

ABSTRACTION

Candra Adi Nurcahyo, 2018, NIT: 51145437. T, "*Identification of refrigeration installations in MT. Celosia* ", Diploma IV Study Program, Merchant Marine Polytechnic of Semarang, Supervisor I: F. Pambudi Widiatmaka, S.T., M.T., M.Mar.E, Supervisor II: Dr. Winarno, S.ST., M.H.

An oil chemical transport vessel (Tanker) is one of the ships that require shipping time for days requiring refrigeration aids for food ingredients to meet the needs of food on board during shipping. Therefore, on a transport vessel that requires days of shipping, it is equipped with a refrigeration auxiliary food that aims to preserve food needs on board, so the ship is equipped with auxiliary aircraft, namely a refrigerator.

Airplane refrigerator is an aircraft that serves to preserve food ingredients used for purposes on board such as preserving meat, fish, vegetables, fruits and other needs on board. In conducting research, researchers use a case study methodology that aims to oversee certain aspects or specifically to obtain existing data in accordance with the research objectives. Researchers used fishbone methods and fault tree analysis, interviews, documentation, and literature studies to obtain data relating to aircraft refrigerators that are useful to support the smooth writing of thesis writing.

Sometimes a machine that works continuously will also experience problems in operation, as well as an airplane refrigerator. One of the problems that has occurred is the blockage of fine mesh filters by crust due to corrosion, gram-grams due to wear of cylinders, piston and piston rings. Blockage of fine gauze filters is also caused by the lube oil foam which is frozen in the filter. While abnormalities occur, the dryer occurs because of the reduced ability of silica gel to absorb the water content in the freon. The ability of this silica gel continues to decrease so that it will cause other components such as the thermostat expansion valve to be disrupted by blockage caused by ice flowers from frozen water. Coolant which should be expanded becomes inhibited so that the coolant for heat absorption is reduced so that the cold room cannot reach normal temperature. Therefore, continuous maintenance and checking is needed so that these components can work properly and do not interfere with the overall operation of the refrigeration installation.

Keywords: *filter dryer, thermostat expansion valve, coil evaporator pipe*