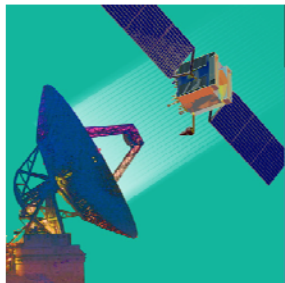


Working Group Outbrief

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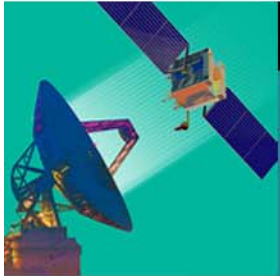


Session 11A

Challenges and Experiences of Adopting Agile
Ground Software Development

*Supannika Mobasser and Steve Rosemergy,
The Aerospace Corporation*

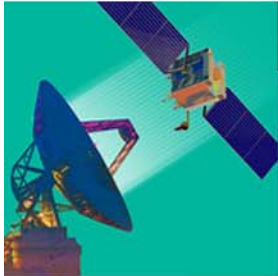
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Presenters/Panelists

- Sue Mobasser, Aerospace
- Steve Rosemergy, Aerospace
- Andre Choi, Aerospace
- Aaron Gould, Vencore
- Michael Brady, L-3
- Rita WiltBerger, Aerospace
- Michael Koller, ESA
- Phil Inslee, Ball Aerospace
- Jeff Potter, NG
- Peter Yoo, SPAWAR
- Kevin Book, SPAWAR
- Sharon Badillo, CCSD/HNCS
- Eva Powell, Alinea
- Ron Bolton, Digital Globe
- Laura Gordon, Raytheon
- Aaron Gregory, NRO/BPO/CAAC
- JonPaul Mozee, GD
- Samuel Lee, USAF
- Clay Hyink, NG
- Joe Baumeister, NASA
- George McCary, Aerospace
- Barbara am Ende, Aerospace
- Davice Nuce, Parsons Corp
- Sherry Stukes, JPL
- Alan Jensen, GS-MS
- Barry Boehm, USC
- Kim Bell, Aerospace
- Jovanna Bunch, Aerospace
- Robyn Haleski, Aerospace

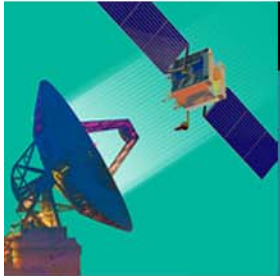
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Schedule

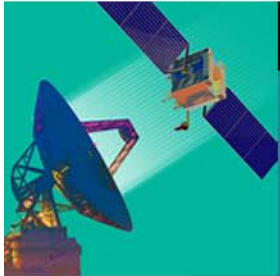
Time	Presentation and Discussion
1:00 – 1:30pm	Session Overview
1:30 – 2:15pm	“Embracing Change to Overcome Challenges with Large-Scale Agile Software Development”, Steve Rosemergy, The Aerospace Corporation
2:15 – 3:00pm	General discussions <ul style="list-style-type: none">- Pains, struggles, and barriers in adopting agile ground software development
3:00 – 3:30pm	Break
3:30 – 4:15pm	“Agile Fit Check”, Sue Mobasser, The Aerospace Corporation
4:15 – 5:00pm	Discussion <ul style="list-style-type: none">- Failed Agile attempts- Going forward, how to increase agility?- Agile Guidance

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Key Takeaways

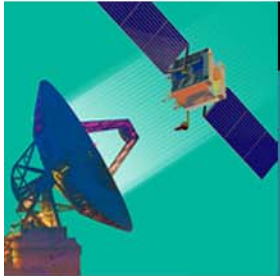
- Teach Agile in ACQ 101
 - Have a proper agile training for both acquirer and developer
- Need a supportive collaboration infrastructure
 - All about people: people have to work together and trust each other
- Plan for evolving requirements
- Having open discussions
 - Contractors tell the Government exactly what you want
 - Increase face time between Government and Contractor
- During source selection
 - Ask the right questions on how the contractor applies agile practices
- CDRLs: consider tailoring up instead of tailoring down
- Better understand what we want to measure and how to measure them



Failed Agile attempts

- Learn Agile on the fly
- Solely rely on individuals and tacit/tribal knowledge
- Lack of integration infrastructure to support agile teams
- Not enough system and software engineering to begin development
- Developing overlapping capability threads
- Use selection criteria such as lowest-cost technically acceptable
- Handle performance requirements as a user story
 - Assign performance requirement to a sprint
 - Tacking on Information Assurance at the end
- User stories not ready when sprint planning begins
- Not having a definition of done

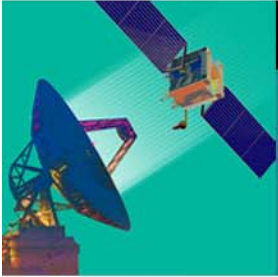
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Pains, struggles, and barriers in adopting agile ground software development

- Disconnect between Government processes (acquisition, contracts, security A&A) vs. the tempo of Agile
- Agile doesn't scale well using current best practices, “A Bridge Too Far”
- The government business model doesn't always align with the principles and values of the agile manifesto (predefined scope and delivery)
- Understanding how to measure “done” and the metrics to determine an equivalent to earned value
- High personnel turnover can impede effectiveness of agile teams
- Rigidity of user story
 - Some user stories can't really fit in a sprint, need a flexible sprint
- Not enough of continuous integration and testing

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- Any questions or comments, please contact
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 - Steve Rosemergy, steven.w.rosemergy@aero.org