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The effect of platform and sensor weapon and command (SEWACO) maintenance and the quality of human resources on the operational readiness of the ship

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ABSTRACT

The enforcement of the country's sovereignty requires the strength and capability of an effective and highly deterrent national defense force, of which the Ship the main component, is supported by all other national resources as a reserve component and supporting component. The presence of Vessel with strong deterrence in the operation area is very influential in the creation of a safe Indonesian waters territory. The effort to present ships, especially ships in Indonesia, requires operational readiness of those ships. Operational readiness consists of the readiness of platform and Sensor Weapon And Command (Sewaco) elements and Quality of Human Resources.

One of the elements that carrying out employment duty is ship. This ship is a ship whose age is more than 20 years. Based on the age of the ship which is relatively old, the technical condition of the ships has greatly decreased both in terms of ship materials and supporting equipment. As time goes by, the readiness of Ship's Platform And Sensor Weapon And Command (Sewaco) have decreased a lot, thus requires to carry out regular maintenance.

This research uses a quantitative method, in which data collection will be done by questionnaire to the object of research. Furthermore, the data are analyzed using Statistical Products and Service Solutions (SPSS) version 25 as the main tools.

1. Preliminary.

Maintenance is basically an effort to maintain conditions at The required level of reliability so that the engines or equipment can function or be operated normally. Ship maintenance activities are very specific and complex, because beside of understanding of several technologies, a variety of experiences are needed to handle the maintenance and repair of an equipment system. The presence of ships with strong deterrence in the operation area is very influential in the creation of safe waters. The effort to present the ships, especially ships in Indonesia, requires operational readiness from these ships. Ship?s readiness of operations includes the readiness of ship material elements.

Ship as part of the forces that have the duty to carrying out the operations of the sea safeguards. This ship is a ship whose age is more than 20 years. Considering the age of the ship which is relatively old, the technical condition of the ships has greatly decreased both in terms of ship material and supporting equipment. As the time passing by, the ship?s technical conditions, especially Platform and Sensor Weapon And Command (Sewaco), have decreased a lot, thus needs regular maintenance. This can be known from the real condition and from the report of the technical condition of ships, including ship?s hull, equipment system are not in ready conditions. The decline in technical conditions that occur is influenced by several main factors, one of which is a maintenance system that is not implemented optimally, so that it affects the operational readiness of the ship.

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Table 1: Recapitulation Report of the technical conditions of the Ship.

NO	SYSTEM	TECHNICAL CONDITIONS OF SHIP READINESS				
		1	2	3	4	5
1	SHIP's HULL	65%	65%	61%	63%	64%
2	*PLATFORM*	60%	65%	64%	61%	60%
3	*SENSOR WEAPON AND COMMAND (SEWACO)*	60%	58%	54%	65%	50%

Source: Report of the technical condition of the ship.

Based on the report of the Ship's technical conditions and author's experience while serving in ship's maintenance the hypothesis taken is that unreadiness condition of ship is caused by lack of ability to regularly maintain equipment.

In this study, researchers will limit the problems only on the maintenance of the Platform and the Sensor Weapon And Command (Sewaco) and Quality of Human Resources in supporting the operational readiness of the ship. This research has the aim to find out the magnitude of the influence of Platform Maintenance And Sensor Weapon And Command (Sewaco) and Quality of Human Resources Ships in realizing operational readiness.

2. Research Methods.

The research method used in solving the problem in this study has been mentioned previously, namely using quantitative methods, where data retrieval will be done by questionnaire to the object of research. To process data, researchers will use software that is adjusted to the level of difficulty and the amount of data obtained. If the numerical data obtained from data retrieval is quite a bit with a simple calculation formula, then researchers only use Microsoft Excel as a tool. If the numerical data obtained is very large and the calculation formula needed is quite complex, the researcher will use the SPSS 25 tools as the main or supporting tools.

2.1. Population and Sample.

Population is a generalization area that consists of objects / subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The population in this study is all personnel (crew) of vessels. The sample is a data collection procedure in which only a portion of the population is taken and is used to determine the desired traits and characteristics of a population. Selected samples are personel of the engine (Department of Machinery), the electronics (Department of Electronics) Ship. This population and sample were chosen because they are the direct object of this study. Ship is Boat 1, Boat 2, Boat 3, Boat 4 and Boat 5.

The sampling technique in this study uses the formula of Taro Yamane quoted by Rachmat (1998: 82) as follows:

$$n = \frac{N}{N.d^2 + 1}$$

Where :
n = Number of Samples
N = Total population
d^2 = Precision established
So with 10% precision, then:

$$\text{n} = \frac{156}{156.\ 0,1^2 + 1} = \frac{156}{156\ (0,01) + 1} = \frac{156}{2,56}$$

$$= 60,937 \approx 61\ respondent$$

2.2. Data Collection and Processing Techniques.

Data collection techniques in this study will use a questionnaire that contains statements that will be given to respondents. And the number of respondents have been determined is a sample of 61 respondents. Furthermore, respondents will answer the questions contained in the questionnaire objectively in accordance with the problems in this study.

Distributing questionnaires is used as the main instrument for obtaining primary data and tracking documentation is used to obtain secondary data. The questionnaire distributed was compiled with a Likert scale model with five alternative answers and determined as independent variables (X) and dependent variables (Y) with the weighting of values as follows:

Table 2: Likert Scale.

NO	ANSWER	SCORE
1.	Strongly agree	5
2.	Agree	4
3.	Doubtful	3
4.	Disagree	2
5.	Strongly Disagree	1

Source: Authors.

3. Discussion.

Ship's operational readiness is absolutely necessary in carrying out activities to support the task. In this case all activities carried out by personnel are very important, especially in the preparing the ship equipment both the Platform and Sensor Weapon And Command (Sewaco) sectors. Maintenance carried out must be in accordance with predetermined standards so that the results obtained can be maximized and optimal. Platform equipment includes machinery maintenance, electrical supports and while for Sensor Weapon And Command (Sewaco) equipment including control systems and navigation equipment.

Based on the results of questionnaire data process, the characteristics of respondents including as folows rank, education level and years of service on the ship.

Table 3: Respondent Data.

NO.	Characteristics	total	Percentage (%)
1	2	3	4
1.	RANK		
	a. Rank A	22	14,8
	b. Rank B	7	32,8
	c. Rank C	19	52,4
	total	**61**	**100**
2.	EDUCATION		
	a. High school	21	34,4
	b. Vocation	32	52,4
	c. College	8	13,2
	total	**61**	**100**
3.	YEARS OF SERVICE		
	a. 5 years	19	31,1
	b. 6-10 years	9	14,7
	c. 11-15 years	6	9,8
	d. > 15 years	27	44,3
	total	**64**	**100**

Source: Researcher Processed Table.

3.1. Data Processing Using SPSS 25.

3.1.1. Classification of Groups.

Researchers carry out coding on the questionnaire / questionnaire data that has been collected based on the identity of the respondents. The questionnaire consisted of 52 statements representing 3 variables studied. The Human Resources research variables in the form of questionnaires are Platform and Sensor Weapon And Command (Sewaco) Maintenance and Quality of Human Resources (X) variables and Operational Readiness (Y) variables, then carry out data entry in accordance with the respondents answers in the questionnaire/questionnaire.

Validity test is done by comparing the value of r from calculation with r from table for a significance level of 5 percent of degree of freedom (df) = n-2, in this case n is the number of samples. In this test to determine the validity of statement items, decision making is carried out with the provisions that if r count is positive, and r count > r table, then the item or variable is valid. If r arithmetic is not positive, and r arithmetic < r table, then the item or variable is invalid.

Table 4: Validity Test Results X1.

Variable	Item	r-hitung	r-tabel	Conclusion
Platform and Sensor Weapon And Command (Sewaco) Maintenance (X1)	1	0,687	0,254	*valid*
	2	0,860	0,254	*valid*
	3	0,674	0,254	*valid*
	4	0,813	0,254	*valid*
	5	0,773	0,254	*valid*
	6	0,893	0,254	*valid*
	7	0,895	0,254	*valid*
	8	0,709	0,254	*valid*
	9	0,770	0,254	*valid*
	10	0,666	0,254	*valid*
	11	0,902	0,254	*valid*
	12	0,705	0,254	*valid*
	13	0,760	0,254	*valid*
	14	0,616	0,254	*valid*
	15	0,516	0,254	*valid*
	16	0,541	0,254	*valid*
	17	0,540	0,254	*valid*
	18	0,397	0,254	*valid*
	19	0,324	0,254	*valid*
	20	0,605	0,254	*valid*
	21	0,593	0,254	*valid*
	22	0,692	0,254	*valid*
	23	00,685	0,254	*valid*
	24	0,573	0,254	*valid*
	25	0,280	0,254	*valid*

Source: Processed Results of SPSS 25.

3.1.2. Validity test.

Validity test is done by comparing the value of r from calculation with r from table for a significance level of 5 percent of degree of freedom (df) = n-2, in this case n is the number of samples. In this test to determine the validity of statement items, decision making is carried out with the provisions that if r count is positive, and r count > r table, then the item or variable is valid. If r arithmetic is not positive, and r arithmetic < r table, then the item or variable is invalid.

a. Instrument Validity X1.

The instruments used in collecting data from respondents for Platform and Sensor Weapon And Command (Sewaco) Maintenance were 25 statements.

Based on the validity test data in table 3.1 it can be seen that all items in the Platform and Sensor Weapon And Command (Sewaco) Maintenance instruments obtain a coefficient value (r-count) greater than the rtable value (0,254), thus declaring all Platform and Sensor Weapon And Command (Sewaco) Maintenance Variables instruments are valid.

b. Instrument Validity X2

The instrument used in collecting data from respondents for

personnel qualification standards was 17 statements. Based on the validity test data it can be seen that all items in the instrument standard variable qualifications of personnel obtain coefficient values (r-count) greater than the value of r table (0,254) thus stated all the instruments of the Resource Quality variable.

c. Instrument Validity Y

The instruments used in collecting data from respondents for performance were 10 statements.

Table 5: Test Results of Validity Y.

Variable	Item	r-count	r-table	Conclusion
Operational Readiness (Y)	1	0,687	0,254	*valid*
	2	0,860	0,254	*valid*
	3	0,674	0,254	*valid*
	4	0,813	0,254	*valid*
	5	0,773	0,254	*valid*
	6	0,893	0,254	*valid*
	7	0,895	0,254	*valid*
	8	0,709	0,254	*valid*
	9	0,770	0,254	*valid*
	10	0,666	0,254	*valid*

Source: Processed Results of SPSS 25.

3.1.3. Reliability Test.

Reliability test shows that an instrument can be trusted enough to test the accuracy of the statement items contained in the research instrument. A construct or variable is said to be reliable if it gives a Cronbach Alpha value > 0,60.

a. Reliability Test X1

The instruments used in collecting data from respondents for Platform and Sensor Weapon And Command (Sewaco) Maintenance were 25 statements.

Table 6: Reliability Test Results X1.

Reliability Statistics	
Cronbach's Alpha	N of Items
0,950	25

Source: Processed Results of SPSS 25.

From the reliability test results it is known that all Platform and Sensor Weapon And Command (Sewaco) Maintenance statement items used in the research model have a Cronbach alpha (α) value greater than the probability value of 0,6 so that it can be concluded that all the Platform and Sensor Weapon And Command (Sewaco) Maintenance variable statement items in the study can be trusted or reliable.

b. Reliability Test X2

The instruments used in collecting data from respondents for the Quality of Human Resources were 17 statements. From the results of reliability test it is known that all items of the statement of the Quality of Human Resources (X2) used in the research model have a calculated Cronbach alpha value (α) which is greater than the probability value of 0,6 so that it can be concluded that all items of the statement of variable Quality Human Resources in research can be trusted or reliable.

Table 7: Reliability Test Results X2.

Reliability Statistics	
Cronbach's Alpha	N of Items
0,900	17

Source: Processed Results of SPSS 25.

c. Reliability Test Y

The instrument used in collecting data from respondents for Operational Readiness was 10 statements.

Table 8: Reliability Test Results Y.

Reliability Statistics	
Cronbach's Alpha	N of Items
0,943	10

Source: Processed Results of SPSS 25.

From the results of the Reliability test, it is known that all items of the Operational Readiness statement used in the research model have a calculated Cronbach alpha value (α) greater than the probability value of 0,6 so that it can be concluded that all items of the Operational Readiness variable statement in the study can be trusted or reliable.

3.1.4. Normality test.

Normality test is carried out to find out how the data is distributed. Normality test related to the accuracy of the selection of statistical tests conducted. Tests carried out to see normality is to use the Kolmogorov-Smirnov test and declared normal if the significant value (α) is greater than 0,05 or 5%.

From the results of testing data normality using the Kolmogorov-Smimov test and Shapiro-Wilk test the values are as follows.

Table 9: Normality Test X1, X2 and Y.

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
X1	,086	61	,200*	,975	61	,252
X2	,96	61	,200	,959	61	.141
Y	,098	61	,200	,973	61	,194

Source: Processed Results of SPSS 25.

*. This is a lower bound of the true significance

a. Lilliefors Significance Correction

Based on the above output, it can be seen that the significance value of the Kolmogorov Smirnov Test (0.200 ¿ 0.05), so

that the data used are normally distributed.

3.1.5. Autocorrelation Test.

Autocorrelation test aims to determine whether there is a correlation between observational data or not. Based on the results of the analysis shows that the value of Durbin-Watson is d. The value data states that the value of du < d < 4-du does not have auto-correlation.

Table 10: Normality Test X1, X2 and Y.

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Durbin-Watson
1	,993[a]	,986	,985	2,208

Source: Processed Results of SPSS 25.
a. Predictors: (Constant), Quality of Human Resources, Platform & Sensor Weapon And Command (Sewaco) Maintenance
b. Dependent Variable: Operational Readiness

The results of the analysis shows that the Durbin-Watson value is 2,208. Data values d = 2,208, dl = 1.5189, du = 1,6540. 4-dl = 2, 4811. 4-du = 2,346 thus the value of du < d < 4 - du has no auto correlation. The value is = 1.6540 < 2.208 < 2.3346, thus it can be concluded that there is no autocorrelation between the observational data.

3.1.6. Heterokedasticity Test.

Heteroskedasticity Test is performed to evaluate whether there is a similarity in the variance of residuals from one observation to another in a regression. If the variance of the residuals from another observation is different then it is concluded heteroskedasticity. A good model is homoskedasticity model or when heteroscedasticity does not occur. If the significance value (p value) is greater than the α value of 5% (0,05) then the data is declared not heteroskedasticity.

Table 11: Heteroskedasticity Test Results.

Coefficients[a]					
Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	2,249	1,185	1,897	,063
	Platform & Sensor Weapon And Command (Sewaco) Maintenance (Sewaco)	,078	,060	1,301	,198

a. Dependent Variable: RES2

Source: Processed Results of SPSS 25.

The results of the heteroskedacity test table stated that the value of sig X1 > 0,05, and X2 > 0,05. This means there is no heteroskedasticity in the regression model. So that the regression model is feasible to predict Operational Readiness based on the input of the independent variable.

3.1.7. Multicollinearity Test.

This test is performed to see whether among predictors have a large relationship or not. If the relationship between predictors is strong then the predictors are not independent.

Table 12: Multicollinearity Test Results.

Model		**Collinearity Statistics**	
		Tolerance	VIF
1	(Constant)		
	Platform&Sensor Weapon And Command (Sewaco) Maintenance	,30	2,816

Source: Processed Results of SPSS 25.

In the table above, the VIF value is not greater than 10 so it can be concluded that this model is free from multicollinearity problems.

3.1.8. Effect of Platform and Sensor Weapon And Command (Sewaco) Maintenance on Operational Readiness.

a. Correlation Coefficient Analysis.

Correlation coefficient analysis is a method to find out how strong the correlation between Platform and Sensor Weapon And Command (Sewaco) Maintenance with Operational Readiness.

Table 13: Correlations.

Correlations			
		Platform & Sensor Weapon And Command (Sewaco) Maintenance	Operational Readiness
Platform & Sensor Weapon And Command (Sewaco) Maintenance	Pearson Correlation	1	,965**
	Sig. (2-tailed)		,000
	N	61	61
Operational Readiness	Pearson Correlation	,965**	1
	Sig. (2-tailed)	,000	
	N	61	61

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Processed Results of SPSS 25.

From the results of test using SPSS version 25 in the table above, it can be seen that the correlation value between Platform and Sensor Weapon And Command (Sewaco) Maintenance with Operational Readiness is r = 0,965. It means that Platform and Sensor Weapon And Command (Sewaco) Maintenance have a perfect correlation to Operational Readiness. So it can be concluded that if Platform and Sensor Weapon And Command (Sewaco) Maintenance increase it will be followed by an increase in Operational Readiness and vice versa. And the significance value is 0,000 < 0,005 which means there is a significant correlation.

b. Analysis of the Coefficient of Determination

Analysis of the coefficient of determination is an analysis used to find out how much the contribution of Operational Readiness by Platform and Sensor Weapon And Command (Sewaco) Maintenance.

Table 14: Summary Model.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,965[a]	,932	,931	1,700

a. Predictors: (Constant), Platform & Sensor Weapon and Command (Sewaco) maintenance

Source: Processed Results of SPSS 25.

From the results of data processing using SPSS version 25 in the table above, by looking at the value of R Square which is equal to 0,932, it can be seen the value of the coefficient of determination (KD) = R2 x 100% ie 0,932 x 100% = 93,2%. This means that Platform and Sensor Weapon And Command (Sewaco) Maintenance has a contribution to Operational Readiness of 93,2%.

c. Regression Coefficient Analysis

Regression coefficient analysis is a method for analyzing the effect of Platform and Sensor Weapon And Command (Sewaco) Maintenance on Operational Readiness.

Table 15: Regression Coefficients.

Coefficients[a]					
Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	-7,355	1,581	-4,653	,000
	Platform & Sensor Weapon And Command (Sewaco) Maintenance	,483	,017	28,455	,000

Source: Processed Results of SPSS 25.

From the results of data processing using SPSS version 25 in the table above, it can be seen that the regression equation is Y = 7.355 + 0,317 X1, and it means that if Platform and Sensor Weapon And Command (Sewaco) maintenance are removed (X1 = 0), then the Operational Readiness is only 7.355. And if Platform and Sensor Weapon And Command (Sewaco) Maintenance, are improved there will be a change in Operational Readiness of 0,483.

d. T-Test Hypothesis Test

Hypothesis T-test is a test used to determine the significance of the influence of Platform and Sensor Weapon And Command (Sewaco) Maintenance on Operational Readiness.

From the results of data processing of SPSS version 25 in table 3.12 above it is known that t count = 28.445. By using a = 5% (n-k) it is known that the value of t table is 5% (61 - 2) = 1.671. So it can be concluded that t arithmetic is greater than t table or 28.445 > 1.671 or Ho is rejected and Ha is accepted. This means that Platform and Sensor Weapon And Command (Sewaco) Maintenance have a positive effect on Operational Readiness.

3.1.9. Effect of Ship Human Resources Quality on Operational Readiness.

a. Correlation Coefficient Analysis

Correlation coefficient analysis is a method to find out how strong the correlation of Human Resources Quality with Operational Readiness.

Table 16: Correlations.

Correlations			
		Quality of Human Resources	Operational Readiness
Quality of Human Resources	Pearson Correlation	1	,910**
	Sig. (2-tailed)		,000
	N	61	61
Operational Readiness	Pearson Correlation	,910**	1
	Sig. (2-tailed)	,000	
	N	61	61

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Processed Results of SPSS 25.

From the test result using SPSS version 25 in the table above, it can be seen the correlation value between Human Resources Quality with Operational Readiness is r = 0,910 and it means that Human Resources Quality has a perfect correlation to Operational Readiness. Thus it can be concluded that if Human Resources Quality increases, it will be followed by an increase in Operational Readiness and vice versa. And the significance value of 0,000 < 0,005 which means there is a significant correlation.

b. Analysis of the Coefficient of Determination

Analysis of the coefficient of determination is an analysis used to find out how much the contribution of Operational Readiness by the Quality of Human Resources.

Table 17: Summary Model.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,910[a]	,828	,825	2,703

a. Predictors: (Constant), Platform & Sensor Weapon And Command (Sewaco) maintenance

Source: Processed Results of SPSS 25.

From the results of SPSS version 25 data processing in the table above, the value of R Square is 0,828, and the coefficient of determination (KD) = R2 x 100%, 0,828 x 100% = 82,8%. This means that the quality of Human Resources has contributed to operational readiness of 82,8%.

c. Regression Coefficient Analysis

Regression coefficient analysis is a method for analyzing the effect of Platform and Sensor Weapon And Command (Sewaco) Maintenance On Operational Readiness.

Table 18: Regression Coefficients.

Coefficients[a]					
Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	-9,331	2,779	-3,358	,001
	Quality of Human Resources	,744	,044	16,874	,000

Source: Processed Results of SPSS 25.

From the results of SPSS version 25 data processing in the table above, it can be seen that the regression equation is Y = 9,331 + 0,744 X2, and it has meaning that if Human Resources Quality is eliminated (eg X2 = 0), the Operational Readiness is only 9,331. And as Human Resources Quality is improved there will be a change in Operational Readiness of 0,744.

d. T-Test Hypothesis Test

Hypothesis T-test is a test used to determine the significance of the effect of Human Resources Quality on Operational Readiness. From the results of data processing SPSS version 25 in the table above it is known that t count = 16,874. By using a = 5% (n-k) then the value of t table is 5% (61 - 2) = 1.671. So it can be concluded that t count is greater than t table or 16.874 > 1.671 or Ho is rejected and Ha is accepted. This means that the quality of Human Resources has a positive effect on Operational Readiness.

3.1.10. Analysis of the Effect of Platform and Sensor Weapon And Command (Sewaco) Maintenance and Ship Human Resources Quality on Operational Readiness.

a. Analysis of Multiple Correlation Coefficients

Multiple correlation coefficient analysis is used to find out how strong the relationship between Platform and Sensor Weapon And Command (Sewaco) Maintenance and Quality of Human Resources together to Operational Readiness. From the test result using SPSS version 25 it is known that the value of R = 0,993. This means that Platform and Sensor Weapon And Command (Sewaco) Maintenance and Quality of Human Resources have a perfect and positive relationship to Operational Readiness.

b. Multiple Determination Coefficient Analysis

The multiple determination coefficient analysis is the analysis used to find out how much the contribution of Operational Readiness by Platform and Sensor Weapon And Command (Sewaco) Maintenance and the Quality of Human Resources. From the results of SPSS version 25 data processing in the table above, based on Adjusted R square value of 0,986, it can be seen the value of the coefficient of determination (KD) = R2 x 100% , 0,986 x 100% = 98,6%. It can be concluded that Platform and Sensor Weapon And Command (Sewaco) Maintenance and Quality of Human Resources have contributed to Operational Readiness of 98,6%.

c. Multiple Regression Coefficient Analysis

Multiple regression coefficient analysis is a method for analyzing the effect of Platform and Sensor Weapon And Command (Sewaco) Maintenance and Quality of Human Resources together on Operational Readiness. From the results of data processing of SPSS version 25 it can be seen that the regression equation is Y = 0,195 + 1,138 X1 + 1,086 X2, meaning that if Platform and Sensor Weapon And Command (Sewaco) Maintenance and Human Resources Quality is eliminated (X1 and X2 = 0), then Operational Readiness is only 0,195. But if Platform and Sensor Weapon And Command (Sewaco) Maintenance increases, there will be a change of 1,138 for Platform and Sensor Weapon And Command (Sewaco) Maintenance and for the Quality of Human Resources there will be a change of 1,086. So we can conclude that Platform and Sensor Weapon And Command (Sewaco) Maintenance and Human Resources Quality really affect Operational Readiness.

d. Hypothesis F-test

The effect of all independent variables on Operational Readiness based on calculations has a significant value. This means that Platform and Sensor Weapon And Command (Sewaco) Maintenance and the Quality of Human Resources greatly affect Operational Readiness. From the results of data processing SPSS version 25 in the table above, it is known that the F count = 2021.313. When compared with the F value of the table using a probability of 0,5, it is known that the value of the F table = 0,05 (k-l). (N-k) = 0,05 (3-1). (61-3) = 3.160. Then it can be seen that the F count is greater than the F table or 2021.313 is greater than 3.160 or Ho is rejected and Ha is accepted. This means that Platform and Sensor Weapon And Command (Sewaco) Maintenance and Quality of Human Resources simultaneously affect

Operational Readiness.

Conclusions

Based on an analysis of the results of research conducted on the influence of Platform and Sensor Weapon And Command (Sewaco) Maintenance and the Quality of Ship Human Resources on Operational Readiness, it was found that :

a. From the results of regression hypothesis testing, there is the influence of Platform and Sensor Weapon And Command (Sewaco) Maintenance on Operational Readiness where t count is greater than t table (28,445 > 1,671) or H1 research hypothesis is accepted, r-square value indicates the contribution of Platform and Weapon And Command (Sewaco) Maintenance to Operational Readiness of 0,932. With the very significant influence between Platform and Sensor Weapon And Command (Sewaco) Maintenance on Operational Readiness, it can be concluded that there is an influence of 93,2%.

b. From the results of the regression hypothesis testing there is an Influence of Vessel Human Resources Quality on Operational Readiness where tcount is greater than ttable (16,874 > 1,671) or H2 research hypothesis is accepted, r-square value indicates the contribution of Ship Human Resources Quality to Operational Readiness of 0.828 so it can be concluded that the Influence of Ship Human Resources Quality Against Operational Readiness is 82,8%.

c. Based on the results of testing the regression hypothesis between the influence of Platform and Sensor Weapon And Command (Sewaco) Maintenance and Ship Human Resources Quality on Operational Readiness simultaneously shows that there is an influence where Fcount is greater than Ftable (2021.313 > 3.160) or the H3 research hypothesis is accepted, the R square value in the summary table shows the contribution of Platform and Sensor Weapon And Command (Sewaco) Maintenance and Ship Human Resources Quality on Operational Readiness of 0,986 so it can be concluded that the Effect of Platform and Sensor Weapon And Command (Sewaco) Maintenance and Ship Human Resources Quality on Operational Readiness is 98,6%.

Those results are very suitable in accordance with theories about maintenance and the theory of Human Resources quality, namely to obtain maximum maintenance results, it requires reliable and professional Human Resources quality who has expertise in their fields so that operational readiness can be achieved with maximum results.

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