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The Future of Military Automation and Manpower

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The Future of Military Automation and Manpower

TechCon 2018

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NPS/Defense Analysis

The Future of Military Automation and Manpower

Sverre Kvalvik

Motivation

- Dramatic advances in AI and autonomous systems
- Little research on what effect will be on on armed forces as a whole
- Important guide to future reform

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Methods

- Assessing probability of «computerization» of military occupations
- Occupations are assigned likelihood based on*
 1. Need for complex manipulation or perception
 2. Need for social intelligence
 3. Need for creativity
- Using US Navy occupations as a case study, 1500+ occupations, 450.000 employees

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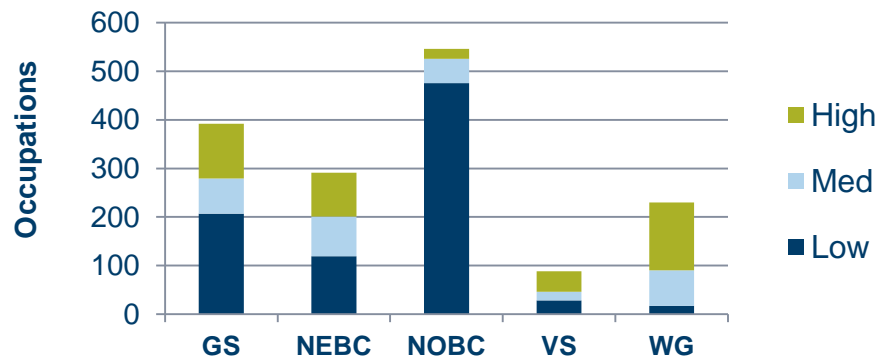
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Probability of being replaced



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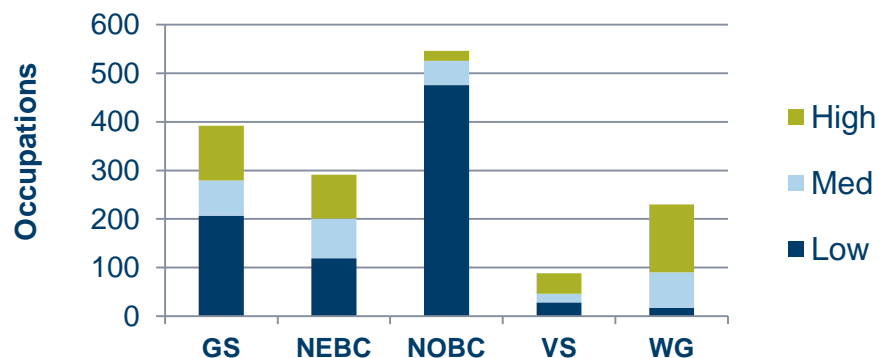
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Takeaways

- Likely very large scope for changes for both operating forces and shore
- Civilian employees seem (so far) most at risk
- However, likely far fewer occupations affected than in US civilian economy (26 % vs. 47 %)



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