

SEI/FAA TIM

8 Feb 2022

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, PA 15213

Copyright 2022 Carnegie Mellon University.

This material is based upon work funded and supported by the Department of Defense under Contract No. FA8702-15-D-0002 with Carnegie Mellon University for the operation of the Software Engineering Institute, a federally funded research and development center.

The view, opinions, and/or findings contained in this material are those of the author(s) and should not be construed as an official Government position, policy, or decision, unless designated by other documentation.

NO WARRANTY. THIS CARNEGIE MELLON UNIVERSITY AND SOFTWARE ENGINEERING INSTITUTE MATERIAL IS FURNISHED ON AN "AS-IS" BASIS. CARNEGIE MELLON UNIVERSITY MAKES NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, AS TO ANY MATTER INCLUDING, BUT NOT LIMITED TO, WARRANTY OF FITNESS FOR PURPOSE OR MERCHANTABILITY, EXCLUSIVITY, OR RESULTS OBTAINED FROM USE OF THE MATERIAL. CARNEGIE MELLON UNIVERSITY DOES NOT MAKE ANY WARRANTY OF ANY KIND WITH RESPECT TO FREEDOM FROM PATENT, TRADEMARK, OR COPYRIGHT INFRINGEMENT.

[DISTRIBUTION STATEMENT A] This material has been approved for public release and unlimited distribution. Please see Copyright notice for non-US Government use and distribution.

This material may be reproduced in its entirety, without modification, and freely distributed in written or electronic form without requesting formal permission. Permission is required for any other use. Requests for permission should be directed to the Software Engineering Institute at permission@sei.cmu.edu.

DM22-0123

Today's Agenda

SEI Participants

Quick Recap






SEI's Agile Research History

Pathfinder Programs and Policy Initiatives

Q&A

Breakout Session

SEI Participants

				
Nanette Brown	Linda Parker Gates	Will Hayes	Brigid Petrie O'Hearn	Eileen Wrubel
Senior Member of the Technical Staff	Initiative Lead, Software Acquisition Pathways	Principal Engineer, Agile Transformation Team Lead	Senior Software Acquisition Innovation Specialist	Technical Director, Transforming Software Acquisition Policy & Practice
nb@sei.cmu.edu	lpg@sei.cmu.edu	wh@sei.cmu.edu	bpohearn@sei.cmu.edu	eow@sei.cmu.edu

SEI Participants -2



Anita Carleton

Director, Software
Solutions Division

adc@sei.cmu.edu



John Robert

Deputy Director,
Software Solutions
Division

jer@sei.cmu.edu



Greg Such

Program
Development
Manager

gsuch@sei.cmu.edu

Quick Recap

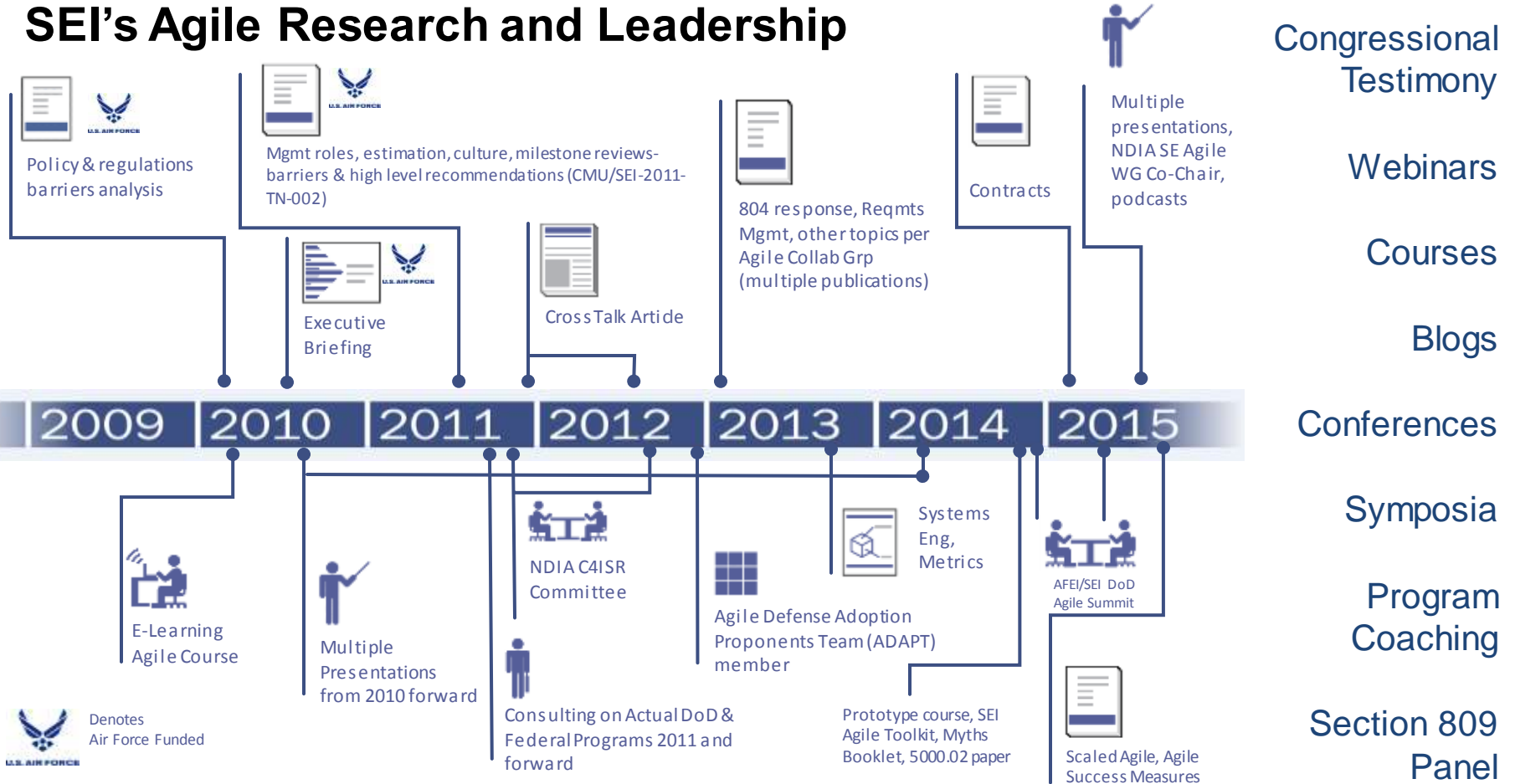
When we last met, we discussed the SEI's work in:

- The National Agenda for Software Engineering
- DoD's new Software Acquisition Pathway
- Shift-left testing and Digital Engineering in the DoD
- Implementing Agile approaches at scale in high stakes environments
- NASA's Agile IV&V efforts on Orion EM-1
- DevSecOps initiatives

And the FAA team's high level concerns surrounding

- Agile Acquisition
- Agile PM
- Connecting Agile SW development to test/integration, V&V

SEI's Agile Research and Leadership





Congress Actively Driving DoD on Software Modernization



Software Acquisition Policy	Sec 872 – Defense Innovation Board analysis of software acquisition regulations	Sec 868 – Implementation of recommendations of the final report of the Defense Science Board on the design and acquisition of software...	Sec 800 – Authority for continuous integration and delivery of software applications and upgrades to embedded systems	Sec 835: Balancing security and innovation in software development and acquisition Sec. 838: Comptroller General report on implementation of software acquisition reforms.	Sec 836: Cadre of software development and acquisition experts. Sec 835: Independent study on technical debt in software-intensive systems.
Software Workforce and Training	Sec 891 – Training on Agile or iterative development methods		Sec 230 – Talent management of digital expertise and software professionals Sec 862 – Software development, software acquisition training and management programs	Sec 812: Inclusion of software in Government performance of acquisition functions.	Sec 909: Digital talent recruiting officer.
Pilot Programs	Sec 873 – Pilot program to use Agile or iterative development methods... Sec 874 – Software development pilot program using Agile best practices	Sec 869 – Implementation of pilot program to use Agile or iterative development methods...	Sec 231 – Digital Engineering capability to automate testing and evaluation	Sec 834: Pilot program on the use of consumption-based solutions to address software-intensive warfighting capability.	Sec 833: Pilot program on a acquisition practices for emerging technologies. Sec 834: Pilot program to accelerate the procurement and fielding of innovative technologies.
Software S&T Modernization			Sec 255 – Department-wide software science and technology strategy		Sec 226: Review and assessment of AI apps and establishment of performance metrics. 117-118*: Digital Twin Assessment ... 117-118: Emerging Tech Adoption Training

20+ provisions in 5 FYs = National Security Issue



Q & A:
What's on your mind?

Contact Info

Please Direct Questions to:

Gregory Such
Program Development Manager
Software Engineering Institute
Carnegie Mellon University
+1 412.389.6280 (M)
gsuch@sei.cmu.edu