Previous Lasswell Award winners

2006
Gary Ford, PEO C4I/PMW-170
ATI Stephen Ryan, AIMD North Island
LT Stephen Vossler, SPAWAR Systems Center Pacific

2007
ET1 Christopher Cooke, SPAWAR Systems Center Pacific
Gerald Robertson, Marine Corps Base 29 Palms
CDR Kurt Rothenhaus, PEO C4I/PMW 750

2008
LT Christopher Anderson, SPAWAR Systems Center, Pacific
Major Billy Cornell, USMC, Marine Corps Tactical Systems Support Activity
Callis Goodrich, SPAWAR Systems Center Pacific

2009
Keith Askew, Fleet Readiness Center Southwest
Richard Caccese, Commander Naval Surface Forces
Wendy Massey, SPAWAR Systems Center Pacific
Kris Witbrodt, SPAWAR Systems Center Pacific

2010
LCDR Ernan S. Obellos, Fleet Industrial Supply Center
LT Derrick Rolland, Space and Naval Warfare Systems Center Pacific
Thomas Tanin, Space and Naval Warfare Systems Center Pacific
Donald Tomasoski, Commander Naval Air Forces

2011
CW03 Thomas Muschamp, USMC, 3rd Marine Aircraft Wing
FC2 Joshua Murphy, USS Dewey (DDG 105)
FC2 Orion Foeller, USS Dewey (DDG 105)
Captain James Regan, Marine Corps Tactical Support Activity
CW02 Justin Mosley, USMC, 3rd Marine Aircraft Wing

2012
ITCS Jeremy Morris, SPAWAR Systems Center Pacific
CWO3 Hobert Reid, SPAWAR
Captain Peter Young, Marine Corps Tactical Support Systems Activity

2013
Denny Duong, SPAWAR Systems Center Pacific
Minh-Van Oyama, Amphibious Vehicle Test Branch
Jodi Visosky, Fleet Readiness Center Southwest

2014
ENS David W. Goulet, Naval Special Warfare Command
Ryohei Kinoshita, SPAWAR Systems Center Pacific
Andrew Palek, Fleet Readiness Center Southwest
IT1 Joe Tran, Naval Special Warfare Command

The A. Bryan Lasswell Award for Fleet Support
October 27, 2015

Presenting Officer
Rear Admiral James Loeblein
Commander, Carrier Strike Group One

This award recognizes mid-level military and government employees who have changed outcomes for the fleet through technology innovation or in-service engineering.

NDIA San Diego Chapter
www.ndia-sd.org

Staff Sergeant Derik R. Holley
Marine Medium
Tiltrotor Squadron 161 (REIN)

Keeping the massive CH-53 flying is the special talent of Staff Sergeant Derik Holley, the senior NCO in the Ch-53 detachment of VMM-161. He found a way to inspect and repair grounded aircraft in order to get the aircraft of the 15th Marine Expeditionary Unit to the ship on time for deployment.

An Airframe Bulletin issued by NAVAIR grounded all the Navy and Marine Corps CH-53E helicopters. Based on his knowledge of the electrical and fueling systems, and his work previously repairing similar problems, SSgt Holley went to work to create a faster way to return the aircraft to service. To begin with, he personally inspected each of the squadron's four CH-53Es, and reviewed all maintenance history on all of them. That research gave the squadron the green light to fly the aircraft another 25 hours. He then brought this aircraft-specific expertise to the Naval Air Forces inspection team to help them conduct their first inspection. They found over 300 discrepancies on that one aircraft. Based on that experience, Derik created a 72 page flow chart and discrepancy log for his detachment's use. That product led to the discovery and repair of 882 discrepancies on the unit's four CH-53 aircraft. It worked so well, that his new tool was released unedited and in its entirety to the Navy and Marine Corps fleet. If that wasn't enough, Staff Sergeant Holley found a problem with the Helicopter In-Flight Refueling system that would make the aircraft non-compliant with the new instruction. He worked with NAVAIR to have that system removed from the aircraft under a new Air Frame Change.

SSgt Derik Holley's innovation culminated in his detachment flying all four CH-53Es aboard the USS Essex for deployment. ■

STG1(SW) Matthew S. Land
USS Sampson (DDG 102)

On 28 December 2014, Indonesia Air Asia Flight 8501, an Airbus A320-215 enroute from Surabaya to Singapore with 162 people on board, crashed into the Java Sea during bad weather. The United States joined international search and rescue operations from Singapore, Malaysia, Australia, South Korea, Japan, China, and Russia, assisting Indonesian authorities in searching for remains and the flight data recorder and cockpit voice recorder (the black box). USS SAMPSON was in the presumed area of the crash site. Commander, Seventh Fleet, directed the ship to assist in search and rescue. Poor weather, the local geography, and a search area covering thousands of square miles made this a daunting task. Initially, all attempts to locate the black box were unsuccessful.

Sonar Technician (Surface) Petty Officer First Class Land knew of an untested theory developed by a sister ship that might help. It would employ a vestigial portion of the SQQ-89 sonar system that was normally used during construction. He put the theory into practice. Petty Officer Land and his team constructed a voltage line driver to increase the magnitude of the input signal. He programmed spectrum analysis software to provide visual and auditory cues to sonar technicians. Additionally, Petty Officer Land and his team created and maintained tables of all audible tonals generated by black boxes in order to optimize SAMPSON's search. It worked! SAMPSON located the flight data recorder, which helped bring closure to the families of those on board the downed airliner, and ultimately helped identify the cause of the crash.

As a direct result of Petty Officer Land's invention, our SQQ-89(V)15 ships now have a new tool for search and rescue. ■

STGC (SW) Benjamin Lebron
USS Fitzgerald (DDG 62)

Foreign submarines continue to improve technically, while their crews become more skillful. Yet, many of the systems used today by our sailors to hunt those submarines have been in place since the 1970s. In particular, crews are tracking targets by combining sensor data in decades-old Target Motion Analysis (TMA) maneuvering boards and bearing rate computers. Sonar Technician (Surface) Chief Lebron knew there had to be a better way; one that would take advantage of modern technology.

Chief Lebron has served most of his 20 year Navy career in the Pacific cruisers and destroyers including LASSEN, VINCENNES, and FITZGERALD. Target motion analysis utilizing passive sonar caught his attention while he was on shore duty at Naval Ocean Processing Facility (NOPF) Whidbey Island. He saw that the fleet needed a better capability than what they were using at sea. He decided he would create a web-based TMA tactical decision aid (TDA).

By using web based technology such as HTML and javascript, STGC Lebron created a TDA named Single Leg Bearing range, or SLBr. He created it with one set of source code that can be used on any platform. This TDA greatly reduces the amount of time needed for manual TMA calculations when compared to installed TDAs such as the Bearing Rate Computer. Since it is web based, it is scalable and easily distributed.

SLBr computes target tracks more accurately, more quickly, with less training. It also produces additional information, such as minimum and maximum range, relative position, relative and reciprocal bearing, and towed array stabilization time, continuously, even while sensor information is changing. Chief Lebron's invention has changed the way the Navy trains its crews to hunt submarines. ■

AT1 Jonathan Lukesh
USS Essex (LHD 2)

Usually when a ship is deployed and the crew cannot solve a problem, they can reach back and obtain assistance from a repair activity ashore. In this case, the loss of capability occurred on board the USS IWO JIMA in port in Norfolk; and the problem was solved by a sailor on board the USS ESSEX during the 2014 deployment

The USS IWO JIMA had suffered a loss of the capability to test and repair CH-53 aircraft stick position sensors. Without this test capability, CH-53 squadrons are forced to order position sensors from Supply: expensive, and time consuming. The IWO JIMA's test fixture needed a gear in order to function correctly. This gear is not available in the Navy supply system and blue prints for manufacturing were not available. Aviation Electronic Technician First Class Jonathan Lukesh, deployed in Fifth Fleet onboard the USS ESSEX, learned of the problem and set out to solve it.

Currently, USS ESSEX is the only US Navy ship equipped with 3D printing technology. Though he had no formal training in that technology, or CAD software, AT1 Lukesh decided to use the ESSEX's 3D printer and SolidWorks CAD Software to manufacture a replacement for the failed gear. He carefully measured an existing gear onboard ESSEX. Then he used that information to create a three dimensional model of the gear, and then to create the replacement. The gear was successfully tested in the ESSEX's test fixture before being forwarded to USS IWO JIMA.

AT1 Lukesh's design and development of this replacement part opens up possibilities for 3D printing to be used onboard US Navy ships to speedily and inexpensively repair other ship-board systems. ■