

ABSTRAK

Pesawat Phenom 300 PT.Pura Purawisata Baruna adalah sebuah pesawat jet berpenumpang 8 orang yang di rilis tahun 2009, pesawat ini menggunakan *landing gear* yang bisa *retracted* dan *extend*, *retracted* dan *extend landing gear* digerakan dengan menggunakan *system hydraulic*. Dari beberapa kejadian terkait dengan kerusakan *landing gear* yang tidak bisa *retrac* atau *extend* di perusahaan PT. Pura Wisatabaruna.

Penanganan kegagalan *system retracted* dan *extened landing gear* pada pesawat Phenom 300 PT. Pura Wisatabaruna dilakukan di hanggar STPI Curug dengan menggunakan metode referensi *Aircraft Maintenace Manual ATA Chapter 32*, analisis penyebab kegagalan *system landing gear* yang tidak bisa *extension* khususnya pada *nose landing gear*.

Hasil dari penelitian tentang permasalahan *system nose landing gear* Phenom 300 adalah terjadi permasalahan pada *actuator*. Permasalahan tersebut diselesaikan dengan melakukan *troubleshooting* yang mengacu pada AMM Phenom 300 *task 32-21-02* untuk *trouble shooting*, AMM Pheom 300 *task 32-21-02* untuk *removal and installation actuator* dan AMM Phenom 300 *task 32-21-02* untuk *removal and installation nose landing gear* serta analisa akar kegagalan dengan menggunakan metode *fault tree analysis* mendapatkan 17 *basic event* yaitu *Nose landing gear problem*, *Main Landing gear problem*, *Nose L/G Control lever problem*, dll.

Kata kunci : Phenom 300, *fault tree analysis*, *Landing gear*

ABSTRACT

The Phenom 300 aircraft PT. Pura Purawisata Baruna is an 8-seater jet aircraft which was released in 2009, this aircraft uses landing gear that can be retracted and extended, retracted and extended the landing gear is moved using hydraulics. From several incidents related to landing gear damage that cannot be retracted or extended at PT. Pura Wisatabaruna.

Handling of retracted and extended landing gear system failures on Phenom 300 PT. Pura Wisatabaruna was carried out at the STPI Curug hangar using the Aircraft Maintenance Manual ATA Chapter 32 reference method, analyzing the causes of the failure of the landing gear system that could not be extended, especially on the nose landing gear.

The result of the research on the nose landing gear system problem in Phenom 300 is that there is a problem with the actuator. The problem was solved by doing troubleshooting referring to AMM Phenom 300 task 232-21-02 for trouble shooting, AMM Phenom 300 task 32-21-02 for the removal and installation of nose landing gear and root failure analysis using the fault tree analysis method, 17 basic events were obtained, namely Nose landing gear problem, Main Landing gear problem, Nose L/G Control lever problem, etc.

Keyword: Phenom 300, fault tree analysis, Landing gear