Innovation is the cornerstone of any successful agency. The Coast Guard innovation program continues to encourage and solicit ideas from innovative members of our workforce to solve complex, everyday problems that we face in our mission execution.

Coast Guard Commandant Adm. Paul Zukunft recently presented deserving individuals the 2015 Niels P. Thomsen innovation awards. The winners in each category were:

**Science and Technology**

*Individual Award Winner: No-Load Transformers, Glen Yanagi, Civil Engineering Unit Honolulu*

This idea was submitted in response to the ECIP challenge sponsored by CG-4 to reduce Cutter power consumption at the pier. Yangani noticed that when the ship was underway, often for months at a time, the ship’s power transformer was still energized. His idea was to lower our energy consumption by simply turning off the power to an unloaded transformer. CG-46 is currently researching this solution. This idea is especially compelling since it requires no real alterations to the ship, the ship’s infrastructure, or the ship’s routine.
Honorable Mention: *Electronic Maintenance Procedure Cards*, Petty Officer 1st Class Robert Kozacek, Aids to Navigation Team Gulfport

This idea was submitted in response to the ALMIS labor hour challenge. ANT Gulfport has prototyped a solution using ruggedized laptops and secure hard drives to go completely paperless for ALMIS maintenance functions. This was the most compelling idea provided to the ALMIS challenge since it has the potential to increase labor hour data validity and to be prototyped among other units and communities.

**Operations or Readiness**

*Individual Award Winner: Commercial Fishing Vessel Checklist Generator*, Daniel E. Hardin, District 13 Commercial Fishing Vessel Safety Coordinator

Dockside safety inspections are now required for most offshore commercial fishing vessels. In the past, the Coast Guard provided static brochures and job aids to assist the fishing fleet in preparing for inspections. Because of the large diversity among fisheries and fishing vessels, inspectors had to make many repeat visits to re-inspect and further educate vessel masters. Hardin developed an online tool that generates custom checklists for particular classes of vessels. He then spearheaded a mobile implementation of that application. In 2015, 11,699 people accessed the checklist generator. Re-inspections have been minimized, saving labor hours and travel costs, and most importantly increasing compliance rates.

*Team Award Winner: Minimum Mission Standards for Coast Guard Force Planning Construct*, Atlantic Area

This idea is especially timely with the Commandant’s strategic intent-mandated force planning construct work commencing this spring. LANT-7 has developed an algorithm to compare the PAL and the qualifications held by each member at a unit against mission requirements. The algorithm provides information on the number of people deployable from a unit, and the mission impact of the deployment. A solution such as this could have a large impact on Coast Guard force planning.

**Administration, Training, or Support**

*Individual Award Winner: Automated Tuition Assistance Payments*, Lt. Cmdr. Lisa Garcez, Coast Guard Institute

Approximately 500 students participate in the Coast Guard’s advanced graduate program each year, and tuition is paid semiannually in support of this program to over 200 different schools. The current method of tuition payment relies on paper based invoicing, and because of the inherent difficulty in tracking the varied due dates of multiple universities, several payments are late each term and, in some cases, missed. In the event of a late or missed payment, a fee is normally assessed, and in some cases, the student is removed from the classroom until the university is paid. Garcez pushed for use of the
electronic Navy platform, which greatly sped up transactions and allowed students to return to class, and the program to comply with the Prompt Payment Act.

*Team Award Winner: Rox Block Tool, ESD South Portland and IPF South Portland (Team Entry)*

Rox Blocks are watertight electrical wiring transit modules installed on various afloat platforms. Rox Blocks are challenging to work on, with wiring for many different components running through sealed modules or “blocks” with extremely tight tolerances. Often, the entire installation would need to be disassembled to access one of many wire runs. ESD South Portland and IPF South Portland developed a tool that cuts a frequent 90-minute job down to 5 minutes. Since Rox Blocks are installed on a broad array of Coast Guard vessels including cutters and boats, this innovation could have positive fleet-wide impact in terms of maintenance hours.

*Honorable Mention: HC-130J Radar Hot Mock Ups, Aviation Logistics Center*

Radar and communication suites on HC-130Js were shipped as far as Israel for service, resulting in a 24-month turnaround time, often with a “no fault found” result. ALC created their own test bench for fault testing the components, saving $600,000 per year and literal years in turnaround time.

*Cmdr. Joel Magnussen Innovation Award for Management*

*Team Award Winner: Risk Based Maritime Security Response Operations (RBMSRO), CG-MSR*

Today, approximately one-third of the Coast Guard’s total programmed underway hours are dedicated to the PWCS mission and its associated MSRO activities. RBMSRO allows Sectors to plan PWCS operations based upon a risk management construct. By leveraging the Maritime Security Risk Analysis Model (MSRAM) to conduct localized risk analyses of ports, each COTP zone is capable of dealing with distinct challenges relative to its location, vessel traffic, and localized risk. Further, the risk-based methodology allows COTPs to shape risk mitigation efforts using only existing resources to maximize risk reduction. Individual MSRO performance requirements for a given Sector are formulated by both risk exposure and available resources. Achieving between 80 and 100 percent of the performance requirement ensures the Sector is optimizing its risk reduction capability. This idea is also well-aligned to the Commandant’s Strategic Intent and the mandate for increased risk-based operations and decision-making. RBMSRO is an efficiency-gaining CONOPs shift with potential implications across other missions. This idea has also captured the attention of the Congressional Research Service as an example of smart governance.

*Honorable Mention: Ion Scan Center of Excellence, Tactical Law Enforcement Team (TACLET) South*
Management of ion scan gear has never been standardized. TACLET South has created a center of excellence that has saved funds and time, extended the service life of expensive equipment, and improved compliance with legal and maintenance requirements. This effort included obtaining the training required to maintain ion scan units, including training on the disposal of hazardous materials.

**Cultural Change**

*Individual Award Winner: Active Duty to Aux Transition, Greg Warnock, Coast Guard Auxiliary*

As a way to increase professional membership and mission expertise, the Coast Guard could offer active duty, reserve, retiring, and separating members non-monetary incentives to join the Auxiliary. Ideas for incentives may include a designation badge worn on Coast Guard uniforms, waiver of Aux membership fees, Servicewide points, etc.

*Team Award Winner: Lifejacket Signage, Petty Officer 2nd Class John Geertsema, Intel Coordination Center, Petty Officer 2nd Class Craig Mercier, Sector Southeast New England*

These two ideas were submitted in response to the Lifejacket challenge. Most states have laws mandating children 12 and under wear a lifejacket in a recreational boat. A Federal rule mandates the requirement for states without the law. Many recreational boaters are unaware of this requirement. Two ideas were posted together that were variations on the same theme.

– Post signs at marinas and boat ramps reminding boaters of the state/federal requirement for kids’ lifejackets.
– Require a lifejacket placard in recreational vessels (similar to the currently-required oil discharge placard) reminding boaters of the state/federal requirement for kids’ lifejackets.

For more information and to join the innovation discussion, please check out ECIP Connect.