



ONR TechSolutions

March 2012 Monthly Project Update

Projects

Under consideration:

- **6,000-lb Shipboard Forklift** approved for use in weapons magazines. **Requestor:** Science Advisors at NAVSUP and CNAF.
- **Diver Hycote Protection** (TS-00569) Protective cover or coating for the KM-37 dive helmet that is easy to apply and remove, and protects the helmet from Hycote. **Requestor:** ND1 at MARMC/NNSY Dive Locker
- **Expeditionary Range Creation Tools** (TS-00566) that allow expeditionary ranges to be designed on-site, ensuring the safe creation of a range, tracking weapons impacts and also aid in being able to track the number and type of rounds impacting on targets in a Training Area. **Requestor:** CWO 4 Gunner at 29 Palms.
- **Non-metallic EOD Toolkit** (TS-00565) that are nonconductive and nonmetallic for working on IEDs and are able to be rigged for remote procedures. **Requestor:** SSGT at Camp Pendleton.
- **Pilot Demonstration of REDI/ESB** (TS-00562) The Reliability Engineer Data Integration/Enterprise Service Bus (REDI/ESB) is the data and platform-agnostic maintenance deferral, availability planning, and material assessment software suite that could take advantage of mobile devices for on-site maintenance execution and documentation. **Requestor:** LCDR in Norfolk.
- **Theater ASW Commander's Data Analysis Tool** (TS-00561) A geographical based application to visualize historical datasets, identify patterns, examine the probability of particular courses of action, and analyze search effectiveness. **Requestor:** Science Advisor at C7F, Yokosuka, Japan.
- **Electronic Sonar TACAIDs** (TS-00560) Electronic versions of physical TACAIDs currently in use. **Requestor:** STGCS from Yokosuka, Japan.
- **HADR Medical Automation** (TS-00558) that provides the capability to collect, store and provide reports for work load at a medical engagement during Medical Civic Action Programs (MEDCAPS), Dental Civic Action Program (DENTCAPS), Subject Veterinary Civic Action Programs (VETCAPS) and other associated assessments. **Requestor:** CDR from Pearl Harbor, HI [*Total Ownership Cost*]
- **Electronic submarine mission planning tools** (TS-00556) that uses inputs from an electronic chart, oceanographic information, sensor capabilities, and threat sensor capabilities to be overlaid one another to allow an operational plan to be developed. **Requestor:** LCDR from the Pentagon [*Assure Access and Hold at Risk*]
- **Handrail Coverings** (TS-00549) that provide both heat resistance and a better gripping surface to increase safety. **Requestor:** ENFN from USS Sentry [*Naval Warfighter Performance*]
- **Generator Switch Redesign** (TS-00545) that allows for the reduction in exciter coils failure in the MEP-806B and similar 60k or 30k generators due to user error when changing desired operational voltage. **Requestor:** E4 at Port Hueneme [*Affordability, Maintainability and Reliability*]
- **Weapons Launch Console Team Trainer** (TS-00542) that provides the detail and physical attributes of a modern, actual torpedo room and can accommodate training on all of the OD 44979 Procedures. **Requestor:** MMC(SS) at Commander Submarine Force Atlantic Fleet [*Naval Warfighter Performance*]
- **Expeditionary Cold Storage Kit** (TS-00535) that is lightweight, easily transportable and allows blood products and other medical/health protection supplies to be kept at prescribed temperatures for at least 48 hours. **Requestor:** CAPT at COMUSNAVEUR [*Naval Warfighter Performance*]
- **Non-combatant Evacuation Operations (NEO) Mission Modeling Software** (TS-00534) for forward deployed staff and its associated Task Forces to plan and rehearse live scenario challenges by utilizing 3-D immersive planning and training tools, elevating situational awareness and enhancing response effectiveness. **Requestor:** CAPT at COMUSNAVEUR [*Naval Warfighter Performance*]

- **Periscope Headwindow Watershedding** (TS-00507) improvements to reduce optical image distortion and maintenance requirements of submarine periscopes. **Requestor:** CIV at NAVSEA [*Total Ownership Cost*]

Initiated:

- **Night Vision Dive Mask (Enhanced Diver Vision System)** (TS-00571) IED divers need an underwater night vision system that provides extremely close focus and details without visible light sources. Awaiting proposal. **Requestor:** EODCS at COMEODGRU TWO, Little Creek

Ongoing:

Power and Energy

- **Improved SDV Battery** (TS-00502) that is safe, affordable, scalable, and optimized for undersea vehicle applications. Phase I cell-level and module level non-propagation testing nearly complete; downselect to one vendor by 30 April. **Requestor:** LT at NAVSPECWAR *Last update: Mar 12 [Power and Energy]*

Total Ownership Cost

- **Automated Catapult Shot Log** (TS-00544) provides the ability to automatically record all the data from the analog gauges on the aircraft carrier steam catapult control panel into a format that is easily reported and disseminated. SRR complete; hardware configuration and system design in process. **Requestor:** LCDR at NAS Whidbey Island *Last update: Feb 12 [Total Ownership Cost]*

Asymmetric and Irregular Warfare

- **Driver's Vision Enhancer (DVE) Improvements** (TS-00508) to reduce image distortions and manual adjustments required for the thermal imagers in Marine Corps combat vehicles. Prototypes complete; user evaluation 4 April; final demo 17 April. **Requestor:** CWO4 at IMEF. *Last update: Feb 12 [Asymmetric and Irregular Warfare]*

Assure Access and Hold at Risk

- **Alternate UAV Launcher** (TS-00531) that reduces per-unit cost and turnaround time from request to launch; leverages existing UAS aircraft and control systems. Baseline characterization measurements in process; awaiting contract award. **Requestor:** COMSUBPAC Science Advisor *Last update: Mar 12 [Assure Access and Hold at Risk]*
- **Non-Traditional Sensor Suite (NTSS) Multi-mission Capabilities** (TS-00548) for enhanced submarine operational capabilities (details classified). Field testing rescheduled for early June. **Requestor:** COMSUBPAC Science Advisor *Last update: Mar 12 [Assure Access and Hold at Risk]*

Information Superiority and Communication

- **Expeditionary TACSAT surrogate** (TS-00494) to provide reliable Over-The-Horizon tactical voice communications capability between all maneuver elements of the MAGTF. Hardware assembly and fabrication in progress; initial test/demo early April. **Requestor:** I MEF Science Advisor *Last update: Feb 12 [Information Superiority and Communication]*

Naval Warfighter Performance

- **HCO-LSE Trainer Upgrades** (TS-00514) Upgrade simulation software; update HCO tower trainer hardware and comms to reflect equipment found on modern vessels. Hardware SRR complete; software upgrade awaiting contract award. **Requestor:** CNAF Science Advisor *Last update: Mar 12 [Naval Warfighter Performance]*

- **Improved Bomb Assembly Table** (TS-00536) will upgrade and redesign air-dropped ordnance equipment to reduce physical strain on personnel. Awaiting contract award. **Requestor:** CNAF Science Advisor *Last update: Mar 12 [Naval Warfighter Performance]*
- **Bravo Tactical Team Trainer (BATTT) [was MRT3 Software Updates]** (TS-00530) will convert SH-60B tactical team training system from simulation to actual helicopter software with sensor stimulation to ensure the trainer remains current, and allow crews to train on the real system prior to installation in helo. Kickoff meeting held; fleet requirements identified; SRR complete. **Requestor:** CIV at NAS Jacksonville *Last update: Mar 12 [Naval Warfighter Performance]*
- **HADR Speech to Speech Translation Tool (S2T2)** (TS-00539) that is a portable machine language translator (S2S-PMLT), able to adequately transfer concepts between users and capable of being easily trained to medical practitioners. Initial Thai data collection conducted during Cobra Gold 12. **Requestor:** LCDR with 3rd MLG, III MEF *Last update: Feb 12 [Naval Warfighter Performance]*
- **Improved Flight Deck Clothing** (TS-00511) New jersey is lighter weight and breathable and provides some fire protection while still providing full coverage. New trousers are specifically designed for flight deck wear, with special pockets and secure closures. Fabric samples undergoing testing; trouser design complete; manufacture of prototypes to begin soon. **Requestor:** CNAF Science Advisor *Last update: Feb 12 [Naval Warfighter Performance]*
- **IPARTS Landing Signal Officer Database** (TS-00500) for collecting landing data to be used for training and resource decisions to allocate flight time and evaluate pilot performance in the carrier landing environment. LOE in progress: hardware and training delivered to VFA122 at NAS Lemoore; 2000+ FLCP passes entered into database. **Performer:** NPS MOVES Institute **End date:** Aug 11 **Requestor:** CDR at NAS Oceana *Last update: Mar 12 [Naval Warfighter Performance]*
- **Powered rope ascender** (TS-00454 and TS-00456) Device to lift men and materials over vertical obstacles during VBSS operations, helicopter extractions, or in steep mountainous terrain. Requests for this technology were received from both NAVSPECWAR and the Marines. Final user assessment postponed due to unsatisfactory results from the First Article Testing. First Article Re-Test and performance characterization testing in progress at NSWC-PCD. **Performer:** NSWC Panama City **Requestors:** LT at MOBSECRON 3 and MARFORPAC Science Advisor *Last update: Feb 12 [Naval Warfighter Performance]*
- **Non-incendiary search and rescue (SAR) marker** (TS-00442) that eliminates the risk of starting brush fires when used in dry environments. User feedback and demonstration April 12. **Performer:** Penn State ARL **Requestor:** AWC at HELSEACOMBATRON 3 *Last update: Feb 12 [Naval Warfighter Performance]*

Operational Environments

- **Automated Digital Weather Observation System** (TS-00498) to automatically provide weather observation data, including accurate and objective wave-height data out to the range of the organic surface search radar.. Information Assurance Certification and Accreditations testing completed in preparation for reinstallation of system on CVN69 for LOE at-sea testing May-June. **Performer:** SPAWAR Charleston **Requestor:** NAVSURFOR Science Advisor *Last update: Mar 12 [Operational Environments]*
- **Oceanborne Radionuclide Monitoring** (TS-00546) that provides the capability for autonomous detection and tracking of radionuclide plumes at the ocean surface and undersea as well as associated environmental conditions. Sampler and detector components selected; design and integration in progress. **Requestor:** CDR at ONR Code 321/32B *Last update: Mar 12 [Operational Environments]*

Power Projection

- **M224 60mm Mortar Handheld Firing Improvements** (TS-00559) Fire Control Unit to accurately direct the mortar during handheld deployment in both day and night conditions; permanently installed heat shield to replace the current asbestos protective mitt. Small scale preliminary live fire tests conducted to determine effect of heat and shock on the fire control system: results positive. Two vendors selected to produce prototype sling/heat shield designs. **Requestor:** CW04 from Quantico and SSGT from Camp LeJeune *Last update: Mar 12 [Power Projection]*

Completed/Closed out:

- **Non-combatant Evacuation Operations (NEO) Logistics Tracking and Planning Tool** (TS-00541) that tracks the outbound flow of US citizens to and from Temporary Safe Havens and helps facilitate the logistic support requirements at different locations. **Requestor:** CDR at NAVEUR-NAVAF-SIXTHFLT **Closed:** *COTS logistics tracking solutions exist*
- **Consolidated Sailor Personnel/Career Database** (TS-00573) would take the various databases and programs revolving around a Sailor and his/her career and streamline them into a single web-based application. **Requestor:** CPO on CVN-70 **Closed:** *being addressed by*
- **Electronic FITREPS** (TS-00572) paperless, digitally-signed fitness reports and personnel evaluation forms **Requestor:** CAPT at EUCOM **Closed:** *being addressed elsewhere*

Activity summary

New requests received: 5

 Via website: 4

 Via email or personal contact: 1

New website accounts: 6

New projects funded: 0

Projects/requests completed or closed: 5

For more information

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