An analysis of the ergonomic design of the tactical commander console (tacco) in the virtual environment of medium-range twin-engine maritime patrol aircraft (mpa)

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Abstrak

This study was carried out to examine the ergonomic aspects of the design of the Tactical Commander Console (TACCO) in the virtual environment of medium-range twin-engine ? Maritime Patrol Aircraft (MPA). The analysis was conducted using Jack 6.0 software. The evaluation method used in this study is the Posture Evaluation Index (PEI) method that integrates the results of analysis from three methods: Lower Back Analysis (LBA), Ovako Working Posture Analysis (OWAS), and Rapid Upper Limb Assessment (RULA). The purpose of this study is to evaluate the actual design of TACCO and to identify the most ergonomic design configuration, which is reviewed according to the distance and tilt angle of the control panel and the height of the chair. The results of this study show that the optimal ergonomic design for TACCO is as follows: panel at a distance of 10 cm, tilt angle of 60?, and a chair height of 29.5 cm.