



PROJECT MANAGEMENT CENTER FOR EXCELLENCE

A.J. CLARK SCHOOL OF ENGINEERING
Civil & Environmental Engineering Department



BEST 'NEXT' PRACTICES

[HTTP://PMSYMPOSIUM.UMD.EDU/](http://PMSYMPOSIUM.UMD.EDU/)

Wade Knudson, Raytheon
2016 Project Management Symposium



*DDG 1000 Program:
Challenges &
Solutions*

Wade Knudson
DDG 1000 Program Director

DDG 1000 Launch: 28 Oct 2013



DDG 1000 Alpha Trials: 7 Dec 2015

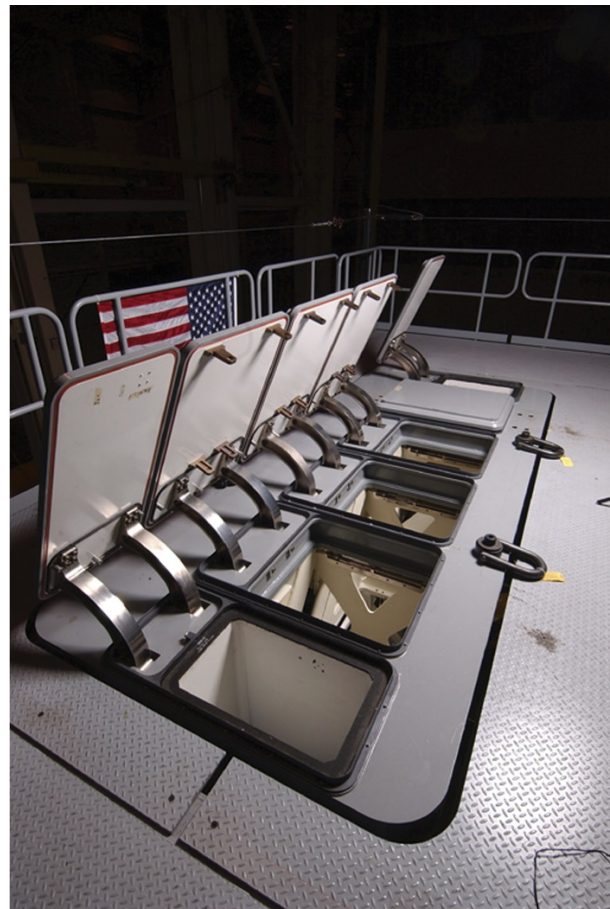


DDG 1000 Key Technologies

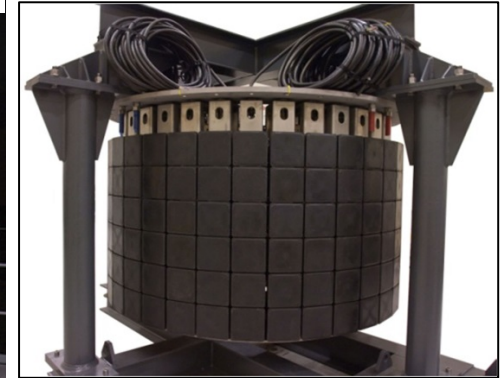
Total Ship Computing Environment



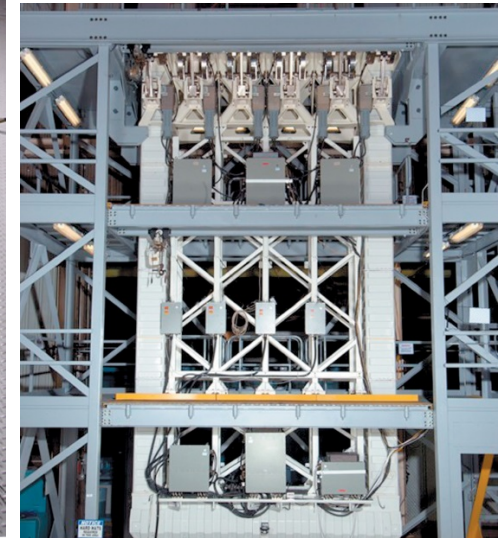
MK57 Vertical Launch System



Hull-Mounted Sonar



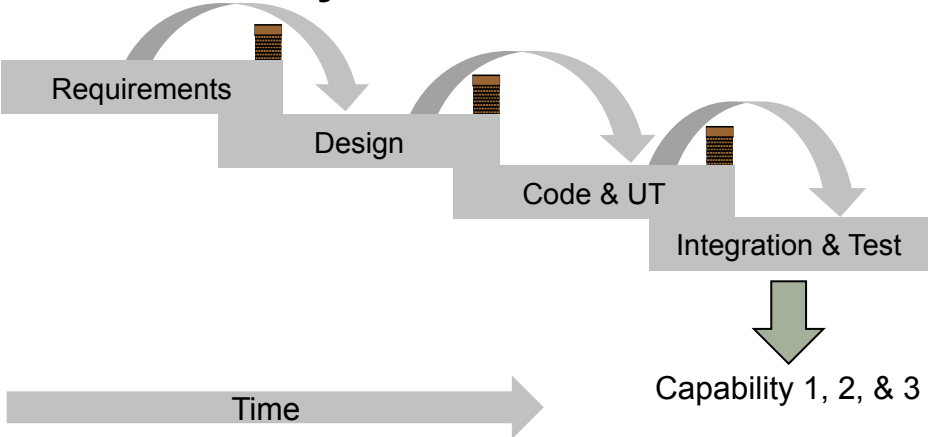
Electronic Modular Enclosures



Peripheral
Vertical Launch System

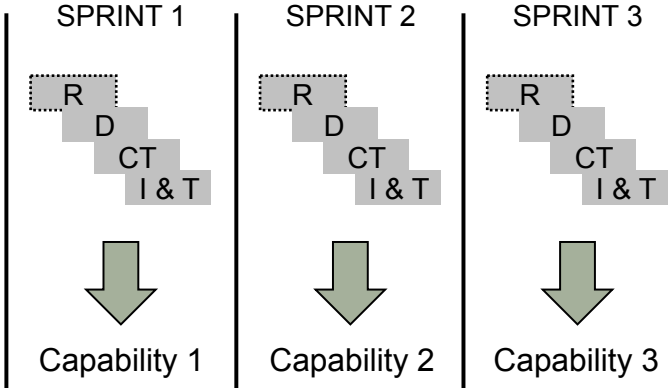
Why Agile? More Effective Model

Waterfall Lifecycle Model



- Activities batched into large stove-piped phases
- “Big Bang” Integration
- Later defect discovery
- Later risk identification & mitigation

Agile Lifecycle Model



- Time Box phases which complete all activities
- Delivers tested, deployable software earlier
- Small Batch integration
- Earlier defect discovery
- Earlier risk identification & mitigation
- Additional measures to track Product and Sprint performance (Release Burndown, Sprint Burnup, Scrum Team Velocity)

“Industry must understand that both Affordability, and schedule, will now become as important as Technical Capability. We are committing ourselves on each Program, to achieve the best-available output by a specific-date.”
- Ashton Carter Sep 2010