

# Ground System Architectures Workshop 2014

Dr. David Gorney  
Senior Vice President, Space Systems Group  
The Aerospace Corporation

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## Ground systems are ***always*** challenging...

- *Fewer \$'s and more mission needed*
- *Sustaining ground systems while dealing with obsolescence*
- *Growing cybersecurity concerns*
- *Space is Congested, Contested, Competitive*
- *Political and institutional realities*
- *Unknown issues ARE coming!!!!*

## ... but we have better opportunities

- *Space community is growing as barriers to entry are falling*
- *Information and computing technology widely available and affordable*
- *World becoming increasingly connected, bringing new ideas, technologies, and ways of doing business*



# Making the Future a Reality

- “Fast thinking” is easy
  - *Over-reliance on “past” as a baseline*
  - *Innovation falls to politics, funding, institutional inertia, legacy systems, expediency, etc.*
- “Slow thinking” is hard work
  - *Opens broader range of innovative solutions*
  - *Allows more thorough evaluation of those solutions*
  - *Results in more robust, adaptive architecture*
  - *Achieves high level of mission assurance and capability*

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*“Thinking, Fast and Slow” by Daniel Kahneman*



## Imagine the Future

- What would you do if you had a blank sheet?
- Would you...
  - *Operate a satellite from a mobile device?*
  - *Fuse, share, mine, repurpose data between missions?*
  - *Aggregate or disaggregate?*
  - *Use Everything as a Service (XaaS)?*
  - *Crowd-, Open-, Out-, In- source?*
- How could you make this happen?



# GSAW Brings the Ground System Community Together

- Civil, commercial, government, international, and academic communities all have contributions to make
- Share lessons-learned on successes AND failures
- Introduce state-of-the-art approaches
- Address system development challenges
- Take advantage of educational opportunities
- Envision the future



*How do we put all the pieces together?*



## Keynote Address

**Maj. Gen. Terry Feehan**

Vice Commander

Space and Missile Systems Center

United States Air Force

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