DEVELOPING FORECASTING TOOLS FOR FAST MOVING AND IMPORTANT SPARE PARTS IN REMOTE STORE : A CASE STUDY AT PT. ABC

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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By

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This research is based on the case study in PT. ABC's material planning. It is addressed how to develop safety stock of the spare parts using several forecasting tools. Currently the demand in the main station will be sacrificed to fulfill the demand in the outstation or called remote store. Moreover, the non-availability of spare parts in time in the main station could lead to the delay flight of the aircraft or interference the maintenance activity. Currently the determination of safety stock to accommodate demand on the remote store is based on average of actual data. Therefore, this research will determine the suitable forecasting tools to predict the demand in the next period and obtained more accurate safety stock quantity by using deviation between actual demand and the forecasted demand. Moreover, this research provides program that can calculate quantity of safety stock based on forecasted demand in the next period by input the actual demand based on 3-year past historical data. The work instruction related to the program also included to help the operator so that the program can be operated properly to obtain accurate result.

Keywords: safety stock, remote store, forecasting tools, work instruction.

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DEDICATION

I dedicate this thesis work for my future self and my beloved parents who always support me.

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