



Junior Leader Innovation Symposium

UNCLASSIFIED

Engaging and Empowering Junior Leaders to Reininvigorate a Culture of Innovation



RADM Terry Kraft
Commander Navy Warfare Development Command
06 June 2012

UNCLASSIFIED

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

GENERATION

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 06 JUN 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE Engaging and Empowering Junior Leaders to Reinvigorate a Culture of Innovation				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Warfare Development Command,Naval Station,Norfolk,VA,23511				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Prsented at the Junior Leader Innovation Symposium, 6 Jun 2012, Norfolk, VA					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 9	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Background: Innovation Campaign

UNCLASSIFIED

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

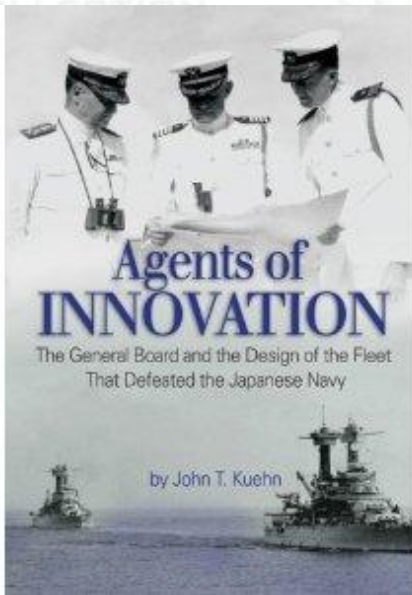
Actions	Status
• Refine process for submitting & developing ideas	CNO-approved revised concept process New concept nomination process online Revitalized NLLS and NDLS
• Push innovation into classrooms	Close coordinating with NWC, NPS, TTGL, Senior Enlisted Academy; Planning USNA internship program
• 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

UNCLASSIFIED



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

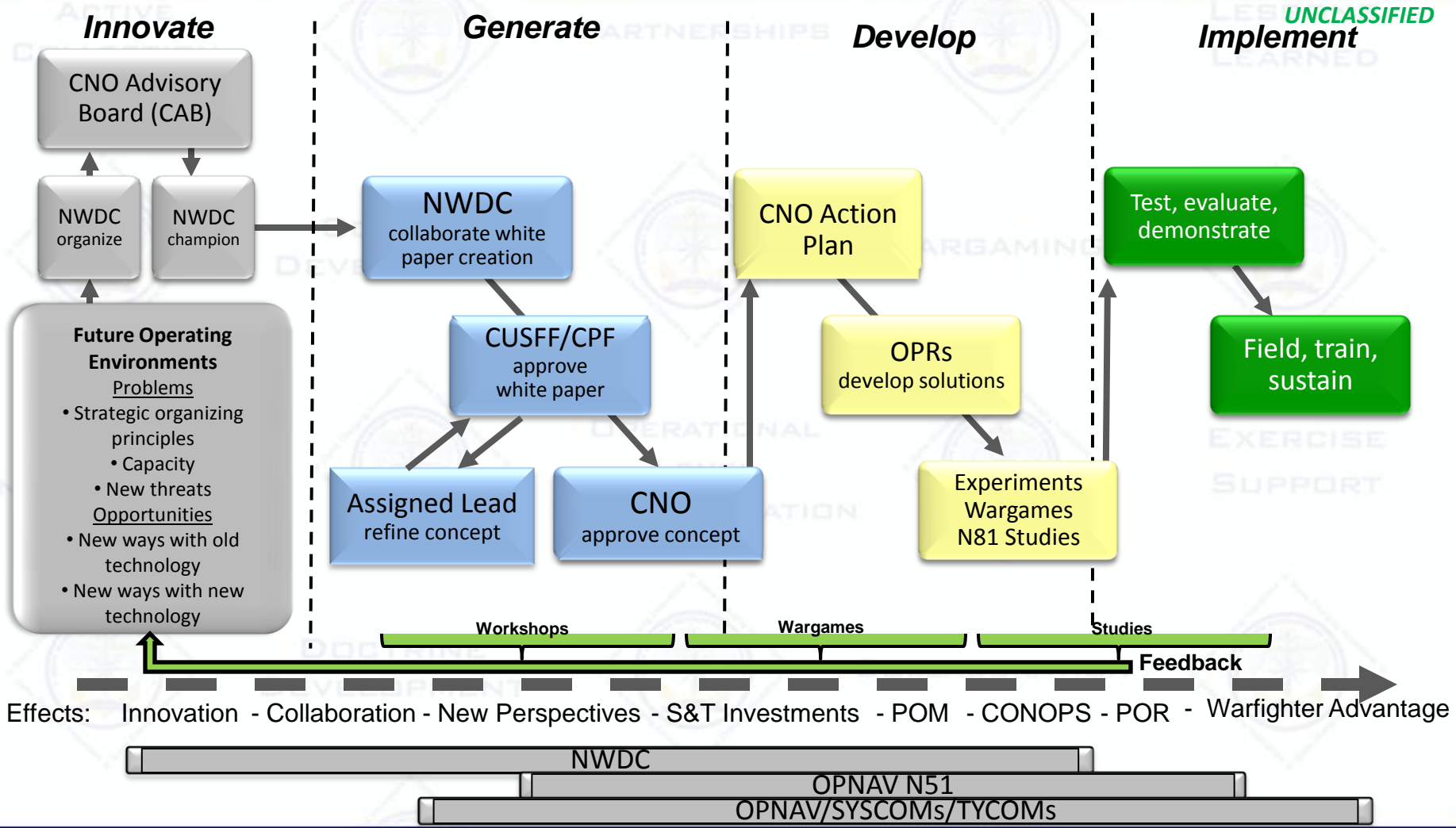
11

UNCLASSIFIED

GENERATION



Navy CGCD Process



UNCLASSIFIED

UNCLASSIFIED

GENERATION

Junior Leaders are Essential



UNCLASSIFIED

- 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



UNCLASSIFIED



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





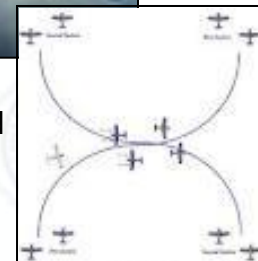
Junior Leader Innovators

- 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

UNCLASSIFIED



F4F Wildcat and the Thach Weave



Benjamin Isherwood and steam frigate USS Missouri circa 1842



15



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



UNCLASSIFIED

- 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

17

UNCLASSIFIED

GENERATION