FROM THE DIRECTOR

Welcome to the first edition of the DON Strategy and Innovation newsletter. On 22 January 2015 Secretary of the Navy (SECNAV) Ray Mabus set up Task Force Innovation (TFI) to energize the culture of innovation and connect its isolated pockets across the Department of the Navy (DON). Our world is increasingly defined by speed and information sharing, one where the pace at which technology is developed, employed, changed and redeveloped drives everything we do. There was no better time to champion our people's innate culture of innovation and once again embrace risk and learn from occasional failure.

On 15 April 2015, the DON Innovation Vision was approved by SECNAV and released concurrently with his speech at Sea-Air-Space Exposition. His five innovation goals were to build the innovation network, manage the talent of our workforce, improve how we use information, accelerate delivery of new capabilities to the fleet, and develop game-changing warfighting concepts. His speech's overarching theme was to remove cultural and process barriers, while energizing us to share great ideas and improve the DON. Over the past 15 months, the workforce, from senior to junior, military to civilian, has responded to the challenge, making the Navy and Marine Corps more responsive.

While much has been achieved over the past year, more remains to be done. We appreciate your support and will continue to work collaboratively with you to encourage innovation and challenge the status quo. As we sustain the Innovation Vision, please continue to ask "Why" or "Why not?"

DIRECTOR'S CORNER

In this edition of the newsletter, we'll cover:

- **Naval Innovation Network –** a network of networks, a directory to connect those in the DON

- **Naval Innovation Advisory Council –** updates

- **DON Innovation Sustainment Group (DISG) –** updates

- **The Hatch –** new website location and how it works

- **Innovation Spotlights –** this is your chance to share your organization's past and current think pieces/articles across the DON

- All of this is available and more at: **www.secnav.navy.mil/innovation/**

We want to hear from you!
Send your stories to
DON_Innovation@navy.mil

f @NavalInnovation

@NavalInnovation

Submit your Ideas and Questions to:
DON_Innovation@navy.mil

NAVAL INNOVATION NETWORK

Learn more! https://portal.secnav.navy.mil/cop/NIN/
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Task Force Innovation (TFI) brought together innovators and problem solving organizations from across the DON. The **NIN Hub** is an IT solution launched to help connect naval innovation communities of practice. The NIN Hub is a simple directory that will facilitate information exchange and sharing of tradecraft. An implementation group has since updated its course to a sustainment group.

NAVAL INNOVATION ADVISORY COUNCIL (NIAC)

http://go.usa.gov/xrQPT

The NIAC builds and maintains an effective network of military, government, academic, and private sector experts and continually assesses future operational and technological environments to identify areas of opportunity for the DON. The FY16 NIAC built relationships/agreements with MITRE, DIUx, Warfare Centers, NPS, Silicon Valley for sustained activity. The FY17 theme, announced last month, is "Design thinking for a learning organization: applying design methods to meet innovative challenges." Stay tuned for highlights of their work as the year progresses!

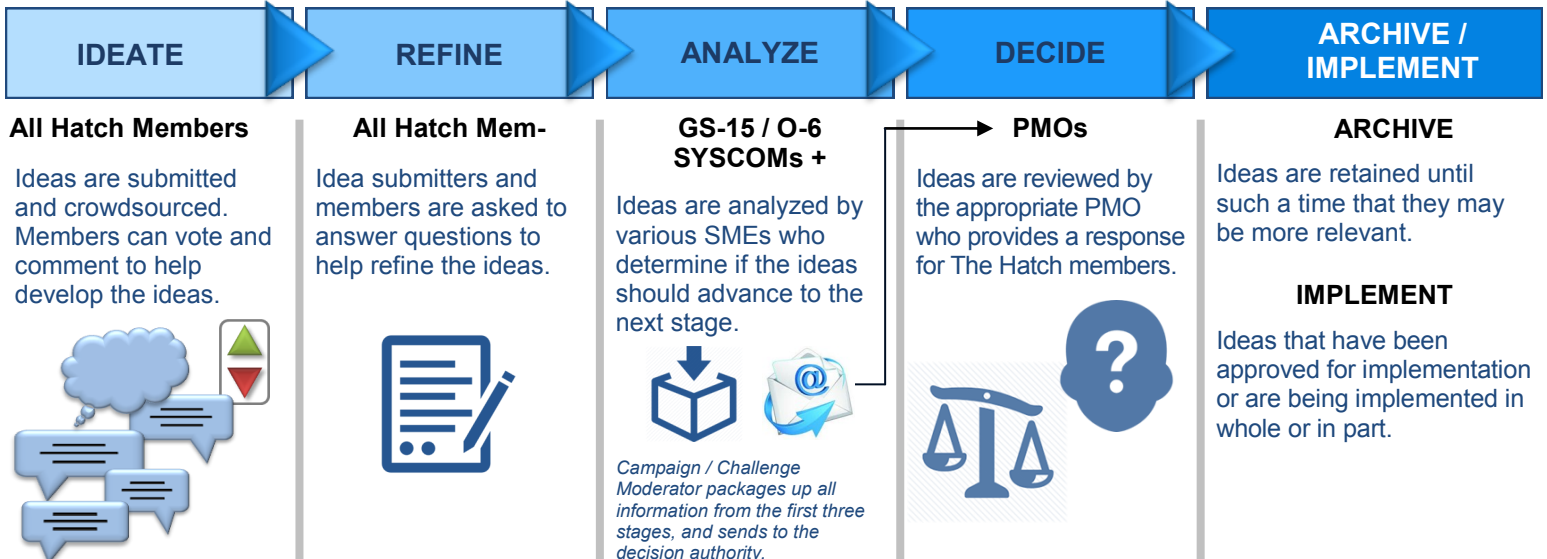## DON INNOVATION SUSTAINMENT GROUP (DISG)

The DISG provides an integrated approach to innovation sustainment by synchronizing the SECNAV Memos, NIN efforts (including The Hatch), NIAC, Seed Funding, Strategic Communications and incentives/awards. Membership is comprised of over 100 members from the Services and every component/level, and incorporates an integrated process for receiving, ranking and nominating ideas for seed funding or sponsorship.

THE HATCH
"Challenge the Force... Change the Game."

The first NIN element – "The Hatch" ideation/crowdsourcing platform - is an accessible, virtual collaboration forum that harnesses the creative energy of Sailors, Marines, and Department of the Navy civilians. In the Hatch, innovative ideas can be refined through crowdsourcing and further developed by local innovators and subject matter experts, with the goal of implementing ideas that benefit the DON. Since its launch in May 2015, The Hatch has generated **15** challenge campaigns and more than **600** innovative ideas from more than **7,900** users from diverse communities of practice.

Learn more!   https://portal.secnav.navy.mil/cop/thehatch/   *Select email certificate*

THE HATCH WORKFLOW

IDEATE	REFINE	ANALYZE	DECIDE	ARCHIVE / IMPLEMENT
All Hatch Members	**All Hatch Mem-**	**GS-15 / O-6 SYSCOMs +**	**PMOs**	**ARCHIVE**
Ideas are submitted and crowdsourced. Members can vote and comment to help develop the ideas.	Idea submitters and members are asked to answer questions to help refine the ideas.	Ideas are analyzed by various SMEs who determine if the ideas should advance to the next stage.	Ideas are reviewed by the appropriate PMO who provides a response for The Hatch members.	Ideas are retained until such a time that they may be more relevant.
		Campaign / Challenge Moderator packages up all information from the first three stages, and sends to the decision authority.		**IMPLEMENT** Ideas that have been approved for implementation or are being implemented in whole or in part.

**"CHALLENGE** THE FORCE...*CHANGE* THE GAME"

HIGHLIGHT ON INNOVATION MEMOS

Key integrated implementation efforts include (*click on bulleted links to view the memos*):

- **Additive Manufacturing (AM) / 3-D Printing**
    - DON AM implementation efforts commended by the SASC in the FY17 NDAA
    - Service and ASN AM leads cite SECNAV/TFI funding support as "vital" to this effort
- **Adaptive Force Packaging** (SIPR, available upon request)
- **Wargaming** (SIPR, available upon request)
- **Afloat & Ashore Installation Policies for Experimentation & Exercise**
    - Outstanding integrated recommendations from both Services to streamline policy
- **Treat Unmanned as Unmanned**
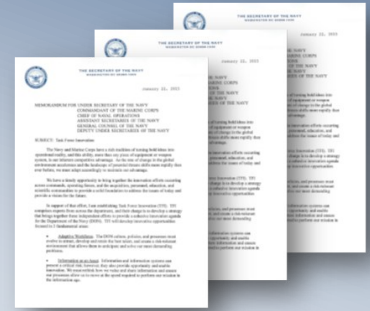
Memos and responses are available on our website

http://www.secnav.navy.mil/innovation/Pages/memos.aspx

INNOVATION SPOTLIGHTS FROM AROUND THE FLEET AND THE FORCE

Navy Cryptology Vision and Guidance JUN 2016

http://go.usa.gov/xcyzY

> *"The Navy and Marine Corps have a rich tradition of turning bold ideas into operational reality, and this ability, more than any piece of equipment or weapon system, is our inherent competitive advantage. As the rate of change in the global environment accelerates and the landscape of potential threats shifts more rapidly than ever before, we must adapt accordingly to maintain our advantage."*
>
> **SECNAV Ray Mabus**, Task Force Innovation Memo

On June 26th, the Navy's Cryptologic Warfare Community released a new vision and guidance titled: "Navy Cryptologists: Leaders Across the Spectrum." This vision directly incorporates insights discovered through Task Force Innovation and the sustaining groups, the Naval Innovation Advisory Council and Naval Innovation Network. The three focus areas of Task Force Innovation were:

- **Adaptive Workforce** The DON culture, policies, and processes must evolve to attract, develop and retain the best talent, and create a risk-tolerant environment that allows them to anticipate and solve our most demanding problems.

- **Information as an Asset** Information and information systems can present a critical risk; however, they also provide opportunity and enable innovation. We must rethink how we value and share information and ensure our processes allow us to move at the speed required to perform our mission in the information age.

- **Emerging Operational Capabilities** The DON must provide emerging operational capabilities a clear and expedient path to the fleet. We must reduce barriers and promote a culture willing to accept new concepts such as adaptive force packages, unmanned/autonomous systems, non-lethal weapons, directed energy, and additive manufacturing.

Navy Cryptology is critically positioned at the merger of these three focus areas. According to the new Cryptologic Community, the three aspects of Navy Cryptology are: Signals Intelligence, Cyber, and Electronic Warfare. "Navy Cryptologists: Leaders Across the Spectrum" provides a clear roadmap to innovation that addresses an innovative workforce, using information as an asset, and actively removing barriers to implementing emerging operational capabilities.

By LT Jason Knudson, the Fleet Innovation Officer for Commander SEVENTH Fleet and a Cryptologic Warfare Officer

"CHALLENGE THE FORCE...CHANGE THE GAME"

History of Innovation in the DON – Making a Difference

Project SNOOPY: Naval Problem Solving in Wartime

By Randy Papadopoulos

Accurate naval gunfire is not easy; continuously moving ships makes the task difficult. During the Vietnam War the problem worsened, as U.S. Navy ships targeted troop positions ashore covered by dense vegetation, making observation of shots difficult, even with radar. Enter the Gyrodyne QH-50C Drone Anti-Submarine Helicopter (DASH), based from Navy destroyers and destroyer escorts and designed to drop Mark 43 torpedoes on Soviet undersea craft.

In 1965, just three years after the introduction of these unmanned aerial vehicles, Commander Phil King, XO of USS *Blue*, had a television camera installed on the ship's DASH. With that, the remotely-piloted aircraft could transmit views from ashore, spotting targets and fall of shot. Repurposing this anti-submarine weapon to support troops on land, called Project "Snoopy," DASH entered use across the surface force during the conflict, eventually helping over 50 ships offer fire ashore. Here was quick thinking to solve a problem, accomplished by modifying a system designed for another mission. See more here: **https://www.youtube.com/watch?v=CMSOhPWHct4**

Navy, DOD Dare Top Coders to #HacktheSky

http://go.usa.gov/xcV3V

By MC2 Victoria Ochoa

Last year, the Naval Postgraduate School (NPS) set a world record by flying a swarm of 50 autonomous drones all controlled by a single operator. Now, NPS and the Department of the Navy Office of Strategy and Innovation have challenged some of the best developers, hackers and designers in Silicon Valley to hack the control system.

The Navy's "#HacktheSky" hackathon and future of autonomy workshop was held June 24-26 at the innovation hub Galvanize in San Francisco, California, bringing together an array of hackers, cyber experts, Silicon Valley tech representatives, and data scientists to find vulnerabilities in the drones' code. Ultimately, the purpose of the hackathon was to improve software, innovate upon technology created at NPS for unmanned systems, and foster stronger relationships between government, industry and Bay area technical leaders. Teams had two full days to crack into the drones' code based on multiple scenarios, with prizes awarded to the teams with the most success. The Navy walked away with some critical feedback from the hacker community, and invaluable newfound knowledge about its swarming capabilities.

Mid-Atlantic Regional Maintenance Center's (MARMC) Fabrication Laboratory,

by Aaron Strickland, Mid-Atlantic Regional Maintenance Center Public Affairs

The Fab Lab participated in the Third Annual National Week of Making to recognize the military's best innovation initiatives. The first design challenge, Project Apollo, solicited ideas from Sailors at sea as well as military members to create their own ideas to test out at MARMC. There were 18 submissions from the military and all were ideas for innovation using Fab Lab's 3-D printers. The projects were assessed based on ingenuity, how quickly the design could be sent to ships at sea, and total votes received in the Hatch, which is an online ideation platform for sharing Navy-wide ideas and ingenuity.

http://go.usa.gov/xcASJ

A project coordinated by the Fab Lab was featured in June during the White House's Third Annual Week of Making.