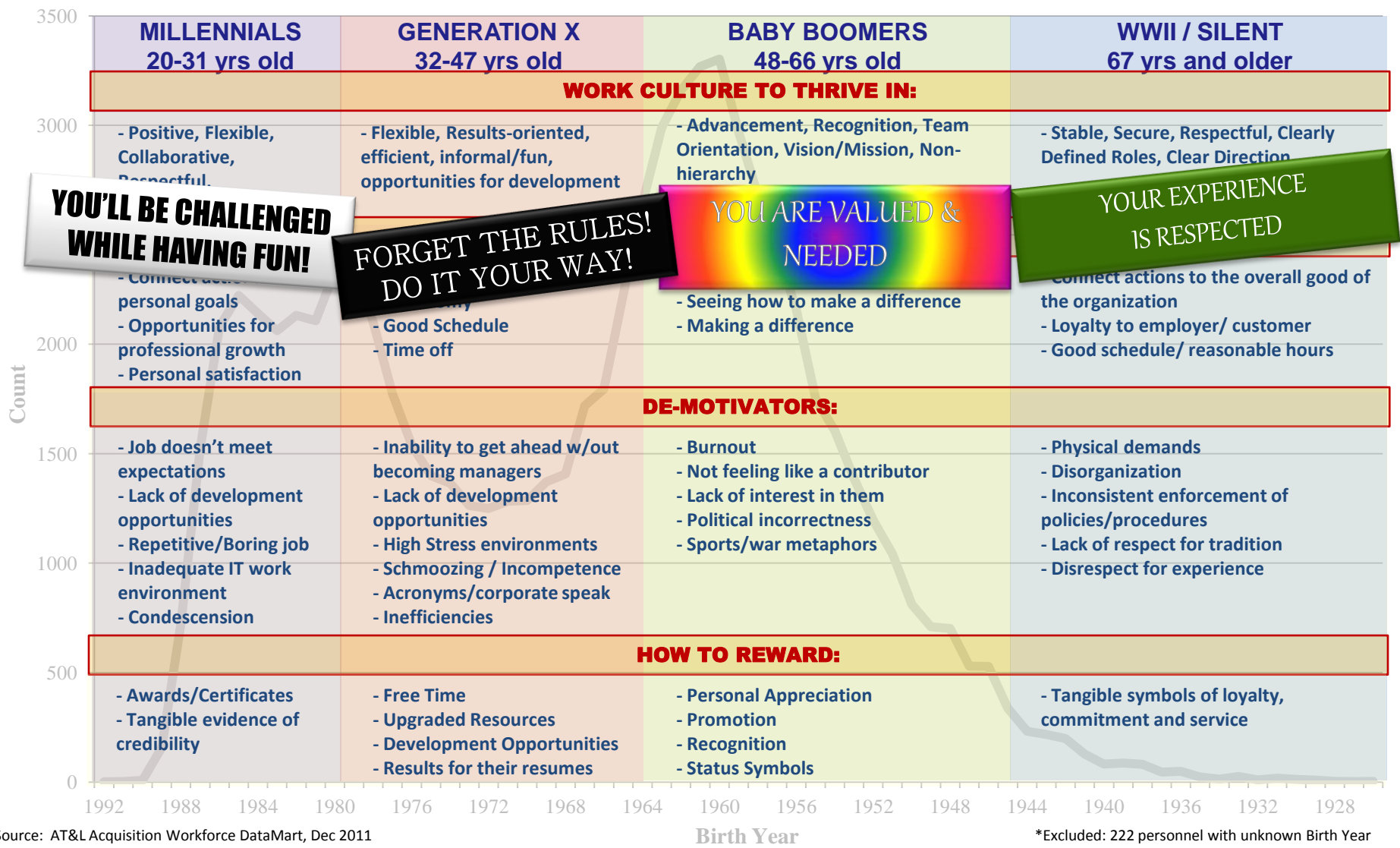
- Awareness of and appreciation for other functional areas
- Understanding of system life cycle and processes
- Knowledge of other engineering disciplines and how they integrate into a system solution
- Knowledge of product domains

- **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*

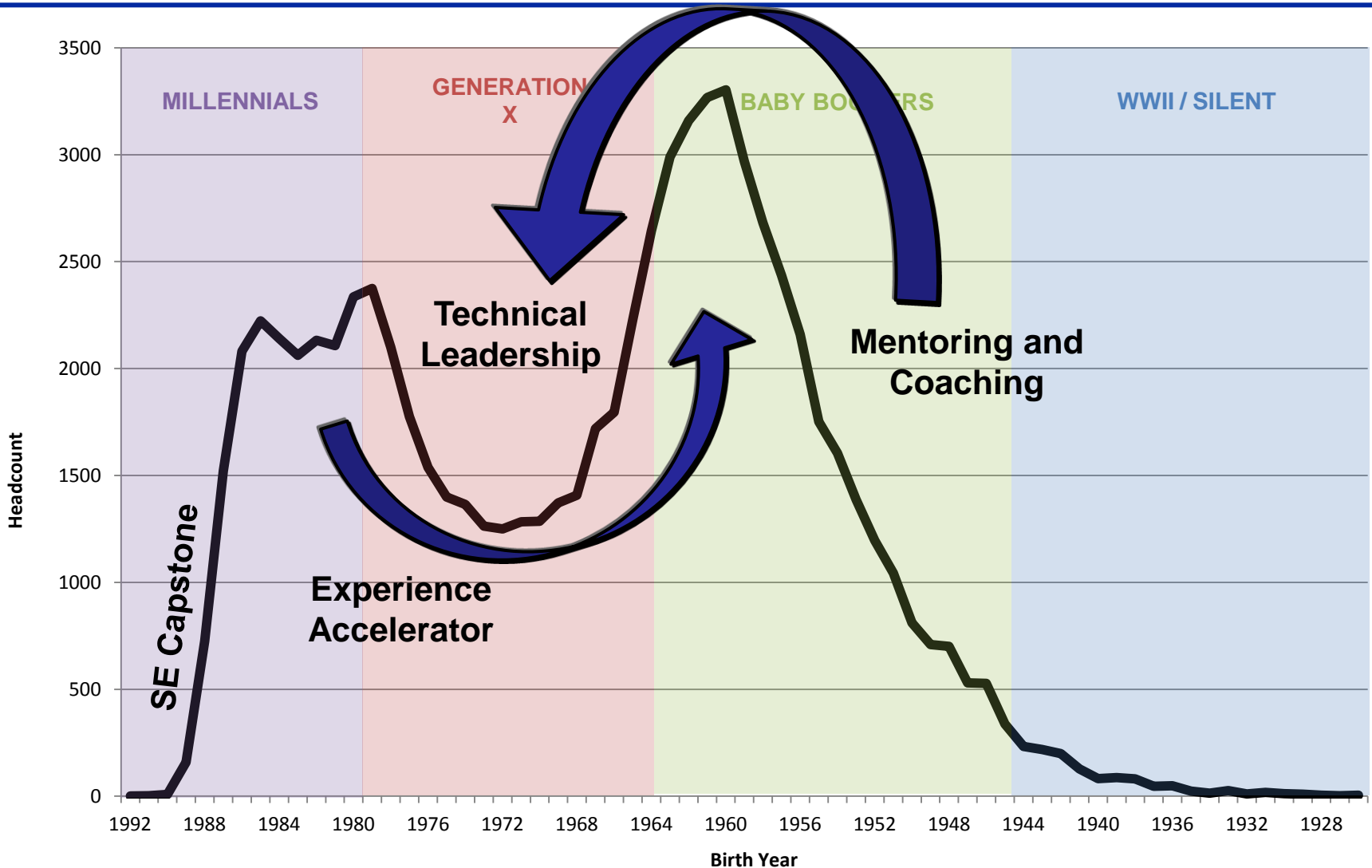


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Systems Engineering Challenges

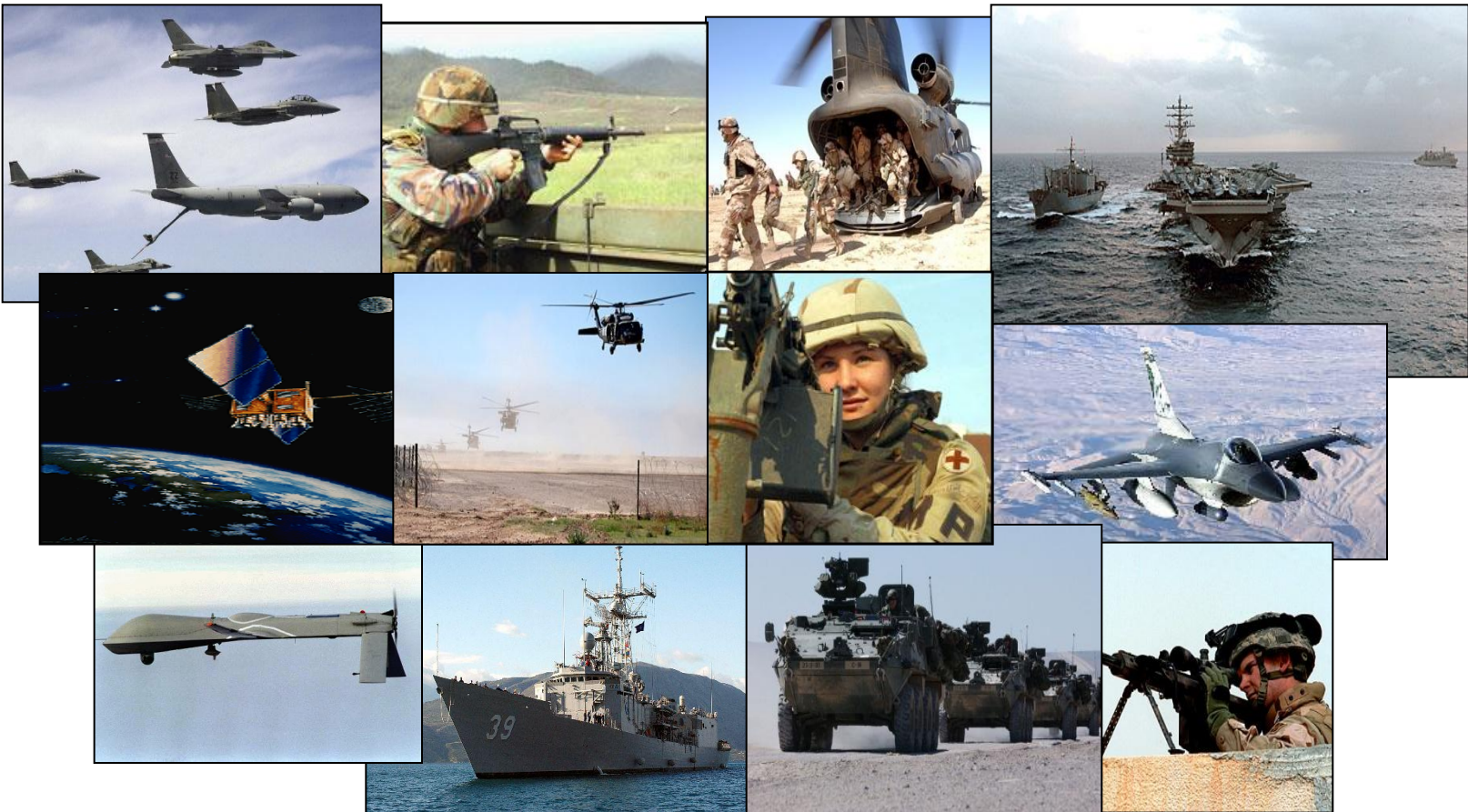


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Systems Engineering: Critical to Program Success



Innovation, Speed, and Agility

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