ABSTRAK

Bandar Udara Internasional Yogyakarta (YIA) merupakan bandara baru sebagai pangkalan transit internasional untuk kawasan Yogyakarta dan sekitarnya yang direncanakan mampu melayani pesawat dengan ukuran besar. Untuk kenyamanan dan keselamatan penerbangan maka runway harus mampu menahan beban roda pesawat yang akan dilayan di bandara. Tujuan penelitian ini adalah mendesain ulang dan mengetahui ketahanan terhadap desain perkerasan dengan menggunakan metode FAA dan *software* COMFAA. Pesawat rencana yang digunakan adalah Boeing 747-400ER berdasarkan konfigurasi roda pendaratan. nilai CBR tanah dasar sebesar 6% berdasarkan data sekunder dari PT. Angkasa Pura I. didapatkan nilai *Aircraft Classification Number* (ACN) 77,8 dan *Pavement Classification Number* (PCN) 94,9. Nilai PCN > ACN, mengindikasikan kondisi struktur perkerasan mampu menerima beban semua jenis pesawat yang direncanakan yang akan dilayani oleh landas pacu.

Kata kunci: Federation Aviation Administration, Software COMFAA, ACN-PCN.

ABSTRACT

Yogyakarta International Airport (YIA) is a new airport as an international transit base for the Yogyakarta and surrounding areas which is planned to be able to serve large-sized aircraft. For flight comfort and safety, the runway must be able to withstand the weight of the aircraft wheels to be served at the airport. The purpose of this study is to redesign and determine the resistance to pavement design using the FAA method and COMFAA software. The planned aircraft used was the Boeing 747-400ER based on the landing gear configuration. subgrade CBR value of 6% based on secondary data from PT. Angkasa Pura I, obtained the value of Aircraft Classification Number (ACN) 77,8 and Pavement Classification Number (PCN) 94,9. PCN value> ACN value, indicates the condition of the pavement structure is able to accept the load of all types of aircrafts which planned to be served by the runway.

Key words : Federation Aviation Administration, Software COMFAA, ACN-PCN.