

ABSTRACT

Most of runways which are used by civil airways cooperation (PT. Angkasa Pura) in Indonesia are located at Indonesia Air Force Base, while the navigation aids which are used together. Although TNI-AU has had it's own electronic equipment maintenance unit (including navigation aids equipment), but PT. Angkasa Pura offers the corrective maintenace to other maintenance cooperation to be carried out. The routine functional test has never been done so that malfunction can not be prevented and predicted earlier and that is why the navigation aids functional equipment has not been prepared up to now.

The purpose this thesis is as a contribution to solve the problem, i.e. to propose a collaboration in maintaining the navigation aids equipment and propose a functional equipment which design is designed to be use in preventive and predictive maintenance. A research has been carried out in one of TNI-AU maintenance unit, i.e. in Depohar 40, to ascertain if this unit fullfills the requirements in maintenance. Functional equipment to test VOR and ILS stations have been design and bulit it's prototype.

Refer to the questionnaires filled by some TNI-AU members which are involved in navigation aids maintenance, according to maintenance management point view TNI-AU can fullfill all requirements to carry out the corrective maintenance of navigation aids equipments belong to TNI-AU as well as to PT. Angkasa Pura. The recomended collaboration is that Depohar 40 has responsibility to carry out navigation aids equipments which are owned by PT. Angkasa Pura, while the routine maintenance can be done together in a team work i.e. by air force base and airport as users. The routine test can use the functional equipment which has been built in a prototype form and tester with a good result. Testing of the functional equipment was carried out in Halim Perdanakusuma base against VOR and ILS stations. This functional equipment can measure the transmitted frequency, relative output power of the stations, and detect the transmitted informations signals.