

ABSTRACT

PT. Dirgantara Indonesia is a company that has a purpose in the field of transportation, communication, defence and security in the form of industrial and commercial products and services. In 2016, the company will develop the aircraft CN – 235 which was finished in November 2015 and will be converted into a plane N – 245. N – 245 will develop the design and evaluate on the hatrack, because there is no higher standard of hatrack. Start with checking existing conditions using CATIA VR on RULA's approach. And after check and an absence of standard about the height of hatrack in cabin plane, we need to the research uses virtual environment. In virtual environment can use posture evaluation index (PEI) method in software Jack. The method of PEI could to represent physically produced by computer with displaying a representation physically with of the real environment. After conducted simulation to find value PEI existing at the time of lifting into hatrack obtained value of PEI is 2.14 . it was necessary to research in handling these problem using posture evaluation index approach. From the result of simulation that have been done, and get the vertical height of hatrack design configuration is 1522.08 mm and get the value of PEI is 2.08. The difference of height before the height the configuration of the seventh is 30.92 mm. This suggests that the design of the vertical height hatrack configuration is relatively ergonomics based the value of posture evaluation index.

Key words: *Aircraft, Hatrack, Virtual Environment, Posture Evaluation Index (PEI).*