REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
7-04-2015	Master of Military Studies Research Paper	July 2014 - April 2015

4. TITLE AND SUBTITLE
Drivers of Erosion of Technical Expertise in the Navy Logistics Specialist Rating

5a. CONTRACT NUMBER
N/A

5b. GRANT NUMBER
N/A

5c. PROGRAM ELEMENT NUMBER
N/A

6. AUTHOR(S)
Tan, Horacio G., LCDR, SC, USN

5d. PROJECT NUMBER
N/A

5e. TASK NUMBER
N/A

5f. WORK UNIT NUMBER
N/A

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
USMC Command and Staff College
Marine Corps University
2076 South Street
Quantico, VA 22134-5068

8. PERFORMING ORGANIZATION REPORT NUMBER
N/A

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
N/A

10. SPONSOR/MONITOR'S ACRONYM(S)
N/A

11. SPONSOR/MONITOR'S REPORT NUMBER(S)
N/A

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES
N/A

14. ABSTRACT

In 2003, when the Navy merged the Aviation Storekeeper with the Surface Storekeeper as one rating (occupational specialty), most senior enlisted and commissioned officers questioned if the Navy truly benefited from the change. The merging of the two technical ratings was a move towards a more generalized workforce, which contradicts the enlisted ratings' historical concept to specialize the technical workforce for efficiency. In addition, the move towards a more generalized workforce further eroded the fleet's logistics expertise when the Postal Clerk merged with the Storekeeper in 2009 to create the Logistics Specialist rating. While most senior enlisted personnel claimed that the rating merger diminished technical expertise in the fleet, this essay will present five other factors that influenced the erosion of technical expertise, as well as recommendations to stop and reverse the declining trend of logistics technical expertise.

15. SUBJECT TERMS
Technical expertise; Rating merger; Logistics Specialist; Aviation Storekeeper; Storekeeper; Postal Clerk

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			Marine Corps University/Command a
Unclass	Unclass	Unclass	UU	32	19b. TELEPHONE NUMBER *(include area code)* (703) 784-3330 (Admin Office)

United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
Quantico, Virginia 22134-5068

MASTER OF MILITARY STUDIES

TITLE: Drivers of Erosion of Technical Expertise in the Navy Logistics Specialist Rating

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

AUTHOR: LCDR Horacio G. Tan

AY 14-15

Mentor and Oral Defense Committee Member: Dr. Joseph W. Ryan
Approved: J. W. Ryan
Date: March 31, 2015

Oral Defense Committee Member: Dr. Anne-Louise Antonoff
Approved: Anne-Louise Antonoff
Date: March 31, 2015

Executive Summary

Title: Drivers of Erosion of Technical Expertise in the Navy Logistics Specialist Rating

Author: LCDR Horacio Tan, Supply Corps, United States Navy

Thesis: While most senior enlisted personnel claimed that the rating merger diminished technical expertise in the fleet, this essay will consider five other factors that influenced the erosion of technical expertise. These five factors—Navy policies on enlisted warfare specialist's mandatory qualification and requalification, optimal manning experiment, top six roll down, culture shift in promotion requirements, and the merged rating implementation process—highlighted core issues that require attention and solution to reverse the declining trend of technical expertise in the fleet.

Discussion: In 2003, when the Navy merged the Aviation Storekeeper with the Surface Storekeeper as one rating (occupational specialty), most senior enlisted and commissioned officers questioned if the Navy truly benefited from the change. The merging of the two technical ratings was a move towards a more generalized workforce, which contradicts the enlisted ratings' historical concept to specialize the technical workforce for efficiency. In addition, the move towards a more generalized workforce further eroded the fleet's expertise when the Postal Clerk merged with the Storekeeper in 2009 to create the Logistics Specialist rating. While most senior enlisted personnel claimed that the rating merger diminished technical expertise in the fleet, this essay will present five other factors that influenced the erosion of technical expertise, as well as recommendations to regain technical expertise.

Conclusion: The rating mergers in 2003 and 2009 between Aviation Storekeeper, Surface Storekeeper, and Postal Clerk that formed the Logistics Specialist rating made sense. However, the merger implementation process needs additional steps to facilitate transition and balance in the distribution of technical experts in the fleet. In addition, four other drivers of erosion of technical expertise, as mentioned in the discussion paragraph, need reform to stop and reverse the declining trend of logistics technical expertise.

DISCLAIMER

THE OPINIONS AND CONCLUSIONS EXPRESSED HEREIN ARE THOSE OF THE INDIVIDUAL STUDENT AUTHOR AND DO NOT NECESSARILY REPRESENT THE VIEWS OF EITHER THE MARINE CORPS COMMAND AND STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

QUOTATION FROM, ABSTRACTION FROM, OR REPRODUCTION OF ALL OR ANY PART OF THIS DOCUMENT IS PERMITTED PROVIDED PROPER ACKNOWLEDGEMENT IS MADE.

Table of Contents

Page

Prior to 2003, there were six supply specialty ratings in the United States Navy—Aviation Storekeeper (AK), Storekeeper (SK), Postal Clerk (PC), Disbursing Clerk (DK), Ship's Serviceman (SH), and Mess Specialist (MS) now called Culinary Specialist (CS). The topic for discussion in this essay is the merger of the Aviation Storekeeper, Storekeeper, and Postal Clerk into one specialty rating as Logistics Specialist (LS). For the sake of clarity to distinguish the differences between Aviation Storekeeper (AK) and Storekeeper (SK) as two different occupational fields, the term Surface Storekeeper is use in place of Storekeeper throughout this essay.

In 2003, when the Navy merged the Aviation Storekeeper with the Surface Storekeeper as one rating (occupational specialty), most senior enlisted and commissioned officers questioned if the Navy truly benefited from the change. The merging of the two technical ratings was a move towards a more generalized workforce, which contradicts the enlisted ratings' historical concept to specialize the technical workforce for efficiency. In addition, the move towards a more generalized workforce further eroded the fleet's expertise when the Postal Clerk merged with the Storekeeper in 2009 to create the Logistics Specialist rating. While most senior enlisted personnel claimed that the rating merger diminished technical expertise in the fleet, this essay will prove five other factors influenced the erosion of technical expertise. These five factors—Navy policies on enlisted warfare specialist's mandatory qualification and requalification, optimal manning experiment, top six roll down, culture shift in promotion requirements, and the merged rating implementation process—highlighted core issues that require attention and solution to reverse the declining trend of technical expertise in the fleet.

According to popular beliefs amongst senior enlisted and commissioned officers, the Aviation Storekeeper and Surface Storekeeper merger was a mistake. However, the Navy's analysis and decision to merge these two occupational fields in 2003 made sense. The automation of reports and operational processes in both Aviation Storekeeper and Surface Storekeeper occupational fields simplified the workload and standardized almost all of the operating procedures except for the maintenance aspect unique to the Aviation Storekeeper's job description. For example, onboard an aircraft carrier, pre-merger period, while Aviation Storekeepers default assignments were to S-6 (Aviation Support) Division, the Surface Storekeepers common assignments were S-1 (Stock Control) Division or S-8 (Materiel) Division.

Both Aviation Storekeepers and Surface Storekeepers receive, stow, and issue repair parts. In addition, periodic stock inventories, shipment of materiel to other stations, and management of stock replenishments were all functions similar to both ratings. However, Aviation Storekeepers managed aviation repair parts only, while Surface Storekeepers managed ship's repair parts and supplies. Since most functions of both Aviation Storekeeper and Surface Storekeeper were similar and the only difference was the aviation maintenance portion of the Aviation Storekeeper rating, the Aviation Storekeeper and Surface Storekeeper merger eliminated function redundancies and was more efficient. One of the article released by the Navy Personnel Development Command Public Affairs office stated that,

> A study conducted by the Supply Training Requirements Review, who partnered with the Fleet and the Navy Manpower Analysis Center, determined the 94 percent commonality in occupational standards and technical training within the two ratings warranted a combined training effort, that would give the Navy a more versatile talent pool to draw from.[1]

Moreover, the implementation of Naval Aviation Logistics Command Management Information System (NALCOMIS) and the Shipboard Uniform Automated Data Processing System (SUADPS) that later upgraded to Relational Supply (R-Supply) linked both aviation and ship's inventory systems that streamlined the accountability processes. Furthermore, the implementation of NALCOMIS and R-Supply eliminated manual processes and facilitated workload reduction from ten to seven units/work centers within the Aviation Support Division. Therefore, the implementation of automated information systems—NALCOMIS and R-Supply—narrowed the occupational gaps between the Aviation Storekeeper and Surface Storekeeper.

Prior to early 1990s, Aviation Support Division had two sections and ten units. The two sections were Supply Response Section and Component Control Section. There were six units under Supply Response Section—Requisition Control, Stock Locator, Technical Research, Material Delivery, Pre-Expended Bin, and Program Management. Then, the Component Control Section had four units—Document Control, Supply Screening, Awaiting Parts, and Local Repair Cycle Storage or Rotatable Pool. Until the mid-1990s, manual processing of requisition documents such as stock location assignment, use of Visual Information Display System (VIDS) board to track components with repair parts requirements, and typing each shipping documents or requisition documents existed. However, improvements in automated information technology eliminated these manual processes.

During the pre-automation period, the Supply Response Section had a dedicated unit, Stock Locator Unit, solely for research and manual annotations of storeroom locations on every requisition document. Post-automation, this unit is no longer required, except for computer system down time. When customers placed their requirements from their shop's computers, the

requisitions printed automatically in the Supply Response Section with prerecorded storeroom locations.

A similar scenario happened to Supply Screening Unit under the Component Control Section. Supply Screening Unit's major workload was to process the shipping documents of components that require repair external to the ship or naval air station. Pre-automation, the Supply Screening Unit dedicated personnel to type shipping documents daily. Post-automation, a single key stroke prints the shipping documents with all required information drawn from the computer databank's records. The automation of information technology system eliminated the dedicated typist and allowed the Component Control Section to combine the Supply Screening Unit's remaining function with Document Control Unit.

Other units within the Supply Response Section and Component Control Section reduced the workload and personnel through automation. Prior to automation, Awaiting Parts Unit used to place the order for every single part required to repair aircraft components in the Aviation Intermediate Maintenance Department (AIMD). In addition, a manual tracking system such as VIDS board tracks the component when it requires repair parts and when all repair parts needed arrived to complete the component's repair. Post-automation, management reports replaced the manual tracking system and maintenance shops themselves placed their repair parts requirements directly from the computer system in their shops. Therefore, automation reduced Awaiting Parts Unit's workload to monitoring/expediting requisitions and issuing of repair parts to the maintenance shops.

Technical Research Unit under the Supply Response Section also benefited with workload reduction through automation. Microfiche records were the primary research tools until the implementation of Federal Logistics (FEDLOG) research system that replaced the

manual intensive research process for Technical Research Unit personnel. Similar workload reduction happened for the expediters in Program Management Unit that researches and tracks high priority requisitions with direct impact to aircraft readiness. These are a few examples of workload and personnel reductions made possible when the information technology streamlined the supply operations in afloat and ashore organizations.

Moreover, the merger administratively offered the opportunity for personnel to learn the standard operating procedures of various logistics divisions—Stock Control, Materiel, and Aviation Support—within the Supply Department. In addition, billets and location opportunities for both Aviation Storekeeper and Surface Storekeeper ratings expanded as Aviation Storekeeper's duty stations were limited to naval air stations and aviation platform ships. These location choice limitations held true except for a token number of Aviation Storekeepers assigned to general or special duty assignments—recruiting duty or instructor billets. On the other hand, Surface Storekeepers have the opportunity for assignment in aviation squadrons and aviation support divisions ashore and afloat, billets designated previously only to Aviation Storekeepers now afforded to Surface Storekeepers.

Furthermore, the advancement opportunities were historically lower for Aviation Storekeepers compared to the Surface Storekeepers. The Aviation Storekeeper and Surface Storekeeper merger leveled the disparity in advancement opportunities between the two similar ratings within the Navy supply community.

Similar to the 2003 merging of Aviation Storekeeper with Surface Storekeeper into one rating, the Postal Clerk (PC) and Storekeeper (combined Aviation and Surface Storekeepers) merger that formed the Logistics Specialist rating in 2009 made sense as well. The Postal Clerk's primary function onboard the ship was to receive, sort, and distribute letter mail and

packages; sell postage stamps; process outgoing regular, certified, and registered mail; and sell money orders. Once again, information technology made significant reductions in letter mail processing as the world transitioned to electronic mail. In addition, the electronic banking system reduced the sale of money orders. Money order transactions range from less than five to zero transactions per month on an aircraft carrier with nearly 5,000 personnel during deployment.

As workload in letter mail and money order transactions declined significantly, shipping and receiving of packages similar to the Surface Storekeepers were the only significant workload left for the Postal Clerks. The only two functions left unique to Postal Clerks compare to Surface Storekeepers were postage stamps sale and certified/registered mail processing. Postal Clerks had similarity with the Aviation Storekeepers' situation in terms of limited duty stations to choose from and advancement opportunities compared with the Surface Storekeepers. The 2009 merger between Postal Clerk and Storekeeper as Logistics Specialist provided more opportunities for the Postal Clerks on both available billet assignments and advancement opportunities.

Unlike the Aviation Storekeeper merger with the Surface Storekeeper, the Postal Clerk rating has a steep learning curve to delve into the variety of Storekeeper jobs especially in the fields of financial, stock control, aviation support, and information technology systems—NALCOMIS and R-Supply—used in inventory and financial management. However, the dilemma with the Postal Clerk's dwindling responsibilities made it difficult to justify the existence of Postal Clerks. The rating merger was a graceful way to dissolve the Postal Clerk rating.

During an interview with Warrant Officer Lisa Edenhofer, a thirty-year logistics expert suggested that the Ships Serviceman (SH) rating has cash accountability similarities and a better rating for the Postal Clerk to merge.[2] One of Ships Serviceman's job onboard the ship was managed the ship's store to sell necessities—uniforms, personal hygiene products, and food items—to sailors. However, the Ships Serviceman and Postal Clerk ratings, both over manned, will only worsen advancement opportunities if merged. Therefore, the Postal Clerk and Storekeeper merged as Logistics Specialist made more sense administratively as compared to the Ships Serviceman and Postal Clerk merge within the Supply ratings.

If both the 2003 and 2009 rating merger decisions made sense, why is the fleet suffering from erosion of technical expertise in the supply operations? Five major factors have influenced the fleet's declining technical expertise: Navy policies on enlisted warfare specialist's mandatory qualification and requalification, optimal manning experiment, top six roll down, culture shift in promotion requirements, and the merged rating implementation process.

First, the unintended consequence of raising the bar for enlisted promotion through mandatory implementation of warfare qualifications and requalification in August 2010.[3] This mandate diverted hundreds of hours away from on-the-job technical training to warfare qualification or requalification during the first twelve months of all enlisted sailor's shipboard assignments. Until the mid-1990s, earning a warfare qualification such as Enlisted Surface Warfare Specialist (ESWS) and Enlisted Aviation Warfare Specialist (EAWS) were optional. The average qualification process could take two to twelve months depending on the person and the available personnel qualified to provide the training. During the time when the warfare qualification was optional, sailors could complete their warfare qualification anytime—beginning, second, or last year—during the sailor's three, four, five, or six year tour. This

flexibility allowed sailors to focus their initial time onboard in learning their primary jobs first as Aviation Storekeeper, Postal Clerk, and Surface Storekeeper rather than dividing their time between primary job and warfare requalification pressured by its deadline.

In addition, during ship's in-port period, it is tougher to qualify due to unavailability of qualifiers on leave, temporary assignment off the ship for training, and other reasons. The optimum time to learn various facets of warfare qualification is during the ship's deployment when there is a 24/7 captive audience at sea. Therefore, timing of sailor's initial assignment onboard and the ship's typical 18-month inter-deployment training cycle may also drive the early or late completion of the sailor's warfare qualification, thus prolonging the time away from sailors' primary jobs.

The Enlisted Surface Warfare Specialist qualification is a time intensive process that involves learning the common functions and capabilities of the ship and each department within the ship. The warfare qualification process starts from requesting approval to start the program. Once approved, a sailor receives a personal qualification standard booklet that lists all required items or processes to learn and its corresponding qualifier signatures to certify completion of each items. Either classroom instruction offered by the ship's warfare coordinator or one on one training with the qualifier completes each checklist items in the qualification booklet. Once the qualification booklet is complete, then the warfare candidate must pass a written exam. Finally, the candidate schedules and must pass an oral board conducted by warfare-qualified personnel to complete the warfare qualification.

The mandatory warfare completion has its merits. It provides an opportunity to broaden the sailors' general shipboard knowledge and it forces the sailors to do so if they desire to stay competitive professionally in the Navy. However, the requalification mandate may not provide

additional value to the ship's mission. The requalification policy forces sailors to remove themselves at least one to three hours a day from their primary duties at the beginning of their new assignment when learning their primary job is critical. These sailors' natural reactions to career survival were due to the warfare qualification and requalification policy and its abbreviated time restriction for compliance poses significant professional penalty to sailors.[4] Organization like the Seventh Fleet in Japan, further reduced the initial warfare qualification period from the Chief of Naval Operation's instruction of thirty months down to eighteen months in local command instruction for Seventh Fleet sailors.[5]

The professional penalty is severe for not completing the warfare qualification within the prescribed period. When the division, department, or command ranks their sailors according to their periodic performance and overall contribution to the command and the Navy, warfare non-qualification is a degrader or discriminator in the ranking process. A technical expert sailor that performs superbly during the entire reporting period, but did not complete the warfare qualification, ranks lower than the mediocre performer with warfare qualification. In addition, some superiors decline individual performance award recommendations for sailors that did not complete their warfare qualification, even if the sailor's specific accomplishment has no bearing on warfare qualification. One of the Navy command instructions delineates that sailors who fail to qualify or requalify within the required timeframe will receive the following:

(1) E-6 and below. Performance evaluation block 33 will be graded no higher than a 2.0 and a performance evaluation block 43 will contain the following statement: "member fails to meet SCW qualification requirements."

(2) E-7 to E-9 Performance evaluation block 34 will be graded no higher than a 2.0 and a performance evaluation block 41 will contain the following statement: "member fails to meet SCW qualification requirements."[6]

SEABEE Combat Warfare or SCW is a warfare qualification for the Navy's construction battalions. A performance evaluation mark of 2.0 out of 5.0 scale and a negative statement as the one mentioned earlier is a "kiss of death" to sailor's career. It would take three years for paygrades E-5 and below, and five years for E-6 and above to recover from this negative evaluation and be competitive for promotion again. This administrative penalty is justified based on the benefit that the sailor and the Navy will gain from the initial warfare qualification. However, the requalification benefit, if there is any, represents the law of diminishing returns. Prior to 2010, once a sailor was warfare qualified, the qualification was good for the rest of the sailor's career. There is no benefit to requalification as most information learned in the warfare qualification while interesting, it is not something that sailors would use again for the rest of their career. In addition, the information learned from each department or sections of the ship is basic and not even enough for sailors to use in an emergency. This requalification value assessment applies to surface and aviation platforms only and excludes the submarine warfare community due to insufficient information to make a fair assessment.

To realize the cost and benefit of the Navy's policy that mandates previously warfare-qualified personnel to requalify upon reporting to new command, three basic questions need forthright answers. First, what is the value added on the warfare requalification? Secondly, how much of the information learned in the warfare requalification is useful to sailors' daily activities? Thirdly, did the number of hours devoted to warfare requalification improved the ship's operation or mission?

Hypothetically, out of 3,000 permanently assigned personnel onboard an aircraft carrier, roughly 2,000 personnel need initial warfare qualification and only 1,000 were warfare qualified from previous commands but newly reported onboard. In the current Navy policy, this means

1,000 personnel need to requalify and spend one to three hours a day away from their primary jobs for weeks or months in their initial assignment onboard a ship. One to three hours a day away from work does not happen every day, it is per training occurrence throughout the requalification period. However, it is still a significant time loss in the sailors' primary jobs.

In a conservative estimate, an average sailor requalifies after forty hours of preparation; this means that for 1,000 sailors in the requalification process onboard a single aircraft carrier a total of 40,000 hours spent away from performing the sailors' primary jobs or technical training to improve expertise within their fields. This figure is only for one aircraft carrier when there are ten total in the United States Navy. To calculate the number of hours spent on requalification in a larger scale, take 300 plus ships and other commands—construction battalion, aviation squadrons, and other warfare qualifying commands impacted by this Navy policy.

An interview with Chief Petty Officer Nicky Neely from a construction battalion revealed that out of 600 personnel in a battalion, roughly half of the battalion needs initial warfare qualification and the other half needs requalification. For initial qualification, construction battalion personnel have twenty-four months to complete while requalification have twelve months. Neely took five months to complete his warfare requalification. Using Neely's requalification timeframe as an example, then multiply by thousands of sailors in the Navy, it shows how a single policy diverted millions of hours on warfare requalification. How much improvement will these diverted millions of hours make to technical expertise in the Navy if redistributed back to technical training instead of warfare requalification within each command?

Competitive leaders have the natural tendency to raise the standard at every opportunity. However, a thorough cost and benefit analysis is necessary prior to implementation of each initiative. It is critical to remember that most sailors will do what they have to do to get things

done based on the leadership's priorities – especially when their career are at stake for noncompliance with the Navy policy.

The second factor that influenced the decline in technical expertise was the optimal manning experiment. USS NIMITZ (CVN 68) was the aircraft carrier to execute the optimal manning experiment in 2004. The ship removed twenty percent of its crew and reassigned them to other commands. Then the ship went through its Inter-Deployment Training Cycle and deployed with the remaining crew as directed by the optimal manning experiment. The ship had a successful deployment in spite of the arbitrary 20% reduction of its crew. However, the experiment did not represent a realistic manning environment in the fleet. In the NIMITZ case, the decision-makers onboard retained the top 80% of the crew. In a real shipboard scenario, the bureau of personnel randomly assigns the majority of the crew to a command. Some officers or senior enlisted personnel maybe selected at the request of the command, but in a regular situation, it was random assignment for as long as the member is physically or medically qualified for shipboard duty. The optimal manning experiment did not come, as advertised, with a robust training pipeline for the crew and advanced technology that will aid in the crew reduction. The only thing that happened was the crew reduction. The training worsened as the Navy moved towards self-taught computer based training compared to classroom instruction with fleet experts as instructors or facilitators. Fewer personnel means more work variety attended by less number of people, which means less job opportunity for personnel to specialize in specific area of their rating. It took seven years for the Navy to admit that the optimal manning concept was a failure.[7] Even with the admission of the optimal manning failure, ships did not regain most of their personnel.

As the Navy patterned its management style on corporate America by accomplishing more with less, the top six roll-down came about in 2009, five years after the implementation of the failed optimal manning concept in 2004. This is the third factor that eroded technical experts in the fleet. The top six roll-down policy authorized the top six enlisted paygrades from E-4 to E-9 specific billets be filled with personnel of lower paygrades than what the billet requires. Prior to implementation of this policy, three E-8s or E-9s led each of the three logistics divisions—Aviation Support, Stock Control, and Materiel—onboard an aircraft carrier Supply Department. Post implementation, either E-8s but mostly E-7s filled these positions. The technical expertise difference between an E-7 and E-9 is at least six years. In the case of Aviation Support Division Leading Chief Petty Officer originally assigned to an E-9 now filled by an E-8 or E-7, that is a significant loss of expertise just in one billet. Now in macro level, multiply the years of experience lost to similar billets of E-7 to E-4 throughout the ship and the Navy. Therefore, this intentional reduction of expertise had short-term financial benefit but with long-term operational consequences.[8]

The fourth major factor that influenced the decline in the fleet's technical expertise was the cultural shift in enlisted promotion requirements. This culture change in the promotion selection criteria, performance evaluation ranking criteria, and definition of a well-rounded sailor—mandatory warfare qualifications, collateral duties, and community involvement—took the emphasis away from technical expertise compared to the mid-1990s and earlier.

Promotions from E-4 to E-6 involved two major criteria—performance evaluation and a Navy rating advancement examination raw score—and additional points for awards, time in rate, and other minor points. Promotions from E-7 to E-9 went through the selection board process where panels of senior enlisted and commissioned officers as board members reviewed each

service members' records to fill promotion slots. Again, performance evaluations were key documents in the selection board process.

While the performance evaluation is the perfect document to justify the sailor's promotion, the criteria to determine the top performer focuses on command involvement, collateral duties, warfare qualification/requalification, and community service. The technical expertise criterion does not carry enough weight to make or break the sailor's performance evaluation. Therefore, sailors in pay grades E-5 through E-8 spent more time in collateral duties, community services, and warfare qualification/requalification to stay competitive. These competing priorities—collateral duties, command involvement, community service, and warfare qualification/requalification—in the sailors' work day and promotion criteria caused further decline in technical expertise. The Fiscal Year 2016 active-duty and reserve Navy senior enlisted advancement selection board precept stated that

> You should consider eligible who have clearly demonstrated sustained superior leadership by enforcing all standards; executed Brilliant on the Basics (Command Sponsor program, Mentorship program, Command Indoctrination program, Career Development Boards, Ombudsman program, recognizing Sailors and team members);
>
> (5) Collateral Duties. Consideration shall be given to the successful accomplishment of major collateral duties affecting mission effectiveness, retention, and morale.[9]

Fiscal Year 2014 and 2015 advancement selection board had similar precepts as Fiscal Year 2016. Sailors react to the Navy's requirements; therefore, it is crucial to prioritize for mission accomplishment.

Lito Oxina, a retired Aviation Storekeeper Master Chief who served from 1971 to 1997, stated

> There are too many competing priorities these days. Warfare qualification was not a requirement to promote during my time. The promotion

> emphases were leadership and technical expertise. There were collateral duties—damage control training team, enlisted section leader, watch bill coordinator, and more—then that still exist today; however, the expectations as Leading Chief Petty Officer (LCPO) were primarily, you understand all operational aspects of your division and that you can train and lead your people. You do not promote or rank at the top of your peer without this primary requirement.[10]

Oxina is one of the technical experts in the aviation logistics community who fast-tracked to the highest rank of Aviation Storekeeper Master Chief within fifteen years. He built his technical expertise from his assignments in aviation squadrons, aircraft carriers, Navy Management System Support Office (NAVMASSO) now called Space and Naval Warfare Systems Command (SPAWAR), and as a logistics inspector for all aircraft carriers under Commander, Naval Air Force Pacific (CNAP). After twenty-six years of naval service, Oxina continued his aviation logistics expertise as a program manager for Fleet Assistance Support Team (FAST). FAST provides automated supply management training and support to all aircraft carriers under CNAP.[11]

Finally, the fifth major factor that contributed in the declining trend of technical experts in the fleet was the merged-rating implementation process or lack thereof. While the rating name change from Postal Clerk or Storekeeper to Logistics Specialist was the easiest portion of the rating merged, the transition required several considerations. First, the Navy Enlisted Classification (NEC) code assignments for Logistics Specialist with Postal Clerk and Aviation Storekeeper background were necessary but not implemented. The purpose of the NEC assignment is to distribute equitably the required expertise in the fleet for operational efficiency.

An example of mismanaged talent distribution occurred on an aircraft carrier, USS EISENHOWER (CVN 69) around 2011 and 2013.[12] Prior to the rating merger, one billet was authorized onboard an aircraft carrier for an E-7 or E-8 Postal Clerk. Post-merger

implementation, five E-7s or E-8s Logistics Specialist with Postal Clerk background granted an assignment in the same aircraft carrier at the same time. These five senior enlisted Logistics Specialist with Postal Clerk background—one E-9, two E-8s, and two E-7s—took the positions in Aviation Support, Stock Control, and Materiel divisions where Storekeeper or Aviation Storekeeper expertise were essential to train, lead, and make sound technical operational decisions. As a result, these five senior enlisted personnel with mismatched expertise in their assigned divisions were only useful in meeting administrative functions but not in the operational arena.[13]

In addition, it is necessary to assign NEC to Logistics Specialist who completed a school or training in aviation type classes—NALCOMIS or higher level of expertise in NALCOMIS operation such as Database Administrator (DBA)—and successfully completed an aviation support division tour. An additional coding system is necessary to identify the number of tours in aviation jobs. For example, the NEC for Logistics Specialist with two tours in aviation job will denote 8020B. Code 8020 (only use as an example and not an actual designated code) means aviation subspecialty and "B" signify second tour in an aviation billet. The NEC assignment is equally important to identify E-6 and above Logistics Specialist with prior Postal Clerk specialty. The NEC will allow managers in bureau of personnel and onboard the ships to plan a balanced staffing distribution according to expertise when necessary. Currently, it requires research through personnel's service records and interviews with the service members to learn the members' capabilities or line of expertise.

The training pipeline is another critical factor to set the technical foundation of junior Logistics Specialists. Impressed by information technology, the Naval Training Center at Meridian, Mississippi transitioned its logistics course from group-paced instructor-based to self-

paced computer-based teaching circa 2005. An interview with Chief Logistics Specialist Veronica Endiape, course supervisor at Naval Technical Training Center Meridian, revealed that self-paced computer-based training proved ineffective. In 2013, the Logistics Specialist's basic course reverted to the traditional group-paced instructor led training method. The self-taught learning process was susceptible to setbacks from relearning previous mistakes when there is no expert in the field to guide the new generation of Logistics Specialists. Classroom instruction with fleet experienced sailors as facilitators sets the fundamentals of jobs in the fleet. Preserving experts in the fleet is critical to the continuity and efficiency of processes and shortens the learning curve of new personnel in the job.[14]

The Navy supply community must establish a specific career path for Logistics Specialists to specialize in submarine, aviation, and surface duty assignments from pay grades E-5 to E-9. Similar to Supply Corps Officers' career path in acquisition or joint qualification officer (JQO) where after completing certain training and successful assignment in a specific billet, the officer attains a subspecialty designation. In addition, the specific career path must not only be publicized but also be officially recognized in the selection board process as part of the promotion selection criteria. For example, a sailor may chose a career path to specialize in surface, submarine, or aviation logistics. Therefore, to specialize in aviation, the specific path of assignments maybe to an aviation squadron, followed by aviation support division on a naval air station, then aviation support division on an aircraft carrier or amphibious assault ship. This concept is similar to a Logistics Specialist with a submarine career path or the former Aviation Storekeeper path. The key is to encourage two or three consecutive related assignments to gain expertise. In addition, promotion or selection boards under the Logistics Specialist rating must

view this specialized path favorably, much as a physician, who began as a general practitioner, then specializes eventually as a surgeon or oncologist.

This specialization in surface, submarine, or aviation logistics will maximize the rating merger efficiency. Not only that it provides the fleet with needed expertise—in surface, submarine, and aviation—similar to the pre-rating merger, the Navy can also cross train or assign aviation experts to surface arena or vice versa because all logistics sailors now belongs to one rating, the Logistics Specialist rating. Unlike when there were Surface and Aviation Storekeepers in separate ratings, cross assignment opportunity was rare.

If the Navy's desire is to preserve technical expertise in the fleet, the performance evaluation ranking and promotion selection criteria must change. As mentioned earlier, sailors react to what is important to the Navy's leadership. The current performance evaluation ranking system and promotion selection criteria place emphasis on collateral duties, community service, warfare qualification/requalification, and college education. Therefore, it is necessary to reverse the importance with heavy emphasis on technical expertise and leadership. This means when a sailor's primary job technical performance is mediocre, in spite of superior performance in collateral duties, compliance in warfare qualification or requalification, the technical inferiority becomes a promotion disqualifier.

The author interviewed fleet experts in logistics operations to determine the root cause or causes of declining technical expertise in the logistics arena. One of the interviewees was an aviation logistics expert, Lieutenant Commander Rolando Pagaduan. Pagaduan was a prior enlisted Senior Chief Aviation Storekeeper and received his commission under the Limited Duty Officer program. His choices of challenging assignments transformed his aviation supply knowledge from apprentice to expert in the field. His enlisted assignments include an aviation

squadron, two aircraft carriers, and Aviation Storekeeper "A" School instructor. His commission officer aviation tours were on an aircraft carrier, two amphibious assault ships, naval air station, and hand selected as logistics training, policy, and inspection officer for the aircraft carrier fleet under Commander, Naval Air Force Pacific.[15] Pagaduan was the perfect candidate to gain credible information specific to the transformation and challenges in the series of rating mergers within the Logistics Specialists rating.

Pagaduan mentioned that smaller commands with fewer assigned Logistics Specialists felt the major adjustments. Before the rating merger, it was easier to determine replacements for personnel leaving the division. There are certain expectations in level of technical expertise based on the member's pay grade. Now with mixed specialties, one has to know what background—Postal Clerk, Surface Storekeeper, or Aviation Storekeeper—the incoming personnel have, especially in supervisory pay grades E-5 and above, before job assignment. The major impact of the rating merger was on small ships with only one Chief Logistics Specialist assigned. An example is when the command expects a Surface Storekeeper background to fill the sole technical billet onboard and instead gains a Logistics Specialist with Postal Clerk experience or vice versa.[16]

The next logistics technical expert interviewed was Chief Warrant Officer Five (CWO5) Lisa Edenhofer. CWO5 Edenhofer, a former enlisted Surface Storekeeper Chief has thirty years of combined enlisted and commissioned naval service. Her enlisted logistics tours in Stock Control divisions onboard three surface ships established her expertise as Surface Storekeeper. Her commissioned officer logistics assignments include a supply ship, two aircraft carriers, and twice as Logistics Training, Policy, and Inspection Officer at Commander Naval Air Force Pacific. Edenhofer rose from the Surface Storekeeper community and successfully maneuvered

in all challenging jobs within the logistics arena to include aviation logistics. According to Edenhofer

> The rating mergers were cost saving initiatives. The more general the sailors, the easier to detail. In addition, technology got better and accountability got easier. Aviation community support is good. A huge infrastructure of retired senior enlisted Aviation and Surface Storekeepers serve as full-time employees at Commander Naval Air Force provided training to sailors assigned to aircraft carriers and aviation support divisions at naval air stations. However, the surface ships with no robust training support group could really feel the pain of the declining expertise in the fleet. The Logistics Specialist is too water downed when the Postal Clerk merged with the Storekeeper. The Surface Storekeeper took on a lot already when merged with the Aviation Storekeeper in 2003.[17]

Edenhofer added that the old expectations of a Division Leading Chief Petty Officer who can analyze logistics management reports and train subordinates on operational actions to correct deficiencies is disappearing. "No one knows what to do in their jobs when they report onboard until the training and long learning curve happened right before the ship's deployment."[18]

What else does the fleet need to do to fix this declining trend of technical expertise? Primarily, nothing beats internal motivation to become a technical expert. Basic "A" or advance "C" schools in the Navy supply rating provided fundamentals only either before or after the rating mergers. Therefore, a job experience in the fleet, where the bow meets the wave, is the battleground for gaining and honing technical expertise. Selecting key divisions—Stock Control, Aviation Support, and Materiel—were good starting points to learn highly technical positions within each division as Functional Area Supervisor, Financial Clerk, Database Administrator, billets in various units of Aviation Support Division and more.

Continue to leverage existing logistics support structures. Currently, retired senior Aviation Storekeeper and Surface Storekeeper civilian full time employees at the fleet headquarters' level (Type Commander) provide training to fleet sailors. In addition, retired

senior enlisted Aviation Storekeepers and Surface Storekeepers were hired as contractors for the Technical Assistance for Repairable Processing (TARP) representatives that come onboard, train, and work with the Logistics Specialists during ships' training exercises and deployments. The TARP program is one of the most successful programs in the logistics arena, and saved the Navy millions of dollars through strict accountability of high value repair parts in the shipment pipeline. TARP representatives' valuable training to fleet sailors bridged some of the technical knowledge gaps in the fleet.

In spite of the labor and expertise cuts throughout the Navy, why do some commands manage to succeed while others fail? It is about the people and the leadership that comprise the team. Given the current issues that leaders and junior sailors have to deal with, leaders and subordinates alike must apply these basic principles: Stay away from the three biggest teamwork degraders—Blaming, Excuses, and Ego (BEE). Instead, focus in the daily application of the three basic principles—Hard work, Attitude, and Train your relief (HAT)—that successful navy organization have in common.

How does the BEE and the HAT combination work? First, leaders and sailors must stop looking for something or someone to blame when inefficiencies happened or major problem/failure occurs. Blaming will not resolve anything but rather cause hate, discontent, and eventually breaks the team spirit. When a major problem happens, avoid falling into the blame game and instead immediately focus to find the root cause and the solution to the problem. Then take action. Attitude towards solving a problem situation is one of the most critical traits of a successful problem solver and contributor in an organization.

It is easy to find excuses why things seem impossible to accomplish or when faced with difficult challenges. STOP! This is when hard work and attitude comes into play. Face the

challenges head on and get things done whatever it takes - as long as the solution is within legal and safety boundaries. It is important for the entire team, not only the leaders but also subordinates and peers to catch themselves or each other when the team is about to take the excuses or blaming path. Stop then refocus to the real issue.

Then there is Ego, the last negative factor of the BEE. Ego stops people from learning. When someone thinks he or she knows everything, that is the moment when a person stops to listen and learn new things. To gain expertise in any field, one must exercise humility and listen more than talk. During job turnover, it is important for incoming personnel to absorb as much information as possible and learn from the predecessor (good or bad). Of course, keep the good information and put it into practice, and then learn from the bad practices or information and stay away from duplicating the mistake. Training someone's relief is the final and most critical task of the person leaving an organization. Consider an assignment to any organization as complete and successful only when a predecessor leaves an organization with a good turnover that reduced the incumbent's learning curve to a minimum.

In conclusion, the sailors' main purpose is to perform technical jobs in the Navy. The expectations of the Chief Petty Officer community are to provide technical expertise, lead, and train junior sailors to become technical experts and be the future generation chiefs. However, as the Navy's technical experts continue to diminish and most of the new generation Chief Petty Officers are more generalized managers rather than technical experts, who will train the junior sailors and become the Navy's backbone? The Navy must implement the NEC assignment to manage and balance the right expertise in the fleet, evaluate the validity of warfare requalification requirement, and emphasize on technical expertise in performance evaluation and

promotion selection criteria. In the meantime, individual commands apply the BEE and the HAT basic principles.

Appendix A

The following charts illustrate the assessment results of logistics operations onboard seven aircraft carriers. Out of thirteen divisions in the Supply Department of an aircraft carrier, about 85% of Logistics Specialists were assigned to three major logistics divisions—S-1 Stock Control, S-6 Aviation Support, and S-8 Materiel. The overall assessments of each logistics divisions in seven aircraft carriers depicted in figure 1 ranges its satisfactory assessment grades from low eightieth to mid-ninetieth percentile with the exception of two grades in the high-sixtieth and mid-seventieth percentile. While most ships received satisfactory grades in overall assessments of each logistics divisions, further details of the assessment checklists for each logistics divisions revealed unsatisfactory marks on operational processes requiring E-6 to E-8 levels of expertise. These lower marks when combined with hundreds of checklist items in each division became unnoticeable on the surface, but crucial technical processes.[19]

Figure 2, 3, and 4 displayed checklist items representing technical processes within each divisions in the Supply Department with three or more ships, out of seven total inspected from 2012 to 2014, failed to satisfy the requirements of the specific assessment checklist. Unsatisfied assessment checklist items could only mean three things to the subject matter experts, an external organization of logistics experts from Commander Naval Air Force assessing the aircraft carrier fleet: First, sailors unintentionally ignore the process due to lack of expertise to perform the tasks

or understanding the importance and effect of the processes in the overall operation. Second, competing priorities forced the sailors to set aside or take short cuts on crucial steps in the process. Third, sailors decided not to do their job due to laziness. These assessment results correlates to the overall technical expertise of Logistics Specialists assigned onboard aircraft carriers in the United States Navy.

For confidentiality, consecutive numbers from one through ten replaced the real hull number of the ten ships identified in the succeeding charts.

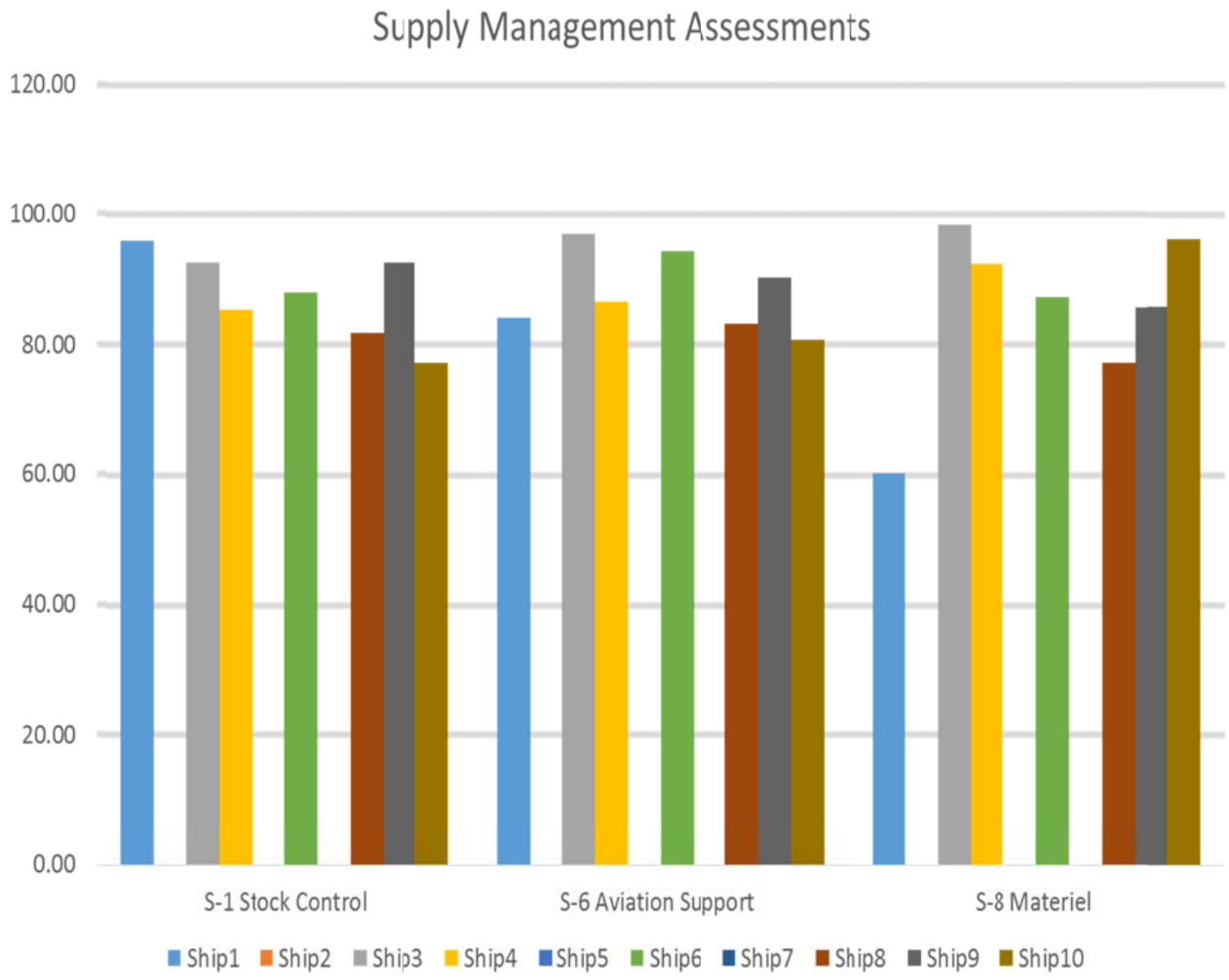

Figure 1. Supply Management Assessment (SMA) grades of all seven ships inspected by Commander Naval Air Force logistics subject matter experts from 2012 to 2014.

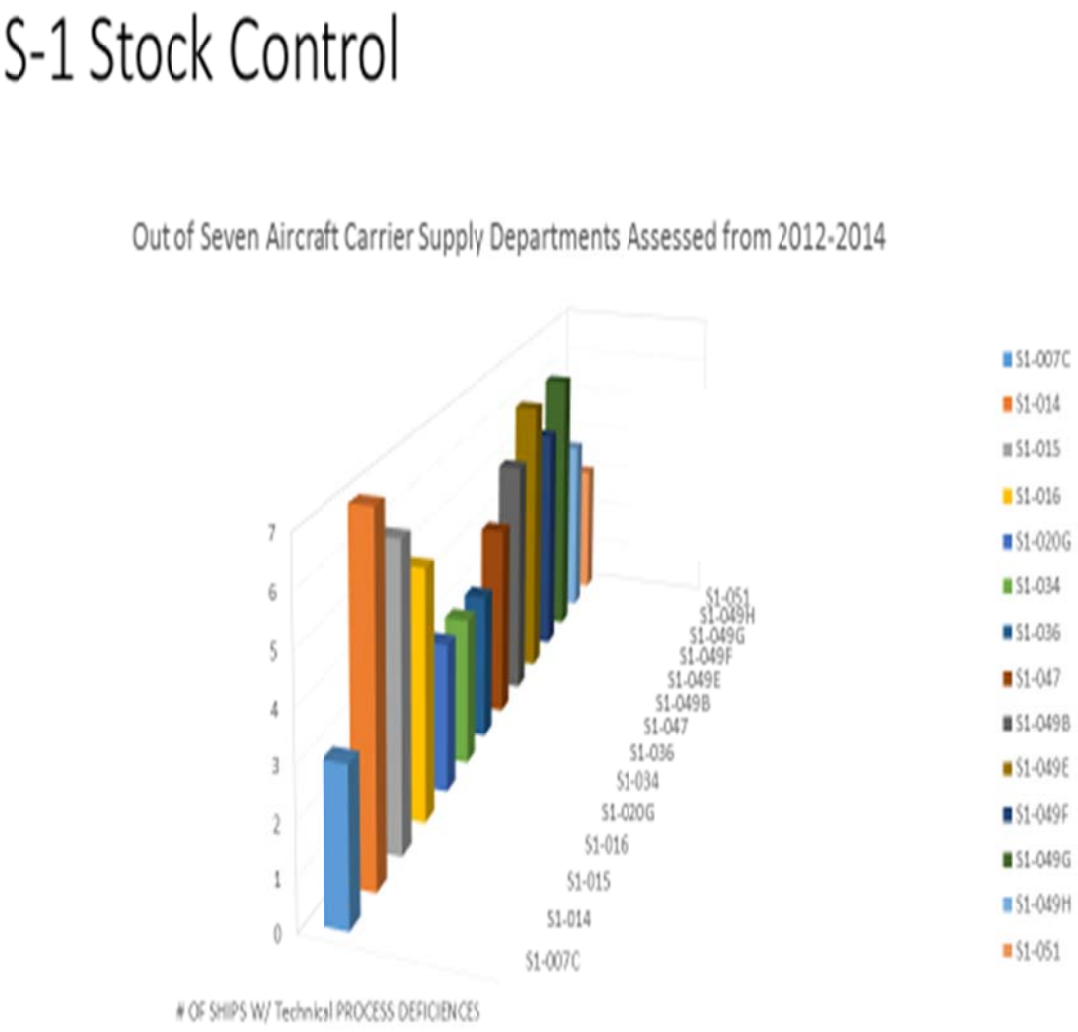

Figure 2. The chart above depicts unsatisfactory results of fourteen checklist items corresponding to deficiencies in technical processes that require levels of expertise ranging from E-6 to E-8 Logistics Specialist. The chart displayed the number of ships that did not meet the process standard of the corresponding assessment checklist items. Not included in this chart are assessment checklist items with two or less ships that did not meet the process standard. Only checklist items with three or more ships out of seven total inspected from 2012-2014 were considered.

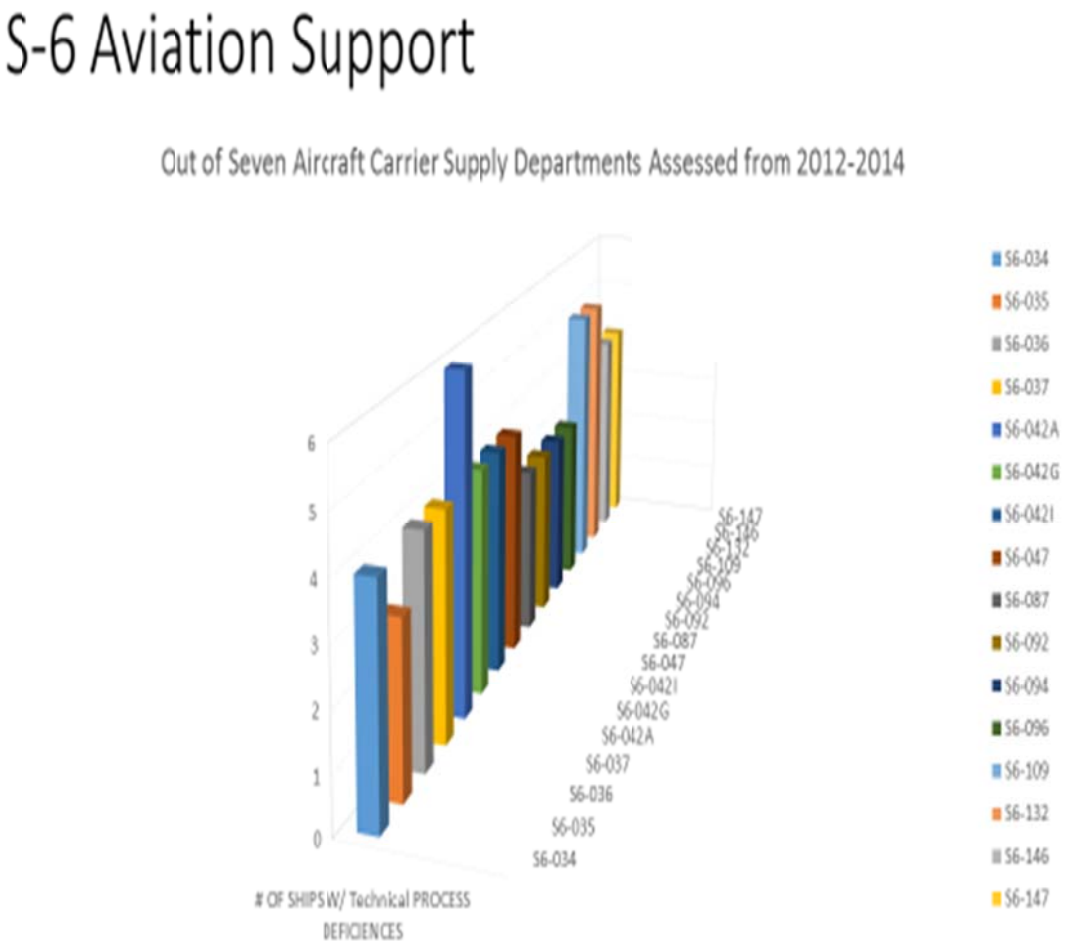

Figure 3. The chart above depicts unsatisfactory results of sixteen checklist items corresponding to deficiencies in technical processes that require levels of expertise ranging from E-6 to E-8 Logistics Specialist. The chart displayed the number of ships that did not meet the process standard of the corresponding assessment checklist items. Assessment checklist items with two or less ships that did not meet the process standard were not included in this chart. Only checklist items with three or more ships out of seven total inspected from 2012-2014 were considered.

S-8 Materiel

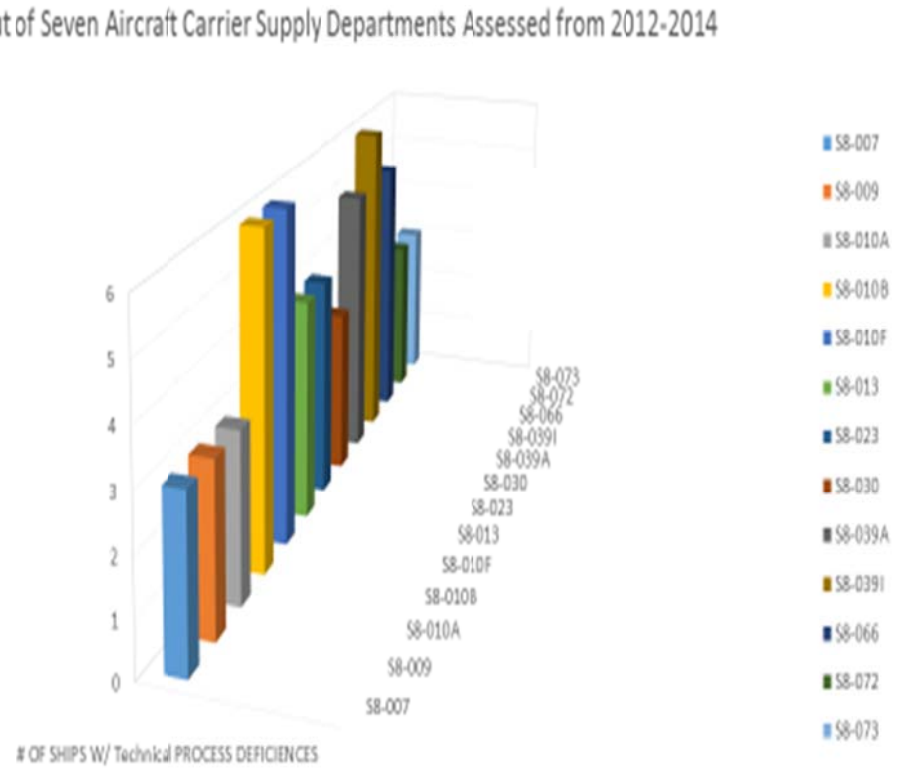

Figure 3. The chart above depicts unsatisfactory results of sixteen checklist items corresponding to deficiencies in technical processes that require levels of expertise ranging from E-6 to E-8 Logistics Specialist. The chart displayed the number of ships that did not meet the process standard of the corresponding assessment checklist items. Assessment checklist items with two or less ships that did not meet the process standard were not included in this chart. Only checklist items with three or more ships out of seven total inspected from 2012-2014 were considered.

Appendix B

Tables 1 to 3 below described the specific SMA checklist items as cited in Figures 2 to 4 in Appendix A.

S-1 STOCK CONTROL DIVISION										
# of Unsat Ships	ITEM No.	TOPIC AREA & EVALUATOR FINDING	Available Points	Ship 1	Ship 2	Ship 3	Ship 4	Ship 5	Ship 6	Ship 7
		III: INVENTORY VALIDITY								
	S1-007	Are spot checks conducted and action taken to verify or correct stock item on-hand balances when the following situations occur:								
3		c. Stock requisitions with overaged shipping status?	3	3	3	1.5	3	1	3	2
		VI: MORNING REPORTS								
7	S1-014	Are Stock Control Review Listings reviewed and annotated by S-1 personnel? Are annotated listings retained for two months?	6	3	3	2	2	5	3	0
6	S1-015	Is each transaction on the Suspense Listing processed properly and annotated with corrective action taken?	6	6	3	3	2	5	3	3
5	S1-016	Are suspended transactions deleted without justification?	3	3	0	3	0	2	0	0
	S1-020	Are the following TYCOM Stock Item Table (SIT) SUB Audit Utility Reports worked, annotated and within standards?								
3		g. RPT 08 - ATC 6/7/8 linked to ATC 1/2/3/4/5.	1	1	1	1	0	0	1	0
3	S1-034	Are NSNs on the Batch Change Notice Error reports reprocessed in RSupply? Are the Batch Change Notice Error reports annotated with corrective action taken?	5	5	5	2.5	5	4	5	4
3	S1-036	Is the FEDLOG current and being used to verify discrepant SIT conditions?	3	0	2	3	3	3	2	3
		A. REQUISITION MAINTENANCE, RECEIPT								
4	S1-047	Are Automated Follow-ups generated twice-monthly and processed properly? Is the existing requisitions status reviewed prior to releasing follow-up?	3	3	2	3	3	2	2	0
	S1-049	Are the following Active Requisition Table (ART) Audit Reports for Stock Non-DLR, and Direct Turn Over (DTO) within standards?								
5		b. Report 05 - Outstanding AO with AE1 BA status > 59 days past SHP/ESD/STS.	5	5	3	5	2.5	3	3	2
6		e. Report 11 - Outstanding AO with AE1 BB/BP/BV > SHP/ESD/STS.	5	5	3	2.5	2.5	4	3	2
5		f. Report 15 - Outstanding AO with AB/AS/AU status > 45~59 days past SHP/ESD/STS.	5	5	3	2.5	5	3	3	3
6		g. Report 16 - Outstanding AO with AB/AS/AU status > 59 days past SHP/ESD/STS.	5	5	3	2.5	2.5	2	3	2
4		h. Report 17 - Outstanding AO with X72 or DRA and No X71.	5	5	3	5	5	2	3	2
3	S1-051	Are dummy receipts prepared properly after required research?	3	3	3	0	3	2	3	0

Table 1: Extracted from Commander Naval Air Force Instruction 4440.2B, Appendix D

S-6 AVIATION SUPPORT DIVISION										
# of Unsat Ships	ITEM No.	TOPIC AREA & EVALUATOR FINDING	Available Points	Ship 1	Ship 2	Ship 3	Ship 4	Ship 5	Ship 6	Ship 7
4	S6-034	**Does division meet requisition validity for requisitions with no status (greater than 7 days = zero).**	10	10	10	5	10	0	0	0
3	S6-035	**Does division meet requisition validity for DLR requisitions with overaged status. (greater than 30 days CONUS and 45 days OCONUS = zero).**	10	10	10	5	10	10	0	5
4	S6-036	**Does division meet requisition validity for Consumable requisitions with overaged status. (greater than 60 days CONUS and 90 days OCONUS = zero).**	10	10	10	5	10	0	0	5
4	S6-037	**Are TYCOM ART AUDIT reports processed and worked according to direction?**	10	10	5	5	10	10	0	0
	S6-042	Do storerooms meet the following criteria:								
6		**a. Ensure maximum utilization of available space**	2	1	2	0	0	0	0	0
4		**g.** Are all components labeled properly and have IBS barcode labels with the NSN?	2	1	2	0	2	0	0	2
4		**i.** Are all components in storerooms locations in RFI condition? Are components properly bubbled wrapped or in approved containers?	3	3	3	2	3	0	0	0
4	S6-047	**Is the IBS Receiving Module used to perform Receipt in Process (RIP processing)? Are all DTO and stock material received onboard processed via IBS (RIP function)?**	3	3	3	0	0	3	0	0
3	S6-087	Are components stowed to protect from environmental and physical damage? Are Gear in shop (GIS) components properly identified as an AWP component? Are they protected from damaged?	3	1	3	3	3	0	3	2
3	S6-092	Does AWP utilize the DIFM Report and the AWP Proposed Candidates for Transpose and Cannibalization Report to identify potential cannibalization actions? Is the report annotated and retained for one month?	2	2	2	2	0	2	0	0
3	S6-094	Is AWP coordinating with RMB concerning disposition of DLR duplicate shipments or MTIS components?	2	2	2	0	0	2	2	0
		VII. REPAIRABLE MANAGEMENT BRANCH (RMB)								
3	S6-096	Does the S-6 Division manage Aviation Depot Level Repairables (AVDLRs), Surface Depot Level Repairables (DLRs) and Field Level Repairables (FLRs)?	5	5	5	2	5	0	5	3
5	S6-109	**Are NRFI Surface DLRs turned into RMB within the prescribed timeframe?**	5	3	0	5	0	0	5	2
5	S6-132	Is the AVCAL Percentage/Analysis Report (JSI220) reviewed monthly to focus on AVCAL range and depth by RIC? Are NIINs without RIC researched and corrected?	2	0	0	0	0	0	2	2
4	S6-146	**Is the Repairable Stock Requisition Status Report (RSRSR) produced weekly and worked accordingly? Is it forwarded to CNAF as required?**	5	3	5	0	3	5	5	0
4	S6-147	**Is an ADHOC ran and corrected monthly to identify materiel with on hand quantity in S-8 and bogus locations?**	10	1	10	5	10	0	10	0

Table 2: Extracted from Commander Naval Air Force Instruction 4440.2B, Appendix D

S-8 MATERIEL DIVISION										
# of Unsat Ships	ITEM No.	TOPIC AREA & EVALUATOR FINDING	Available Points	Ship 1	Ship 2	Ship 3	Ship 4	Ship 5	Ship 6	Ship 7
3	S8-007	Are the Monthly/Mid-month Change Notice Action reports reviewed and action taken for items that affect physical properties of materiel, i.e., superseded NIINs, UI changes, COG migrations? Are these transactions initialed by person who made the correction?	5	5	5	5	3	3	5	0
3	S8-009	Are Defective Material Summaries (DMS) properly screened, processed, and annotated with action taken and submitted when required? Are DMS retained on file for the current and prior fiscal year?	5	5	5	4	0	5	5	0
		II: SHELF LIFE MANAGEMENT								
	S8-010	Has a Shelf-life Program been established for managing Type I and Type II shelf-life material? Does it meet the following requirements?								
3		**a.** Is monthly drawdown being conducted to identify material expiring each month?	5	5	5	0	0	3	5	5
6		**b.** Is a monthly ADHOC produced that shows shelf-life items in stock without a corresponding shelf-life expiration LMC?	5	0	3	0	0	0	0	5
6		**f.** Do all material requiring shelf-life management have LMC assigned?	5	0	3	0	0	0	0	5
		III: SECURITY								
4	S8-013	Is a Key Control Log properly used? Does it indicate the name of the person checking the key out, the storeroom, and the time and day the key was checked in and out?	2	0	2	0	2	0	2	0
		V: RECEIVING								
4	**S8-023**	**For CVNs not utilizing MPC, is all DTO and stock materiel received onboard RIP'd with IBS? Is CVN "Desk Top Guide" being utilized?**	10	10	0	10	0	10	0	0
		VI: INTEGRATED BARCODE SYSTEM (IBS)								
3	S8-030	**Are all stock materiel receipts processed via IBS Stow function?**	10	10	10	0	10	10	5	0
		VII: STOREROOM MANAGEMENT								
	S8-039*	Do storerooms meet the following criteria for effective storeroom management?								
5		**a.** Neatness, preservation, stowage, and overall appearance and cleanliness.	10	0	10	4	5	8	5	10
6		**i.** Ready for sea conditions.	10	5	10	0	7	7	5	5
		XI: Q-COSAL								
5	**S8-066**	**Are Q-COSAL items stowed in a unique location separate from other material?**	5	0	5	4	0	3	0	5
3	**S8-072**	**Does Q-COSAL on-hand plus on-order equal 100%?**	2	2	2	2	2	0	0	0
3	**S8-073**	**Does the Q-COSAL custodian have an effective Shelf-Life management program?**	5	0	5	2	5	0	5	5

Table 3: Extracted from Commander Naval Air Force Instruction 4440.2B, Appendix D

[1] Edward Flynn, "Supply Community Merges Resources," *America's Navy*, June 2003, http://www.navy.mil/submit/display.asp ?story_id=8286
[2] Lisa Edenhofer (Chief Warrant Officer Five, Training and Policy Officer of Commander Naval Air Force Pacific), interviewed by LCDR Horacio Tan, February 18, 2015.
[3] Chief of Naval Operations, *Navy Enlisted Warfare Qualification Programs*, Instruction 1414.9, August 10, 2010. http://doni.daps.dla.mil/Directives/01000%20Military%20Personnel__%20Support/01-400%20Promotion%20and%20Advancement%20Programs/1414.9.pdf
[4] Ibid.
[5] Karsten, Joshua. "Fleet Master Chief Earns ESWS Qualification." *Seahawk Umitaka*, May 2014, https://seahawkumitaka.wordpress.com/2014/05/28/fleet-master-chief-earns-esws-qualification/
[6] Commander Naval Facilities Engineering Command. *SEABEE Combat Warfare Qualification*, Instruction 1410.1A, August 2, 2013, 9.
[7] CTR1(SW) H. Lucien Gauthier III, "Viewed From the Deckplates," *U.S. Naval Institute*, June 26, 2011. http://blog.usni.org/2011/06/26/guest-post-viewed-from-the-deckplates
[8] Ibid.
[9] Chief of Naval Personnel, *FY-16 Active-Duty and Reserve Navy Senior Enlisted Advancement Selection Board Precept*, January 20, 2015. http://www.public.navy.mil/bupers-npc/boards/activedutyenlisted/Documents/FY-16/FY16%20Enlisted%20Advancement%20Core%20Precept.pdf
[10] Lito Oxina (Retired Aviation Storekeeper Master Chief and Fleet Assistance Support Team Program Manager of Commander Naval Air Force Pacific), interview by LCDR Horacio Tan, February 18, 2015
[11] Ibid.
[12] Lisa Edenhofer (Chief Warrant Officer Five, Training and Policy Officer of Commander Naval Air Force Pacific), interviewed by LCDR Horacio Tan, February 18, 2015.
[13] Ibid.
[14] Veronica Endiape (Logistics Specialist Chief Petty Officer, Course Supervisor at Naval Technical Training Center Meridian, MS), interview by LCDR Horacio Tan, February 23, 2015.
[15] Rolando Pagaduan (Lieutenant Commander, Training, Policy, and Inspection Officer of Commander Naval Air Force Pacific), interview by LCDR Horacio Tan, February 18, 2015.
[16] Ibid.
[17] Lisa Edenhofer (Chief Warrant Officer Five, Training and Policy Officer of Commander Naval Air Force Pacific), interviewed by LCDR Horacio Tan, February 18, 2015.
[18] Ibid.
[19] Commander Naval Air Force, *Supply Operations Manual*, Instruction 4440.2B, Appendix D, May 22, 2012.

Bibliography

Bureau of Naval Personnel. *Mission and Function of Navy Manpower Analysis Center (NAVMAC).* Instruction 5450.49C, March 21, 2007.

Chief of Naval Operations. *Navy Enlisted Warfare Qualification Programs.* Instruction 1414.9, August 10, 2010. http://doni.daps.dla.mil/Directives/01000%20Military%20Personnel%20Support/01-400%20Promotion%20and%20Advancement%20Programs/1414.9.pdf

Chief of Naval Personnel. *FY-16 Active-Duty and Reserve Navy Senior Enlisted Advancement Selection Board Precept*. January 20, 2015. http://www.public.navy.mil/bupers-npc/boards/activedutyenlisted/Documents/FY-16/FY16 %20Enlisted%20Advancement%20Core%20Precept.pdf

Commander Naval Air Force. *Supply Operations Manual*. Instruction 4440.2B, May 22, 2012.

Commander Naval Facilities Engineering Command. *SEABEE Combat Warfare Qualification*. Instruction 1410.1A, August 2, 2013.

Ewing, Philip. "Surface Navy: 'We're not good to go.'" *DOD BUZZ.com*, July 2011. http://www.dodbuzz.com/2011/07/12/surface-navy-were-not-good-to-go/

Fellman, Sam. "VCNO: Optimal Manning is Over." *Navy Times*, January 2011. http://archive .navytimes.com/article/20110111/NEWS/101110316/VCNO-Optimal-manning-over

Flynn, Edward. "Supply Community Merges Resources." *America's Navy* (2003): http://www.navy.mil/submit/display.asp?story_id=8286

Karsten, Joshua. "Fleet Master Chief Earns ESWS Qualification." *Seahawk Umitaka*, May 2014. https://seahawkumitaka.wordpress.com/2014/05/28/fleet-master-chief-earns-esws-qualification/

Roth, Margaret. "Only Highly Trained Need Apply in Navy's 'New World' of Optimal Manning." *SeaPower*. December 2004. http://www.military.com /NewContent/0,13190,NL_Optimal_121304,00.html