

ABSTRAK

Air conditioning system merupakan salah satu sistem pada pesawat yang berfungsi untuk kenyamanan penumpang di *cabin*. *Air conditioning system* dalam pesawat harus diperhatikan ketika melakukan *maintenance*. Salah satu masalah dalam penerbangan yaitu kurangnya kenyamanan dari penumpang. Oleh karena itu, harus dilakukan penelitian untuk mengetahui permasalahan yang terjadi pada suatu komponen di *air conditioning system*.

Identifikasi masalah kerusakan pada *air conditioning system* adalah indentifikasi pada *heat exchanger*, *air cycle machine (ACM)*, *water separator*, *pressure* dan *temperature*. Identifikasi tersebut dengan cara mengecek satu persatu kerusakan.

Setelah melakukan indentifikasi pada komponen *air conditioning system*, ditemukan kerusakan pada *water separator* di sebabkan karena adanya butiran air es di *Coaleser bag* dan motor *temperature control valve* yang disebabkan karena motor lemah. Proses selanjutnya di *repair* sesuai dengan *aircraft maintenance manual (AMM)* dan *component maintenance manual (CMM)*.

Kata kunci: *Air conditioning system*, Identifikasi, Repair.

ABSTRACT

Air conditioning system is one of the systems on the aircraft that serves for the comfort of passengers in the cabin. Air conditioning systems in aircraft must be considered when doing maintenance. One problem in flight is the lack of comfort from passengers. Therefore, research must be conducted to determine the problems that occur in a component in the air conditioning system.

Identification of problems with damage to the air conditioning system is identification on the heat exchanger, air cycle machine (ACM), water separator, pressure and temperature. The identification is by checking one by one the damage.

After identifying the components of the air conditioning system, it was found that damage to the water separator was caused due to the presence of ice water grains in the Coaleser bag and the motor temperature control valve caused by a weak motor. The next process is repaired in accordance with aircraft maintenance manual (AMM) and component maintenance manual (CMM).

Keyword: air conditioning, identification, repair