

## Coast Guard members compete at second Deck Plate Hackathon

The proverb “necessity is the mother of invention” has a definition in the Merriam-Webster dictionary, which states it is “used to say that new ways to do things are found or created when there is a strong and special need for them.” Automation, artificial intelligence, Power Business Intelligence (BI) ... these buzz words are now part of everyday business lingo when seeking ways to improve efficiency while maintaining quality. The Coast Guard is only one of a growing number of organizations discovering and deploying new ways of using applications or apps to address critical workforce needs when resources are limited; simply put, doing more with less.

On Dec. 6, 2024, six Coast Guard member finalists presented their outside-of-the-box apps at a virtually held, Shark Tank-like event called the Deck Plate Developers Power Platform and SharePoint Hackathon. Finalists battled it out not for prizes but for the chance to showcase their ability to create using only the resources available to them such as Microsoft’s Power Apps, Power BI, Power Automate and SharePoint.

The Hackathon idea came from a challenge at a town hall in February 2024 from the commandant of the Coast Guard to members of the fleet to find ways to eliminate outdated processes and improve operations, which falls in line with the mission of the Innovation Program (currently part of CG-926) that was established in 2000 to encourage workforce innovation through “technologies that may enhance our missions.” Initiatives under this program include the Capt. Niels P. Thomsen Innovation Awards and CG\_Ideas@Work, the crowdsourcing platform where contestants for the Hackathon uploaded their submissions. The commandant’s challenge led to the Coast Guard’s first-ever Power Platform Science Fair in March 2024 that included the first Hackathon. The March competition did not have a specific focus; members were invited to submit apps they created that solved problems within their local units. For this Hackathon, however, the scope was narrowed.

The submission period was September through November, and the problem set or scope that was provided contained three items. The app should either: a) modernize the C-School training code and management system, b) modernize the industrial service order management system or c) generate and route perfectly formatted correspondence and awards. Each member had 13 minutes to impress the tank of Hackathon sharks by highlighting the problem and the solution their app provided along with a demonstration, followed by questions from the panel.

The submission process contained two parts:

- In part one, members in the fleet were solicited to submit administrative problems



Lt. J.G. Garrett Gibson of the C5I Service Center (pictured right) served as emcee at the Hackathon.

Mission execution begins [here](#).

[NEXT](#)

- they felt a micro app or power app could solve using data available on SharePoint
- In part two, three top problems were chosen from the solicitation, and participants were tasked with developing a solution for one of the three top problems.

Cmdr. Laura Springer, Innovation Program manager, kicked off the event and Lt. j.g. Garrett Gibson of the CSI Service Center served as emcee for the Hackathon, shepherding presentations from finalists:

- Lt. Cmdr. Kieran Clayton and Chief Petty Officer Ivan Adams
- Lt. Avery Lowe
- Lt. Ryan Ostrander
- Lt. Manuel Rojas
- Lt. Christopher Villaverde
- Petty Officer 1st Class Dana Albarran

The “sharks” who had the tough job of voting on the finalists:

- Rear Adm. Chad Jacoby, assistant commandant for acquisition and chief acquisition officer
- Capt. Steve Ramassini, chief of the Office of Navigation Systems
- Master Chief Petty Officer Ky McElrath, IT ratings force master chief
- Brian Campo, deputy chief technology officer and deputy executive director of the Chief Technology Officer Directorate for DHS Office of the Chief Information Officer

After awards were announced, the panel expressed their appreciation for the effort put forth by the participants to address the needs of the Coast Guard workforce through available technology. Jacoby expressed his pleasure at the ingenuity of all presenters and praised them for inventions that provided internal solutions to workforce problems rather than contracting externally for such services. He encouraged all the finalists to continue their developer work as well as encourage others who have identified a problem that can be solved through automation.

To find out more about finalists, their apps and awards won, read on:

**Winner: Broadest Capability Award – Lt. Christopher Villaverde  
Power Platform Solution – C-School Training Quota Management System (TQMS) app**

Villaverde began his presentation by discussing the main issues his app seeks to address: the current course schedule is on an Excel spreadsheet which leads to undynamic data, is limited when used for collaboration and lacks visualization for those who like to view their data graphically. His app allows users to easily search, find and select courses and complete a request form that is submitted via the app through an approved workflow that sends notifications to access users on whether their request was approved or denied. Villaverde stated future improvements involve cleaning up the list data to fine tune his heat map feature that shows the location where training courses are held. Ramassini announced he had forwarded information about Villaverde’s power platform solution to Lt. Cmdr. Dana Prefer, commanding officer, Education Training and Quota Management Command, to provide resources necessary to fully develop the app’s capabilities, especially the heat map feature.

**Winner: Best Digital Transformation Initiative Award – Lt. Ryan Ostrander and Team  
Industrial Management app**

Ostrander stated his app was the result of a team collaboration that included Lt. Cmdr. Andrew Armstrong, Chief Warrant Officer 2 Adam Peers, Lt. Tai Chan, Lt. Sarah Porizillo, Chris Boothe and Jason Topshe. It was created for the needs of Industrial Production Facility Alameda, which includes 16 facilities that conduct maintenance and repairs to surface assets regardless of scale or type of maintenance/repair request.



Rear Adm. Chad Jacoby, assistant commandant for acquisition and chief acquisition officer, was present to welcome participants to the online Hackathon.

Mission execution begins [here](#).

NEXT

HOME

To place such a request, members must submit Coast Guard Form 3103 – Industrial Service Order (ISO), which is currently in PDF and can take 11-22 business days to process depending on the type of ISO. His app contains the digital version of Form 3103 along with the Condition Found Reports, which are used to communicate project information or to initiate change orders. The app allows members to track their ISO and update cost estimates if required and allows requestors to assign an owner and submit Condition Found Reports. Ostrander gave the sharks a demonstration and stated that moving forward, he wants to include capabilities such as Gantt charts, role-based access, a “financial component to list the ledger of transactions against respective project budgets,” detailed labor tracking, data to assist leadership decision making and a data stream with field level security to track completed maintenance by Industrial Operations Division for product lines.

**Winner: Most Customer-Focused App Award – Lt. Avery Lowe**  
**Modernization of Coast Guard’s Training Quota Management System (TQMS)**

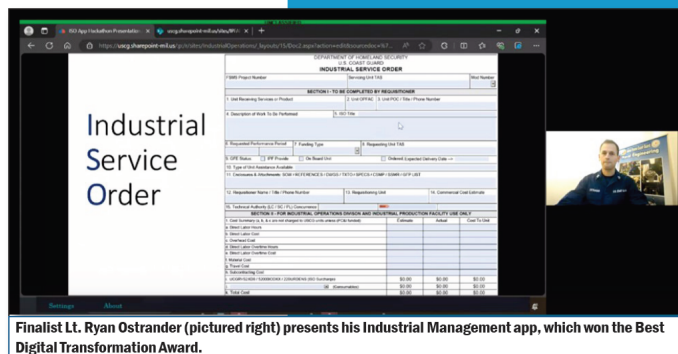
Lowe created her app to modernize the TQMS by streamlining training requests, which will enhance transparency and improve communication when submitting course requests for approval. She discussed various issues with the current Electronic Training Schedule, one issue being lack of transparency after submittal to the training officer; members are unaware of the status of their request until they receive approval. Members currently do not receive notification if they aren’t selected and there is no communication to the member’s supervisor. This current process also affects Reservists who have limited access to their Coast Guard email. These members have an employment notification requirement for orders, so they need to know as soon as possible when they have been granted a seat. Lowe’s app addresses the standardization needed and offers real-time status tracking, notifications to requestors and supervisors and the option to request notifications be sent to a personal email address so Reservists can quickly act to schedule time off with their employers. Ramassini praised Lowe’s app for clarity of focus, scalability and its consideration of the needs of Reservists.

**Winner: Best Newcomer/Rookie of the Year Award – Petty Officer 1st Class Dana Albarran**  
**Memo Writing app**

Albarran presented her app, the first one she has ever created, which assists members with properly formatting official correspondence and allows the user to generate output based on the type of memo required. Each field has tool tips that instruct the user what data is appropriate for a particular field. Once a user generates the correspondence, the data outputs to a Microsoft Word document on OneDrive perfectly formatted according to Coast Guard correspondence requirements on letterhead for editing. The app can also generate a second page with formatted headers that include subject line and date of memo. A benefit of this app is the ability to generate correspondence when Wi-Fi is unavailable. Moving forward, Albarran would like to collaborate with other presenters to share ideas and resources. She agreed with Jacoby’s next step suggestion of creating a library or suite of apps that “make an easy or navigable route” to completing a task from start to finish.

**Winner: Best Broader User-Based App – Lt. Manuel Rojas**  
**ARIA-C app**

ARIA-C stands for Always wRite Intelligent Awards and Correspondence, but Aria also happens to be the name of Rojas’s daughter! Users can create memos, business letters and Flag letters and Rojas stated the reason for creating this app, which took approximately 80 hours, came out of an everyday need to generate correspondence and awards quickly, especially during transfer season. He stated his app is a timesaver that ensures perfect formatting each time, thus allowing the user to focus on content.



Finalist Lt. Ryan Ostrander (pictured right) presents his Industrial Management app, which won the Best Digital Transformation Award.

BACK

HACKATHON continued from page 7

Mission execution begins [here](#).

NEXT

HOME

His app allows users to choose the type of award, name, rate and rank information, and text for the body of the citation, which you can edit in the app. The app outputs the data in Coast Guard format on letterhead to an MS Word and PDF to a file folder the user chooses on OneDrive, providing step-by-step guidance from start to finish.

**Winner: Perfect Pitch Award – Lt. Cmdr. Kieran Clayton and Chief Petty Officer Ivan Adams  
Correspondence and Awards app**

Clayton and Adams began the presentation of their correspondence and award app and its features with a scripted back-and-forth introduction similar to a 1980's late night infomercial, hence the award bestowed for perfect pitch. Their app assists users to create correspondence and awards in five simple steps without having to change screens. The team explained the creation of tables with such data as rates and ranks in SharePoint, which were used for the drop-down fields to ensure accuracy. Once input is complete, the document can be saved on OneDrive in Word format for review. The user can then return to the app to route the correspondence for review and approval through the all-Coast Guard routing system. Clayton and Adams discussed future improvements that include partnering with owners of reference publication regarding proper correspondence to ensure data for drop-down fields are up to date. Adams further stated that as an organization, the Coast Guard should reduce the use of PDFs for housing data and instead create data in a usable manner that is accessible to the fleet and deck plate developers.

**BACK**

**HACKATHON** *continued from page 8*

