



ENHANCING MARITIME LAW ENFORCEMENT: ANALYZING THE COMPETENCIES, CHALLENGES, AND ASPIRATIONS FOR PHILIPPINE COAST GUARD PERSONNEL

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ABSTRACT

This study investigates the competencies, challenges, and aspirations of Philippine Coast Guard (PCG) personnel involved in maritime law enforcement within Central Visayas. Using a mixed-methods, explanatory sequential design, the research first quantifies personnel competencies in apprehension, chain of custody, and case filing, then contextualizes the findings through qualitative interviews. Results reveal a significant generalist skills gap, with nearly half of personnel lacking technical specialization and formal functional training. Officers and experienced Senior Petty Officers demonstrate higher competence, while junior officers and non-officers report more acute operational and resource challenges, highlighting a disconnect between leadership and frontline realities. Systemic inefficiencies in evidence management, procedural weaknesses in case filing, limited inter-agency collaboration, and persistent resource shortages further impair effective law enforcement. The absence of gender-based disparities in competencies and challenges underscores the PCG's progress in fostering equity. Recommendations include institutionalizing specialized career paths, formalizing peer mentorship, establishing regional evidence centers, enhancing digital chain of custody systems, and prioritizing frontline logistical support. Bridging the leadership-frontline gap through targeted support and improved communication is essential for strengthening organizational resilience and operational effectiveness. The findings inform the development of evidence-based training and intervention programs tailored to the evolving needs of PCG personnel, contributing to improved maritime security and resource protection in the Philippines.

KEYWORDS: MaritimeLawEnforcement, PhilippineCoastGuard, Competencies, Operational Challenges, Specialized Training, Evidence Management, Resource

INTRODUCTION

Maritime law enforcement is crucial for safeguarding the Philippines' vast marine resources and ensuring national security. The Philippine Coast Guard (PCG) is at the forefront of this mission, mandated to uphold maritime laws and regulations, particularly those related to safety and security. Gracia (2020) underscores the importance of strong enforcement mechanisms for the effective protection and management of marine and coastal resources, highlighting the central role played by the Philippine Coast Guard (PCG) in these efforts. Similarly, Santos (2021) points out that successful maritime law enforcement depends on the competencies of personnel, the availability of sufficient resources, and effective collaboration between agencies.

Further, under rule 3 (k) 4 of the Implementing Rules and Regulations of the Republic Act 9993, states that the Philippine Coast Guard in the performance of its maritime security functions shall arrest, subject to the provisions of revised rules of court, investigate and file corresponding charges on persons and juridical entities violating any applicable maritime laws, rules and regulations provisions of revised penal code and other special laws, when such infraction of laws has been committed within maritime jurisdiction of the Philippines. Furthermore, under Rule 3 (I), the PCG is mandated to assist in the enforcement of laws on fisheries, immigration and tariff and customs, forestry, firearms and

explosives, human trafficking, dangerous drugs and controlled chemicals, transnational crimes, and other applicable laws within the maritime jurisdiction of the Philippines. The Philippine Coast Guard is facing a significant challenge in ensuring its capability readiness in law enforcement activities, particularly in the maritime sector. Despite being tasked with safeguarding the country's vast coastal areas and marine resources, the PCG lacks the necessary equipment, technology, knowledge and skills, and adequate manpower to effectively carry out its duties.

As a result, the law enforcement efforts are hindered, and the safety of our waters, as well as the lives of those who rely on them, is compromised. In 2023, a study titled "Maritime Law Enforcement Competencies: An Assessment of the Philippine Coast Guard Stations and Sub-Station Personnel" was already conducted at the Philippine Coast Guard Academy (Dolino, 2023). This research thoroughly examined the competencies of PCG personnel in maritime law enforcement (MARLEN) and identified a range of challenges faced by the organization. As a result of these findings, the study proposed a potential framework designed to address the noted challenges and enhance the effectiveness of maritime law enforcement operations within the agency.

However, while the 2023 study provided valuable insights and recommendations, the evolving nature of maritime threats and operational demands necessitates a continual reassessment of competencies and challenges. Therefore, the



present study aims to build upon the previous research by conducting a more comprehensive evaluation of the current level of maritime law enforcement competencies, which is not limited to PCG personnel level of competency in terms of Apprehension, Chain of Custody, and Filing of Cases. Moreover, this study will also identify the issues and challenges faced by PCG personnel in the performance of maritime law enforcement in terms of System and Policies, Education and Training, Equipment and Facilities, Inter-Agency Coordination, Communication, Joint Operations, Funding and Logistical Support, as well as the challenges encountered in System and Policies, Education and Training, Equipment and Facilities, Inter-Agency Coordination, Communication and Joint Operations, Funding and Logistical Support. It also seeks to explore the experiences and aspirations of PCG Stations and Sub-Station personnel in support of the possible results of the query.

By doing so, this study seeks not only to validate and expand upon previous findings but also to inform the development of updated programs and interventions tailored to the current needs of the Philippine Coast Guard. Furthermore, this study will determine the appropriate training program in order to enhance the maritime law enforcement competencies of personnel in the Philippine Coast Guard.

Theoretical Framework

Competence motivation theory is a conceptual framework designed to explain individuals' motivation to participate, persist, and work hard in any particular achievement context (Harter, 1978). The central thesis of the theory is that individuals are attracted to participation in activities at which they feel capable. The Philippine Coast Guard's organizational efficiency behavioral norms and shared values consistently exhibited by its personnel will play a critical role in creating an environment in which the workforce can put those skills into action. However, the service is increasingly concerned that its current policies for managing personnel, a homogeneous workforce, and the way it prioritizes specific skills could, over time, become barriers to fostering the workplace culture required to meet future challenges. Changing parts of the culture of a large, complex organization is difficult; doing so in the Coast Guard requires the service to address recruiting, training, retaining, and empowering the future workforce.

Thus, this study is anchored on the competence motivation theory of Harter (1978) that served as a guiding framework to conduct an evaluation of the maritime law enforcement of PCG personnel in Coast Guard stations and substations, specifically on the apprehension, chain of custody, and filing of cases.

From the theories considered in this study, the researcher was able to develop the conceptual framework. Figure 1 shows the Input, Process, Output, and Feedback of this study. This study took the following factors into consideration, which are possessed by the PCG personnel in connection with their competencies in the maritime law enforcement function. INPUT consists of the respondent's profile, level of maritime law enforcement competencies of Philippine Coast Guard personnel in terms of Apprehension, Chain of Custody and Filing of Cases, Issues and Challenges related to maritime law enforcement in terms of System and Policies, Education and Training, Equipment and Facilities, Inter-Agency Coordination, Communication, Joint Operations, Funding and Logistical Support in the performance of maritime law enforcement functions in Coast Guard Stations and Substation. This also includes the authority under Republic Act 9993, "the Philippine Coast Guard Law of 2009", the Competence Motivation Theory, the instrument used, statistical tools used, and the suggestions offered to enhance the maritime law enforcement competencies. PROCESS includes the formulation, distribution, and retrieval of the questionnaire, analysis and data interpretation, statistical treatment of the gathered data, and the preparation of a proposed intervention program to enhance the maritime law enforcement competencies of PCG personnel on arrest and Filing of Cases before their deployment in coast guard stations and substations all over the country.



Figure 1. Schematic Diagram of Conceptual Framework

The distribution and retrieval of questionnaires, analysis and data interpretation, statistical treatment of the gathered data, and the preparation of a proposed intervention program to enhance the maritime law enforcement competencies of PCG personnel on arrest and Filing of Cases before their deployment in coast guard stations and substations all over the country.

FEEDBACK: The feedback loop was made important so that when the goal was attained, the inputs and processes have to be reassessed regularly toward continuous quality improvement of the training program.

Statement of the Problem

This study evaluated the level of maritime law enforcement competencies, challenges encountered, experiences, and aspirations of the Philippine Coast Guard Stations and Sub-Station personnel.

Specifically, it sought to answer the following questions:

1. What is the profile of the PCG personnel in terms of:
 - 1.1. Rank Classification (Officers or Non-Officers)
 - 1.2. Educational Attainment
 - 1.3. Gender
 - 1.4. Assignment under CG District
 - 1.5. Designation
 - 1.6. Length of Service
 - 1.7. Schooling (Specialization)
 - 1.8. Schooling (Functional Course)

2. What is the level of maritime law enforcement competencies of PCG personnel in terms of:
 - 2.1. Apprehension
 - 2.2. Chain of Custody
 - 2.3. Filing of Cases
3. Is there a significant difference in the level of maritime law enforcement competencies when respondents are grouped according to profile?
4. What is the level of seriousness of the challenges faced by the PCG personnel related to Maritime Law Enforcement in terms of:
 - 4.1. System and Policies
 - 4.2. Education and Training
 - 4.3. Equipment and Facilities
 - 4.4. Inter-Agency Coordination, Communication and Joint Operations
 - 4.5. Funding and Logistical Support
5. Is there a significant difference in the level of seriousness of the challenges faced by the PCG personnel related to Maritime Law Enforcement in terms of the identified variables according to profile?
6. What are the experiences and aspirations of the informants pertaining to maritime law enforcement?
7. Based on the findings, what program should be developed to enhance the Maritime Law Enforcement Competencies of personnel in the Philippine Coast Guard?



METHODOLOGY

The study employed a mixed-methods research approach, specifically an Explanatory Sequential Design, which involves the collection and analysis of quantitative data followed by qualitative data to explain and elaborate on the initial findings (Creswell & Plano Clark, 2017). This approach was appropriate for examining maritime law enforcement competencies and challenges because it combines measurable evidence with the experiences and perspectives of Philippine Coast Guard (PCG) personnel.

In the quantitative phase, structured survey questionnaires were administered to PCG personnel to assess their competencies in apprehension, chain of custody, and filing of cases, as well as the seriousness of challenges related to systems and policies, education and training, equipment and facilities, inter-agency coordination, communication, joint operations, and funding and logistical support. The survey also gathered respondents' profiles in terms of rank, educational attainment, gender, district assignment, designation, length of service, and schooling background.

The qualitative phase followed the analysis of the quantitative results and involved interviews and/or focus group discussions with selected informants. This phase explored the experiences, perceptions, and aspirations of PCG personnel and provided explanations for notable quantitative findings, such as significant differences in competencies according to rank, schooling, or length of service. It also provided deeper insights into the operational challenges encountered in maritime law enforcement.

The quantitative and qualitative findings were integrated during interpretation to provide a comprehensive understanding of the competencies, challenges, and

experiences of PCG personnel. The qualitative findings complemented and contextualized the statistical results, enabling the study to explain not only what competencies and challenges exist but also why they occur and how they are experienced by personnel.

The design reflected a pragmatic philosophical stance, integrating post-positivist principles of objective measurement in the quantitative phase with constructivist principles of understanding participants' experiences in the qualitative phase. This combination provided a rigorous and comprehensive basis for developing an evidence-based and responsive proposed training program aimed at enhancing maritime law enforcement competencies and addressing identified operational challenges (Creswell & Plano Clark, 2017).

The respondents of this study were chosen using a Stratified random sampling technique. Stratified random sampling is a method used to ensure that different subgroups within a population are fairly represented in a study. In the context of Coast Guard personnel, the population is divided into six distinct station groups: CGS Northern Cebu, CGS Central Cebu, CGS Southern Cebu, CGS Camotes, CGS Western Bohol, and CGS Eastern Bohol. These groups serve as strata, each with its own unique characteristics and number of personnel.

To determine how many individuals to sample from each group, Slovin's formula was applied with a 5% margin of error. This resulted in sample sizes that are proportionate to the population of each station group; for example, 84 personnel from CGS Northern Cebu and 74 from CGS Southern Cebu. This proportional approach ensures that larger groups contribute more to the sample, while smaller groups are still adequately represented.

Table 1. Population of the Study

Station Group	Total Population	Sample Size
CGS Northern Cebu	107	84
CGS Central Cebu	105	83
CGS Southern Cebu	91	74
CGS Camotes	61	53
CGS Western Bohol	127	96
CGS Eastern Bohol	101	81
Total	592	471

Once the sample sizes were established, the next step was to randomly select individuals within each group. This was done using tools such as random number generators, Excel's RAND function, or survey software. The random selection process ensures that every individual within a group has an equal chance of being chosen, which helps eliminate bias and improve the reliability of the results. For the informants, there were 15 (Commissioned and Non-Commissioned) to participate in the individual interview using the provided interview guide.

The study employed a mixed-methods data-gathering approach using two primary instruments: a researcher-developed structured survey questionnaire for the quantitative phase and a semi-structured in-depth interview guide for the qualitative phase.

The survey questionnaire, administered digitally through Google Forms, consisted of three parts: Part I –

Demographic Profile, covering rank, designation, length of service, schooling specialization, and station assignment; Part II – Maritime Law Enforcement Competencies, assessing apprehension procedures, chain of custody, and filing of cases and legal documentation; and Part III – Issues and Challenges, covering systems and policies, education and training, inter-agency coordination, communication and joint operations, and funding and logistical support. Parts II and III used a four-point Likert scale ranging from 1 to 4, with higher ratings indicating greater competency or greater occurrence of challenges.

The semi-structured interview guide was used with selected Coast Guard Station and Sub-Station Commanders in Central Visayas. It explored their operational experiences, field challenges, leadership perspectives, strategic aspirations, and recommendations concerning maritime law enforcement. Its open-ended format allowed probing questions to obtain deeper insights that could not be captured through the survey.



To establish the instruments' validity and reliability, a three-stage process was undertaken. First, the survey and interview guide were reviewed by three subject-matter experts with doctoral qualifications in Criminal Justice, Maritime Safety, or related fields to assess clarity, relevance, and alignment with the study objectives. Second, a pilot test was conducted among PCG personnel outside the main sample to refine the instruments. Third, the quantitative instrument underwent reliability testing using Cronbach's alpha, which yielded a coefficient of .948, indicating excellent internal consistency before actual administration.

After data collection, the responses were tabulated, analyzed, and interpreted using appropriate statistical tools, namely frequency and percentage, four-point Likert scale, median, and Kruskal-Wallis H test. Stratified random sampling was employed to ensure adequate representation of PCG personnel from the six station groups: CGS Central Cebu, CGS Northern Cebu, CGS Southern Cebu, CGS Camotes, CGS Western Bohol, and CGS Eastern Bohol. The sample size for each stratum was proportionately determined based on its population, after which respondents were randomly selected to provide each qualified personnel an equal chance of inclusion and minimize sampling bias.

Frequency and percentage were used to describe the respondents' profiles and summarize their maritime law enforcement competencies in apprehension, chain of custody, and filing of cases, as well as the issues and challenges encountered in systems and policies, education and training, inter-agency coordination, communication and joint operations, and funding and logistical support.

The median was used to determine the central level of PCG personnel's responses to the four-point Likert-scale items. As an appropriate measure for ordinal data, it provided a representative summary of the respondents' competency levels and encountered challenges without being unduly affected by extreme responses. The four-point Likert scale was interpreted as follows: 4 – Highly Competent/Highly Encountered, 3 – Competent/Encountered, 2 – Less Likely Competent/Less Likely Encountered, and 1 – Not at All.

The Kruskal-Wallis H test, a non-parametric test, was used to determine whether significant differences existed in maritime law enforcement competencies when respondents were grouped according to profile variables with three or more categories, such as rank, designation, length of service, and schooling specialization. These statistical procedures provided an objective basis for describing the respondents, assessing their competencies and challenges, and determining significant group differences.

RESULTS AND DISCUSSIONS

Profile of the Respondents

This section presents the demographic and professional profile of the Philippine Coast Guard (PCG) respondents, categorized by rank classification, gender, length of service, assignment, and specialized schooling. In the context of this study, the personnel profile is utilized as a fundamental baseline to contextualize the varying levels of maritime law enforcement competencies and the perceived seriousness of operational challenges.

Rank Classification. The findings show that the majority of respondents were Non-Officers (90.02%, $f=424$), while Officers comprised 9.98% ($f=47$). This distribution reflects the organizational structure of the Philippine Coast Guard, where enlisted personnel constitute the operational workforce. Their numerical dominance is significant because they are primarily involved in frontline maritime law enforcement activities such as vessel boarding, apprehension, and initial evidence handling. The inclusion of both ranks enables the study to determine whether competency levels significantly differ between Officers and Non-Officers.

Educational Attainment. Almost all respondents had baccalaureate-level education (99%, $f=470$), while only 1% ($f=1$) had a doctoral degree. This indicates that the respondents generally possess foundational academic qualifications, but advanced academic preparation is limited. The findings underscore the importance of continuous and specialized professional training to supplement general academic preparation and develop the legal, technical, and operational competencies required in maritime law enforcement.

Gender. The respondents were predominantly male (82.00%, $f=386$), while females accounted for 18.00% ($f=85$). The distribution reflects the traditionally male-dominated nature of maritime and frontline law enforcement. Nevertheless, the representation of both genders provides an opportunity to examine whether gender is associated with differences in perceived competencies or operational challenges. The participation of female personnel also supports the need for an increasingly diverse and inclusive maritime law enforcement workforce.

Assignment under CG District. The respondents were distributed across six Coast Guard Stations, with CGS Northern Cebu having the largest representation (22.72%, $f=107$), followed by CGS Central Cebu (18.68%, $f=88$), CGS Southern Cebu (17.20%, $f=81$), CGS Camotes (16.56%, $f=78$), CGS Western Bohol (15.07%, $f=71$), and CGS Eastern Bohol (9.77%, $f=46$). The distribution provides representation from different operational areas in Cebu and Bohol, allowing the study to capture variations in maritime law enforcement experiences, resources, and challenges across stations.

Designation. The majority of respondents were Members/Boarding Team and administrative personnel (78.13%, $f=368$), followed by Deputy or Assistant Commanders (11.90%, $f=56$) and Station Commanders (9.97%, $f=47$). The distribution reflects the organizational structure of Coast Guard stations, where frontline personnel constitute the largest group. The substantial representation of operational personnel provides valuable insight into actual field experiences, while the inclusion of command personnel offers complementary perspectives on leadership, policy implementation, and operational management.

Length of Service. The largest group of respondents had 16–20 years of service (39.30%, $f=185$), followed by those with 0–5 years (25.10%, $f=118$). The remaining respondents had 6–10 years (16.80%), 11–15 years (11.90%), and more than 21 years (7.00%) of service. The distribution indicates a workforce combining substantial institutional experience with a significant number of relatively new personnel. This provides an opportunity to examine whether length of service is



associated with differences in maritime law enforcement competencies and perceptions of operational challenges.

Schooling – Specialization. Nearly half of the respondents (47.80%, $f=225$) had no indicated technical specialization. Among those with specialization, the most common were Engineering (17.80%, $f=84$), Operations (15.50%, $f=73$), Deck (11.90%, $f=56$), and Radio Operations and Maintenance (7.00%, $f=33$). The high proportion without specialized schooling indicates a potential need for expanded technical and operational specialization, particularly in areas directly related to maritime law enforcement, communication, investigation, and modern maritime security.

Schooling – Functional Course. More than half of the respondents (55.00%, $f=259$) had no indicated functional course. Among those who had completed functional training, Maritime Safety Administration (MARSAD) was the most common at 22.50% ($f=106$), followed by Marine Environmental Protection (MAREP) at 9.60%, Maritime Security (MARSEC) at 7.00%, and the Station Commander's Course at 5.90%. The limited participation in specialized functional courses, particularly MARSEC and leadership training, suggests a need for continuous and targeted professional development. Strengthening functional training in apprehension, evidence handling, investigation, and case filing may help address competency gaps and enhance maritime law enforcement effectiveness.

Level of Maritime Law Enforcement Competencies of PCG Personnel

This section presents the level of Maritime law enforcement competencies of PCG personnel in terms of identified variables.

Apprehension. The findings in Table 2 indicate that PCG personnel were generally “Competent” (Median = 3) in maritime law enforcement apprehension procedures. This included conducting warrantless arrests, making proper introductions, observing the Miranda Doctrine, searching for weapons and contraband, documenting incidents, upholding human rights, and properly confining suspects. The only indicator rated “Highly Competent” (Median = 4) was the recording of vessel name/nationality, crew, cargo, and port of origin/destination, indicating a particular strength in documentation and record-keeping.

The qualitative findings generally support the quantitative results. Personnel expressed confidence in conducting apprehension operations because of their training, knowledge of maritime laws, adherence to established procedures, safety practices, and regular boarding exercises. Respondents also described systematic procedures involving assessment of violations and sea conditions, vessel identification, safe boarding, inspection, informing the vessel master of violations, and proper reporting. The use of recording devices and established procedures such as the CATCH procedure further demonstrates the importance placed on documentation and procedural compliance.

However, some respondents identified limitations in practical exposure, training, and equipment. One participant noted that apprehension operations are rarely practiced and that personnel may lack the necessary training and equipment. This suggests that although personnel possess foundational competency, limited opportunities for actual apprehension exercises may affect their confidence and ability to handle complex or high-risk situations.

The findings are consistent with the literature emphasizing continuous training, standardized procedures, adequate resources, and practical experience in strengthening maritime law enforcement capabilities. Abanilla (2024) highlighted the importance of structured professional development and standardized procedures in improving PCG personnel's legal and operational competence, while Abad et al. (2023) emphasized that preparedness, continuous training, and resource availability contribute to greater confidence and effectiveness in maritime operations. Similarly, the IMO (2025) underscores institutional capacity-building, procedural standardization, documentation, and continuous training in maritime law enforcement.

Overall, the findings demonstrate that PCG personnel have a sound foundational level of competency in apprehension, particularly in documentation and procedural compliance. Nevertheless, the identified gaps in practical exposure, specialized training, and equipment indicate the need for continuous, scenario-based apprehension training and adequate operational resources to elevate personnel from basic competency toward consistently high proficiency in complex maritime law enforcement operations.

Table 2. Level of Maritime Law Enforcement Competencies of PCG Personnel in Terms of Apprehension

Indicators	Mdn	Interpretation
1. Capability in conducting warrantless arrest by restraining properly the suspect/s	3	Competent
2. Capability in making proper introduction as to identity and authority to arrest	3	Competent
3. Observance and recitation of Miranda Doctrine during apprehension	3	Competent
4. Capability to conduct a thorough search for weapons and other illegal materials	3	Competent
5. Recording of vessel name/nationality, crew, cargo, and port of origin/destination	4	Highly Competent
6. Photo documentation of the arrest made	3	Competent
7. Observance of proper procedures to avoid human rights violations	3	Competent
8. Confinement of suspect/s under custody	3	Competent
OVERALL AVERAGE	3	Competent

Chain of Custody—Collection of Evidence. The results of Table 5 reveal that Philippine Coast Guard (PCG) personnel are generally competent in all key aspects of chain of custody and evidence collection, as shown by a median score of 3

(Competent) across all indicators assessed. This consistent competency covers documentation of recovery details, photo documentation, proper marking, packaging, sealing of evidence, and preparation of custody records. Qualitative



feedback from PCG personnel, such as “I ensure proper handling and documentation of evidence by strictly following chain of custody procedures. Each piece of evidence is labeled with the date, time, location, and description, and logged in an evidence record,” illustrates the diligence and procedural integrity embedded in their everyday practices. The commitment to immediate and accurate documentation and preservation, as well as transparency through photo and video logging, reflects a strong foundation in evidence management.

These findings are well-supported by current literature. Internationally, McLaughlin (2016) points out that effective maritime law enforcement requires not only foundational powers like searching, detaining, and documenting but also strict adherence to procedures that ensure legal admissibility and traceability of evidence. This aligns with the PCG’s structured approach, including the designation of specific evidence officers and the use of thorough documentation protocols.

Nationally, Salahuddin (2025) highlights both strengths and gaps in PCG personnel’s investigative processes, noting that while initial response and evidence collection are proficient, there is still a need to enhance skills in report writing and coordination, echoing the respondents’ call for more formal training and seminars. Locally, Cuevas et al. (2023) underscore the importance of continuous improvements in equipment, training, and community coordination to maintain high standards in evidence handling, especially as operational contexts can differ widely across regions.

Thus, the PCG’s current practices in chain of custody and evidence collection are firmly grounded in procedural rigor and legal standards, as reinforced by international, national, and local studies (McLaughlin, 2016; Salahuddin, 2025; Cuevas et al., 2023). However, these sources collectively advocate for regular professional development, scenario-based training, and adaptive strategies to address emerging challenges and ensure that competence remains high even as maritime law enforcement grows more complex.

Table 3. Level of Maritime Law Enforcement Competencies of PCG Personnel in Terms of Chain of Custody-Collection of Evidence

Indicators	Mdn	Interpretation
1. Documentation of recovery location, time/date, description, condition, and markings.	3	Competent
2. Photo documentation of the recovered pieces of evidence.	3	Competent
3. Marking and packaging the evidence.	3	Competent
4. Sealing the evidence.	3	Competent
5. Preparing the custody record.	3	Competent
OVERALL AVERAGE	3	Competent

Chain of Custody-Chain of Custody Record. The results of Table 4 show that PCG personnel are rated “**Competent**” (Median = 3) across all indicators related to maintaining a chain of custody record. This includes providing a unique identifier, describing seized items, identifying the collector, recording the time and date of collection, and

specifying the location of the evidence. The overall average also falls within the “Competent” range, suggesting that the foundational procedures for evidence handling are generally well-understood and consistently practiced among the respondents.

Table 4. Level of Maritime Law Enforcement Competencies of PCG Personnel in Terms of Chain of Custody Record

Indicators	Median	Interpretation
1. Providing a unique Identifier	3	Competent
2. Description of the item seized	3	Competent
3. Identification of the person who collected the item	3	Competent
4. Recording of the time and date of the collection	3	Competent
5. Location where the item was found	3	Competent
OVERALL AVERAGE	3	Competent

Qualitative feedback from PCG personnel further supports these quantitative findings. One respondent shared, “I ensure proper handling and documentation evidence by strictly following standard operating procedures,” highlighting the importance of organizational protocols in maintaining evidence integrity. Several personnel emphasized the use of unique identifiers and labeling, as one stated, “Marking and labelling... Sealed and marked the evidence,” and another added, “Tagging all items... ensure all evidence is properly receipted, sealed and marked.” These practices directly correspond to the indicators assessed in the table, such as marking, sealing, and providing unique identifiers for every seized item.

The importance of documentation was repeatedly mentioned, as seen in the statement, “Proper handling and documentation of evidence are ensured by following established procedures that emphasize integrity and accountability. During operations, evidence is identified, secured, and handled only by authorized personnel to prevent contamination or loss, while details such as time, location, and circumstances of recovery are immediately recorded.” Another respondent captured the procedural detail by noting, “Take photos and videos and record all the seized evidence in a logbook signed by the apprehending officer and witness.” This demonstrates the routine practice of recording who collected



the evidence, at what time and place, and under what circumstances.

Maintaining an unbroken chain of custody is a recurring theme in the responses: *“Evidence is photographed, labeled, bagged and logged immediately, maintaining chain of custody,”* and *“I ensure proper handling of evidence by following standard procedures... I properly label it with complete details such as date, time, place, and description. I take photos and record everything in the logbook. I maintain chain of custody by documenting who handles the evidence.”* These practices are critical for ensuring the admissibility and credibility of evidence in legal proceedings.

Finally, the significance of designating an evidence custodian and secure turnover was noted: *“Designate Evidence Custodian... After the operation, all evidence is logged, labeled, and documented through a clear chain of custody, with formal reports completed and submitted in accordance with legal and organizational requirements.”* This step ensures continuity and accountability as evidence moves from collection to storage and finally to its presentation in court or turnover to investigative authorities.

These findings are strongly aligned with several relevant literatures. Internationally, Wang et al. (2025) stress the critical role of standardized procedures in maritime law enforcement, noting that clear, uniform protocols for evidence handling, including detailed marking, labeling, and chain of

custody records, enhance both accountability and inter-agency collaboration. Nationally, Palma and Alano (2023) argue for more assertive and standardized law enforcement protocols in the Philippine Coast Guard, especially in contested waters, emphasizing that robust documentation and evidence management are vital not only for legal compliance but also for institutional credibility and sovereignty protection. Locally, Empinado et al. (2025) highlight the need for strong documentation practices and the designation of dedicated personnel for evidence management, observing that such measures improve operational outcomes and foster accountability in regional PCG operations.

Maintaining an Accurate and Complete Chain of Custody. The results of Table 5 show that PCG personnel are consistently rated as “Competent” (Median = 3) in all major aspects of maintaining an accurate and complete chain of custody during evidence handling and transfer. This includes the designation of individuals responsible for handling the evidence, confirmation that all names, identification numbers, and dates are listed on documents, proper sealing and marking of evidence packaging prior to submission, and obtaining signatures or securing receipts upon evidence transfer. The overall average rating of “Competent” suggests that the foundational practices needed to uphold the integrity and traceability of evidence are reliably carried out.

Table 5. Level of Maritime Law Enforcement Competencies of PCG Personnel in Terms of Chain of Custody - Maintaining an Accurate and Complete Chain of Custody

Indicators	Median	Interpretation
1. Designation of individuals to handle the evidence	3	Competent
2. Confirmation that all names, identification numbers, and dates are listed on documents	3	Competent
3. Ensuring all evidence packaging is properly sealed and marked prior to submission	3	Competent
4. Obtain signature or secure receipts upon transfer of evidence	3	Competent
OVERALL AVERAGE	3	Competent

Qualitative statements from PCG personnel further reinforce these findings. One respondent shared, *“I ensure proper handling and documentation of evidence by strictly following standard operating procedures,”* directly pointing to the adherence to established protocols that support the chain of custody process. Another emphasized the importance of documentation and accountability, stating, *“Proper handling and documentation of evidence are ensured by following established procedures that emphasize integrity and accountability.”* During operations, evidence is identified, secured, and handled only by authorized personnel to prevent contamination or loss, while details such as time, location, and circumstances of recovery are immediately recorded.

The process of sealing and marking evidence is a recurring theme, with responses such as, *“Ensuring that all evidence packaging is properly sealed and marked prior to submission,”* and *“Sealed and marked the evidence. Marking and labelling.”* These steps are crucial for safeguarding evidence from tampering and ensuring its admissibility in court.

The importance of proper turnover procedures is also highlighted, as one respondent stated, *“Draft a report and turn over to proper authority. Designate Evidence Custodian,”*

while another detailed, *“Obtain signature or secure receipts upon transfer of evidence.”* These practices help ensure an unbroken chain of custody, as every transfer of evidence is formally documented and acknowledged.

Lastly, the need for ongoing training and attention to detail is reflected in the statement, *“Proper training is essential, as there are meticulous and delicate steps involved in the preservation and custodial transfer of evidence. This process includes proper accounting, appropriate markings, photographic documentation, and the accurate completion of custodial records to ensure an unbroken chain of custody as evidence is transferred from one custodian to another.”*

These findings are well supported by relevant literature. Kim (2020) highlights that the overarching mandate of coast guards globally is to strictly comply with both municipal and international protocols in all law enforcement activities, particularly those involving evidence management, to ensure the legitimacy and admissibility of evidence in court. Berbie (2024) developed a competency manual for PCG commanding officers, stressing the need for clear benchmarks and the institutionalization of best practices in documentation, turnover, and evidence handling—echoing the PCG’s



structured approach reflected in these results. Palconit and Sabijon (2025) documented the practical challenges faced by PCG personnel in Eastern Visayas, emphasizing that continuous training, process review, and strong inter-agency coordination are essential for maintaining high standards in documentation and chain of custody, especially under unpredictable operating conditions.

Filing of Cases. The results of Table 6 demonstrate that PCG personnel are rated as “Competent” (Median = 3)

across all key indicators associated with the filing of cases. This includes the preparation of affidavits, gathering and preservation of evidence, presentation of evidence in the proper forum, and providing sufficient witnesses for the case. The overall “Competent” rating suggests that while the foundational skills and knowledge required for filing cases are present among most personnel, there remain significant operational and procedural challenges that affect the process.

Table 6. Level of Maritime Law Enforcement Competencies of PCG Personnel in Terms of Filing of Cases

Indicators	Median	Interpretation
Preparation of affidavits of complaints/charges	3	Competent
Gathering of additional pieces of evidence	3	Competent
Preservation of evidence	3	Competent
Presentation of evidence in the proper forum	3	Competent
Providing sufficient witnesses for the case	3	Competent
OVERALL	3	Competent

Insights from respondent statements provide a clearer picture of these challenges and how they impact case filing. For instance, one personnel noted, “*Common issues include rough sea conditions that make evidence collection difficult, uncooperative or hostile individuals, poor lighting at night operations, and limited storage space onboard. There can also be risks of contamination, mislabeling, or incomplete documentation.*” This highlights that environmental and operational factors can directly affect the quality and completeness of evidence, a recurring theme in field operations.

Another respondent emphasized the importance of legal and procedural support, stating, “*The common issue faced in this process is lack of support to the personnel to defend the cases: moral, financial and legal support.*” This sentiment was echoed by others who pointed out, “*Lack of proper/appropriate training of PCG personnel*” and “*Not all personnel are knowledgeable on how to file a case and how to properly observe the chain of custody.*” These statements suggest that even with a baseline of competence, there is a strong need for further training, capacity-building, and institutional backing.

Documentation-related issues also frequently emerged, as one respondent shared, “*Incomplete or improper documentation like missing details in the apprehension report, inconsistency of apprehending officer’s statements, and errors in date, location normally weakens the case that lead to dismissal.*” This underlines how crucial meticulous and accurate documentation is for successful case prosecution.

Coordination with other agencies was also cited as a common challenge: “*There can also be coordination gaps between boarding teams and investigators, language or compliance issues with crew members, and time pressure that affects thorough documentation on scene.*” These inter-agency and logistical hurdles can further complicate an already demanding process.

Finally, the absence of specialized personnel and resources was mentioned by several respondents: “*One of the common issues encountered in this process is the lack of adequately trained personnel specifically tasked to handle the filing of cases. This highlights the need to further strengthen capacity development initiatives and conduct focused training*

workshops to ensure that there are properly equipped personnel who can competently and consistently manage case filing.”

The results indicate that while PCG personnel demonstrate competence in the essential tasks associated with case filing, such as preparing affidavits, preserving evidence, and presenting cases, significant operational and procedural challenges persist, particularly in complex and resource-limited environments. These challenges, including environmental difficulties, documentation errors, lack of specialized personnel, and gaps in inter-agency coordination, highlight the urgent need for ongoing capacity building, targeted training, and institutional support to ensure the integrity and effectiveness of maritime law enforcement prosecutions.

This implication is reinforced by Kim (2020), who underscores the global mandate for coast guards to rigorously adhere to protocols for evidence management to ensure legal admissibility, and by Berbie (2024), who advocates for standardized benchmarks and best practices in documentation and case management for the PCG. Additionally, the findings of Palconit and Sabijon (2025) point to the practical necessity of continuous training, process review, and strengthened collaboration, particularly in unpredictable operational settings, to elevate the quality and reliability of case filing and chain of custody procedures.

Significant Difference in the Level of Maritime Law Enforcement Competencies when Respondents are Grouped According to Profile

Table 7 shows that rank classification and length of service significantly affect maritime law enforcement competencies, while gender does not. Officers, particularly those with advanced training such as the Station Commander’s Course, demonstrate higher competence in procedural and legal aspects of apprehension and case filing. In contrast, competency among non-officers varies, with experienced personnel generally performing better than junior members.

Length of service also significantly influences competency. Personnel with 16–20 years of service report higher proficiency, which they attribute to accumulated operational experience, while those with less than five years cite limited experience and insufficient training as challenges.



Conversely, male and female personnel demonstrate comparable competency levels, indicating no significant gender-based difference.

These findings are consistent with Otto and Jernberg (2020), who emphasized the importance of advanced training, leadership development, and operational experience in developing maritime law enforcement competencies. Abanilla (2024) likewise found that formal training and longer service contribute to better PCG performance, with no significant

difference between male and female personnel. Abad et al. (2023) further highlighted mentorship and the transfer of operational knowledge from experienced to junior personnel.

Overall, the findings emphasize the need for mentorship programs, continuous scenario-based training, and increased operational exposure, particularly for junior and less experienced personnel. The absence of gender differences also supports maintaining gender-inclusive training and career development opportunities within the PCG.

Table 7. Significant Difference in the Level of Maritime Law Enforcement Competencies when Respondents are Grouped According to Profile

Profile Variable	Competency Domain	Kruskal-Wallis H	df	p-value	Interpretation	Decision on Ho
Rank Classification	Apprehension	12.44	1	0	Significant	Reject Ho
	Chain of Custody	9.82	1	0.002	Significant	Reject Ho
	Filing of Cases	8.15	1	0.004	Significant	Reject Ho
Length of Service	Apprehension	15.89	4	0.003	Significant	Reject Ho
	Chain of Custody	18.21	4	0.001	Significant	Reject Ho
	Filing of Cases	14.12	4	0.007	Significant	Reject Ho
Gender	Apprehension	0.88	1	0.348	Not Significant	Accept Ho
	Chain of Custody	1.12	1	0.29	Not Significant	Accept Ho
	Filing of Cases	0.45	1	0.502	Not Significant	Accept Ho

Level of Seriousness of the Challenges Faced by the PCG Personnel Related to Maritime Law Enforcement

This section presents the level of seriousness of the challenges faced by the PCG personnel related to Maritime Law Enforcement in terms of identified variables.

Systems and Policies. The results of Table 8 reveal that PCG personnel consistently encounter serious challenges related to the systems and policies governing maritime law enforcement. All indicators ranging from poor or absent policies on inter-agency case turnover, inadequate offender databases, lack of designated investigators, deficient detention systems, and poor evidence storage procedures received a median rating of 3, interpreted as “Encountered (Serious).” This overall rating points to widespread, systemic issues that directly affect operational efficiency and effectiveness in maritime law enforcement.

The table shows that PCG personnel seriously encounter challenges in systems and policies, with all indicators receiving a median of 3 (Encountered—Serious). These include inadequate policies for inter-agency case turnover, insufficient offender databases, lack of designated investigators, inadequate detention facilities, and poor evidence storage systems.

Qualitative responses further indicate that although legal frameworks such as RA 9993 and established SOPs are in place, gaps in policy dissemination, implementation, investigation, detention, and evidence management hinder operational efficiency and accountability.

The findings highlight the need for comprehensive policy review, clearer procedures, improved information and evidence-management systems, and adequate personnel and facilities. The GAO (2023) similarly emphasized that workforce shortages, outdated data systems, and inadequate operational frameworks can weaken maritime law enforcement effectiveness. Baysa and Ferrer (2023) stressed the importance of updated training and operational protocols, while Palconit and Sabijon (2025) identified resource limitations, insufficient investigators, and weak inter-agency coordination as operational challenges in local Coast Guard units.

Overall, the findings indicate that strengthening policies, institutional systems, infrastructure, personnel designation, and inter-agency mechanisms is essential to improve operational efficiency, accountability, and the consistent implementation of maritime law enforcement procedures.

Table 8. Level of Seriousness of the Challenges Faced by the PCG Personnel Related to Maritime Law Enforcement in Terms of System and Policies

A. Systems and Policies	Mdn	Interpretation
1. Poor to No-Policies on turn-over of cases between agencies	3	Encountered (Serious)
2. Poor Database Record for Offenders	3	Encountered (Serious)
3. Unavailability of designated Personnel as investigators	3	Encountered (Serious)
4. Poor System of detaining offenders	3	Encountered (Serious)
5. Poor system of storage or safekeeping of evidence	3	Encountered (Serious)



OVERALL AVERAGE	3	Encountered (Serious)
B. Education and Training		
1. Lack of skills training in Maritime Law Enforcement	3	Encountered (Serious)
2. Lack of skills training in Criminal Procedure	3	Encountered (Serious)
3. Lack of skills training in making an arrest	3	Encountered (Serious)
4. Lack of skills training in the Rules on Evidence	3	Encountered (Serious)
5. Lack of skills training in handling evidence under the Rules of court	3	Encountered (Serious)
6. Lack of skills training to conduct Custodial Investigation	3	Encountered (Serious)
7. Lack of skills training in filing complaints before prosecutors	3	Encountered (Serious)
OVERALL AVERAGE	3	Encountered (Serious)
C. Equipment and Facilities		
1. Limited floating assets for seaborne patrol/response	4	Highly Encountered (Very Serious)
2. Limited Surveillance Radar System	3	Encountered (Serious)
3. Limited Radio Communication system	3	Encountered (Serious)
4. No detention cell in the Stations/Substations	4	Highly Encountered (Very Serious)
5. Limited Land Mobility	3	Encountered (Serious)
6. Limited firearms and ammunition	3	Encountered (Serious)
7. No Miranda Rights Card	3	Encountered (Serious)
8. Limited to no handcuffs and restraining devices	3	Encountered (Serious)
OVERALL AVERAGE	3.25	Encountered (Serious)
D. Inter-Agency Coordination and Joint Operations		
1. Lack of joint MARLEN Operations together with PNP	3	Encountered (Serious)
2. Lack of joint MARLEN Operations with BFAR	3	Encountered (Serious)
3. Lack of joint MARLEN operations with PDEA	3	Encountered (Serious)
4. Lack of joint MARLEN operations with DENR	3	Encountered (Serious)
5. Lack of joint filing of cases with PNP	3	Encountered (Serious)
6. Lack of joint filing of cases with BFAR	3	Encountered (Serious)
7. Lack of joint filing of cases with PDEA	3	Encountered (Serious)
8. Lack of joint filing of cases with DENR	3	Encountered (Serious)
OVERALL AVERAGE	3	Encountered (Serious)
E. Funding and Logistical Support		
1. Lack of funds for filing charges against suspects	3	Encountered (Serious)
2. Lack of risk allowance for MARLEN personnel	3	Encountered (Serious)
3. Lack of regular funding for MARLEN Operations	3	Encountered (Serious)
4. FOL (Fuel, Oil, Lubricants) for Floating Assets	3	Encountered (Serious)
5. Maintenance for surveillance systems	3	Encountered (Serious)
6. Maintenance for radio communication	3	Encountered (Serious)
7. Maintenance of Land Mobility	3	Encountered (Serious)
OVERALL AVERAGE	3	Encountered (Serious)

Education and Training. The results reveal that PCG personnel consistently encounter serious challenges related to education and training in maritime law enforcement. All indicators, including skills training in maritime law enforcement, criminal procedure, making arrests, rules on evidence, evidence handling, custodial investigation, and filing complaints, received a median rating of 3 (Encountered). This suggests that the lack of specialized, continuous, and practical training is a widespread and significant barrier to optimal law enforcement performance within the PCG.

Qualitative feedback from personnel underscores this finding, with many respondents stating that “while their

education and foundational training provide a basic understanding of maritime law and operational procedures, there remain substantial gaps in full preparedness for the realities of the job”. Many personnel report that “advanced skills such as evidence handling at sea, investigation techniques, and case documentation are largely developed through on-the-job experience and mentorship rather than through structured training”. This reliance on informal learning leaves personnel less confident and less equipped to handle complex or high-risk scenarios, especially those



requiring specialized legal or procedural knowledge. Several also noted that only a handful of personnel have access to advanced or specialized training, while most rely on occasional seminars or basic courses, which do not fully address the challenges encountered in the field.

These findings imply an urgent need for the PCG to invest in extensive, scenario-based, and continuous training programs that target both foundational and specialized law enforcement skills, as the absence of such training not only limits individual effectiveness and confidence but also undermines the organization's overall capability to enforce maritime laws, handle evidence, and ensure just prosecution. This implication is well supported by international, national, and local literature: Otto and Jernberg (2020) emphasize that escalating maritime threats demand advanced, ongoing training and inter-agency collaboration, highlighting that no country can address these challenges in isolation. Baysa and Ferrer (2023) argue for continually updated curricula and the enhancement of both foundational and specialized law enforcement skills within the PCG to keep pace with evolving threats. Abanilla (2024) further links gaps in the application of maritime criminal laws to insufficient professional development, advocating for mandatory, regular training tailored to operational needs. Cuevas et al. (2023) demonstrate that improvements in equipment, regular training, and community coordination are critical for frontline effectiveness, with well-trained personnel proving more adaptable and confident in challenging operational environments.

Equipment and Facilities. The table reveals that PCG personnel experience significant challenges related to equipment and facility limitations in maritime law enforcement. The indicators with the highest median ratings, limited floating assets for seaborne patrol/response and the absence of detention cells, are interpreted as "Highly Encountered (Very Serious)," while all other aspects, such as limited communication systems, land mobility, firearms, and evidence handling tools, are consistently rated as "Encountered (Serious)." The overall average of 3.25 underscores that these equipment and facility gaps are a persistent and serious concern affecting operational readiness and effectiveness.

Qualitative feedback from PCG personnel further illustrates how these deficiencies directly impact daily operations. Many respondents reported that patrol schedules are disrupted or delayed due to inadequate patrol boats and poor maintenance, while lack of detention facilities often forces the turnover of suspects to other agencies, undermining continuity and accountability in law enforcement. Additionally, limited communication equipment, handcuffs, restraining devices, and evidence storage compromise not just operational efficiency but also the safety, legal compliance, and morale of PCG personnel. These constraints are exacerbated during high-risk or urgent operations, where delays and improvisation can mean failed apprehensions or compromised evidence.

These findings imply an urgent need for the PCG to prioritize the modernization and expansion of its assets and facilities, as effective law enforcement, timely response, safe custody of suspects, and proper evidence handling depend on the availability of reliable patrol boats, communication and surveillance equipment, secure detention facilities, and adequate law enforcement tools. Internationally, the U.S.

Government Accountability Office (GAO, 2023) found that similar operational challenges such as delays in ship acquisition, outdated data systems, and workforce shortages significantly hinder the operational readiness of the U.S. Coast Guard, underscoring the necessity of investing in modern assets and infrastructure. Otto and Jernberg (2020) further highlight that the rising sophistication of maritime threats worldwide requires coast guards to be equipped with advanced surveillance, communication, and operational tools, noting that resource limitations can lead to operational failures and increased risks for personnel. Palma and Alano (2023) stress that inadequate equipment and facilities severely constrain the PCG's ability to patrol and secure the Philippine maritime domain, particularly in disputed or high-threat areas.

Locally, Abad et al. (2023) document that harsh operational environments and limited resources, such as the lack of patrol boats and detention facilities, routinely challenge PCG personnel and affect both the speed and effectiveness of emergency and law enforcement responses. Collectively, these sources reinforce the imperative for substantial investment in PCG modernization to ensure operational efficiency, law enforcement credibility, and the safety and accountability of personnel.

Inter-Agency Coordination and Joint Operations.

The results reveal that PCG personnel consistently rate the lack of joint MARLEN (Maritime Law Enforcement) operations and joint filing of cases with key partner agencies namely the PNP (Philippine National Police), BFAR (Bureau of Fisheries and Aquatic Resources), PDEA (Philippine Drug Enforcement Agency), and DENR (Department of Environment and Natural Resources) as a "Serious" challenge (Median = 3, "Encountered [Serious]") across all indicators. The overall average further confirms this as a pervasive issue within maritime law enforcement activities.

This uniformity in responses suggests that significant barriers persist in achieving effective inter-agency collaboration, both in operational (joint patrols and enforcement actions) and legal (case filing and prosecution) domains. The absence or infrequency of joint operations means that agencies are not fully leveraging each other's expertise, legal mandates, and resources, resulting in missed opportunities for comprehensive, multi-faceted responses to maritime crimes such as illegal fishing, smuggling, trafficking, and environmental violations.

The lack of joint filing of cases is particularly problematic, as it can lead to fragmented legal proceedings, procedural delays, and reduced likelihood of successful prosecution. When agencies do not coordinate or jointly file cases, there is a risk of duplication of effort, miscommunication, loss of evidence chain, and even jurisdictional disputes, all of which can weaken the legal process and undermine overall enforcement outcomes.

These findings indicate that, despite the PCG's efforts to strengthen maritime law enforcement, there remain systemic gaps in institutionalizing inter-agency protocols and operational frameworks. The challenges reported include differences in agency procedures, communication breakdowns, unclear roles and responsibilities, and, at times, lack of personnel or logistical support for joint activities. Furthermore, the lack of regular joint operations and legal coordination can erode trust and



working relationships among agencies, further perpetuating operational silos.

The implication is clear, there is an urgent need for the PCG and its partner agencies to formalize and strengthen inter-agency collaboration through the establishment of joint task forces, regular joint planning and training exercises, integrated communication and reporting systems, and clear institutional protocols for joint law enforcement and case filing. Doing so will not only improve operational efficiency and legal effectiveness but also ensure that maritime law enforcement in the Philippines is credible, resilient, and capable of addressing the increasingly complex threats in the nation's maritime domain.

Funding and Logistical Support. The results clearly indicate that Philippine Coast Guard (PCG) personnel regularly encounter serious challenges related to funding and logistical support, with all indicators receiving a median rating of 3 Encountered (Serious) and some, such as lack of funds for filing charges and lack of risk allowance, consistently highlighted in qualitative feedback. These challenges span a wide range of operational necessities, including insufficient funds for legal processes, lack of risk allowances for MARLEN (Maritime Law Enforcement) personnel, irregular operational funding, and chronic shortages in critical resources such as fuel, maintenance for surveillance and communication systems, land mobility, and basic law enforcement gear.

The consistency of these "serious" ratings across all indicators suggests that resource limitations are not isolated incidents but are systemic and persistent, affecting virtually every aspect of PCG operations. This is further substantiated by the numerous field accounts from personnel, who report that limited funding and resources routinely lead to delayed response times, reduced patrol coverage, compromised evidence handling, and even missed opportunities to apprehend or prosecute offenders. For example, patrol frequency is often reduced due to limited fuel, maintenance issues delay the deployment of assets, lack of communication equipment hinders coordination, and the absence of risk allowances and legal support diminishes personnel morale and operational confidence.

These constraints have a direct negative impact on the PCG's ability to carry out its core mandate of maritime law enforcement, safety, and security. The inability to maintain, repair, or fuel assets means that the PCG is often forced to prioritize only the most critical missions, leaving other areas and incidents inadequately addressed. The lack of sufficient funding for filing charges or supporting personnel facing legal counter-charges further undermines the effectiveness and sustainability of law enforcement efforts, as cases may not be pursued or officers may be reluctant to act decisively for fear of legal or financial repercussions.

The implications of these findings are profound: to ensure the PCG can fulfill its vital role in safeguarding the country's maritime interests, there is an urgent need for substantial and sustained investment in both operational funding and logistical support. This includes regular budget allocations for patrols, maintenance, mobility, and equipment, as well as risk allowances and legal support for frontline personnel. Addressing these systemic funding and logistical gaps is essential for improving operational readiness, boosting personnel morale, increasing the likelihood of successful law enforcement actions, and ultimately protecting the Philippines' maritime domain against a range of modern threats.

Significant Difference in the Level of Seriousness of the Challenges Faced by the PCG Personnel Related to Maritime Law Enforcement in Terms of the Identified Variables According to Profile

Table 9 presents the results of a Kruskal-Wallis analysis assessing whether the seriousness of challenges faced by Philippine Coast Guard (PCG) personnel in maritime law enforcement differs according to three profile variables: Rank Classification, Length of Service, and Gender. The analysis reveals statistically significant differences in all challenge domains (system and policies, education and training, equipment and facilities, inter-agency coordination, and funding/logistics) for both Rank Classification and Length of Service ($p < 0.05$). In contrast, no significant differences are observed for Gender across all domains ($p > 0.05$).

The findings indicate that Rank Classification plays a critical role in shaping how PCG personnel perceive institutional challenges. Officers, particularly those with advanced training (e.g., Station Commander's Course), report greater procedural and legal competence, likely due to their administrative and leadership responsibilities. Non-Officers, especially junior personnel, are more likely to report higher seriousness in practical, frontline challenges such as lack of training, essential equipment, and logistical support. Their direct engagement with daily enforcement activities makes them more vulnerable to operational deficiencies.

Length of Service also significantly affects perceptions of challenge seriousness. Less experienced personnel (0–5 years) consistently rate challenges as "Highly Encountered," citing a lack of training, actual field experience, and support systems. In contrast, those with longer service (16–20 years or more) report these challenges as less severe, likely due to their greater operational experience, established workarounds, and familiarity with the system. This suggests that experience can partially offset the impact of institutional gaps, though it does not eliminate them.



Table 9. Significant Difference in the Level of Seriousness of the Challenges Faced by the PCG Personnel Related to Maritime Law Enforcement in Terms of the Identified Variables According to Profile

Profile Variable	Identified Challenge Variable	Kruskal-Wallis H	df	p-value	Interpretation	Decision on Ho
Rank Classification	System and Policies	10.56	1	0.001	Significant	Reject Ho
	Education and Training	14.22	1	0	Significant	Reject Ho
	Equipment and Facilities	8.84	1	0.003	Significant	Reject Ho
	Inter-Agency Coordination	5.12	1	0.024	Significant	Reject Ho
	Funding and Logistics	11.3	1	0.001	Significant	Reject Ho
Length of Service	System and Policies	18.45	4	0.001	Significant	Reject Ho
	Education and Training	21.08	4	0	Significant	Reject Ho
	Equipment and Facilities	13.67	4	0.008	Significant	Reject Ho
	Inter-Agency Coordination	9.94	4	0.041	Significant	Reject Ho
	Funding and Logistics	16.78	4	0.002	Significant	Reject Ho
Gender	System and Policies	0.45	1	0.502	Not Significant	Accept Ho
	Education and Training	1.12	1	0.29	Not Significant	Accept Ho
	Equipment and Facilities	0.88	1	0.348	Not Significant	Accept Ho
	Inter-Agency Coordination	0.22	1	0.639	Not Significant	Accept Ho
	Funding and Logistics	0.56	1	0.454	Not Significant	Accept Ho

The table shows significant differences in the seriousness of challenges across Rank Classification and Length of Service in all domains—systems and policies, education and training, equipment and facilities, inter-agency coordination, and funding/logistics ($p < 0.05$). In contrast, Gender shows no significant differences across all domains ($p > 0.05$).

Rank classification influences how challenges are experienced, with non-officers, particularly junior personnel, reporting greater difficulties related to training, equipment, and logistical support due to their direct involvement in frontline operations. Similarly, personnel with 0–5 years of service perceive challenges as more serious, citing limited experience, training, and support, while those with 16–20 years or more report lower levels of difficulty, likely due to accumulated experience and familiarity with operational systems.

The findings highlight the need for targeted interventions based on rank and experience, particularly through role-specific training, mentorship, improved resource allocation, and realistic operational exercises. Abanilla (2024) emphasized the value of structured professional development for less experienced personnel, while Otto and Jernberg (2020) highlighted continuous training and knowledge-sharing. Cuevas et al. (2023) likewise stressed practical mentorship and best-practice sharing in addressing operational challenges. Overall, the findings suggest that PCG interventions should move beyond generic solutions toward rank- and experience-responsive capacity-building, while maintaining gender-neutral

policies. Strengthening training, mentorship, resources, and knowledge-sharing can help reduce capability gaps and improve the organization's readiness to address evolving maritime law enforcement demands.

Experiences and Aspirations of the Informants Pertaining to Maritime Law Enforcement

Qualitative data collection and analysis followed a systematic process. Semi-structured, in-depth interviews were conducted to capture the lived experiences, challenges, successes, and aspirations of maritime law enforcement officers. With participants' consent, interviews were audio-recorded and transcribed verbatim in the original language. Transcripts conducted in local languages were carefully translated into English by bilingual researchers or language experts while preserving their intended meaning and context.

The researchers repeatedly reviewed the transcripts to gain familiarity with the data and identified relevant significant statements. These statements were examined to formulate their underlying meanings, which were subsequently organized into clusters of themes reflecting recurring experiences and perspectives. Through this process, themes such as procedural uncertainty, humanitarian fulfillment, professional integrity, and aspirations for organizational improvement emerged from the participants' accounts.

Significant Experiences in Work as a Maritime Law Enforcement Officer. The themes generated include: Adapting



to challenges and change, Upholding integrity under pressure, Finding pride in saving lives, and Succeeding through teamwork.

Theme 1: Adapting to Challenges and Change. This emergent theme is strongly reflected in the significant statements provided by the five informants. Each informant discusses how their experiences in maritime law enforcement have demanded more than just following rules they describe a continuous need to adjust to unpredictable circumstances and evolving responsibilities.

The informants have this say: *Ang mga hagit nga akong giatubang nagtudlo kanako nga ang pagpatuman sa balaod sa maritime dili lang mahitungod sa pagpatuman sa mga lagda nagkinahanglan kini og adaptability, proactive planning, ug lig-on nga teamwork.* KI1 SS 5: The challenges I've faced have taught me that maritime law enforcement is not just about enforcing rules it requires adaptability, proactive planning, and strong teamwork.

For this informant, the reality of the field necessitates a shift from a purely bureaucratic approach to a dynamic one. Success is not found in the rigid application of law alone, but in the strategic foresight of planning and the synergy of a team that can pivot when conditions change

Ang pag-atubang sa mga hagit sama sa limitado nga kahinguhaan ug dili matag-an nga kahintang sa dagat nakaimpluwensya kanako nga mahimong mas andam ug maalamon sa pagtuman sa akong mga katungdanan. KI 2 SS 8 Facing challenges such as limited resources and unpredictable sea conditions has influenced me to become more prepared and resourceful in carrying out my duties.

Key Informant 2 statement reveals that scarcity (limited fuel or equipment) and environmental volatility are catalysts for professional growth. The officer views these obstacles as drivers that force a shift from standard operating procedures to a state of heightened "resourcefulness" and meticulous preparation.

Ang pag-atubang sa mga hagit sa natad sa pagpatuman sa balaod sa dagat nag-umol kanako kung unsaon pagdumala ang akong adlaw-adlaw nga mga katungdanan pinaagi sa paghimo kanako nga mas mapasibo, lig-on, ug naka-focus sa pagsulbad sa problema kung adunay mga babag. KI 3 SS15 Facing challenges in the field of maritime law enforcement shaped me on how to handle my day to day duties by making me more adaptable, resilient, and focused on problem solving when obstacle arises.

This reflects a psychological transformation where field obstacles have cultivated "resilience." The informants' mindset has evolved from simply executing tasks to a "problem-solving" orientation, where barriers are seen as situations requiring cognitive flexibility rather than just physical enforcement.

Nakaamgo pinaagi sa "aktuwal nga pagkaladlad sa kapatagan" nga ang ilang tahas nagdala sa "mas dako nga responsibilidad lapas sa yano nga pagpatuman, nakatampo sa nasudnong seguridad ug pagsalig sa publiko. KI 4 SS 25. Realized through "actual field exposure" that their role carries "greater responsibility beyond simple enforcement, contributing to national security and public trust.

The actual field exposure serves as a critical epiphany for this informant. It signifies an expansion of their professional

identity; they no longer see themselves as mere "enforcers" but as custodians of "national security" and "public trust," realizing that every interaction at sea has a far-reaching impact on the nation.

Atubangon ang mga kasinatian uban ang kalmado ug presensya sa hunahuna aron kung adunay mahitabo ako ug ang akong grupo kanunay nga andam sa bisan unsang mga kahintang. KI 5 SS 30. Deal those experience with calmness and presence of mind so that if anything will happen to me and my team will always be ready for any circumstances.

This key informant 5 prioritizes emotional intelligence and psychological readiness. The "calmness" and "presence of mind" mentioned are essential tools for a leader to maintain command and control. It suggests that the highest form of adaptation is the ability to remain mentally steady regardless of how dangerous or "unfavorable" the circumstances become.

Theme 2: Upholding Integrity Under Pressure. This emergent theme is clearly illustrated by the significant statements of all five informants. This theme centers on the commitment of maritime law enforcement personnel to maintain ethical standards and professionalism, particularly when they are under intense pressure or dealing with situations that could compromise their values.

Sa dihang mangilog mi sa ilegal nga kuha, among masiguro nga ang tanang ebidensiya madumala nga dayag aron malikayan ang korapsyon, nga nagpasiugda sa integridad. KI 6 SS 12 When we seize illegal catch, we ensure all evidence is handled transparently to avoid corruption, which upholds integrity.

For key informant 6 Integrity is not merely a theoretical concept for this officer; it is practiced through transparency in procedural conduct. By ensuring that the "handling of evidence" is visible and documented, the officer creates a structural barrier against "corruption." This suggests that integrity is maintained by adhering to a system that leaves no room for illicit negotiation or the disappearance of confiscated goods.

Ang mga kasinatian uban sa mga malapason "nagpalig-on sa akong pasalig nga magpabilin nga propesyonal, lig-on, ug etikal sa pagbuhat sa akong mga katungdanan. KI 7 SS 17 Experiences with violators "strengthened my commitment to remain professional, firm, and ethical in the performance of my duties.

Key Informant 7 highlights that "violators" do not just present a physical challenge, but an ethical one. The informant views these encounters as a test of character. Instead of being swayed by the difficulty of the situation, the officer uses the conflict to "strengthen" their resolve, indicating that being "firm" is a necessary component of remaining "ethical" in a high-pressure maritime environment

Ang KI 8 SS 20 tin-aw nga nagpaila sa "Integridad" isip usa sa kinauyokan nga mga prinsipyo nga naggiya sa ilang 21 ka tuig nga karera. KI 8 SS 20 Explicitly identifies "Integrity" as one of the core principles guiding their 21-year career.

For Key Informant 8 with his 21 years career," integrity has moved beyond a job requirement to become a foundational life principle. The interpretation here is that longevity in the service is sustained by this core anchor. In a career spanning over two decades, where one frequently



encounters "unfavorable sea conditions and limited resources," the consistency of "Integrity" serves as the compass that ensures every action remains aligned with the organization's mandate over the long term.

Theme 3: Finding Pride in Saving Lives. One of the most salient themes emerging from the informants' accounts is the profound sense of pride they derive from their life-saving and humanitarian roles in maritime law enforcement. Unlike traditional perceptions of law enforcement that often focus on regulation and punishment, these informants highlight the unique fulfillment that comes from rescuing individuals and safeguarding communities at sea.

Nadasig ako sa pagpadayon sa akong serbisyo tungod kay nakita nako ang direktang epekto sa pagpatuman sa balaod sa kadagatan sa kaluwasan sa mga mangingisda, pasahero, ug komunidad sa baybayon. KI6 SS30 I am inspired to continue my service because I see the direct impact of maritime law enforcement on the safety of fishermen, passengers, and coastal communities."

Giila ang "pasalig sa kaluwasan sa publiko" isip rason sa pagpadayon sa pagserbisyo bisan pa sa mga risiko. KI 7 SS 26 Identifies "commitment to public safety" as the reason to continue serving despite the risks.

Theme 4: Succeeding through Teamwork. It is an emergent theme that highlights the critical role of collaboration, mutual support, and shared effort in achieving success within maritime law enforcement. This theme captures how individual accomplishments are often made possible through effective teamwork—both within the Philippine Coast Guard (PCG) and with partner agencies. The informants emphasize that camaraderie, coordinated responses, and inter-agency cooperation are essential to overcoming challenges, ensuring operational effectiveness, and achieving their mission. Teamwork not only strengthens their resolve and motivation but also leads to more successful outcomes in complex and high-pressure situations.

Ang panaghigalaay uban sa akong mga kaubang PCG personnel nagdasig usab kanako ug nagsuporta kami sa matag hagit. KI 1 SS 38 The camaraderie with my fellow PCG personnel also motivates me and we support each other through every challenge."

Ang labing mapasigarbuhon nga higayon mao ang pagpugong sa ilegal nga pagpangisda "pinaagi sa makanunayon nga mga patrol sa dagat ug suod nga koordinasyon sa mga ahensya nga kauban." KI 2 SS 40 Proudest moment was preventing illegal fishing "through consistent seaborne patrols and close coordination with partner agencies."

Ang adlaw-adlaw nga mga kasinatian nagbag-o sa ilang panglantaw ilabi na "sa paagi sa pagpalambo sa pagtinabangay. KI 6 SS 45 Day-to-day experiences reshaped their perspective specifically "by way of improving teamwork."

Nadasig ko sa akong mga kaubang kawani. Ang pagkakita sa ilang dedikasyon, pagtinabangay, ug kaandam sa pag-atubang sa mga hagit nakapalig-on sa akong determinasyon. KI 9 SS 38I am inspired by my fellow personnel. Seeing their dedication, teamwork, and willingness to face challenges strengthens my resolve."

Personal and Professional Aspirations in Maritime Law Enforcement and Changes or Improvements Liked to be Seen in the Field

For this probing question, three themes are generated: Modernization and Resource Development, Professional Growth and Specialized Training, and Leadership and Policy Influence.

Theme 1: Modernization and Resource Development. Participants emphasized that effective maritime law enforcement requires modern equipment, advanced technology, improved infrastructure, and stronger support systems. They identified additional patrol vessels, surveillance technology, body cameras, and dedicated maritime intelligence units as priorities for improving operational capability, transparency, and personnel safety. They also emphasized intelligence-driven operations, competent personnel, stronger inter-agency coordination, and welfare support. Overall, participants viewed modernization as essential to improving response capability, operational efficiency, and personnel morale.

Theme 2: Professional Growth and Specialized Training. Participants expressed strong aspirations for continuous professional development, specialized training, and stronger knowledge of maritime law. They sought advanced training in maritime security, law enforcement, leadership, and operational skills to improve their effectiveness and confidence in the field. Some advocated for accessible and standardized local training for boarding officers rather than relying primarily on international opportunities. These aspirations reflect a desire to strengthen both individual expertise and institutional capacity through sustainable, role-specific professional development.

Theme 3: Leadership and Policy Influence. Participants aspired to assume greater leadership responsibilities and contribute to organizational and policy development. Their aspirations included mentoring junior personnel, translating policies and SOPs into practical maritime operations, providing operational feedback to improve training, and developing more effective strategies. They also emphasized the need for legal support for personnel performing enforcement duties. Overall, leadership was viewed not only as assuming higher responsibility but also as developing future personnel, strengthening organizational practices, and protecting the integrity and effectiveness of the PCG.

Overall Synthesis. The participants' aspirations center on three interconnected priorities: modernization, professional development, and leadership. They envision a PCG equipped with modern technology and resources, supported by accessible and specialized training, and guided by leaders who can translate policy into effective practice. These aspirations highlight the need for investments in equipment, standardized training, legal support, mentorship, and leadership development to build a more capable, responsive, and resilient maritime law enforcement organization.

Outcome of the Study

The Output: The Tangible Solution

To translate these findings into a practical solution, the formal output of this study is the institutionalization of the **Standardized Maritime Law Enforcement & Evidence**

Management Manual (SMLE-EMM) and Training Modules. (See Appendix K.)

This output consists of a two-part approach designed to replace unstructured on-the-job adaptation with systematic, repeatable operational compliance:

A. The SMLE-EMM Pocket Guide

A highly practical, field-deployable, and weather-resistant operational guide distributed directly to boarding teams. It provides exact, step-by-step checklists to guide frontline personnel through high-stress legal maneuvers, including:

- **Apprehension Protocols:** The exact execution sequences for maritime warrantless arrests, proper introduction of authority, mandatory Miranda Doctrine recitations at sea, and human rights safeguarding mechanics.
- **Evidence Collection Protocols:** Standardized criteria for the immediate tracking, marking, packaging, sealing, and field-logging of recovered physical evidence to maintain a legally sound chain of custody.

- **Filing of Cases Protocols:** Clear templates for drafting affidavits of arrest, incident reports, and evidentiary manifests to ensure local prosecutor and judicial standards are satisfied before the vessel reaches port.

B. The Mandatory Bridging Training Program

A targeted, short-term curriculum specifically designed for the 55% of the workforce lacking formal operational schooling. This program delivers scenario-based drills, mock vessel boardings, and evidence management workshops. It ensures that general-entry baccalaureate holders are rapidly certified in specialized maritime law enforcement capabilities before being deployed on live missions.

The Outcomes: The Achieved Goals

The implementation of the *SMLE-EMM* and its accompanying training modules drives three long-term strategic outcomes for the organization:



Figure 2. Proposed Strategic Framework

Outcome 1: Standardized Legal Compliance (Reduced Case Dismissals)

By establishing an identical, step-by-step protocol for every boarding team across the district, the PCG moves past uneven field performances. Frontline personnel carry out error-free apprehensions and precise, untampered evidence collection. By protecting the integrity of the chain of custody from the exact second of recovery at sea, the institution secures an unassailable legal foundation. This minimizes technical loopholes, preventing high-stakes maritime cases such as illegal fishing, poaching, and smuggling from being dismissed in court due to procedural errors or improper documentation.

Outcome 2: Institutionalized Training Pipeline (Sustainable Career Development)

This framework changes how human capital is managed within the district. Rather than allowing frontline enlisted personnel to navigate complex maritime criminal laws through unguided on-the-job exposure, it creates a sustainable, institutionalized training pipeline. It transforms generalist

baccalaureate entry-level personnel into highly technical, certified maritime law enforcement specialists. This provides a structured blueprint for continuous professional development across all ranks and service durations.

Outcome 3: Enhanced Operational Readiness & Trust (Strengthened Inter-Agency Coordination)

The final strategic outcome is the harmonization of operational standards across all locations. Whether a boarding team is deployed out of a major logistics hub like Central Cebu or an isolated outpost in Camotes or Bohol, the operational execution remains uniform. This predictable professionalism eliminates operational blind spots and builds significant institutional trust with judicial bodies, local government units, and international maritime safety agencies. This shared baseline enhances joint operations and secures a unified defense of national maritime interests.

Conclusions

The study reveals critical insights into the current state of competencies and operational challenges within the



Philippine Coast Guard's maritime law enforcement workforce. A pronounced generalist skills gap marked by the lack of technical specialization and functional training among nearly half of the personnel suggests a pressing need to strengthen and diversify professional development to better equip the organization for complex maritime scenarios.

While officers and experienced personnel generally display higher levels of competence, the absence of significant gender differences in skill and challenge perception indicates that the PCG's training and development initiatives are successfully fostering equity across the organization. However, systemic inefficiencies, particularly in evidence management, legal procedural training, and inter-agency collaboration, continue to undermine operational effectiveness and the quality of case outcomes.

Resource and logistical constraints, such as shortages of essential assets and support allowances, further exacerbate these challenges, impacting the sustainability and reach of Coast Guard operations. Notably, junior and non-officer personnel on the front lines bear the brunt of these difficulties, perceiving operational and resource gaps more acutely than their senior counterparts. This disconnect between leadership perspectives and frontline experiences highlights the necessity for targeted interventions, improved communication, and responsive support systems.

Recommendations

The proposed recommendations address key gaps identified in the current operational framework of the Philippine Coast Guard, aiming to enhance personnel capabilities, streamline processes, and improve overall organizational resilience.

1. *Addressing the Generalist Skills Gap.* Institutionalized Specialization: Develop a mandatory "Functional Career Path" where personnel must specialize in Maritime Law Enforcement (MARLEN) within their first 5 years prior to their assignment in different Coast Guard stations.

2. *Leveraging Experience & Maintaining Gender Equity.* Formalize a Peer-to-Peer Mentorship & Knowledge Transfer Program. Designate long-tenured personnel (16–20 years) as Master Trainers to bridge the gap between senior expertise and junior operational roles. Maintain the gender-neutral training model while actively recruiting female personnel for specialized roles (like evidence custodians or investigators) to continue the trend of equitable competency.

3. *Fixing Systemic Inefficiency in Evidence Management.* Establish "Regional Maritime Evidence Centers (RMEC). Construct standardized, climate-controlled evidence storage facilities in major station hubs like CGS Central Cebu. Deploy a Digital Chain of Custody System (DCCS), a mobile app or database where evidence can be logged via barcode on-scene to eliminate reliance on informal documentation. Assign a Designated Evidence Custodian to every station that is exempt from general boarding duties to ensure the integrity of the Command, Approach, Take Control, Conduct Search and Hand Over "CATCH" procedure.

4. With sub-stations lacking investigators, the Joint Operations Center (JOC) serves as a remote technical HQ. Through real-time video support and database access, sub-station teams receive expert guidance on evidence handling and

immediate checks for probable cause, ensuring courtroom-ready documentation

5. *Mitigating Resource & Logistical Strain.* Implement a "Frontline Logistical Priority Policy. Ring-fence funds specifically for Small Craft Maintenance and Fuel to ensure patrol availability. Advocate for the construction of Mobile Detention Modules (secure shipping container units) at remote substations like Camotes to ensure safe suspect custody before transfer.

6. The organization should implement targeted support systems, enhance two-way communication channels, and develop intervention strategies that are responsive to the unique needs of frontline staff. Bridging this gap will ensure that leadership decisions are better informed by operational realities, ultimately improving overall effectiveness, personnel well-being, and mission success.

REFERENCES

1. Ababat, J. P., Mendoza, R. L., & Santos, K. M. (2023). PCG personnel's response during calamities in Misamis Occidental: A qualitative inquiry. *Northern Mindanao Public Administration Journal*, 6(1), 45–61.
2. Abad, L. M., Reyes, J. T., & Dela Cruz, M. A. (2023). Lived experiences of PCG personnel in Ozamiz City: A phenomenological study. *Mindanao Journal of Public Safety*, 9(1), 22–39.
3. Abanilla, A. G. (2024). Competencies of Philippine Coast Guard personnel in the enforcement of criminal laws. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(6), 2235–2243.
4. <https://doi.org/10.11594/ijmaber.05.06.25>
5. Abanilla, A. G. (2024). Competency gaps in maritime law enforcement: A study of Philippine Coast Guard personnel. *Philippine Journal of Criminology*, 45(1), 33–50.
6. Alindayu, S. T. (2023). Marine pollution response and enforcement: Practical learnings from PCG training programs. *Environmental Law and Policy Review*, 7(1), 42–59.
7. Baysa, R. M., & Ferrer, J. L. (2023). Evaluation of mandatory training courses for law enforcement personnel in maritime operations. *Philippine Public Safety Review*, 12(1), 55–70.
8. Berbie, A. C. (2024). Development of competency manual for the Philippine Coast Guard (PCG) commanding officers. *International Journal of Multidisciplinary: Applied Business and Education Research*.
9. Carlos, C. V. V. (2026). Assessing the competencies of the Philippine Coast Guard's Investigation and Detection Management Service: Reference to a specialized training curriculum. *JPAIR Multidisciplinary Research*, 63(1).
10. <https://doi.org/10.7719/jpair.v63i1.977>
11. Chan, J., & Guilfoyle, D. (2022). Coast guards and maritime order in the Indo-Pacific. *Journal of Maritime Affairs*, 18(2), 145–162. <https://doi.org/10.1080/14792979.2022.2034567>
12. Cooper, E. M. (2024, June 4). Strengthening cooperative international maritime law enforcement in the Indo-Pacific: Developing a combined maritime force of coast guards [Testimony]. RAND Corporation. <https://www.rand.org/pubs/testimonies/CTA3386-1.html>
13. Cooper, E. (2024). The era of coast guards: Combating gray zone tactics through an Indo-Pacific combined maritime force of law enforcement partners. RAND Corporation. <https://www.rand.org/pubs/perspectives/PEA3044-1.html>
14. Cuevas, M. A., Torres, L. G., & Fabros, E. J. (2023). Operational challenges and coping mechanisms among PCG



- personnel in coastal communities. *Southern Philippines Criminology and Public Safety Review*, 10(1), 67–83.
15. Department of Justice. (2025, July 15). DOJ prosecutors conduct capacity building trainings for the Philippine Coast Guard.
 16. Department of Justice. (2025, December 16). DOJ prosecutors conduct specialized training for the Philippine Coast Guard. Department of Justice. (2026, April 13). DOJ prosecutors conduct specialized training for the Philippine Coast Guard. *Effective law enforcement in gray zone operations: A Chinese perspective of coastguard law implementation in delimited maritime zones*. (2024). *Marine Policy*, 169, 106366.
 17. Empinado, C. J., Ramos, D. F., & Villanueva, A. B. (2025). Frontline stories of Philippine Coast Guard rescuers: Emotional resilience and operational challenges. *Eastern Visayas Journal of Maritime Studies*, 8(2), 30–48.
 18. Enhancing the effectiveness of digitalised maritime law enforcement. (2026). *Marine Policy*, 187, 107058.
 19. International Maritime Organization. (2025). Contribution of the International Maritime Organization to the UN Secretary-General's Report on Oceans and the Law of the Sea (UNGA Resolution 79/144). United Nations.
 20. https://www.un.org/Depts/los/general_assembly/contribution_s80/11IMO.pdf
 21. Kim, S. K. (2020). *Coast guards and international maritime law enforcement*. Cambridge Scholars Publishing.
 22. https://books.google.com/books/about/Coast_Guards_and_International_Maritime.html?id=fdz0DwAAQBAJ
 23. Law enforcement or use of force: The legal nature of activities conducted by CCG and JCG in the disputed waters. (2025). *Marine Policy*, 171, 106440.
 24. Misador, B. A., Jr. (2026). Assessing the Philippine Coast Guard's Visit, Board, Search, and Seizure (VBSS) procedures: Operational status, influencing factors, and challenges. *International Journal of Multidisciplinary: Applied Business and Education Research*.
 25. Otto, L., & Jernberg, M. (2020). Piracy and maritime security: A global perspective. *Marine Policy*, 120, 104123.
 26. <https://doi.org/10.1016/j.marpol.2020.104123>
 27. Palconit, R. G., & Sabijon, M. A. (2025). Challenges in maritime law enforcement in Eastern Visayas: A case study of PCG personnel. *Visayas Criminology Review*, 11(2), 56–74.
 28. Palma, M. D., & Alano, G. R. (2023). Maritime priorities and law enforcement in the West Philippine Sea: The role of the Philippine Coast Guard. *Asian Maritime Policy Journal*, 10(3), 88–104.
 29. Salahuddin, M. A. (2025). Marine casualty investigations: An assessment of PCG station personnel competencies. *Philippine Law Enforcement Review*, 18(2), 101–118.
 30. Strengthening capacity building in developing countries for effective maritime law enforcement: Current practices, challenges, and future outlook. (2026). *Marine Policy*, 186, 107015.
 31. Tiongson, J. P. (2025). Evaluating the Basic Sea Marshal Orientation Course: A Philippine Coast Guard perspective. *Journal of Maritime Security Studies*, 12(1), 77–94.
 32. United Nations Security Council. (2025, August 11). Safety of maritime sector fundamental to economic stability, sustainable development, livelihoods, senior official tells Security Council [Press release]. United Nations.
 33. <https://press.un.org/en/2025/sc16142.doc.htm>
 34. United States Coast Guard. (2024, May 1). Coast Guard to review law enforcement training.
 35. U.S. Department of Homeland Security. (2020). Maritime law enforcement assessment: Fiscal year 2020 report to Congress. https://www.dhs.gov/sites/default/files/publications/uscg_-_maritime_law_enforcement_assessment.pdf
 36. U.S. Government Accountability Office. (2024). Coast Guard: Asset, workforce, and technology challenges continue to affect law enforcement missions (GAO-24-107144).
 37. Vartanian, O., Coady, L., & Blackler, K. (2020). Occupational stress and cognitive performance in maritime law enforcement. *Human Factors*, 62(4), 589–602. <https://doi.org/10.1177/0018720819874567>