

Navigating the Changing Seascape of Maritime Public Safety



Abstract:

A look at the all the change factors that are contributing to the challenges of the maritime law enforcement, public safety, and emergency response domain, and how government organizations, state and local agencies, and private sector providers, can navigate through the evolving seascape.

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I. *Overview and Introduction*

The maritime domain continues to evolve with rapidly advancing technologies, a challenging competitive landscape, a persistent threat environment, altering and increasing operational requirements, and a dynamically shifting workforce. Those businesses, organizations and governments who work in and around our maritime law enforcement, emergency response and public safety community need operational guidance, acquisition expertise, training assistance and strategic vision to meet their goals and objectives. These organizations need the best **People**, the right **Platforms (or Products)** to provide to their operators, the most efficient and effective **Processes**, and the ability to **Perform, (or Performance)** to meet their mission requirements. This is what we call the “4 P’s of Public Safety”.



And in each of those four categories, leaders must constantly balance and evaluate Capacity and Capability: Do we have the right tools to do the job? Are there better solutions that can enable us to do the job better, easier or more efficiently and effectively? Are our people trained appropriately to do the job and to use these tools, or are we incurring a liability that we could otherwise avoid? Is our training keeping up with the people, the technologies, the environment and the evolving world around us? All good questions that face every organization and its leaders across the maritime public safety domain.

In this paper, we will break down each of those elements, and describe the current challenges maritime public safety organizations (and those companies doing business with them) are facing today, with a glimpse into the future about changes in the environment that are currently affecting our mission areas. We will provide you with 20 recommendations on how to approach these challenges and navigate through this changing seascape, and lay out some course corrections that can enhance your abilities to meet your destination safely, effectively and efficiently.

The National Maritime Law Enforcement Academy (Academy or NMLEA) is a non-profit member driven organization, that provides assessment, evaluation, training, research, education and



consulting services to the professionals that patrol, protect and preserve our nation's rivers, bays, harbors, lakes and coastlines, and the businesses that work with them. Formed in 2000 under the guidance of Admiral Siler, a former U.S. Coast Guard Commandant, the NMLEA (and its subsidiary, the International Maritime Law Enforcement Academy or IMLEA) are dedicated to meeting the needs of our maritime guardians and providing "Strength through Knowledge." Our staff of recognized experts are the Nation's premier maritime operational consultants, training mentors, business counselors, and advocacy advisors.

This White Paper is written by NMLEA professionals who have each spent over three decades working, teaching, leading, coaching, counselling and influencing maritime law enforcement, emergency response, public safety and military officers, organizations, businesses and operations all across America, and internationally. The unique insight, analysis and recommendations contained herein, are a product of experience and recognized accomplishments at the local, county, state, and federal levels, and from public, private and non-profit sector perspectives. We hope that this provides applicable guidance for you and the endeavors of your agency, department, or business.

Onward and forward.



II. *The 4 P's, of Public Safety: and Their Respective Challenges*

If you had to break down the responsibilities of today's field supervisors, business managers and organizational leaders, we think it generally falls in the four categories we will discuss in this section: People, Platforms, Process and Performance. If we had to stop this discussion right here, how would you rate your agency or department on a scale of one to ten in each category, with 1 being the worst, and 10 being the best? Do you have the right people? What's the condition of your boats? Do you have the right one's for the jobs you perform? How are your internal processes, like purchasing and acquisition, or training? Are there some areas where there are no processes, protocols or procedures? How had each of those areas affected your performance, you or your agency's ability to do your job? Are you able to do your job in the best possible way, or is the equipment, tools and training inhibiting you?

When you've added up the numbers you gave for each category, what number did you come up with? A number between 4 and 17 suggests you're in the RED, and need to continue reading. You've got some vulnerable areas of your organization that are putting you at significant risk, which can be improved with some of these recommendations and quickly impact your operations. A number between 18 and 26 suggests you're in the AMBER, and should continue reading so that can polish some of these things you might already be doing, and address those areas that aren't quite keeping up with the rest of the organization. And if you're number is between 27 and 40, you should continue reading so that you can identify the areas in this paper that illustrate and validate that what you're doing is the right thing. Although we're sure there is likely some areas that could be enhanced, and when implemented you will see exponential impact. Let's read on.

A. The People Puzzle

The **People** category is the largest, most expensive, and often the most challenging element for maritime law enforcement agencies, emergency response organizations, and other public safety departments. And what makes this area of concern for today's organizational leaders is the shifting workforce. As 10,000 Baby Boomers retire each day¹, taking experience and institutional knowledge with them, that loss of talent combined with recruitment and retention challenges, have resulted in an

¹ https://www.washingtonpost.com/news/fact-checker/wp/2014/07/24/do-10000-baby-boomers-retire-every-day/?utm_term=.9d847d2145e3



increasingly difficult personnel management environment. Especially as agencies strive for diversity.

Managing Millennials

The other part of the People Puzzle is Millennials. According to the Bureau of Labor Statistics,

“If you look at certain types of companies, like we work with the San Diego Police Department... you have as much as 70-80% millennials in the workplace.”

Millennials are currently the largest generation in the workforce. They are also becoming the most influential population in our market today as they are graduating from college and reaching their peak employment years. In a Forbes

article where Dan Negroni was interviewed, (author of *Chasing Relevance: 6 Steps to Understand, Engage, and Maximize Next Generation Leaders in the Workplace*), he stated “Today, 40% of the workforce and most average companies are millennials. If you look at certain types of companies, like we work with the San Diego Police Department, ... you have as much as 70-80% millennials in the workplace. In the next ten years, 75% of the workplace will be millennials no matter where you are.”²

So what challenges does this Part of the People Puzzle Present? Jeff Fromm, in his 2015 Forbes article, *Millennials in the Workplace: They Don’t Need Trophies But They Want Reinforcement*³, made these four key observations:

1. **They want to grow, even if it means growing out of your company/organization.** What does this mean to LE and public safety organizations, as well as businesses in general? You should water them to help them grow! This means you should show this generation of employees a way to enhance and improve themselves, be it on the job or outside the job. You should empower them, and enable them to flourish. This is often a hard concept to get the older generations that are managing the Millennials to understand and apply.

² <https://www.forbes.com/sites/kevinkruse/2017/05/11/how-to-harness-the-power-of-a-millennial-workforce/#2c276db1382b>

³ <https://www.forbes.com/sites/jefffromm/2015/11/06/millennials-in-the-workplace-they-dont-need-trophies-but-they-want-reinforcement/#716c56ea53f6>



2. **They want a coach, not a boss.** Another key point when it comes to directing supervisors and managers. Research shows that the number one reason Millennials are likely to leave their current job is because of their boss⁴. Creating an environment where Millennial employees feel supported and valued by the leadership will lead to increased productivity and valuable relationships. This is directly related to how we train this group of officers. If we create the right atmosphere from the moment they walk into the academy, to their time with their FTO, to the in-service training we provide them throughout their career, we will solidify their longevity, and maximize the return on our investment in them. But sometimes, the coaches need to be coached on how to coach, or the curricula needs to be brought up to the level that these recruits and officers deserve.
3. **They don't want to waste time on the little things.** More than half of employees who responded to a survey from TriNet⁵, said they have given up the opportunity to attend a conference, training or other professional opportunities because their employer's reimbursement policy made it too difficult. We already know that professional development is vital to Millennial employment satisfaction. So why do we make it difficult for them to get an expense check issued? Think about this for a minute. The generation that is coming to work for you, that grew up on PlayStations, Smartphones and the Internet of Things, is going to be "happy" about an outdated, archaic reimbursement process? What we are likely doing is turning this important benefit – outside training or professional improvement opportunities - from interesting to "no thanks". Now take that a step further. If we are doing that for an expense reimbursement, how complicated or tedious are we making other operations within our agency?
4. **They want balance and democracy.** Gone are the days of dictatorial leadership. This generation fostered the growth of companies like Uber, GoPro, Airbnb and others, all built upon the concept of consumer equality, ease of accessibility and shared purpose. For Millennials, there is no reason why these same principles cannot be transitioned into the workplace. Millennials have very much revamped how we look at the 40-hour work week. An estimated three million Americans work from home and that number is expected to increase 63 percent over the next five years⁶. According to Pew

Millennials no longer work for you; they work with you. Therefore, success in leading this group begins in how you train them, how you nurture them, and how you train your trainers.

⁴ Ibid.

⁵ <https://www.trinet.com/company/news-press/press-releases/2015/survey-finds-three-out-of-five-business-travelers-had-problems-paying-a-personal-bill-due-to-expense-reimbursement-delays-by-emp>

⁶ <https://www.forbes.com/sites/jefffromm/2015/11/06/millennials-in-the-workplace-they-dont-need-trophies-but-they-want-reinforcement/2/#2a4fa7dd3842>



Research Center, “if they were able to make their current job more flexible, 64 percent of Millennials want to occasionally work from home and 66 percent would like to shift their hours.” This is not a result of Millennial laziness. In fact, it is the exact opposite. Millennials base their performance on output rather than time spent on a project. Millennial employees are happy to work long hours on the projects that require additional time however, they do not want to sit around the office until 5pm if their work was completed two hours earlier. With this thought in mind, think about how your agency or department handles or manages shift work. All across the country we have observed agencies struggling with this issue: 4-day work weeks vs. two days on and two days off. Flex hours vs. A and B shifts. But often the struggle is with the managers who haven’t adjusted to this new view of “work” that the new officers possess.



As Jeff Fromm says in his article, the key to managing this new workforce is understanding this key principle: Millennials no longer work for you; they work with you. Therefore, success in leading this group begins in how you train them, how you nurture them, and how you train your trainers.

The next part of the People Puzzle is **recruiting**. Agencies across the country, especially game warden, fish and wildlife, and natural resource agencies, have all voiced the same concerns: the recruiting pool is declining, minority application is virtually non-existent, and demands for diversity is increasing exponentially. This **People Puzzle “Perfect Storm”** (retiring boomers, increasing Millennials, diminishing recruits, and evasive diversity) is complicated when you look at the stress on the training system that this shift in the workforce creates. Because the average tenure of your department is decreasing, people in positions of responsibility (supervisors, managers, training staff) have less experience. That affects performance, as Field Training Officers (FTOs) may not be teaching to the same quality and knowledge level that the FTOs a decade ago trained their recruits, and instructors at the academy have less experiences to impart upon their students. One Florida agency has seen the average experience of its FTOs dwindle to just three years on the job.

The workforce shift to Millennials carries with it change in training dynamics that your



organization may not be ready for, or appropriately equipped for, and the recruiting challenges may jeopardize your ability to meet your mission requirements. All of this going on while the need to keep up with the increasing responsibilities, or changing/evolving technologies is pushing your training requirements even further. The “perfect storm” for training directors and organizational leadership, as they struggle to have Capacity meet Capabilities, and have Capabilities meet Capacity.

B. Platforms, Products and Procurement

The **Platforms** and **Products** that agencies utilize to do their jobs are the next critical ingredients in the ability of maritime law enforcement officers and emergency responders to execute their missions. And this category can also be a significant challenge for organizations, as they struggle with identifying the right product, to do the right job, at the right price, given the budgetary and operational constraints they may be facing. The procurement process often taxes the abilities of personnel, and sifting through what a vendor or manufacturer tells you, verses what they can actually do, may be difficult without insight into the industry and its inner workings. Let’s look at vessel procurement as an example.



The Recreational Market is Affecting Your Procurement

The recent rapid growth of the recreational boat industry may be great for our economy and the manufacturers, but it creates a difficult challenge for maritime first responders in need of equipment to keep pace with the emerging maritime security responsibilities.

The U.S. boating industry is reporting some of its highest sales in a decade. The National Marine Manufacturers Association (NMMA) reports that the \$36 billion U.S. boating industry saw powerboat sales rise 6 percent in 2016, reaching 247,800 boats. The NMMA expects powerboat sales to



rise an additional 6 percent this year, a trajectory that it expects will continue through 2018⁷.

“Economic factors, including an improving housing market, higher employment, strong consumer confidence and growing disposable income, are creating a golden age for the country’s recreational boating industry.” - Tom Dammarich, President of the NMMA.

One of the few original American-made industries, (95 percent of boats sold in the U.S. are made in the U.S.) recreational boating is seeing some of its healthiest gains in nearly a decade. Why does this increase in boat sales matter to the Public Safety community? First and foremost, it means more people will be on the water, which in turn means that more accidents, fatalities, emergencies, and distress calls for maritime first responders at the local, county, state, tribal, territorial and federal levels.

Secondly, these professionals who are tasked to protect our maritime domain, assist recreational boaters in distress, respond to catastrophic disasters and provide law and order on our Nation’s waterways, rely heavily on much of the same equipment used by recreational boaters. As boats, outboard motors, and electronics accessories are in big demand by the consumers, manufacturers work diligently to ramp up production to fill depleted dealer inventories, while pre-sold boat dealers and consumers are waiting up to a year for their new boat. Put simply, manufacturers make more money selling a recreational boat than they do selling a government platform. That means that public safety agencies awaiting the delivery of a boat could be in a very long line to get their vessel.

Government Sales are Also Affecting Your Boat Purchase

The U.S. Navy & U.S. Coast Guard are also in the boat buying business and the boat selling business through their respective Foreign Military Sales (FMS) process. They buy a lot of boats for themselves, and they supply ships, small boats and defense related equipment to partner nations, as does the Department of State and the Department of Defense. And often, those purchases take up a portion of the production capabilities of larger commercial boat manufacturers. So again, your purchase request must get in line behind some of these larger government purchases. This happens because a segment of

⁷ <https://www.tradeonlytoday.com/industry-news/nmma-sees-6-percent-gain-in-boat-sales-in-2017>



these acquisitions is designated as a “Small Business Set-Aside,” meaning that the supplier must meet the requirements and be classified as a “small-business with under 500 employees.” A significant percentage of the U.S. FMS purchased small boats are acquired through privately-held small companies who produce approximately 100 boats annually, that are battle proven, reliable products with unique capabilities. It should be noted that these small businesses have similar “4 P” challenges and many need guidance in navigating through them. Specifically, as it relates to connecting with and understanding the mission and requirements of its maritime law enforcement/public safety customers.

Progression of Products

The professionalism and readiness of our maritime first responders have grown exponentially. To protect the maritime transportation system, a vital lifeline for the country, from 2002 through 2016 over \$3 Billion has been distributed through the Port Security Grant Program (PSGP) alone⁸. Millions of dollars have been invested into vessels and equipment, primarily focused on ports and the critical infrastructure around them. The maritime industry has risen to the post 9-11 challenge, as accessory companies have developed cross functional equipment to meet both first responders and recreational user’s needs, and boat builders that had ample production have customized their leisure products to meet the needs of law enforcement and fire departments. That is primarily because it has been easy to communicate and adjust production to fit public sector needs for a customized first responder boat, when recreational production lines are slow and going through a significant recession.

But now, with recreational boat demand being energized and dramatically increasing, the flexibility of major manufacturers is

Executive Order: Examine our Supply Chain and Manufacturing Capabilities

On July 21, 2017, President Trump directed the Pentagon through Executive Order to work with other agencies on a deep-dive analysis of the defense industrial base. The White House called it a “groundbreaking” effort to look at U.S. manufacturing capabilities from a broad national security perspective.

“A healthy manufacturing and defense industrial base and resilient supply chains are essential to the economic strength and national security of the United States. The ability of the United States to maintain readiness, and to surge in response to an emergency, directly relates to the capacity, capabilities, and resiliency of our manufacturing and defense industrial base and supply chains.”

As the manufacturing capacity and defense industrial base of the United States have been weakened by the loss of factories and manufacturing jobs, so too have workforce skills important to national defense. This creates a need for strategic and swift action in creating education and workforce development programs and policies that support job growth in manufacturing and the defense industrial base.

https://www.realcleardefense.com/articles/2017/07/24/trump_directs_major_study_of_us_defense_industrial_base_111874.html

⁸ https://transportation.house.gov/uploadedfiles/2017-03-16_-_lawless_testimony.pdf



decreasing. For maritime law enforcement agencies, emergency response departments, and public safety organizations, those trusted suppliers and well-known boat brands are now really busy, with production at, or approaching, maximum capacity. Manufacturers are in-turn pressuring suppliers to keep pace with the rising demand and many vendors are falling behind schedule and under immense financial pressure to make up for the lean times they weathered in years gone by. Couple this with the shortage of skilled laborers, and the growth of many boat builders is limited, as is the path to profitability.



Workforce Crisis for Manufacturers

“It’s no exaggeration to say that this workforce crisis may be the biggest challenge facing the boating industry right now. Affordability, expanding to new markets and access issues are all important, but if there aren’t enough people to build and service the boats and engines, none of

the rest of that will matter.” That was a quote from an article titled *The Workforce Crisis* by Brianna Liestman & Jonathan Sweet in April 2017⁹. The result of this challenge? Custom boats do not fit well in a production line where the slightest change to a product will create a back-up at almost every level within a company.

C. Processes

As we look at the maritime law enforcement and public safety mission, there are a lot of things involved in the process of doing our job. Processes affect your people (recruitment process, training process, etc.), your procurement (funding process, grant solicitation and award, vendor selection process, product evaluation, etc.) deliveries of your platforms (manufacturing process, delivery process, sustainment, etc.) and your overall mission performance (readiness of platforms and people, in-service

⁹ <http://boatingindustry.com/top-stories/2017/04/06/the-workforce-crisis/>



training, maintenance process, etc.). And often, what drives these processes is experience. The problem in today's maritime public safety community is that experience is not always there to draw upon, and henceforth, there are problems or faults within the processes.

Here are the primary areas where experience, or lack thereof, can affect your processes:

1. **Loss of Institutional Knowledge** (experience): With retirements growing exponentially (as mentioned in the People portion of this paper), knowledge within organizations is declining. So as that legacy walks out the door, agencies lose some of the experience that helped guide previous purchases, procedures and protocols. Which leads to the next point.
2. **Limited Personnel Resources:** With increased responsibilities and decreasing staffing fulfillment, personnel resources are limited, and therefore people with minimal experience are thrust into positions that they are unfamiliar with. This affects training, procurement, maintenance, and other operational processes. If we don't have people who are experienced grant writers, then we either don't apply or put a haphazard application together. If we don't have people who understand lifecycle costs of a vessel or know how to apply measures to lower those costs, we end up spending too much on an initial purchase and too little on their maintenance thereafter. If we don't know what training will dramatically impact an officer's ability to do their job, then we end up putting our people in harm's way and wondering why they capsized a boat in a Hurricane Harvey flood response¹⁰. Or we see a Fish and Wildlife boat crew nearly lose their lives when led by a Lieutenant with the wrong boat in a swift water current while wearing improper personal protection equipment and need to be rescued by an alert helicopter crew¹¹. All of which leads to the next point.



¹⁰ <http://abc13.com/rescue-crews-boat-flips-in-rushing-flood-waters/2362721/>

¹¹ http://www.theadvocate.com/baton_rouge/multimedia/photos/collection_54517c42-8e9c-11e7-a130-d3bc8505bb50.html?utm_medium=social&utm_source=facebook&utm_campaign=user-share



3. **Stove-piped exposure and learning:** Many people in decision making positions within our



maritime law enforcement and public safety agencies have grown up through the system. They have worked for this agency their whole career. And although their rise to leadership is admirable, their exposure to how other agencies, organizations or businesses operate is extremely limited. Yes, they may have degrees in criminal justice, public administration, business or management, but those degrees do not share the

realities that are associated with the world outside of the Sheriff's Department. Which leads to the next point when people are put in charge of acquisitions or procurement.

4. **Limited understanding of the manufacturing business or process:** Police officers are great police officers. Firefighters are great firefighters. But few of them have any understanding of how the boat manufacturing business operates, or how they make business decisions. This lack of understanding creates a rub between the newly minted Sergeant or Lieutenant put in charge of acquiring the next platform, and the boat company that he is making requests (or demands) to. This limited exposure to "other things" can also influence training decisions, policies or protocols. Put simply, the supervisor often doesn't know what he/she doesn't know, and makes the best decision based on their current knowledge and experience.

5. **Reliance on improperly trained procurement personnel or uneducated sales people creates risk:** All too often, thrust into a position of finding and buying a boat without proper background, training or understanding of the entire process, officers and agencies purchase vessels without fully understanding THE FINE PRINT of a manufacturer warranty or the sub-system warranty policies. This lack of disclosure often leads to expensive un-planned repairs. They fail to do a deep-dive into the structural capabilities of their boats when high horsepower engines and shock mitigating seats are added. They often fail to research how addition of advanced systems effect the performance and maneuverability under different load conditions or various sea states.



- a. Many agencies fail to require vendor supporting documentation that can confirm that the configuration has been properly tested and their vessel can operate safely in extreme conditions that an officer may encounter in the performance of their job, in their specific operating area. Common mechanical failures caused during the sales configuration process include: undersized steering systems, inadequate battery power, sub-par wiring, improperly vented fuel systems, scuppers shipping water on to the deck, insufficient generator configuration, excessive corrosion, and may others.



- b. These failures have the potential to create catastrophic results. And often, the sales person doesn't have the background or knowledge related to your specific world of work, your operating area, and your expectations. Combine this lack of experience with overtaxed salespeople covering an entire country, and you can understand why the right questions aren't always asked by the customer, nor by the builder.

All of these points lead to and influence performance. Your ability to do your job.

D. Performance: A question of Capacity vs. Capability vs. Competency

The last element of the Four P's in Public Safety: Performance. All the other "P's" lead to this ultimate point. Can you, your agency, or your officers do their job? Can you train the people the right way, acquire the right platform for them, institute the right processes to ensure that they do their job correctly, safely, effectively and efficiently?

The boats that officers operate today are distinctly different than the ones from 20, 15 or even 10 years ago. We have shock mitigating seats, advanced hull designs with stabilizing fins, foam or air collars, thermo imaging systems, integrated radar and chart plotting navigational tools, an automatic



identification system, blue force tracking, joy stick or fly-by-wire steering, and propulsion systems that go from 0 to “hold on” in seconds. So, what we’ve created through these advances is Capacity, but we’ve not kept up with the Capability. Capability is a collaborative process that can be deployed and through which individual competencies can be applied. The boats, tools and technologies can do the job, but the operators don’t necessarily have the training and therefore, don’t have the Competency.

This is exemplified in the mishaps that we see happening across the country. And this is illustrated in a survey of maritime law enforcement officers and emergency responders in 2016, conducted by the National Association of State Boating Law Administrators. When asked, “what keeps them up at night?” as it relates to maritime training for their agency, 55% of the respondents listed their biggest concern as the liabilities if their people are not trained correctly and appropriately. 46% listed lack of training/knowledge in specific areas as their concern.



So, the point is clear: they know what they need, or what they lack, yet they don’t necessarily know where to get solutions that can mitigate these risks. And nothing makes this concern of marine unit supervisors and operators more relevant than the death of a South Carolina Deputy during boat training,¹² or the capsizing of an Arizona Game and Fish patrol boat where three officers were injured¹³, or the collision of a Sheriff’s airboat with a tour boat in Florida during training,¹⁴ or when the two Fryeburg, Maine Police officers were injured in a boat crash with serious injuries - one of the officers with life threatening injuries on his first day of training¹⁵, or the infamous DC Metro Police Boat captured on video crashing into pleasure boats¹⁶.

The list goes on. The technology and capabilities of vessels have rapidly advanced, often outperforming or outpacing the capabilities of the operators. The training required to understand the operational limitations of the platforms is often sacrificed in the vessel acquisition process, or the agency

¹² <http://www.officer.com/news/12340022/south-carolina-deputy-killed-in-boating-accident-during-training>

¹³ <http://www.azfamily.com/story/28368598/ariz-game-and-fish-officers-injured-in-boating-accident>

¹⁴ <https://www.youtube.com/watch?v=byf6ZNUjHE>

¹⁵ <http://www.wcsh6.com/news/local/fryeburg-boat-crash-officer-has-potentially-life-threatening-injuries/443689929>

¹⁶ http://www.huffingtonpost.com/2013/09/03/police-boat-crashes-video_n_3859642.html



hasn't mandated or instituted required training. This is especially magnified when you consider volunteers, part-timers, multi-duty officers, or seasonal officers as part of your marine unit.

III. External Influencers, and Indicators for Maritime Public Safety Decision Makers

The most notable external influence on agencies and their procurement plans is the fact that many of their budgets were based on prices when there was more supply than demand, and their trusted suppliers needed their business. Fast forward to a shift in the economy and now what? Many agencies have funding to buy large fleets of small boats, being funded by real estate taxes, sales tax, and economic factors, including an improving housing market, higher employment, strong consumer confidence and growing disposable income. Because of this growth in the funding base, agencies can receive larger budgets to fund projects and buy equipment needed to protect and serve their citizens. Many divisions of police and fire departments may not be as effected by this sudden growth like our maritime first responders are about to be. Patrol cars, fire trucks, and specialty equipment used in their day to day duties may not be under the same stressors as the agencies looking for fleet expansion, or replacement of small boats and marine equipment.



Another external influencer, especially if the department is not seeing the rewards of the boosted economy to their operational budget, is the grant funding process. Port Security dollars have declined over the last decade, and although holding steady of the last three years (primarily because of the government's sequestration limitations) all indicators are that this pot of funding may further diminish, or be merged into one big National Preparedness grant program. At which time, all the maritime law enforcement and public safety agencies will be competing against all other organizations in the country for limited funding. More importantly, the smaller departments with only a few boats will be competing against much larger agencies. And those departments with limited grant writing experience will be even more challenged.



One size does not fit all... but Standardization does.

There is a significant difference in the type, size and configuration of boats used to patrol in the open ocean and ports verses the millions of miles of protected waterways, inland lakes, rivers and bays



that boaters flock to. Driving forces affecting small vessel choices are: water depth, launching ramps, low bridges, narrow water-ways, etc., and all require smaller, nimbler, easily transported vessels. Many of the largest boating enforcement agencies in the country are responsible for both types of waterways and require diverse fleets. The decision-making process is rather obvious: big water, big boats; small water, small boats. In both cases, there is a need for purpose built professional grade vessels. And although there is clearly a need, there isn't always a perfect answer.

For those of you readers that are old enough, you may remember the days when ambulances were simply a station wagon painted white with a revolving red beacon on the roof and a stretcher in the back. Like ambulances, patrol and rescue boats have evolved into purpose built boats required to perform a multitude of missions under the most extreme conditions. The quality of the equipment, and of the training the emergency responders received who are operating the equipment, determines whether they can save those people's lives and get home safely to their families after the mission.

As mentioned earlier, when there was ample production to meet the demand in the recreational industry, boat manufacturers could fit a few customized patrol boats into open production spots. The companies had engineering resources to develop solutions to meet customer needs, and they could build them a high-quality product when those few boats wouldn't negatively affect production. It was a profitable option and a way to fill open production slots.



Today it's a different story. In many of the high-volume boat companies, there are no open production slots, and a few custom boats inserted into a fast-moving production line will negatively affect an entire operation. Companies can't charge enough for a custom-built product to make up for the delays it causes. From many boat builder's prospective, it is better to turn-away custom boats then it is to disrupt a profit producing production line.



But where this challenge can be overcome is within the concept of standardizing boat types and purchases. Or, where a Group Purchase can make an alteration in a production line more attractive to the builder. We'll talk more about these concepts in the Recommendations portion of this paper.

Your Purchase May Not Be that Important

The recreational boating community is growing extremely fast and our political climate domestically and internationally has changed, creating a significant increase in the number of small maritime security and first responder vessels needed on our inland lakes, rivers and waterways.

Data shows total recreational marine expenditures reached a high of \$36 billion in 2016 with over 250,000 boats being sold annually. And with this explosive recreational growth, the days of purchasing departments developing a competitive bid specification, encompassing a lengthy list of desired custom features, mailing it out and hoping manufacturers will fight it out to win by responding with their lowest price and fastest delivery... those days may be gone for now. Responding to these bids are tedious and complicated. They require in-depth proposals and it is nearly impossible to plan production around the potential of an award for a boat that may erode the margins of other potential sales.

With this type of competitive landscape, it is now critical for agencies to join forces, standardize purchases, and develop a group vessel acquisition plan. All of which we will talk about in the next section.



Influencers on our People

As stated earlier regarding our people, a younger generation of maritime law enforcement officers requires new and innovative learning tools and adaptation. Academies and internal training programs need to adjust to the trends that are driving these adult learners. The world of connectivity is upon us, and mobile learning is not something we have to prepare for, it is already here and passing us by if we don't adjust accordingly. Immediate access to knowledge is what we must provide this agile, intuitive, curious and intelligent brand of officers.



The second thing that we must recognize as influencing our people and our agency is an increasing number of catastrophes. As the recent events surrounding Hurricanes Harvey and Irma have illustrated, we must train our maritime law enforcement officers appropriately to respond to these types of events that are becoming commonplace, not anomalies.

Tornadoes, floods, earthquakes, and record size storms are impacting regions of the country where they have never appeared before. Those officers that operate in these affected areas must be prepared, and those officers that we send to aid their brethren in other regions must also be trained and prepared. Another example of how officers' responsibilities are expanding, while their skills may not necessarily be keeping pace.

The fire services understand the power and purpose associated with standardizing training all across the country. The best explanation of this comes from a 2008 *Fire Engineering* article entitled *Fire Service Court: On Standards*¹⁷, written by John Murphy, an attorney and retired Chief of Sammamish, Washington with 32 years of service. He writes, "Standards are set, like policies are created, because there is a need to regulate behavior and to provide a safe operating environment. In the early days of the

¹⁷ <http://www.fireengineering.com/articles/2008/11/fire-service-court-on-standards.html>



fire service, each jurisdiction would create some type of training standard because of the nature of their business, by the incumbent fire chief, training officer, firefighters, or neighboring jurisdictions. Some "standards" were inherited by the current staff and firefighters because "it's just the way we do it--and we are not changing." After many firefighter fatalities, lack of coordination between responding jurisdictions, or someone got tired of creating a "lesson plan," our industry brought together a group of experts to formulate these standards.¹⁸

He concludes, "Why are these standards important? Safety is the primary reason. The secondary reason should be the fear of litigation."



¹⁸ <http://www.fireengineering.com/articles/2008/11/fire-service-court-on-standards.html>



IV. *Setting the Course for the Future: Recommended Solutions*

The advancement of technologies, of resources, and of our people presents an exciting and dynamic future. The question is, are we preparing our Guardians of America’s waterways appropriately? As a community, we must look forward to the emerging needs of our maritime first responders of the future, and not back at what has worked in the past. We must break away from fleets being managed and planned based on aged technology and products (and aged opinions), and look at planning a future based on new boats designed for a new generation of buyers and operators, new acquisition processes, and the latest and most advanced training our officers can receive. We must “Ready the Guardians.”

Maritime boat operator training and education over the last decade has exposed the weaknesses of many existing law enforcement vessels. This tactical type training has changed the designs and the way patrol boats need to perform. And it has driven the need and demand for purpose built vessels, while off-the-shelf recreational boats are less and less appropriate. Just look back at the boats of 5, 10 and 15 years ago verses the boats of today. But this is just the beginning of advancing technologies.

And as the skill set of boat operators grow, so are the operational requirements for the vessels, further confirming the need for expert guidance from skilled and experienced navigators. The 20 recommendations below will outline key elements that the agency of the future should include as they move onward and forward.

A. Planning: Fleet Management (or a FLEATS™ Program¹⁹)

Effective fleet replacement planning has never been more critical, as the law of supply and demand will work against agencies that don’t plan properly. Remember, as stated earlier, boat manufacturing is at capacity, so you need to plan for your future with this fact in consideration. Additionally, full lifecycle management must be part of the plan, but that requires a true understanding of what lifecycle management is, and the components of selection, acquisition, maintenance and sustainment that will make an impact and reduce or increase lifecycle costs.

¹⁹ Appendix A



- ✓ **Recommendation 1:** *Implement a holistic lifecycle Fleet Management plan (or FLEATS™ Program²⁰) that can guide people in supervisory positions to a pathway into the future. So that as the people change, the plan stays in place and executable. Utilize research organizations and subject matter experts that can provide insight into the true costs and considerations necessary to develop a functional and individually tailored plan for your agency.*

B. Performance Assessment and Analysis

As stated in this paper, Performance is the last element of the Four P's in Public Safety. All the other "P's" lead to this point. Can your officers do their job safely, effectively and efficiently? Can you train the people the right way, acquire the right platform for them, institute the right processes to ensure that they do their job correctly, safely, effectively and efficiently? Often this requires analysis and assessment.

- ✓ **Recommendation 2:** *Take the time and small investment to conduct an assessment of your performance that could make a significant impact on your organization. Assess your processes, policies, procedures, training and your readiness. This can be accomplished through standardized assessments, facilitated discussions and interviews, table top and full-scale exercises. Do this through a national organization that can provide recognized experts in these areas to help guide your department or agency, and create tailored, customized solutions based on your unique mission requirement.*

C. Presence: Match the Platform to the Mission

Recreational boats are getting bigger and faster, man-powered vessels are increasing exponentially, and our waterways are reaching epic density levels. With this growth, studies have consistently shown that increasing the presence of law enforcement on the water is the most cost-

²⁰ Appendix A



effective way to reduce conflict between boaters. No one debates that strict enforcement of no wake zones, deterring the abuse of alcohol and drugs while boating and educating the public reduces accidents and deaths on the water.

We know that officer presence is the first level in the use of force continuum, so “blending in” or operating a boat that looks like it is the same as theirs and was purchased at the same dealership as the



boaters on your waterways may not produce the desired effect of “officer presence.” The boating public can be harsh critics of our boating enforcement programs simply by the brand or style of the boat. Therefore, agencies should make it a goal to set professional standards for your patrol boats and officers to look sharp and distinguishable.

Remember, perception is reality. Premium boat brands are very distinguishable to the boating public, and agencies are often accused of spending tax dollars lavishly. A manager of a large fleet once said that he hears these complaints often from the public about premium brand boats, but has never heard of someone complain about the price of an ambulance. A fine balance must be struck between quality, durability, functionality and professionalism. Food for thought: there is no benchmark for the price of a purpose built industrial patrol boat like there is with a modified recreational fishing boat.

- ✓ **Recommendation 3:** *Get the right boat for your mission. Often, the ability of an agency to truly understand or assess what they need is limited by the knowledge of the staff personnel chosen to make that assessment or decision. Conversely, the salesperson’s understanding of your needs and application may also be limited. Establish a procurement process and vessel/builder evaluation protocol to help make sure you get the right platform. If needed, get the right help to guide you in defining what the “right boat” is, and consider conducting a mission performance analysis.*

D. Communication: It’s a Two-Way Street

So how do we resolve this fleet acquisition challenge during these periods of rapid growth? How do we transition to affordable purpose-built vessels? How do we ensure that our guardians of the sea are equipped and trained appropriately, without exceeding budgets? We don’t have to reinvent the wheel,



we just have to communicate among our brethren and look outside of our ranks for industry experts to help us identify, vet and train new vendors that are committed to growing with us.

Partnership with industry is as simple as presenting a challenge to people that make their living off developing and delivering solutions to consumer needs. If the entire community developed round-table discussions with industry leaders and set standards for how these vessels needed to be equipped, and if reasonable expectations were set for service and outfitting in uniformed specifications, companies could develop solutions. Partnerships also create an opportunity to collaborate, and utilize the skills of these vendors to develop new tools, equipment and technologies that can truly enhance the officer's work performance.



Secondly, government employees tasked to buy equipment often struggle to understand the importance industry places on forecasting and planning. The selling price of equipment changes throughout the year based on so many variables, such as sub-suppliers price increases and raw material availability. However, the most significant economic factor facing purchasing agents and fleet acquisition teams is the “law of supply and demand.” Right now, boat builders have big demand and limited supply. In a survey of vendors at a recent NASBLA conference, builders were all talking about how they were at capacity, and that a new order was looking at a Spring date for initiation of production. Imagine what we could create if we could collectively forecast and project the needs of not just your agency, but a collection of agencies across the country.

And lastly, communication is a two-way street. Manufacturers and vendors want to talk to people who are on the water at the Deckplate level, and who are influencers within their agency. They want to get ground-truth assessments of their products and the needs of the officers. But they typically don't have the bandwidth to reach out to that populace and are left in a reactive mode: if the customer calls, then they respond. Forward thinking and relationship building is often overlooked, because the resources don't exist to pursue them. If you're a boat manufacturer with just two salespeople covering the United States, you can understand how you don't have the time to truly connect with your audience.



This is where leverage can be realized using a national organization that is connected to that community as a “distribution point.”

- ✓ **Recommendation 4:** *Communicate... tell industry what your problem is, and ask them to solve it. Be able to communicate what you want, how you want it, and when you want it. (Having an acquisition standard would help, and covered in the next section.) Most importantly, be able to speak the industry/mManufacturer language. And don't be afraid to get an agnostic interpreter from a recognized organization that is fluid in the specific business "speak," who understands your world, and who can work on your behalf.*
- ✓ **Recommendation 5:** *For industry, communication at the deck-plate level is an important ingredient to its overall success. Utilize a national organization with deep roots and connections to the influencers at the local, county, state, tribal and territorial level marine units as a distribution point. The right organization that represents this community fully and singularly, will be your conduit to long term success.*

E. Standards Can Simplify Sustainability, Reduce Risk and Save Money

Standards can affect many aspects of a business or operation, including, but not limited to, procurement, personnel management, training, lifecycle management, and overall general management. And when it comes to purchasing new vessels, if the configuration management process is left up to the interpretation of inexperienced people (on both the buyer and seller side of the equation), an unnecessary risk is commonly taken.



It is nearly impossible for an agency to budget for maintenance when operating multiple boats with little to no commonality in their subsystems. So, questions that should be asked prior to purchase are: who, how and when will these subsystems be serviced in the event of a failure, is there local service facilities that stock parts and have trained mechanics, do the companies have a relationship with that local service provider to support the boat and all its sub-systems?

If we look closely, boat manufacturers simply build a hull and integrate a multitude of



subsystems provided by outside suppliers. So, in the event of a subsystem failure, the warranty responsibility ultimately is on the subsystem, not the hull manufacturer. That is always in the FINE PRINT of a boat manufacturer's warranty. Each of those subsystems require preventative maintenance and if the end-user fails to produce documentation that they have maintained the system, then the "Limited Warranty" is null and void.

Therefore, agencies must implement an SOP for preventative maintenance. It is simply unreasonable for an agency to expect a "bumper to bumper" warranty on a boat without accepting responsibility for a preventative maintenance clause.

These small boat fleets make up over 70% of most agency's boating enforcement capabilities across America, and a lack of funding over the last several years has put agencies behind the curve. But thanks to a resurgence in our economy, agencies have funding to begin replacing this aging fleet. But to do so, and sustain their marine unit efforts for the long-term, they must develop a new way of acquiring and managing their vessels. The U.S. Coast Guard realized that fleet standardization was essential to improve the operational readiness of their organization. And the fire service learned a long time ago that standards can directly save lives, and ensure true interoperability internally, and externally. But there is a difference between standards and standardization.

The Coast Guard took the path of Standardization, which meant that they would select a boat type, establish the requirements for that boat type, and then put the specifications out to the manufacturing community to build a boat that met those specs. After a down selection process, they chose one boat, one manufacturer.



This method has its pluses and its minuses. Although it can reduce competition, and potentially increase initial acquisition costs, it does allow an organization the ability to reduce their overall costs by standardizing many processes within their department (procurement, purchasing, training, maintenance, outfitting, etc.) Some may also argue that there is simply too much to Standardization, but that can be overcome by starting with one common



denominator, which is usually the boat itself for a specific application (bay boat, offshore patrol boat, flats boat, airboat, etc.)



The fire service, on the other hand, has selected Standards as its guiding principle. And in this context, it means that they can purchase equipment and gear from multiple vendors, provided each piece of equipment meets specific standards. And once the equipment is received, there are standards on how each piece is outfitted, where each tool is stored. This provides tremendous benefit to the department, to fire fighters across the country, and to the citizens that they

serve and protect. This becomes most apparent when mutual aid requests are made from city to city, state to state, or region to region. Every firefighter knows that a truck showing up from Florida has the same equipment, in the same place, meeting the same standards as the truck from Oregon.

But establishing Standards has its pluses and minuses, too. For one, it can take a long time to get consensus on what that standard is. Or what if there is disagreement (that will never happen in America...right?)

Regardless of which approach an individual department or agency takes, establishing standards or standardizing will have a significant impact on that agency. Now imagine for a moment, the impact if local, county, state, tribal and territorial agencies across the country all adopted a similar approach with their maritime law enforcement/public safety boats and equipment. Although large boating enforcement agencies have many types of boats, they would still benefit from a standards approach to each category of vessel. Total ownership costs would be reduced, operational costs would be more forecastable, standardized training would improve officer safety, and overall acquisition costs would be more predictable. Imagine the impact it could make on the acquisition process, and how manufacturers would react. It is clearly a paradigm shifting principle.

- ✓ **Recommendation 6:** Agencies should establish standards for their department in multiple areas, including procurement process, boat configuration, vendor and



evaluation process, SOPs for boat operations, etc. Standard SOPs can prevent unnecessary risks, and some examples are: Mandatory Wear of Life Vests (and type of lifejackets), mandatory posting a look-out during reduced light or foggy conditions, two or more officer patrols during peak or high risk times, operational limitations of the platform (ex: vessel cannot exceed xx speed at night, or operate in this area, etc.) A standard for proper ongoing training on monthly, quarterly or annual basis is also recommended to keep officers proficient in very specific skills, relative to their world of work.

- ✓ **Recommendation 7:** Agencies would greatly benefit if they work together with other agencies across the region, state, or country to develop a uniformed set of standards for patrol and rescue boats, with the help of industry experts from a recognized institution to facilitate the process. Standards in this regard could be about boat design (see next section) or about what type of equipment goes on boats, where the equipment was placed or stored, or even a standard for procurement processes. This would encourage manufacturers to listen to your collective voice. It would also ensure true interoperability, and would start shaping the training for areas, regions and the Nation.
- ✓ **Recommendation 8:** To ensure proper operation and maintenance of platforms in their lifecycles, agencies should ensure that simple processes are required of officers such as a pre-launch check list, post-mission check list, preventative maintenance steps, etc.

F. Design for Yourself – Crowd Source Your Build

While we've spent a lot of time discussing how to identify and evaluate what the best platform is for you and your agency, and how all the issues that exist may hamper your ability to get the exact boat that you desire, let's imagine a change in the paradigm. What if, rather than assessing and settling for designs that boat builders provide, you designed your own perfect platform? What if, with access to a leading naval architectural firm you could create your own custom designed platform? Designs that you would own, forever? What if you could create the jigs and were able to approach multiple boat manufacturers to build your design? Even if you were a big agency and needed 30 boats, by approaching multiple builders (and maybe even smaller or local builders) and asking them to build 5 to 10 each, you could still be assured a standardized, quality product. But now you wouldn't be dependent on a production schedule, or their timelines. You could





create and meet your own schedule.

- ✓ **Recommendation 9:** Take advantage of creating a platform that is your design, with your jigs, and change the paradigm on how boats are built in America. Consider collaborating with other agencies/marine units so that you can collectively design the right boat and crowd source the build. Utilize agnostic industry experts that have experience in facilitating this process amongst your partners.

G. Cooperative Purchasing Can Create Leverage

Building off the standardization recommendations and the crowd sourcing build, let's go one step further. After the Coast Guard had standardized their fleet, they brought the concept to a larger scale when they became part of the Department of Homeland Security. They created a "Boat Commodity Council" where the Coast Guard, Customs and Border Protection, and Border Patrol all came together to create standard boat purchases, and buy boats under one contract. This gave the departments greater leverage with builders than they had independently. By joining forces and making standardized cooperative purchases, they saved the taxpayer significant amounts of money, and could streamline maintenance and mission interoperability. Imagine what that could do for you and your agency, if you established a "group buy" program and got together with 5, 10, 15... or 50 other departments from around the country? Now, you are no longer trying to fit your one or two boats into a production line that otherwise wouldn't stop. It brings smaller agencies into a larger position, and able to do things they could never do on their own. How much would you save if you could be a part of this group?

- ✓ **Recommendation 10:** Establish or partner with a National Coalition/Collaborative boat buying group, that can seek out opportunities with manufacturers to build to the standards and incorporate design recommendations made previously, and establish one contract purchase type of acquisition process. Use a trusted vendor agnostic organization with SME's who have experience and a proven history in this type of engagement.
- ✓ **Recommendation 11:** When Crowd Sourcing the build, consider smaller boat manufacturers that may have the capabilities, capacity, quality and service that you are looking for, and are more than willing to work with you to fill their production line.



H. Product Assessments (STAR™ Program²¹)

It is often very difficult to discern an excellent product from an inferior product in today's marketplace. What we rely upon is words and reviews from colleagues and peers. From boat builders to radar manufacturers, from clothing lines to personal protective gear, from guns to helmets... there are a lot of products out there and it gets hard to sift through and determine which one is right for your agency. That choice should be supported with a lot of factors including, but not limited to: deliverability (can they deliver the platform when they say they can, and by the dates we need it), additional costs (what other costs do I have to anticipate to operate this piece of equipment,) functionality (does it do what it says it will do), application (is it right for what we want to do), support and service (is there service available in my area, and is it readily available, will the manufacturer stand behind their product), dependability (can this manufacturer do what they say, and will it last for the lifecycle I am planning), lifecycle costs (what will we need for maintenance, replacement, and service in the future, and how much will that cost), etc. Now finding a resource or a vehicle that can provide these answers are limited. But there are steps you can take to reduce this burden.



- ✓ **Recommendation 12:** Reach out to recognized organizations that have established a method or process for evaluating products on your behalf, and that can draw upon the community and SMEs who can provide a detailed review using a specific process, like the Service Tested – Academy Recognized (STAR) Program²².

²¹ Appendix B

²² Appendix B



I. Extend your Training Staff, and Adapt to the Needs of Today's Learners



As discussed in the “People” portion of this paper and throughout the document, people are the foundation of any organization. How we prepare them and train them is your responsibility. And so many mishaps, accidents, mechanical and human errors can be avoided if we just train them properly and effectively to do their job. The problem is often that we don't know what we don't know. In other words, we assume that the training we are providing is

sufficient... until something bad happens. Then, although too late, we react and implement change. But this can be avoided, by extending our training capabilities through an alliance with a national organization that has the trainers, tools, resources and institutional knowledge that can dramatically increase our internal capabilities, without spending exorbitant amount of dollars to do so.

Secondly, and equally important, is the need to meet the requirements of this changing workforce. We must adapt our training appropriately, to ensure that we connect with them and provide learning in way that will “stick.” This often requires “outside the box” type thinking by management and leadership, and is often difficult to understand or accept.

- ✓ **Recommendation 13:** Consider contracting, or a retainer type agreement, with a nationally recognized organization that can supplement and support your training efforts with experienced SMEs, credentialed Master Trainers, instructional design professionals. Ensure that customized and tailored solutions can be developed to meet your agency's specific and focused requirements.
- ✓ **Recommendation 14:** Adapt your learning/training techniques to today's workforce. Consider having an assessment of your current training at the academy and in-service levels, to evaluate its effectiveness for today's challenging environment. This can be done by credentialed Master Trainers, Instructional Designers, Facilitators and adult learning experts. Explore adding training like advanced operator's skills, firearms training on the water, critical incident stress management, technology use training, leadership training, and community diversity interaction skills.
- ✓ **Recommendation 15:** Mobilize your training. What this means is incorporate your training into mobile learning tools, so that your people can take portions of training



(microlearning) or a module in its entirety from remote or mobile locations. Additionally, and almost more importantly, allow your personnel to access something they learned previously as many times as they need to when out in the field.

J. Capture/Retrieve Institutional Knowledge

As we stated and as everyone is aware, agencies are struggling with the loss of their experienced and skilled professionals through retirement and attrition. But there are ways to recapture or retrieve that knowledge, by bringing those experts back through national type organizations that can essentially provide you access to these SME's "on-demand." When you need them, they're there and available to meet your needs.



- ✓ **Recommendation 16:** *Partner with, or contract with a nationally recognized organization that can provide these talented individuals and their knowledge back to your agency, be it for training, assessments, product evaluations or general consultation. And make this resource available to all agencies throughout the country.*

K. Create/Implement A National Maritime Law Enforcement/Public Safety Credential

The maritime law enforcement profession has evolved and changed dramatically over the last 15 years. The required knowledge, skills and abilities of the officer today are more expanding, more complex, and more demanding. To meet these expectations of the officer, we need to make sure they are trained appropriately and to a standard that their agencies can trust when it comes to mutual aid and interoperability. Although there are some courses that are recognized as standards, there is no national MLEO credential.

- ✓ **Recommendation 17:** *Through a national training and education institution, establish a curriculum that could provide recognized credential, certification.*



L. Standardized Maritime Law Enforcement Response Package and Maritime Deployment Training

As the recent events surrounding Hurricanes Harvey and Irma have illustrated, we must train our maritime law enforcement officers appropriately to respond to these types of catastrophes. And as our national response framework gets stretched and taxed, we must ensure that we build sustainable, qualified response teams.



✓ **Recommendation 18:** *Establish a national maritime waterborne response team program framework, similar to USAR type teams, with standardized equipment, tools, resources and training.*

✓ **Recommendation 19:** *Absent a national waterborne response team framework, establish a national training program to prepare assigned personnel and ensure they have the appropriate knowledge, skills and equipment to respond to the events that are becoming all too common in our Nation and to other parts of the world.*

M. Utilize the Secret P: Professional

The last of our recommendations has ties to all the previous ones above, and we call it the “Secret P” or the Fifth P in Public Safety. It stands for Professional. Make sure that what you do is Professional, that your officers are Professional, that your platforms look Professional, that vendors you choose are Professional, and the experts you reach out to help you are Professional.

✓ **Recommendation 20:** *Be Professional, employ and deploy Professionals, seek Professionals when assistance is needed.*



IV. Conclusion

We have done many good things over the last decade, in advancing the capabilities of our maritime first responders, but the changing seascape means that gaps remain in our maritime security and emergency capabilities. These gaps are driven by increasing responsibilities, fluctuating budgets, advanced technologies, and a dramatically changing workforce. This requires collaboration tailored to the unique world we are currently operating in, and into the foreseeable future. It is our intent to address these gaps by providing maritime tools, training, education, resources, guidance and consultation in collaboration with our partners, and establish a pool of industry experts that can quantify the equipment needs of agencies, identify credible and competent industry resources and bridge the communication gap between government and industry to develop solutions that are sustainable and affordable for both parties.



As the challenges and dynamics in our maritime domain continue to change domestically and abroad, we must remain on the forefront of ideas, research and vision to prepare for the future. We and our fellow maritime law enforcement, emergency response and public safety organizations throughout the country, must maintain a vigilant and leading role in the protection of our homeland.

And through a comprehensive FLEATS™ (Fleet Lifecycle - Equipment Design, Evaluation, Acquisition, Assessment, Training and Sustainment - Services) Program, and a process for vetting and assessing new tools, technologies and resources through the STAR Program (Service Tested – Academy Recognized) led by the most experienced and dedicated individuals within the maritime industry, the National Maritime Law Enforcement Academy (and the International Maritime Law Enforcement Academy) will make an impact for our members, our community, our industry and our rivers, lakes, bays, harbors, ports and coastlines.



About the Authors



Mark DuPont is the Executive Director of the National Maritime Law Enforcement Academy (NMLEA), and provides expert consultation, assessments, intelligence, predictive analysis, training, exercises and evaluation for the port security, maritime law enforcement and emergency responder community. With over 35 years of organizational and entrepreneurial leadership, as a maritime law enforcement/military/port security specialist, he provides a unique blend of federal, state, local, private, and non-profit sector perspective and knowledge.

As a Master Training, facilitator, and instructional designer with the motto of "Praeparo Custodis" (Ready the Guardians,) Mark DuPont contributes to the enhancement of the response, prevention and protection capabilities of maritime public safety professionals throughout the world, having developed and implemented a national standard of training and certification recognized by all 50 United States and six territories, and the United States Coast Guard.

Mark's positions and achievements as the Chief Intelligence Office for the State of Florida's FWC (the largest conservation law enforcement agency in the world), and as a Homeland Security and Intelligence Officer for the United States Coast Guard, give him a wealth of experience to share.



John Hotz is the NMLEA's Assistant Director, and is a subject matter expert in maritime first responder vessels and equipment. As a 30-year marine industry veteran and independent industry consultant, John has led sales and marketing teams, as well as design and engineering efforts for many of the most successful companies in the world. He has assisted thousands of maritime agencies domestically and internationally in areas such as; grant writing training, product needs assessments, budget development, establishing logistic and support networks and streamlining agency's acquisition processes. Hotz began his career with an iconic boat builder, Boston Whaler, where he spent 12-years developing a diverse skill set in both domestic and international business. This led to his selection as Vice President of Government Sales by American Marine Holdings Inc., the parent company of the prestigious Florida boat builder, Donzi Marine.

A career defining moment was when John worked closely with his team to develop a co-production agreement with a small family owned aluminum boat builder in Louisiana to launch Metal Shark Boats, which is now a market leader in the world wide maritime defense industry.

Most recently John led domestic and international business development efforts for SAFE Boats International, and Horizon Shipbuilding before joining the Academy.



Appendices

FLEATS Program Overview

STAR Program Overview



FLEATS™ Program Overview

Fleet Lifecycle - Equipment dEsign, Evaluation, Acquisition, Assessment, Testing, Training and Sustainment - Services

Background

The National Maritime Law Enforcement Academy (NMLEA) was formed in 2000 as a non-profit professional provider of subject matter expertise in the maritime law enforcement and public safety arena, offering Assessment, Assistance, Advocacy, Consultation, Training, Tools, Technologies and Service to the professionals that patrol, protect and preserve our Nation's waterways.

Our focus is on raising the level of professionalism, proficiency, officer safety and survival through customized training, nationally recognized instructors, a cadre of specialty SMEs, and access to resources, tools and technologies that can enhance their success, and the safety and security of our Nation's maritime domain.



The Challenges

Working directly with local, county, state, federal, military and private sector first responders all across the United States (and internationally through our International Maritime Law Enforcement Academy), the NMLEA recognizes that our maritime domain continues to evolve with rapidly advancing technologies, a challenging competitive landscape, continuously constrained budgets, altering operational requirements, increased responsibilities and a dynamically shifting workforce. Managing a fleet of vessels, no matter how small or large, contains a long list of lifecycle management, including product selections, identifying operational requirements, identifying acquisition procedures, maintenance processes, equipment refurbishment, and much more. Acquisition programs in particular, frequently have difficulty meeting aggressive cost requirements, schedule deadlines, and technical objectives. Those personnel put in positions to manage and acquisition process are often challenged to understand topics as diverse as risk identification and mitigation, selection and integration of commercial off-the-shelf (COTS) components, process capability, program management, architecture, survivability, interoperability, source selection, and contract monitoring. Put simply, sometimes the most obvious questions are difficult to answer without access to the right resources and experts. Questions like;

- What type of vessel should we choose?
- Aluminum or fiberglass?
- How long should it be?
- What type of equipment should we put on it?
- Which vendor should we go with?
- What are current trends and technologies?
- Will that vendor honor their warranty, or provide the support/parts when needed?



FLEATS™ Program Overview

- Should we acquire new, or refurbish?
- What are our lifecycle costs?
- Should we handle maintenance internally or contract it out?

To meet those challenges, those businesses, organizations and governments who manage public safety marine units require direct access to knowledgeable technical experts, experienced manufacturing professionals, and proven operational management consultants with strategic vision in order to help administer their fleet and meet their organizational goals and objectives.

The Solution

The NMLEA has spent more than two decades compiling a body of knowledge and developing solutions for these areas of fleet acquisition, management and sustainment, helping teams throughout the Nation at local, county, state, federal, tribal, military and private sector levels navigate the intricacies of acquiring complex maritime equipment and training. By being vendor agnostic, and utilizing the extensive knowledge of nationally recognized industry experts, our goal is to facilitate **Fleet Lifecycle - Equipment dEsign, Evaluation, Acquisition, Assessment, Testing, Training and Sustainment - Services (FLEATS™)**, and ensure that it is the best choice for our Nation's maritime first responders to enhance their capabilities and achieve their mission objectives in the most innovative, technologically advanced, operationally efficient and cost-effective methods.

How the FLEATS™ Program Can Help You and Your Agency

➤ Fleet Lifecycle Management

Management of your maritime assets requires more than just buying them, but a whole lifecycle approach that will ensure you spend your budget dollars wisely, and that your equipment operates at top performance levels for the longest periods of time. From platform design to initial procurement, and from operational maintenance to repairs and refurbishment, the NMLEA staff can assist you in laying out and executing a cost effective and manageable lifecycle plan.

➤ Platform Design

Often, designing a new vessel for your agency is challenging, and agencies just revert to whatever the vendors are showing them. This is one area where the NMLEA staff can help you define exactly what you need, based on mission and operational requirements. With access to the Nation's premier naval architects and designers,





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you can be assured that you are getting something that will perform. More importantly, we can ensure that we align you with the right builders that can effectively and efficiently meet the requirements.

➤ Equipment Assessments, Reviews, and Evaluations

For many organizations, the most valuable engagement with the NMLEA comes in the form of a program assessment, review, or evaluation. The NMLEA has developed a valued reputation as a skilled, fair, and neutral examiner of vessels, equipment, acquisition processes and training programs.

➤ Independent Technical Assessments

Independent technical assessments (ITAs) examine the field staff equipment and training needs and reduce the agency's risk of acquiring ineffective equipment from vendors or identify causes of problems affecting current fleet needs. The NMLEA staff provide recommendations that maximize a program's strengths while minimizing and mitigating its risks. ITAs are typically initiated by a program director, program executive officer, or another acquisition official. ITA teams comprise NMLEA staff members with a mix of expertise who conduct a series of interviews with program stakeholders and deliver a briefing and recommendations.



➤ Equipment Risk Evaluations

An equipment risk evaluation provides program managers with a mechanism to anticipate and address program risks. This evaluation is used to identify and categorize specific program risks emanating from products, processes, management, resources, and constraints. The program's staff members participate in the identification, analysis, and mitigation of risks that could affect their development effort.

➤ Request for Proposal (RFP) Preparation and Reviews

The language used in a formal request for proposal (RFP) makes a critical difference in the quality of the proposals received and ultimately the success of an acquisition program. The NMLEA is adept at developing RFP language, including sample language for a variety of specific clauses relevant to maritime equipment and training acquisition. For example, some proposals should specifically address the importance of the vendor's logistic support structure, product life span costing, the test and evaluation approach, equipment or training measurement needs, and requirements. Additionally, the NMLEA works directly with acquirers to improve RFP processes and capabilities, conducting pre-award workshops to help identify and mitigate risks by evolving the RFP package. After the award, the NMLEA helps establish expectations and process interactions between the acquirer and supplier.



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➤ Source-Selection Reviews

The NMLEA supports the proposal-evaluation phase of the source-selection process by providing technical reviews of the submissions, with an emphasis on technical-related issues. Experienced NMLEA staff members help agencies prepare to evaluate proposals, judge them against the criteria set forth in the solicitation, assist with past performance and cost evaluations, and more.

➤ Measurement-Plan Evaluations

Effectively monitoring a contract requires that a program have in place an effective, customized measurement system. When a program's measurement system includes consistent collection of metrics and analysis for decision making and fact-based planning, it can operate as an effective early-warning system for program problems. The NMLEA helps agencies create a system for recording metrics data so that they can use reliable historical data as a basis for more accurate program estimates.

➤ System Requirements Technical Reviews

The NMLEA works with project stakeholders to ensure that customer requirements, product and technical requirements, and analysis and validation processes reflect the fundamental needs that drive programs, from both mission and business perspectives. In addition, the NMLEA advises agencies on how to manage requirements and technical changes, maintain traceability and change history, and evaluate the impact of changes from the viewpoint of the stakeholders.



➤ Quality Assessments of System Architectures and their Requirements (QUASAR)

The NMLEA assessment method provides a practical way to determine if a product, including its subsystems, meets quality requirements. NMLEA technical staff members help agencies formulate claims, build arguments, and gather evidence to demonstrate to the agencies senior staff and other stakeholders that their specific requisitions possess sufficient quality.

➤ Testing-Approach Evaluation

The testing approach for a product or training course has a significant impact on the ultimate quality of the delivered system. NMLEA experts help to ensure an appropriate approach to product testing by reviewing the system-test approach. Conducting an evaluation ensures appropriate test coverage, traceability to requirements, testing for COTS products, visibility into contractor testing, testing of both quality and functional requirements, and integration of sub-systems testing into the overall test strategy.



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➤ Training of Personnel

Often the area overlooked, training of personnel to operate new platforms and technology, as well as training of staff to establish standards, protocols and processes, are vital aspects of your fleet management and overall lifecycle costs. The more we can prepare our people to acquire and operate the equipment properly, the more likely we are to avoid unnecessary costs, mishaps, and unforeseen organization impacts.

➤ Sustainment-Readiness Review

A sustainment-readiness review can help an organization determine its overall fleet plan, whether its current equipment is ready for sustainment, and whether sufficient artifacts exist. Technical experts from the NMLEA conduct these reviews to identify potential issues and to recommend actions for ensuring the project's well defined and supported lifecycle.

➤ Document Reviews

The quality, completeness, and level of detail of milestone document deliverables have a substantial impact on a program's ability to execute effective acquisitions. Experts in many different areas of equipment and training expertise can provide or augment the technical review of documents produced by both the procurement office and the contractor. Types of documents that can be reviewed include those emanating from the acquisition strategy as well as the transition and operations plans.

About our Team

This program is being led by John Hotz, a nationally recognized subject matter expert in maritime first responder vessels and equipment. As a 30-year marine industry veteran and industry consultant, John has led sales and marketing teams, as well as design and engineering efforts for many of the most successful companies in the world. He has assisted thousands of maritime agencies domestically and internationally in areas such as; grant writing training, product needs assessments, budget development, establishing logistic and support networks and streamlining agency's acquisition processes.



What does this cost?

The NMLEA is vendor agnostic, meaning that we do not get paid by manufacturers to sell their products. Our services are provided to our members on a project fee basis, a retainer agreement, or a percentage of the equipment acquisition costs. Contact us today, and we can give you a direct proposal based on your project needs.

We're Here to Help

If we can help your organization with any of these efforts, let us tailor a specific solution to your unique fleet needs. Contact: John Hotz, NMLEA Assistant Director and FLEATS™ Program Manager
John.Hotz@NMLEA.org or 386-233-4198.



STAR™ Program Overview

The "Service Tested – Academy Recognized" Program

How products, platforms, equipment, technologies and tools can be reviewed, assessed, evaluated and vetted by trusted members, peers and maritime operators.

Background

The National Maritime Law Enforcement Academy (NMLEA) was formed in 2000 as a non-profit professional provider of subject matter expertise in the maritime law enforcement and public safety arena, offering Assessment, Assistance, Advocacy, Consultation, Training, Tools, Technologies and Service to the professionals that patrol, protect and preserve our Nation's waterways.

Our focus is on raising the level of professionalism, proficiency, officer safety and survival through customized training through nationally recognized instructors, a cadre of specialty SMEs from every aspect of maritime law public safety, and access to resources that can directly enhance their operations and readiness.

Finding the Right Equipment for your Mission: The Challenges

Today's maritime public safety agencies face a lot of challenges, as outlined in an NMLEA White Paper entitled *Navigating the Changing Seascape* (Sept 2017)¹. And when it comes to searching for and selecting new mission specific equipment, those challenges are accentuated by the loss of institutional knowledge (experienced people within your agency who have retired), limited personnel resources (and consequently, the responsibility to search for and select new equipment falls on an officer who is already multi-tasking), and likely inadequately trained or an inexperienced procurement agent. Vendors, equipment providers and manufacturers face similar challenges as they rarely have the bandwidth and marketing resources to personally reach all of the prospective clients, and thoroughly educate them with the information which allow agencies to make fiscally responsible equipment choices. As the bridge between industry and the agencies, the Academy has the answer.



The Solution

The NMLEA has developed a program to help agencies and vendors discern products in a crowded marketplace by utilizing our trained and seasoned staff along with members to provide a reviews and evaluations of products. Our cadre of professionals have spent more than two decades compiling a body of knowledge and developing solutions for agencies in the areas of equipment evaluation, testing, acquisition, management and sustainment.

¹ A copy available through this link: <https://form.jotform.us/72647782084163>, or by email request to info@nmlea.org.



STAR™ Program Overview

We've taken that experience to develop an evaluation and assessment protocol and called it the **NMLEA STAR PROGRAM: Service Tested – Academy Recognized**. Helping teams throughout the Nation at the local, county, state, federal, tribal, military and private sector levels (and Internationally through the IMLEA), the STAR Program provides a network of operators, peers and subject matter experts to assist in the evaluation and assessment processes.

How it Works

Vendors and manufacturers with new or existing products can submit their new or existing products to the NMLEA for STAR Program review. Being vendor agnostic, the Academy selects a minimum of five evaluators/subject matter experts/operators that meet the knowledge, skills and abilities necessary for each STAR Project. After selection of the team, the assigned STAR Project Manager applies a NMLEA structured evaluation and assessment process that consists of five phases: Product Submission, Initial Assessment, Functional Evaluation, Operator Review and Final Report. Some examples of the categories examined in each of the Phases (depending on the type of product being evaluated) are the following:



Phase I: Product Submission

- Submission/evaluation interview
- Confirmation of applicable evaluation criteria
- Staff Project Manager assigned
- Selection of Evaluation, Testing and Assessment Team
- Timeline established
- Safety plan established
- Safety Coordinator assigned
- Planning and Logistics conducted
- Project initiated
- Shipping/delivery to designated evaluation points

Phase II: Initial Evaluation

- Applicability
- Performs or facilitates a work function in a way that did or did not previously exist
- Criticality of product function to operations
- Comparison to other items on the market
- Is Training Provided?
- Are Instructions accurate, user friendly?
- Ergonomics
- Quality

Phase III: Functional Evaluation/Field Testing

- Functionality
- Did it work?
- Does it do what it says it will do?
- Efficiency



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- Effectiveness
- Ease of operation
- User interface
- Training required/recommended

Phase IV: Post Evaluation and Operator Review

- Would recommend this to my agency
- Availability
- Maintenance
- Dependability
- Pricing
- Sustainability
- Support & Serviceability
- Time on the market/experience

Phase V: Final Report with Equipment Scoring and Comments

- Impact on Operations
- Posting of Report Findings
- Use of STAR Logo Authorized

What does this cost?

To cover the time necessary for a minimum of five subject matter experts/operators to conduct the STAR Program evaluation and assessment and move the equipment through the various test processes, we charge a fee based on the size and complexity of the product. Contact us today, and we can give you a direct proposal based on the scope of your STAR Program submission and specific project needs.



We're Here to Help

Let the Academy evaluate your products, and provide you with a review that has the support of our members behind it. Contact: John Hotz, NMLEA Assistant Director and STAR Program Manager
John.Hotz@NMLEA.org or 386-233-4198.