



TRAINING
INTEGRATION

ANALYSIS



ACTIVE
COLLECTION

PARTNERSHIPS

LESSONS
LEARNED

Junior Leader Innovation Symposium

CONCEPT
DEVELOPMENT

WARGAMING

JOINT
INTEGRATION

EXPERIMENTATION

EXERCISE
SUPPORT



DOCTRINE
DEVELOPMENT

CAPT David Tyler
NWDC

COLLABORATION

Navy Center for Innovation
6 June 2012



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Navy Warfare Development Command
"Forward . . . For the Fleet"

GENERATION



Welcome Aboard

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- This event is part of a campaign to regain a culture of innovation
- Junior leaders are a vital component of this campaign because they are the:
 - Untarnished creative energy of the Fleet
 - Navy's long term intellectual investment
- Its designed to facilitate collaboration and kindle ideas that help Navy solve problems and seize opportunities

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Symposium Objectives



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1. Boost awareness & educate junior leaders on the importance of innovation
2. Deputize junior leaders to contribute new ideas to Navy missions
3. Explore new ways to organize, connect, and proliferate open discussion venues
4. Harvest recommendations from junior leaders on key issues confronting the Navy
5. Employ the creative energy of junior leaders to tackle emerging challenges

Gather Feedback on Draft Innovator's Guide



Advancing CNO Guidance



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Sailing Directions:

- We will innovate to:
 - Use new technologies and operating concepts to sharpen our warfighting advantage
- Navy will evolve and remain the preeminent maritime force.
 - Reach & effectiveness of ships & aircraft will be greatly expanded through new and updated weapons, unmanned systems, sensors, & increased power
 - Unmanned systems will employ greater autonomy and be fully integrated with their manned counterparts
- Our primary mission is warfighting. Efforts to improve capabilities, develop people, and structure our organizations should be grounded in this fundamental responsibility.



Admin

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- This symposium is **UNCLASSIFIED**
- Stay on the first deck unless escorted
- Note emergency exits
- Heads are just outside NCAMS on the right
- Hold questions until the end of speeches
 - Use microphone and “get to the point”
- The ADM Hogg room is for Flags/DVs
- Working Lunch: Lunch is being sold onsite
 - Participants will have 15 minutes to return to their seats prior to the lunchtime session



Defense Connect Online



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- This is being streamed live & recorded on DCO
- **Unclassified** laptops throughout the room for on-site participation
- Log-in as a guest (*DCO comments are non-attributable*)
- Chat is being used to capture ideas, questions, and recommendations. Guidelines:
 - Be bold, but professional
 - Moderators will monitor chat for questions
 - Technical assistants are available to help
- Local participants, use the microphone so you can be heard on DCO



Symposium Agenda



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- 1000 – 1030 Opening remarks (RADM Kraft, Commander, NWDC)
- 1030 – 1130 Leadership kick-off (VADM Richardson, Commander, SUBFOR)
- 1130 – 1145 Break
- 1145 – 1230 Senior Enlisted Leadership kick-off (CNSL FORCM Williams)
- 1230 – 1315 Innovation from the civilian sector perspective (Dr. Fall, ONR)
- 1315 – 1415 Working Lunch, History of Junior Innovation (LCDR BJ Armstrong) /U.S. Naval Institute J.O. Outreach (LT McFall)
- 1415 – 1515 Rapid innovation in a military context (Dr. Denning, NPS (via DCO))
- 1515 – 1530 Break
- 1530 – 1600 Innovation in social media: Disruptive Innovation (LT Kohlmann)
- 1600 – 1730 Panel (Prof. Culora, LCDR Armstrong, LT Kohlmann, SHC Zamora, PS1 Maher)
- 1730 – 1800 Closing remarks and way ahead (RADM Kraft)

Full schedule: Be on Time!

Revised: 04 June 2012

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Questions

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EXERCISE
SUPPORT

"There is a tide in the affairs of men, Which taken at the flood, leads on to fortune. Omitted, all the voyage of their life is bound in shallows and in miseries. On such a full sea are we now afloat. And we must take the current when it serves, or lose our ventures." - Shakespeare



Junior Leader Innovation Symposium

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Engaging and Empowering Junior Leaders to Reinvigorate a Culture of Innovation



RADM Terry Kraft
Commander Navy Warfare Development Command
06 June 2012

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Background: Innovation Campaign

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This is the second major event. The first, the Maritime Innovation Symposium (13-14 Mar), yielded several actionable recommendations:

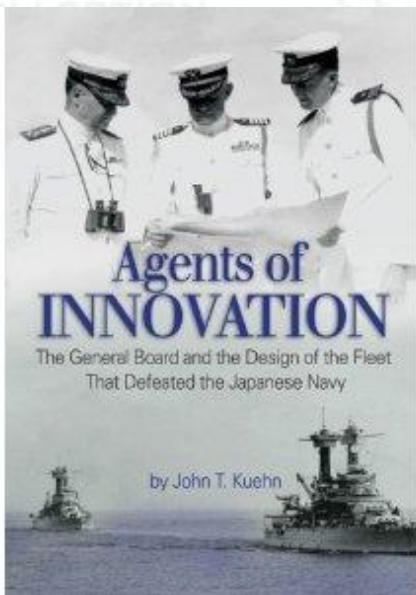
Actions	Status
• Refine process for submitting & developing ideas	CNO-approved revised concept process New concept nomination process online Revitalized NLLS and NDLS
• Push innovation into classrooms	Close coordinating with NWC, NPS, TTGL, Senior Enlisted Academy; Planning USNA internship program
• Develop network of innovators	Launched Innovation Collaborative Team Exploit via online tools, DCO, Facebook, etc
• Leadership & strategic communications emphasis	Supporting innovation at Flag events and through command messaging tools

Navy Center for Innovation – Transforming ideas into realities



Agents of Innovation

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Innovation can occur in the face of constraints. When military leaders perceive they have to solve specific problems they rarely concede defeat in the face of constraints. German, American, Japanese experiences in 1919 - 1937 show how naval innovation was affected in a positive way by physical, strategic, and materiel constraints. The curiosity of leaders was piqued, rather than dulled, by limitations or disarmament.

- John T. Kuehn

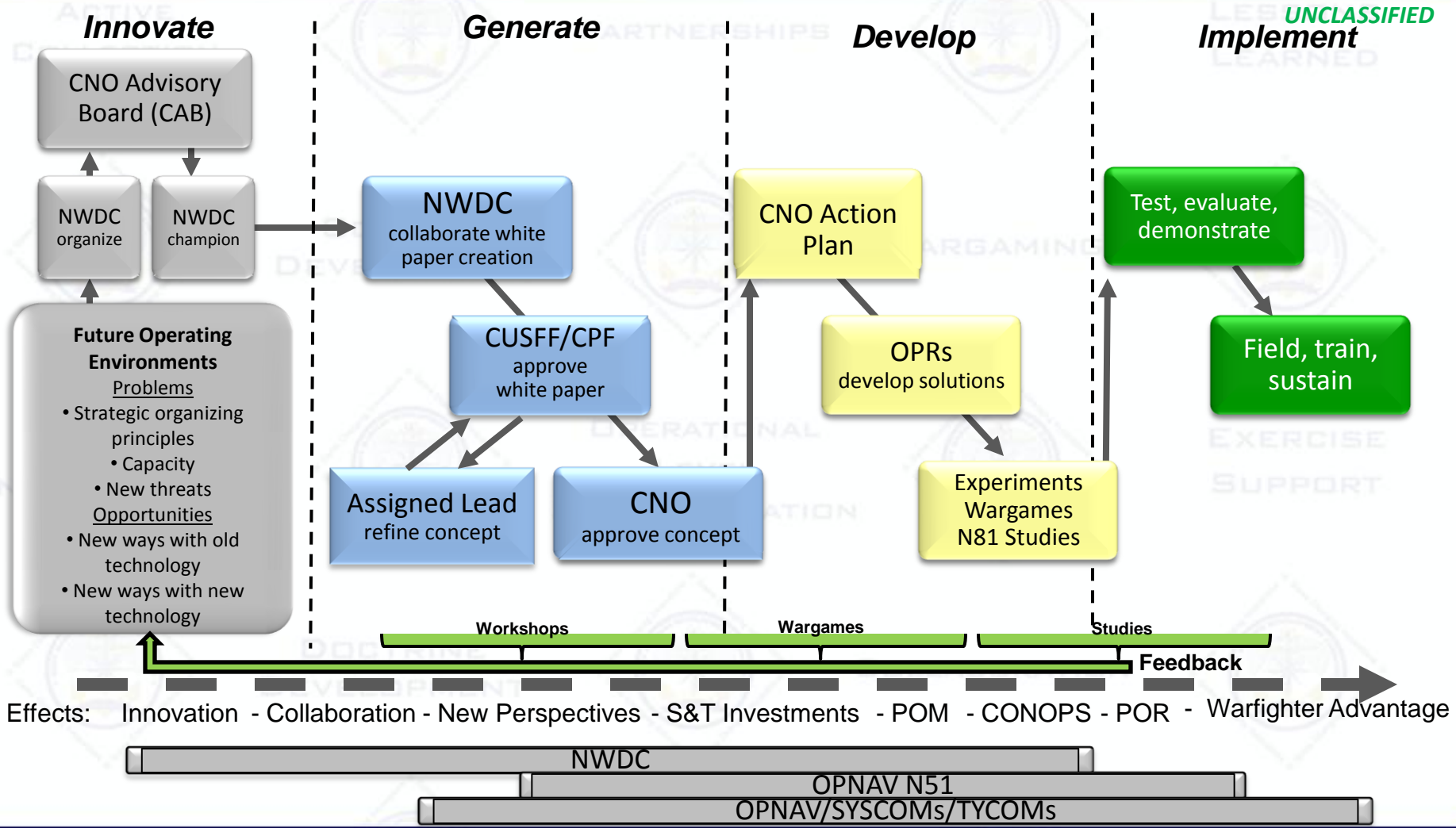
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Navy CGCD Process



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Junior Leaders are Essential



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- Are a large demographic group
- Must instill innovation into everyday operations - Junior Leaders run daily activities
- Are open-minded and less wedded to traditional processes
- Experts with new technology
- Greater tolerance for risk
- Cultural change is slow – the next generation is the key



Junior Leader Innovators

- Submarine Rescue: LT Swede Momsen
 - Designed submarine escape device and rescue chamber to allow crewmen trapped in sunken submarines to escape



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Swede Momsen and the Momsen Lung

- Amphibious Warfare: Capt Pete Ellis, USMC
 - Writings led to development of WWII amphibious warfare doctrine at the Naval War College and fleet exercises



Pete Ellis and Amphibious exercises at Culebra, Puerto Rico



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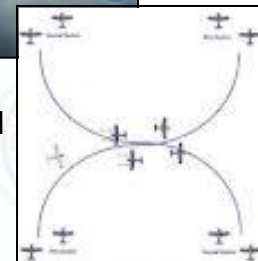
Junior Leader Innovators

- WWII Air Combat Tactics: LCDRs Thach & Flatley, ENS O'Hare
 - Thach Weave: Tactical innovation allowed Navy fighters to counter maneuverable Japanese aircraft
 - Fighter direction, radar pickets, and CAP tactics countered massed kamikaze attacks
- Steam Propulsion: Benjamin Isherwood
 - 22 year old naval engineer who helped design steam engines for shipboard propulsion prior to the Civil War
 - Became a prolific antebellum technical writer

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F4F Wildcat and the Thach Weave



Benjamin Isherwood and steam frigate USS Missouri circa 1842



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Junior Leader Innovators



- Combat IPAD & Afghanistan Air Support: Capt Jim Carlson (USMC)
 - Capt Carlson, a Cobra pilot in the 3rd Air Wing, digitized 1,000 Helmand Valley maps on an IPAD (amounting to 30 pounds of paper) for close air support missions
 - For less than \$1,000 per aircraft, the IPAD system provides the AH-1W Cobra a GPS-based moving map display capability and dramatically cut the time required to coordinate air support to ground troops under fire



Capt Carlson manning up an AH-1W Cobra with his IPAD



Junior Leader Roles and Expectations



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- ADM Harvey “...*there are some very smart Sailors and JOs out there who both care deeply about what they are doing and have the knowledge, insight and experience to give us ideas that can significantly improve many fundamental aspects of how we do business today.*”
- You own the future. You have a professional obligation and vested interest to shape the capabilities and culture of tomorrow’s Fleet.
 - Think deeply
 - Question continuously
 - Debate rigorously
 - Read broadly
 - Write boldly
 - Communicate your ideas to leadership

This is an opportunity to step forward & speak up – make the most of it

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