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Reforming the Aeronautical Engineering Law: A Legislative Proposal on Licensure Examination Standards and Frequency for Enhanced Engineering Management and Public Safety

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Abstract

The research identifies a significant appeal for reform, with 56% of examinees advocating for the harmonization of the minimum General Weighted Average (GWA) to 70%, a standard that 89% believe maintains public safety while addressing the current inequities in Aeronautical Engineering licensure requirements. This reform corresponds with a demand for a semi-annual examination frequency, supported by 82% of respondents, to replace the restrictive annual cycle mandated by Section 15 of Presidential Decree 1570. Discussion of the findings indicates that 84% of participants favor subject rationalization toward a clustered, competency-based approach, which 91% believe will prompt universities to modernize curriculum and better prepare engineers for the specialized demands of the Clark Aviation Hub and international Maintenance, Repair, and Overhaul (MRO) investments. Because 78% of respondents view these reforms as logistically feasible through modern Professional Regulation Commission (PRC) systems like Computer-Based Licensure Examination (CBLE), the study concludes that immediate legislative action is necessary to remove outdated 1978 regulations. It is recommended that Sections 15–17 of Presidential Decree 1570 be amended to enhance engineering management stability and accelerate the production of licensed professionals to fill critical industry skill gaps.

Keywords: Aeronautical Engineering, Presidential Decree 1570, Legislative Proposal, Revisions of Sections

1. Interdiction

Becoming an engineer in the family is one of the greatest victories for every student taking engineering courses. Apart from 4-year courses they took, the last struggle will be the passing of licensure exam. Licensure exams in all engineering fields have different difficulties. Every applicant must pass the licensing exam in order to be registered to practice engineering. Therefore, meeting the Commission's requirements is the first barrier for engineering graduates after receiving their baccalaureate degree [2]. Students taking aeronautical engineering relationship with their parents, peers and siblings played a major role on their career decision making. The majority expressed that the work as well as parents' advice influenced their decision to take aeronautical engineering course. Parents, siblings and peers who become successful in their aeronautical engineering careers have persuaded many students to take the aeronautical engineering course [2].

Professional Regulation Commission is the one that administers the examinations and future regulations of every engineering field under its supervision. The Professional Regulation Commission (PRC) oversees the administration, implementation, and enforcement of the nation's regulatory laws and policies concerning the licensing and regulation of the various professions and occupations that fall under its purview. This includes maintaining and improving professional and occupational standards and ethics as well as enforcing the rules and regulations pertaining to them (Professional Regulation Commission). The Philippine Aeronautical Engineering Decree of Presidential Decree 1570 is the stronghold of laws in which all of registered Aeronautical Engineers must follow. It is the foundation of safety and morals of different registered Aeronautical Engineers around the country.

The incoming Aeronautical Engineering Licensure Examination will be held across the Philippines on

December 8-10, 2025, some of the respondents that was ask if they are ready, some of them have different doubts on the licensure examination since some of the engineering fields conducted their examinations ahead of the exam. Some of the respondents also noticed the passing grade, frequency of examination, and subjects to be taken since some of them are having a hard time on their review. This research will focus on Presidential Decree 1570 otherwise known as Philippine Aeronautical Engineering Decree. The research will find the differences of every engineering law and offers a legislative proposal on licensure examinations standards and frequency for enhanced engineering management and public safety. The proposed changes for existing law will give different perspective on every student after they graduate from their Aeronautical Engineering course.

2. The Problem and Its Background

2.1. Background of Study

Presidential Decree 1570 was made by Late President Ferdinand E. Marcos at the City of Manila on June 11, 1978. No further revisions or rectification have been made up until now. The researcher came up with different problems about this law. Some are not in line with the current provisions of different engineering fields listed on the Professional Regulation Commission. General Average are required to pass a licensure examination since it is a reliable indicator of passing licensing exams. A strong undergraduate GWA has a direct impact on the reputation and accreditation of the institution, but it is not the only factor. It also suggests a strong academic background, which tends to correspond with better performance on the board test. According to Presidential Decree 1570 Section 17, depending on the board test, passing requires a minimum passing grade of 75%. It indicates that among engineering fields existing in the Philippines requires a passing grade of 70% only which is contradicting with the current Presidential Decree 1570. Specific core subjects are being utilized for the licensure exams. Among the engineering fields available in the Professional Regulation Commission, Aeronautical Engineering Licensure Exam has the most subject, which is six according to Presidential Decree 1570 Section 16 comparing to the other engineering fields that has at least 2-3 subjects. According to Hallmark Education Consultants Int'l (2017), one of the most challenging engineering specialties is Aeronautical Engineering. It includes difficult physics and math concepts. You'll need to be really proficient in physics and math's, so you should anticipate being put to the test. Also, some of the subjects under the current Presidential Decree 1570 consist of syllabus under a different course which is Aircraft Maintenance Technician. The research clearly indicates that subjects are not being utilized in a specific field only. Aeronautical Engineering licensure exam will be taken only once a year according to the Presidential Decree 1570 Section 15 which is unfair to other engineering fields that can be taken twice or thrice a year. According to Professional Regulation Commission, they permit effective administration because the PRC must plan, coordinate, and administer the test nationwide for a variety of vocations. This research wants to justify the Presidential Decree 1570 or the Philippine Aeronautical Engineering Decree in which certain sections are proposed to be revised especially the sections 15, 16, and 17. By way of comparison of challenges faced, utilizing practices, and results achieved, this research adds to the general debate of revising the Presidential Decree 1570. By way of critical analysis, this research shall be able to give practical recommendations for improving laws in Aeronautical Engineering industry, thus ensuring preparedness and applicability to future examiners.

2.2. Objective of the Study

2.2.1. General Objective

The main objective of this research is to propose legislative amendments to the Philippine Aeronautical Engineering Decree (Presidential Decree 1570), specifically concerning the licensure examination standards and frequency.

2.2.2. Specific Objectives

- To compare and analyze the existing licensure examination standards (minimum general average, number of subjects) for Aeronautical Engineering under Presidential Decree 1570 (Sections 16 and 17) against those of other engineering professions under the Professional Regulation Commission.
- To evaluate the current frequency of the Aeronautical Engineering Licensure Examination (Section 15) and assess the feasibility, logistical implications, and potential benefits of increasing the examination frequency, in line with the practices of other engineering boards.
- To develop and propose specific, evidence-based responds for revision of Sections 15, 16, and 17 of Presidential Decree 1570, addressing the perceived inconsistencies and challenges regarding examination frequency, the minimum.

2.3. Significance of Study

The study entitled Reforming the Aeronautical Engineering Law: A Legislative Proposal on Licensure Examination Standards and Frequency for Enhanced Engineering Management and Public Safety will significantly affect the incoming examinees of licensure exam. It will encourage them to take licensure exams just like other engineering fields took in terms of subject decrease, passing rate decrease, and frequency of taking licensure exam at least twice a year. It will also significantly affect the aviation industry to hire more Aeronautical Engineers amidst revising Presidential Decree 1570. It will also significantly affect the curriculum and review centers to make more comprehensive lessons to prepare incoming examinees of licensure exam. Lastly, it will significantly affect future researchers to find more legislative proposals on revising some sections of Presidential Decree 1570.

2.4. Scope and Delimitation

The general intent of this study was to provide a conclusive result on the effects of revising the Presidential Decree 1570 Sections 15-17. It will change the perspectives of different universities and campuses on how they will nurture future Aeronautical Engineers with the legislative proposals on

changing such sections.

The primary scope of this study was to identify the means of implementing legislative proposals on the Presidential Decree 1570. It will emphasize the new revisions in Sections 15-17 that will change the perspective of new or old examinees. The duration of the study will take two months to complete. The limitation of this study only covers the new and old examinees of incoming Aeronautical Engineering Licensure Exam. A limited budget and time schedule will be used to carry out the research.

3. Methodology

3.1. Research Design

The research design to be used is comparative research design. The researcher will compare the existing Presidential Decree 1570 Sections 15-17 to the new legislative proposal. It will cover my specific objectives number one, two, and three in which the data gathered provides evidence needed to justify the proposal legislative proposal. Comparative research is to characterize, investigate, and clarify the similarities and differences of the cases being examined. One's knowledge and comprehension of their own culture, nation, or system as well as those of others are expanded through comparative research [3].

3.2. Research Method

This research employs a quantitative method in which the data will be taken from the examinees that will answer the questionnaires and the existing data of Professional Regulation Commission in which the number of frequencies, subjects, and passing grades will be compared against Aeronautical Engineering. Fundamental techniques for producing numerical data that may be examined using statistical or mathematical tools make up quantitative research data gathering approaches. Utilizing structured surveys with closed-ended questions to get quantifiable data from a sizable sample of participants is the most popular method for gathering quantitative data. These can be done in person, over the phone, or online [4].

3.3. Population and Sample of the Study

The researcher will use simple random sampling among the examinees of incoming Aeronautical Engineering Licensure Exam. From the population of whole examinees of Licensure Exam to the sample of one hundred random respondents. Every member of the population has an equal probability of being chosen in a simple random sampling [5].

3.4. Research Instruments

The research instrument to be used is via Google Forms. The researcher will create a Google Forms in which the users will have the ability to choose from choices that the researcher will make. Students can use Google Forms to fulfill curriculum requirements. Students will be able to formulate a significant research question, choose a sample group from the population using a suitable sampling technique, create a questionnaire free of bias, administer the survey, use graphs, data tables, and pivot charts to analyze the data, and draw conclusions from the data. One helpful tool for achieving goals is Google Forms [6].

3.5. Data Collection Procedure

The researcher will disseminate the questionnaires via Google Forms to one hundred examinees for data collection. The data gathered will be sorted via Microsoft Excel for better tabulation. The allocated time for the researcher to accomplish and interpret the data will be at least 15 days, data gathering, and interpretation combined.

3.6. Statistical Treatment

This study will interpret the data collected using Data Analysis in which different quantitative data's are being interpreted and illustrated for more precise discussion. Thematical Analysis was used in the paper for identifying, analyzing, and interpreting patterns of meaning, known as themes, within quantitative data.

4. Review of Related Literature

4.1. House Bill No. 7662

Since the issuance of P. D. No. 1570 otherwise known as the "Philippine Aeronautical Engineering Decree" on June 11, 1978, the field of aeronautical science and civil aviation have grown tremendously that the said Presidential Decree is no longer adequate to meet the challenges of a globalized economy. There is therefore a need to repeal P. D. No. 1570 to make it more effective and responsive (House of Representatives, 2023).

4.2. Revisions in Licensure Exams

Rep. Paul Daza of the Northern Samar 1st District called for a review of the nation's licensing exam regulations, proposing the creation of alternate licensing pathways to provide non-passers an opportunity. Daza stated in a privilege speech on Wednesday that a developing nation like the Philippines should grow its labor force to boost the economy, but that this objective is hampered by the extremely high requirements set by licensing tests [7].

4.3. Comparative Study on Licensure Examinations

The performance of engineering graduates in the licensing examinations can be attributed to the following factors, according to pertinent findings of some studies carried out in the country's local areas: their grades in all of their baccalaureate subjects, from general education to professional engineering; their involvement in review classes or intervention programs; their consideration of the time interval between taking or retaking the exam; and their skills and affective domain [1].

5. Results and Discussion

This research mainly focuses on the legislative proposal of Presidential Decree 1570 Sections 15-17 focusing on the standards and frequency of licensure exam. Results shown are based on the data gathered from Google Forms and show more systematic approach to legislative proposal in which the researchers demanded to have revisions. Discussions will further specify the reliability of the data gathered. Data's

are from overall examinees who are waiting to take licensure exam this December. Shown below are categories of different approaches on data's in accordance with how incoming examinees perspective affects the legislative proposal of Presidential Decree 1570 Sections 15-17.

5.1. Licensure Examination Standards (Minimum General Average & Subjects)

This approach is designed to isolate and analyze the data supporting the need to revise Sections 16 and 17 of Presidential Decree 1570. The interpretation measures the examinees' opinion of regulatory unfairness and legislative invalidity by contrasting the strict subject list with the cluster approach and the Aeronautical Engineering requirement (75% GWA) with the standard for other engineering professions (70% GWA). The numerical basis for suggesting synchronization and subject simplification is provided by the obtained statistics.

5.2. Examination Frequency & Logistical Evaluation

This section focuses on analyzing the data required to justify the revision of Section 15. It measures the perceived advantages of switching from yearly to semi-annual exam frequency, such as less financial and mental stress. Importantly, it also assesses how the participants perceive the Professional Regulation Commission's (PRC) logistical capacity to manage the expansion, confirming the viability of the idea using contemporary administrative systems (such as the CBLES).

5.3. Legislative Proposal & Industry Impact

This section provides a high-level analysis that connects the specific proposed revisions to the research's main objective and significance of the study. It quantifies the expected benefits to the industry, such as improving professional engineering management and accelerating the talent pipeline and assessing the general stakeholder support of the legislative solution. According to this assessment, the suggested modifications are seen as having a positive overall impact on the aviation industry's future.

6. Tables and Figures

ENGINEERING FIELDS	PASSING AVERAGE	FREQUENCY OF EXAM PER YEAR	NUMBER OF SUBJECTS
Aeronautical Engineering	75%	Once	6
Agricultural and Biosystems Engineering	70%	Twice	4
Chemical Engineering	70%	Once	3
Civil Engineering	70%	Twice	3
Electrical Engineering	70%	Twice	3
Electronics Engineering	70%	Twice	4
Geodetic Engineering	70%	Once	5
Mechanical Engineering	70%	Twice	3
Metallurgical Engineering	70%	Once	3
Mining Engineering	70%	Once	3
Naval Architecture and Marine Engineering	70%	Once	4
Sanitary Engineering	70%	Once	3

Table 1: List of Engineering Fields according to Professional Regulation Commission with their Passing Average, Frequency of Exam per Year, and Number of Subjects

QUESTIONNAIRE	TOP ANSWER	FREQUENCY	PERCENTAGE
1. COMPARISON OF MINIMUM GENERAL WEIGHTED AVERAGE (GWA) The Aeronautical Engineering Law (PD 1570, Sec. 17) requires 75% GWA to pass, while major comparable fields like Civil and Mechanical Engineering generally require 70%. How do you view this 75% requirement for Aeronautical Engineers?	It should be harmonized to 70% to ensure regulatory equity across the PRC.	56/100	56%
2. RATIONALIZATION OF THE NUMBER OF SUBJECTS The Aeronautical Engineering Licensure Examination covers at least six distinct subjects (PD 1570, Sec. 16). In contrast, many other engineering boards structure their exams around three or four major weighted competency clusters. Which structure do you believe is most effective for a modern professional licensure exam?	Adopt a clustered, weighted approach (3-4 major areas) to test integrated application of engineering principles.	84/100	84%
3. IMPACT OF REDUCING GWA ON PUBLIC SAFETY The research suggests changing the GWA from 75% to 70% (PD 1570, Sec. 17), while keeping the required minimum rating in any single subject at 50%. How would this specific change affect public confidence and safety in the practice of licensed Aeronautical Engineers?	Public safety would be compromised, as 70% GWA implies a significantly lower standard of professional competence.	89/100	89%

Table 2: Licensure Examination Standards (Minimum General Average & Subjects)

QUESTIONNAIRE	TOP ANSWER	FREQUENCY	PERCENTAGE
4. PROPOSED INCREASE IN EXAMINATION FREQUENCY The current law (PD 1570, Sec. 15) mandates the exam to be held only once a year. If this were revised to "not less than twice a year," what would be the most significant benefit to incoming examinees?	Halving the maximum waiting time, which reduces the financial and psychological burden of preparation.	100/100	100%
5. LOGISTICAL FEASIBILITY OF INCREASED FREQUENCY Given the PRC's adoption of the Computerized Board Licensure Examination System (CBLES), which reduces the need for traditional logistical requirements (venue, manual scoring), do you believe the PRC is logistically capable of administering the AE examination at least twice a year?	Yes, modern PRC systems fully support semi-annual testing, making the annual limit obsolete.	78/100	78%
6. PREFERRED FREQUENCY FOR PROFESSIONAL ENTRY Assuming the PRC ensures all logistical needs are met, what is the optimal examination frequency for graduates seeking to enter the Aeronautical Engineering profession?	Semi-annually (twice per year).	82/100	82%

Table 3: Examination Frequency & Logistical Evaluation

QUESTIONNAIRE	TOP ANSWER	FREQUENCY	PERCENTAGE
7. ADDRESSING STATUTORY OBSOLESCENCE The Philippine Aeronautical Engineering Decree (PD 1570) has not been substantially revised since 1978. In light of modern technological advancements in aviation, what is the most pressing reason for proposing legislative amendments to the decree?	The urgent necessity to harmonize inconsistent licensure standards with other contemporary engineering professions.	100/100	100%
8. IMPACT ON CURRICULUM AND REVIEW CENTERS If the licensure examination structure is revised from six enumerated subjects to fewer weighted competency clusters (e.g., integrated systems, design, and regulatory frameworks), what anticipate will be the long-term impact on educational institutions?	Universities will be forced to modernize curricula to teach integrated, competency-based engineering application.	91/100	91%
9. PROPOSED REVISION TO SECTION 16 (SUBJECT FLEXIBILITY) Your proposal grants the Board of Aeronautical Engineering flexibility to amend or revise the subjects and their weights based on technological advancements, without requiring a new law. Do you support granting this administrative flexibility to the Board?	Strongly support, as it allows the examination to remain relevant in a rapidly evolving global aviation industry.	64/100	64%
10. IMPACT ON AVIATION INDUSTRY AND ENGINEERING MANAGEMENT If all proposed legislative revisions (70% GWA, semi-annual frequency, clustered subjects) are enacted, what do you believe will be the primary effect on the Philippine aviation industry and engineering management practices?	It will lead to an increased supply of younger, professionally licensed engineers, enhancing management stability and reducing skill gaps.	91/100	91%

Table 4: Legislative Proposal & Industry Impact

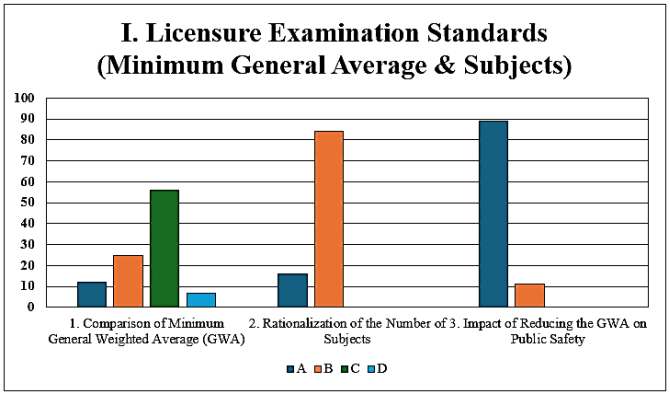

Figure 1: Licensure Examination Standards (Minimum General Average & Subjects) Tally Summary Showing Ratings Across 3 Questions

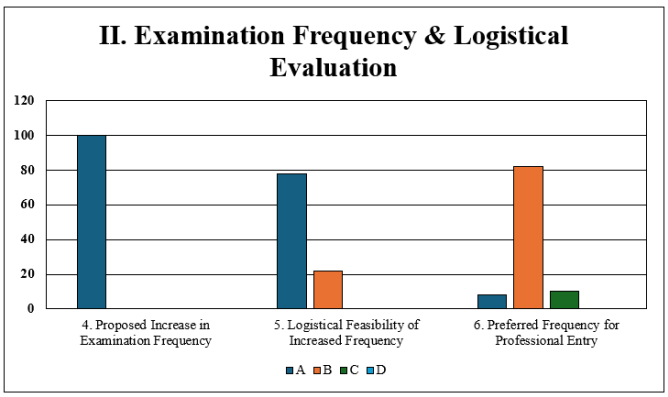

Figure 2: Examination Frequency & Logistical Evaluation Tally Summary Showing Ratings Across 3 Questions

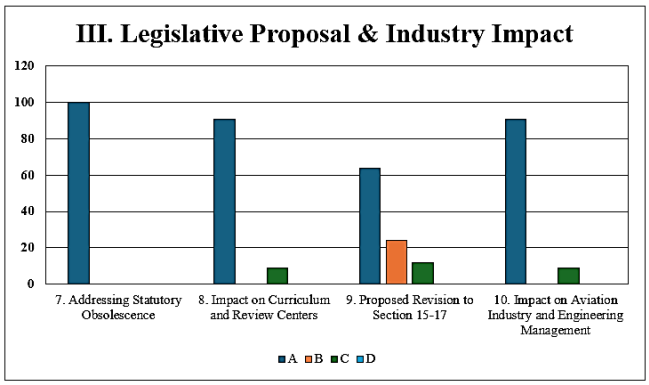

Figure 3: Legislative Proposal & Industry Impact Tally Summary Showing Ratings Across 4 Questions

7. Results and Discussion

7.1. Summary

The research primarily centers on the reforming of the Aeronautical Engineering Law: A legislative proposal on licensure examination standards and frequency for enhanced engineering management and public safety. The results presented are derived from quantitative data, analyzed to reveal systematic approaches to the legislative proposal. The discussion further elaborates on the reliability of the collected data, emphasizing that it reflects the experiences of incoming examinees of Aeronautical Engineering Licensure Exam. The findings are organized into categories that represent different facets of how examinees envision the future of licensure exams of Aeronautical Engineering.

7.2. Results

The main results of the study are categorized into categories of different approaches on data gathering and licensure examination standards (minimum general average & subjects).

7.2.1. Specific Objective 1. Comparison of Minimum General Weighted Average

The gathered data shows that 56 out of 100 respondents answers that "It should be harmonized to 70% to ensure regulatory equity across the PRC". It was strongly suggested according to data that the minimum general weighted average requested by examinees is 70%. According to Professional Regulation Commission, the 70% mark is typically regarded as a strong passing score that suggests a deeper comprehension of the subject matter. It indicates a solid understanding of the fundamental ideas, which is essential in a technical profession like engineering.

7.2.2. Specific Objective 1. Rationalization of the Number of the Subjects

The gathered data shows that 84 out of 100 respondents answers that "Adopt a clustered, weighted approach (3-4 major areas) to test integrated application of engineering principles". It generally indicates that the number of subjects to be taken under Aeronautical Engineering Licensure Exam will be at least 3-4 subjects. The Professional Regulatory Board (PRB) of each discipline, with approval from the Professional Regulation Commission (PRC), mandates and reviews the deliberate clustering of numerous, specialized college courses into a few comprehensive subjects that represent the core domains of professional practice, which is the basis for the typical structure of three to four subjects in Philippine engineering licensure exams according to Professional Regulation Commission.

7.2.3. Specific Objective 1. Impact of Reducing GWA on Public Safety

The gathered data shows that 89 out of 100 respondents answers that "Public safety would be maintained, as the 70% GWA ensures baseline competency in critical areas". Since most of the engineering licensure exams offer only 70% in GWA, the data highly suggests that Aeronautical Engineering

Licensure Exam must take the account of lowering its GWA to 70% also. Since Civil Engineering industry mostly produced 100% of infrastructure around the globe, their passing GWA was maintained only to 70%. They are not just considering the safety of thousands but billions unlike in Aeronautical Engineering industry.

7.3. Examination Frequency and Logistical Evaluation

7.3.1. Specific Objective 2. Proposed Increase in Examination Frequency

The gathered data shows that 100 out of 100 respondents answers that "Halving the maximum waiting time, which reduces the financial and psychological burden of preparation". The main benefit of the Professional Regulation Commission's (PRC) twice-yearly licensing exams, especially for engineering-related professions, is that they greatly reduce down on waiting times and stress for graduates and retakes, allowing a quicker entry into the workforce. There are two main advantages to this semi-annual schedule: first, it gives failed examinees a quicker chance to repeat the test and eventually get their license, avoiding prolonged career delays (which were a significant issue when tests were only held once a year). Second, it makes it possible for recent graduates to take the test sooner after graduation, which helps them retain the review content and speeds up the entry of licensed professionals into the national labor market to satisfy industry demand.

7.3.2. Specific Objective 2. Logistical Feasibility of Increased Frequency

The gathered data shows that 78 out of 100 respondents answers that "Yes, modern PRC systems fully support semi-annual testing, making the annual limit obsolete". In order to achieve the objective of accelerating the entry of certified professionals into the workforce, the PRC is able to increase the frequency of examinations thanks to the efficiency advantages from CBLE which highly verified that it could help provide the licensure exam to be held at least twice a year.

7.3.3. Specific Objective 2. Preferred Frequency for Professional Entry

The gathered data shows that 82 out of 100 respondents answers that "Semi-annually (twice per year)". It was highly suggested by the data that semi-annually or twice a month must hold the Aeronautical Engineering Licensure Exam. It was also recommended that holding it twice a year can accelerate the workforce needed in such conditions in workplace.

7.4. Legislative Proposal & Industry Impact

7.4.1. Main Objective. Addressing Statutory Obsolescence

The gathered data shows that 100 out of 100 respondents answers that "The urgent necessity to harmonize inconsistent licensure standards with other contemporary engineering professions". According to the data presented, it was highly suggested that the passing average, frequency, and number of subjects must be in harmony with other engineering fields. Aeronautical Engineering Licensure Exam set the highest standards in guidelines but according to studies, Civil Engineering Licensure Exam was to be the hardest licensure exam but not that complicated in terms of conditions in frequency, subjects, and passing average.

7.4.2. Main Objective. Impact on Curriculum and Review Centers

The gathered data shows that 91 out of 100 respondents answers that "Universities will be forced to modernize curricula to teach integrated, competency-based engineering application". Universities and Review Centers must be organized in terms of legislative proposals on revising Sections 15-17 of Presidential Decree 1570. Since it was not revised from 1978, the law was left behind in terms of technological advancement. This research tries to make a legislative proposal for new guidelines because Philippines especially Clark gradually becomes the Aviation Hub of the Philippines hence, the demand for licensed Aeronautical Engineers are needed.

7.4.3. Specific Objective 3. Proposed Revision to Section 15-17

The gathered data shows that 64 out of 100 respondents answers that "Strongly support, as it allows the examination to remain relevant in a rapidly evolving global aviation industry". As the Clark Freeport Zone, Pampanga becoming the Aviation Hub of the Philippines, demands for Aeronautical Engineers are needed. So, upon the innovation of aviation in the country, the revision of Presidential Decree 1570 must consider for filling the gap of needing Aeronautical Engineers in the future.

7.4.4. Specific Objective 3. Impact on Aviation Industry and Engineering Management

The gathered data shows that 91 out of 100 respondents answers that "It will lead to an increased supply of younger, professionally licensed engineers, enhancing management stability and reducing skill gaps". The demand for licensed Aeronautical Engineers will boost when the aviation hub in the Philippines was finished. More workforces will be given to newly licensed engineers. The revisions are not for the repeaters of exams but for all aspiring engineers to become licensed and work in their field.

7.5. Discussion

There is a strong need for regulatory similarity across incoming examinees, as seen by the findings on licensure examination standards. To guarantee equity throughout the Professional Regulation Commission (PRC), the vast majority (56%) support harmonizing the minimum General Weighted Average (GWA) to 70%. 89% of respondents firmly believe that public safety would be upheld, noting the example given by prominent engineering peers like Civil and Mechanical Engineering, whose passing GWA is 70% while overseeing massive, safety-critical infrastructure. Additionally, a significant 84% of respondents favor using a clustered, weighted approach to subject rationalization (3-4 key areas). By realigning subjects and weights into clusters to assess the integrated application of engineering principles

and conform to modern curricula, this proposed modification aligns the Aeronautical Engineering examination with the contemporary structures utilized by other PRC Boards, such as the Civil Engineering Board. This change shifts the emphasis from rote memorization to proficiency in fundamental, integrated engineering disciplines. 100% of respondents agreed that the maximum waiting period should be cut in half, and they all demanded more frequent exams. The existing once-yearly testing schedule, which is required by Section 15 of Presidential Decree 1570, has a significant financial and psychological cost, as this finding highlight. A semi-annual (twice a year) examination schedule is the recommended answer, supported by 82% of respondents. Crucially, 78% of respondents said that current PRC systems fully support semi-annual testing and that the logistical challenges are manageable. PRC history, such as the administration of twice a year exam for occupations like Customs Brokers and the effective introduction of Computer Based Licensure Examinations (CBLE) for occupations like Chemical Engineers, which enable results to be released instantly, support this confidence. These administrative and technological advancements show that the PRC is prepared to accelerate the entry of skilled professionals into the workforce.

100% of responders who acknowledge the pressing need to harmonize various licensing standards support the need for legislative action. It is generally accepted that the current regulatory framework, PD 1570, which has been in effect since 1978, is out of date and unable to handle the demands of a globalized economy. The rapid growth of the worldwide aviation industry, especially the development of the Clark Freeport Zone as the aviation center of the Philippines, is directly related to the strong support (64%) for the revision of Sections 15–17 of PD 1570. According to the results, 91% of respondents believe that these changes will lead to a greater and younger group of engineers with professional licenses. To maintain the country's aviation economic strategy, this quick rush of skilled workers will be crucial for improving engineering management stability, closing skill gaps, and meeting the high-value manpower needs of foreign investors in the Maintenance, Repair, and Overhaul (MRO) sector.

In conclusion of the discussion, the quantitative results focus on three related reform pillars: legislative modernization, faster licensing, and regulatory uniformity. The evidence clearly supports eliminating the main administrative obstacles caused by the outdated Presidential Decree 1570 by lowering the GWA to 70% and raising the inspection frequency to semiannually. These modifications serve as a required legal revision that requires educational institutions to update their curricula and guarantees a competitive, ongoing supply of certified Aeronautical Engineers. They are not just administrative conveniences. In the end, these changes are essential to ensuring competency, safeguarding the workforce needed to maintain the Philippines' ambition as a major global aviation hub, and bringing the country's professional standards into line with international standards [8,9].

8. Conclusion and Recommendations

• **Conclusion:** A clear mandate to modernize the Aeronautical Engineering licensure process through the dual policy actions of standard harmonization and frequency acceleration is shown by the quantitative analysis of incoming examinee perspectives. In order to maintain regulatory fairness within the Professional Regulation Commission (PRC), the majority of respondents (56%) demand that the minimum General Weighted Average (GWA) be harmonized to 70%. 89% of participants acknowledge that this level preserves public safety. This desire for equalization corresponds with a 100% acceptance that a semi-annual schedule chosen by 82% of aspiring professionals must take the place of the current yearly examination frequency, which places a substantial financial and psychological burden. Additionally, there is a need to shift the assessment model toward integrated, competency-based application, bringing the exam's content into line with contemporary engineering practice, as seen by the push for subject rationalization (84%) toward a clustered, weighted approach.

The legislative proposal of Presidential Decree 1570, which is overwhelmingly seen by respondents as a barrier to aligning licensure standards with modern engineering professions, is the basis for the need of this regulatory change. Unlocking the required administrative reforms requires strong support (64%) for amending Sections 15–17 of the decree. Crucially, the data indicates that these reforms are completely logistically possible because 78% of respondents think that semi-annual testing is adequately supported by recent PRC systems, which benefit from technological efficiencies like CBLE. Therefore, the immediate removal of the outdated regulations that currently need a restrictive 75% GWA and an annual testing cycle is a necessity for attaining the intended rate and equality. In the end, the suggested upgrade is seen as a calculated move that directly advances the country's economic objectives in the aircraft industry. Significantly, 91% of respondents think that these legislative and regulatory changes will increase the number of younger, professionally licensed engineers, which is essential for improving the stability of engineering management and filling gaps in skills. The Clark Aviation Hub's growing demands and the specialized Maintenance, Repair, and Overhaul (MRO) companies that are drawing significant international investment depend on this increase in skilled human capital. In the meantime, 91% of respondents believe that this legislative change will force colleges to update their curricula in the direction of competency-based application, guaranteeing that newly licensed professionals have the advanced, specialized skills required to uphold quality and safety standards in a rapidly changing international aviation environment.

• **Recommendations:** Based on the findings of this study, the following recommendations are proposed.

o **Legislative Action:** Repeal of Presidential Decree No. 1570: The study's conclusions offer a clear and practical course of action, requiring quick legislative and administrative change

to bring the field of Aeronautical Engineering into compliance with modern regulations and the country's economic plan. The main suggestion is the prompt legislative repeal of Presidential Decree No. 1570, which is a legal requirement backed by the vast conclusion (100% of respondents) that the current licensing requirements are incompatible with those of other modern engineering professions. In order to facilitate the modernization of the profession's scope, standards, and licensure pace, this legislative action must enable the Professional Regulatory Board (PRB) to amend the crucial restrictions outlined in Sections 15–17 of the out-of-date decree. To guarantee that the Philippine civil aviation industry, especially the expanding MRO and logistics sectors in the Clark Aviation Hub, has access to the skilled human capital needed to support foreign investment and high-value operations, this fundamental change is necessary.

o **Regulatory Modernization:** Standards and Frequency Acceleration: The two major administrative modifications required by the data must be quickly implemented by the PRB and the Professional Regulation Commission (PRC) upon the removal of the legislative barrier. First, according to 56% of respondents who seek regulatory equity and 89% who believe this requirement promotes baseline competency and public safety, the minimum General Weighted Average (GWA) must be harmonized to 70%. Second, to lessen the financial and psychological stress brought on by the present long waiting period, the examination frequency needs to be raised to semiannual, or twice a year, as recommended by 82% of examinees and widely supported. Given that 78% of respondents think that modern PRC systems can fully support semi-annual testing, utilizing the efficiencies shown by Computer-Based Licensure Examinations (CBLE) to shorten result waiting times and speed up entry into the workforce, this operational acceleration should be technologically supported.

o **Educational and Assessment Alignment:** Lastly, to force systemic advancements in professional preparation, the modernization effort must go beyond simple administrative adjustments. The categorized, weighted approach to topic reduction (3–4 major areas) that 84% of respondents preferred should be adopted by the PRB, requiring that the examination concentrate on integrated, competency-based engineering application. This action guarantees that educational institutions and review centers are in sync to generate a steady stream of highly qualified, employable professionals, especially considering the observed fact that 91% of respondents think the legislative change will force colleges to upgrade curricula. To improve management stability, close skill shortages, and eventually achieve the Philippines' strategic objective of becoming a major player in the global aerospace sector, the expected outcome a greater and younger supply of licensed engineers (91% prediction)—will be crucial. The study recommends in general that the Professional Regulatory Board must consider this research for future purposes of conducting licensure examinations specifically for Aeronautical Engineering. This research serves as a receipt that Presidential Decree 1570 must revise for continuous innovation of technology and industry .

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