



SYSTEMS ENGINEERING  
Research Center

A US DoD University Affiliated Research Center

2<sup>nd</sup> Annual SERC Research Review:  
*Panel on Systems Engineering  
Research Needs*

Michael Wynne  
21<sup>st</sup> Secretary of the Air Force and  
Chairman of the SERC Advisory Board

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# Themes We Continually Hear...

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1. Respond more quickly, flexibly, agilely
2. Acquire, operate, and evolve large complex systems that have distributed and diffuse governance, architecture, and mission
3. Increase the pool and capabilities of systems engineers, and instill systems engineering into all engineers
4. Address security challenges in a systemic fashion rather than piecemeal

With an increasing focus on design for affordability

# Panel Description

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What are the systems engineering research needs that the government faces – What is common? What is unique? – from the perspectives of 4 senior executives:

- Andrei Kirilenko – Deputy Chief Economist, Commodity Futures Trading Commission
- Michael Romanowski – Director, NextGen Integration and Implementation, Federal Aviation Administration
- Stephen Welby, Director of Systems Engineering, Office of the Undersecretary of Defense, AT&L
- John Whiteford, Associate Director of Engineering and Chief Systems Engineer, National Security Agency



# Panel Format

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1. Mike Wynne introduces the panel (5 minutes)
2. Each panelist gets 10 minutes to present their individual perspective on SE research needs (40 minutes)
3. Facilitated discussion among the panelists (25 minutes)