## **ABSTRACT**

Avin Bagas Pratama, 51145466.T, 2018,"Identification of labor abnormalities hydrophore tank to supply fresh water to accommodation in MV. Sinar Banda", Diploma IV, Technical, Merchant Marine Polytechnic Semarang, Supervisor I: H. Rahyono, SP.1,MM, M.Mar.E and supervisor II: Purwantono S.Psi.,M.Pd.

To maintain the quality and quatity of fresh water on the boat, we can use the system supplies fresh water to the needs of fresh water on board, using hydrophore tank fresh water from the room engine fixed to the accommodation of quality even in the fresh water reservoirs in the old tank and fresh water was not much degreded. If demand of fresh water for the needs of fresh water in board can be provided.

The methode used on this reasearch is the fault tree analysis that result in factors that may affect the work hydrophore abnormalities. Fault tree analysis is a method of analysis, where there is an unwanted event called undersired event occurs in the system, and the system is then analyzed by evironmental and operational conditions that axist unuk find all possible way that lead to the accurrence of the undersired event. The method is done approach by is top down, starting with the assumption of failure or loss of peak incidence (Top Event) then detailing the cause of a Too Event came to a basic failure (Root Cause).

The purpose of this research is to find out what influences the work abnormalities of hydrophore tank on freshwater supply to accommodation in MV. Sinar Banda using the fault tree analysis method that produces factors that can affect the abnormal work of hydrophore tank during operation and stop too often, fresh water supply problem, problem on feed water pump and delivery valve problem. The result of the hydrophore tank work abuses research on the supply of fresh water to the accommodation, the compiler can conclude the factors that can not be investigated from any top event cause that the feed water pump is not working properly, having problems with fresh water supply, delivery valve.

Keywords: hydrophore tank, feed water pump, fishbone, and fault tree analisys.