CWO2 Joseph Lester has dedicated his life’s work to ensuring that his fellow Marines have access to the correct information, at the appropriate time, to enable them to make the right decisions. His personal drive has fundamentally altered how Meteorology and Oceanography (METOC) supports overall intelligence operations within the Marine Corps. The positive results from CWO2 Lester’s efforts have been wide-ranging, substantially impacting many people from the individual Marine to the Department of Defense as a whole, as well as at each level in-between.

Locally, CWO2 Lester created a culture within his Meteorology and Oceanography (METOC) section that resulted in sustained creativity and innovation. In pursuit of revolutionizing METOC support to Intelligence and MAGTF Operations, he promoted ingenuity throughout his battalion, inspiring others around him to find unique solutions to dynamic problem sets. CWO2 Lester has championed an environment of creative thinking that takes cutting edge METOC concepts from vision to policy.

During Humanitarian Assistance/Disaster Response (HA/DR) Operations in Nepal, CWO2 Lester, acting as Joint Task Force 505 Joint METOC Officer (JMO), submitted an Urgent Universal Needs Statement (U-UNS) prompting service-wide review of lightweight meteorological sensors that could operate in austere locations such as the Himalayan Mountains. Following the tragic crashing of a Marine Helicopter near the mountain town of Gorthali, Nepal (elevation 12,000 ft), recovery and extraction operations became extremely dangerous. In addition to providing hourly weather updates to JTF-505 forward during the duration of the recovery operations, CWO2 Lester identified a gap in collections capabilities that would have alleviated much of the risk involved in the shuttling of recovery personnel and equipment to and
from the crash site at such an extreme altitude. His advocacy for the lightweight sensor provided a flexible and adaptable solution to complex problems which, in essence, revolutionized METOC support for high altitude operations across the DoD. The result of his actions led to HQMC approval to fund a Micro-Scale Weather Sensor, capable of deploying to areas not otherwise suitable for currently fielded weather sensing equipment. Full fleet fielding of these sensors was recently realized this past month and will become the industry standard for limited scale operations and future humanitarian assistance missions.

CWO2 Lester led a team of METOC personnel and certified divers in the development of a comprehensive dive weather forecast utilizing the Delft3D ocean model to predict longshore and sub-surface currents, as well as sea temperatures at prescribed depths. The 3D Reconnaissance Battalion Command Master Diver stated, “The dive product allows the dive teams and supervisors to plan their diving operations down to the hour based on the tide and current data provided, ensuring that the operations are conducted in the safest environment possible. It also allows us to forecast what the water, surface, and weather conditions will be for surface support/boat personnel. This is an extremely useful tool that I require all dive supervisors to review days before the planned diving operations.” This product improves efficiency and overall readiness. It has become a requirement for reconnaissance divers and scout swimmers at 3D Reconnaissance Battalion and is currently being validated for inclusion in the Marine Corps Reference Publication 2-10B.6. In order to inform recreational divers of potential hazards for the island of Okinawa, efforts are currently underway to distribute this product to a wider audience.

Upon receiving tactical upper air sensing equipment, CWO2 Lester coordinated the first ever deployment of a Marine METOC detachment in support of parachute operations. Embedding during Exercise Blue Chromite 16, the team successfully deployed two upper air tactical rawinsondes (sensors attached to weather balloons) in advance of a parachute jump, collecting and relaying real-time upper level wind data to jumpmasters. This unprecedented level of support served as the first proof of concept for METOC support to parachute operations in the Marine Corps, the innovation improved mission readiness, reduced risk, and assisted in employing airborne units. This particular innovation has been widely viewed as a success at all levels. The scheme of maneuver developed by CWO2 Lester and the subsequent findings were forwarded to HQMC Aviation Expeditionary Enablers Branch for consideration as a standardized METOC support capability across the Marine Corps.

CWO2 Lester has provided direct advocacy of his innovations for full inclusion into Marine Corps Intelligence. Recently, he used official correspondence to lobby HQMC Intelligence Department to consider METOC Marines supporting intelligence efforts for their annual Intelligence Awards. CWO2 Lester subsequently nominated one of his own Marines for the Intelligence Marine of the Year award. This forecaster became the first METOC recipient of any Marine Intelligence award in Marine Corps History. Through CWO2 Lester’s efforts, HQMC Intelligence Department officially considers METOC Marines for all annual intelligence awards henceforth.

CWO2 Lester has consistently pushed the limits on how Meteorology and Oceanography (METOC) supports overall intelligence in a manner such that Marine Corps leaders at all levels have the capability to access the appropriate intelligence at the precise time. The tangible and
intangible impacts made by this innovative leader will be experienced by individuals and the institution for years to come.

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CWO2 Joseph Lester was recognized with honorable mention for the 2016 Secretary of the Navy (SECNAV) Innovation Award in the Innovation Leadership category.

The SECNAV Innovation Awards recognize the top innovators within the Department of the Navy (DON). Their accomplishments are remarkable and serve as inspiration for the Navy and Marine Corps to think boldly and solve the fleet and force’s most challenging problems.