

### Dunk, Dunk, Sunk: The Role of the Medical Allowance List in Response to a Submarine Escape and Rescue

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#### Abstract

Seven years prior to the tragic events of September 11th, 2001, Tom Clancy wrote a book titled *Debt of Honor*. In this novel, a passenger airliner is deliberately flown into the US Capitol building. In a 2002 episode of the BBC program *Panorama* titled "September 11th – a warning from Hollywood" Steve Bradshaw asks Tom Clancy how he came up with the scenario of a plane, full of fuel, flying into a government building. Mr. Clancy responded, "Well first you identify the vulnerability and then you try to see how you can address that particular problem." The idea of exposing vulnerabilities is limited only by what we fail to imagine.

The maritime environment does not lack events from which to identify vulnerabilities. An article published in *Military Medicine* details the 2005 high speed collision of the USS SAN FRANCISCO (SSN 711) with a seamount. The force of impact resulted in injuries to ninety percent of the 138 crew onboard. Upon initial assessment, two were severely injured; twenty-two required prompt medical attention and thirty-two others had notable injuries. Adverse weather and sea state precluded medical personnel, from a surface vessel that arrived eighteen hours post collision, from boarding. Approximately twenty-four hours post collision; a medical team arrived via helicopter and made the transfer to the submarine. Medical response to the crisis was considered outstanding, with adequate medical supplies and appropriate care given to all casualties.

One of the roles of the Royal Australian Navy (RAN) Fleet Health Division (FHD) is to address medical vulnerabilities in isolated maritime environments. This is done by ensuring those entrusted with providing medical care at sea have the necessary medical capabilities including pharmaceuticals, medical equipment and consumables, otherwise known as Class VIII materiel at their disposal. The essence of being prepared for a disaster starts with having a list of the right tools necessary to treat a variety of medical casualties.

The Medical Allowance List (MAL) is a pre-authorised inventory of Class VIII material developed and continually reviewed by medical subject matter

experts, through effective communication, collaboration and dedication of active duty, civilian and contract personnel. Items on the MAL are deemed necessary and required to be held onboard Fleet vessels. The MAL enables a rapid deployable platform for the provision of routine and emergency medical care to shipboard personnel for approximately thirty days. It is a fluid document with considerations given to the role and size of the platform; skill set of the medical personnel deployed; the quantity of crew onboard; and the ever-changing advancements to medical equipment, products, and training. In perhaps the most isolated of seagoing environments, RAN submarines not only have a MAL but they also have separate medical stocks specifically designed to respond to submarine escape and rescue scenarios. The sole purpose of these stores is to allow for a quick response to the unpredictable.

Utilising research from unclassified submarine events around the world and personal observations from *Black Carillon 2016*, the 15th iteration of the annual submarine escape and rescue exercises, this presentation reflects upon three key principles: the importance of trust, communication, and building the essential relationships necessary for planning medical logistic responses during a submarine escape and rescue event. In addition, these key principles demonstrate the practicality of planning for the unpredictable and the evolution of the preparedness cycle from a medical logistics perspective, while offering participants a greater understanding of the overall benefit of MAL utilisation.

#### Biography

*Lieutenant Frasco holds a Bachelor of Art from Michigan State University, a Master of Public Administration from Grand Valley State University and a Master of Business Administration from the University of Michigan-Flint.*

*LT Frasco commissioned as a direct accession into the Medical Service Corps in 2010. She reported to Officer Development School in Newport, Rhode Island on September 11, 2010 and in October reported to Naval Health Clinic Quantico, VA. Frasco served as a business operations liaison to the Medical Home Port and later as Department Head, Materiel Management. She led the effort for the clinic to become the first Military Treatment Facility in the Military Health System to obtain Level III Medical Home Port recognition from the National Committee on Quality Assurance.*

*In August 2012, she transferred to U.S. Naval Hospital Guantanamo Bay and served as Department Head, Materiel Management. She earned recognition as the*