DFBA DEFENSE FORENSICS AND BIOMETRICS AGENCY Navy Biometrics at Sea

A Maritime Approach to Detection and Deterrence

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Al Given, 7/15/2016

On 1 Oct 2015, the HMAS Melbourne, operating under the auspices of Combined Maritime Forces, intercepted a small cargo vessel (known as a dhow), to conduct a flag verification boarding. Based on the suspicion the dhow was engaged in narcotics smuggling, the boarding team, supported by a Naval Criminal Investigative Service (NCIS) Special Agent (SA) acting in the capacity of a law enforcement adviser, conducted a search of the vessel. The boarding team found 427kgs of heroin with a street value of over \$174M U.S.D inside a void space in the ships fuel tank. Using a SEEK-II device, the NCIS SA collected and submitted biometric information from the ship's crew to the DoD's authoritative Automated Biometric Information System (ABIS). NCIS later nominated the dhow's crewmembers to the DoD Biometric Enabled Watch List (BEWL).

> The Irish Statesman Edmund Burke said, "The only thing necessary for the triumph of evil is for good men to do nothing."

Today's naval forces operating in the maritime domain stand ready to counter threats against rogue nation states, non-state and trans-national actors, terrorists, and criminal organizations who use the oceans for illicit activities. Individuals engaged in the illegal shipment of large and small-scale weapons, human trafficking, narcotics smuggling, and piracy rely on the open waters and anonymity to avoid detection. Such criminal activities threaten maritime commerce, and fund terrorist network activities throughout the world.

Our Navy conducts operations to identify, counter, and deter these illegal activities within the maritime domain. The Naval Criminal Investigative Service (NCIS), the Naval Expeditionary Intelligence Command (NEIC), and ships at sea conducting Maritime Interdiction Operations (MIO) and Visit Board Search and Seizure (VBSS) operations form our nation's forward defensive perimeter.

Identity Activities

Identity Activities are a collection of functions and actions that appropriately recognize and differentiate one entity from another to support decision-making. They include the collection of identity attributes and physical materials; their processing and exploitation; all-source analytic efforts, production of identity intelligence (I2), Department of Defense (DOD) law enforcement criminal intelligence products, and dissemination of those products to inform policy and strategy development, operational planning and assessment, and appropriate action at the point of encounter. As the Department of Defense (DoD) biometric technology and employment matures, and as global collection of biometric records expand, the DoD realizes an unprecedented capability to positively identify, track, and locate persons of intelligence and security interest. This ability to exploit identity information is a combat multiplier.

Current Naval Capabilities: Identity Dominance System (IDS)

The Navy's Program of Record (PoR), for Identity Activities is the Identity Dominance System (IDS). The IDS team began fielding equipment and training in May 2013 and projects the fleet will be Full Operational Capable (FOC) in FY-16. To date, the IDS program office has equipped over 100 VBSS capable ships and trained over 460 personnel on how to employ the SEEK-II collection device. As fielding continues, the IDS office ensures initial training, materials, and equipment is maintained and





current. Once IDS fielding is complete, the program office will no longer have funding to provide continued training and sustainment.

The Navy's current IDS kit includes a Secure Electronic Enrollment Kit (SEEK-II), peripherals and a laptop. The SEEK-II is a portable hand-held, lightweight, multimodal device used to biometrically enroll, verify, and identify individuals. The modalities collected by the SEEK-II include fingerprint (flat and rolled), facial, and iris images; it also supports multiple watch lists and databases and can be updated, shared, and used to support matching activities. The SEEK-II uses peripherals to scan biometrically enabled and non-biometrically enabled credentials.

The IDS provides the Navy with a means to collect and process identity information in the conduct of maritime and expeditionary identity activities. In the conduct of operations, it enables forces to identify unknown individuals, it also verifies unknown individuals' claimed identity, and provides security forces the ability to update, manage, and share identity information on friendly, neutral, and enemy individuals in support of Identity Activities.

Navy personnel engaged in Identity Activities afloat and ashore have the authority to employ SEEK-II and SEEK Avengers to collect biometric information on individuals whether during routine aid and assistance encounters afloat or as a screening tool for base and ship access.

The Navy's NCIS, and Special Warfare Group have been the most successful in collecting biometric information. The Enabler system for Base Access used in Djibouti and Bahrain, and NEIC have also been successful in employing Identity Activities as a means of protecting our personnel and facilities, and adding identities to the DoD's authoritative database. One area where increased Navy biometric collections could have a major impact on controlling the seas is during Maritime Interdiction and VBSS operations.

> Noted strategist Alfred Thayer Mahan posited that naval power, control of the seas, was the key to success in international politics: the nation that controlled the seas held the upper hand in modern warfare. For Mahan, a strong Navy was important to the conduct of legitimate commerce.

Target Rich Environment

Removing an adversary's anonymity is a critical step in removing them from the battlefield and gaining and maintaining control of an operational area. Similarly, positively identifying individuals taken aboard ship during humanitarian/refugee missions or during shipboard rescues is essential to protecting our sailors and marines afloat.

Although NCIS is by far the Navy's leader in ABIS biometric submissions with over 67,636 and 34 watch list matches, the 617 submissions from Navy ships collected during MIO/VBSS operations netted 17watch list matches is significant when comparing collection metrics. Surely, increasing biometric collections during MIO/VBSS using existing equipment and already trained personnel would have a huge impact on criminal and terrorist network activities at sea.

The measure of success for the Navy's base access Enabler system is the small number of watch list hits compared to the large number of screened individuals seeking access. Terrorists, and those with criminal histories, avoid detection by not challenging the access screening process. Increasing biometric collections at sea during MIO and VBSS operations will make it more difficult for our adversaries to



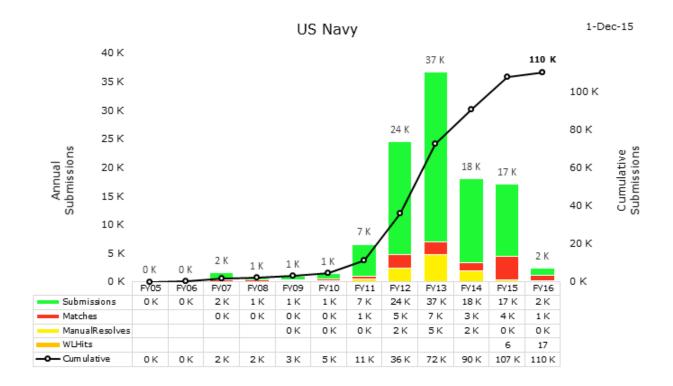


successfully conduct nefarious activities, and will result in a shift regarding the way they conduct such activities, compelling them to change their Tactics, Techniques and Practices (TTP's).

Historical Information

The success of NCIS is the number of biometric collections submitted to the DoD's authoritative ABIS database; today's enrollments may be tomorrow's watch list hits! Similar to an individual retirement account, steady deposits over time increase the value of our investment and our future ability to make correct vetting and screening decisions for unknown individuals.

Despite the importance of collection and the success of NCIS, the Navy's collection efforts peaked in FY-13 but have since declined most rapidly in FY-16 as depicted in the graph below. The decline in military operations in Afghanistan and Iraq and the subsequent decline in Combatant Commander Operational Tasks are likely factors in the overall decline in submissions, the latter affecting the relatively low numbers associated with MIO and VBSS operations.







As of 02 December 2015

Agency	Description	Total Submissions	Submissions Last Week	Total Matches	Matches Last Week	Total WL Hits	WL Hits Last Week
NCIS	NCIS	67,636	61	5,715	13	34	0
Navy	Enabler	9,760	61	7,271	28	12	0
Navy	Enabler	6,560	32	2,593	11	1	0
Navy	NEIC	233	0	86	0	9	0
Navy MIO	Navy Ships	617	0	98	0	17	0

Context

Total Submissions is the total number of transactions submitted to DoD ABIS for all-time.

Submissions Last Week is the total submissions for the previous week (Sun-Sat).

Total Matches is the number of submissions that resulted in an identification for all-time.

Matches Last Week is the total number of submissions resulted in an identification for the previous week.

All data excludes Latent-to-Latent (L2L) submissions.

Test ORI data has been excluded.

As of 02 December 2015

Agency	Description	Total Submissions	Submissions Last Week	Total Matches	Matches Last Week	Total WL Hits	WL Hits Last Week
Navy MIO	U.S.S Curtis	61	0	11	0	0	0
Navy MIO	U.S.S Taylor	53	0	11	0	0	0
Navy MIO	U.S.S Gettysburg	36	0	20	0	0	0
Navy MIO	U.S.S Gridley	36	0	13	0	0	0

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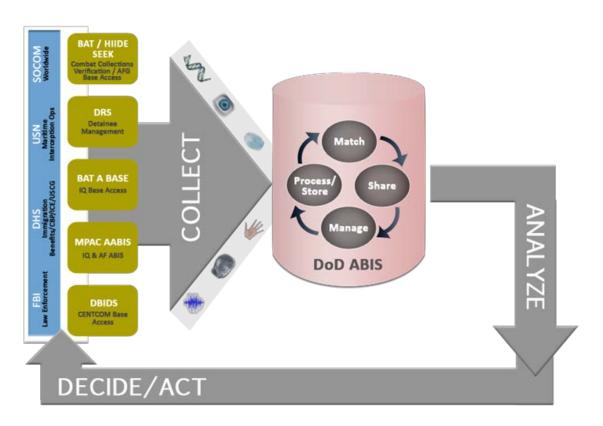
DoD's Automated Biometric Identification System

The Automated Biometric Identification System (ABIS) is the DoD's single authoritative database used to store, match, and share; finger and palm prints, iris patterns, facial images, and latent biometric information for over 12 million Known or Suspected Terrorist and Third Country Nationals. The DoD ABIS also stores over 270,000 identities on the DoD's Biometrically Enabled Watch List (BEWL).

The database also shares biometric files with the Department of Homeland Security's Automated Biometric Identification System (IDENT) and the FBI's Next Generation Identification (NGI) system further enhancing National Security.

In FY-15, military security personnel screeners that used the ABIS as a vetting tool denied over 10k individuals base access and characterized another 50k as "do not hire." Also in FY-15, the Department of Homeland Security (DHS), and Customs and Border Patrol used the ABIS during border operations to identify nearly 6,000 individuals. DHS also used the DoD ABIS to positively identify over 17K refugees. The Department of State also used the DoD ABIS to positively identify nearly 700 Visa applicants.

Over its lifetime, the DoD ABIS has made 4.5 million biometric matches and enabled U.S. forces to identify and remove thousands of Known or Suspected Terrorists from the fight. Each new ABIS submission increases the system's value and the return on our national security investment. Employing the collection systems where we know criminal and terrorist linked activities occur would only further enhance the value of this vital security toolset.



Moving Decision Makers to Yes!

Leaders and decision makers' must be educated on the crucial role Identity Activities plays in protecting our national and global interests. The soon to be released update to the Identity Activity Joint Doctrine Note (JDN) will serve as a foundation for fleet commanders and leaders on how to employ Identity Activities in support of missions across the ROMO. Incorporating Identity Activities into perspective Commanding and Executive Officer leadership courses would also raise fleet level awareness.





Our current and future leaders' must develop doctrine and implement guidance for their operating forces to employ biometric collections in the maritime environment. Lastly, promoting and managing biometric collection success among MIO/VBSS capable ships through metrics and results will promote this vital enduring capability.

Removing anonymity at sea, and mitigating the criminal activity that funds international terrorism is a must-do to protect our National Security at home. Combatant Commander's must provide and implement guidance that supports Identity Activities and the collection of biometrics and forensic evidence in the Maritime Domain. The time to act is now!