

ABSTRACTION

Falen Dani Pratama, 2018, NIT : 50134966.T "*Analysis Causes of Increase Level of Salinity of Fresh Water Productivity at Fresh Water Generator In MT. Enduro with Methods of Analytical Hierarchy Process* ", Studies Program Diploma IV, Merchant Marine Polytechnic Semarang, Supervisor I:H. Mustoliq, M.M,M.Mar.E, Supervisor II:Capt Didi Sumardi, M.mar.

Fresh Water Generator is an aircraft that function change sea water into fresh water through the process of evaporation and condensation. So hopefully with this tool installed aboard the ship against dependence can reduce the supply of fresh water from the land. However the fact the real level of high levels of salt in the Fresh Water Generator affects freshwater productivity due to the process of heating and cooling on the evaporator and condensor running slow and caused the decline in the production of the freshwater.

The research was carried out against Fresh Water Generator, Alfa Laval type HW HW80 Aqua on the ship MT. Enduro, one of a fleet owned by PT. Pertamina. This done by the writer in the ship for the past 14 months when the author implement the practice of sea. The source of the data used in the preparation of this thesis includes primary data obtained directly from the place of research, as well as secondary data obtained from the literature relating to the title of the thesis. While the types of methods that writers use is Analisa SWOT, which aims to determine the most influential factor in the causes of increased levels of salt. Source data obtained directly from the boat is interview with the head of the engine room as well as the documentation related to this research.

From this research, factors cause elevated levels of salts on freshwater productivity is to adhere crust on the pipe evaporator and salt crust on the plate evaporator heater and there is dirt in the form of mud on the cooling pipe of condenser. Its effects on the freshwater production is declining. Efforts are being made is to do maintenance on a regular basis, periodic and periodic inspections.

Key Word : Fresh Water Generator, Analisa SWOT, Evaporator