

## ABSTRACT

**Faizal Anang Abriyanto**, NIT: 50134936T, 2018, “*Disturbance Identification on FO Purifier which can affect the performance of main machine dan ship operations in MT. Sambu*” , Thesis in Teknika Majors, Diploma IV Programme, Politeknik Ilmu Pelayaran Semarang, Supervisor I: Dwi Prasetyo, MM, M.Mar.E, Supervisor II: H.Suharso, SH, S.Pd, SE, MM.

All parties do not want to be harmed, the cargo owner expects the ship to arrive at destination, so that cargo does not face obstacles on the unloading process. The operator wants to make the voyage smooth at a cost that is not increasing. Therefore it is expected to always pay attention to auxiliary equipment. Purifier is an auxiliary equipment which functions as fuel separator, so that the sediments do not enter the daily tank. Purifier condition is very influential as it relates to the fuel. For sample case, the main engine can not be started when docked to port during the unloading process. It happens because the injector is blocked. The blockage of the injector is caused by dirty fuel.

This research aims to determine the factors that causing interference on FO Purifier and to know how to maintenance and repairs as well as efforts to prevent overflow. The methodology used in terms of research type is descriptive qualitative and in terms of collection methods this research use interviews, observations, literature study, and documents study.

From the results of the study and research conducted, there are several issues that are important to discuss, that is : what causes the occurrence of interference on FO Purifier and how to overcome interference on FO Purifier. At the end of the thesis the authors summarize conclusion that the defect in the purifier exists in MT. Sambu is the sliding factor bowl and damage to the main seal ring. The researcher proposes to company to provide spare parts according to the manufacturer and suggestions for engineer to improve treatment on the purifier, pay attention to both the factors causing the overflow on the purifier and improve maintenance on systems related to FO purifier.

**Keywords** : FO Purifier, Disturbance Identification, Affect Machine Performance