

ABSTRACT

Muhamad Taufik, 2017, NIT : 49124490.N, *"Analisis Precondition For Unsafe Act Use Analytical Hierarchy Process (AHP)"*, Study Program Nautical, Diploma IV Program, Merchant Marine Polytechnic Semarang, Advisor I: Dr.Capt.Antoni Arif Priadi, M.sc, Advisor II: R.A.J Hadi Susilo Wibowo, S.IP., M.M.

As a maritime nation is having technological advances marine transportation sector, many happened problems in term of marine accidents that often afflict ships. This caused by variety of errors, one of them is human errors.

Human error is often a primary factor caused by the negligence of humans who ignore safety and security for himself, another people and ships. But any another factor can caused by people make error in work thats is environment factor, condition of operators and the people's physical condition. The factors have been divided into several classification according to Human Factor Analysis and Classification System (HFACS) as build of Dr. Scott Shappell and Dr. Doug Wiegman. The factors of HFACS that's divided into several parts, one of them is a factor Precondition for Unsafe Act (the certain that lead to unsafe act). These factors is a highest factor in second after Unsafe Act that led to the accidents or create a dangerous situation which refers to the environment conditions, conditions of operator and personnel. To get the value of the most influential factor to accidents in the process of loading and unloading, author use the quantitative methods of processing by using Analytical Hierarchy Process (AHP) methods to get the value of the highest factors that influence the accident happened.the result, then can get a value result of the factor of conditions operators and personnel factor is more highest factor than environment factors that caused the accident in the process of loading and unloading and in other conditions. The author also looked at the potential of practical sailing experience on ships of MV. Energy Midas and type of Bulk Carrier vessel.

In these case can be concluded that the factors of accident has many types, divided into various classification due of HFACS who were instrument to the occurence of marine accident.

Key words : Precondition for Unsafe Act, Analytical Hierarchy Process (AHP)