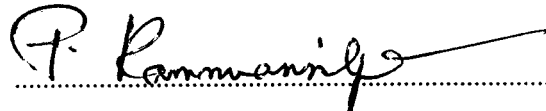


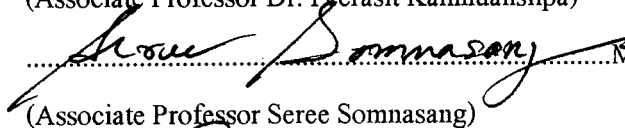
THESIS TITLE: DEVELOPMENT OF TRAFFIC LIGHT CONTROL IN
KHON KAEN MUNICIPALITY

AUTHOR: POL.CAPT. THANAWAT DEEBOONMEE

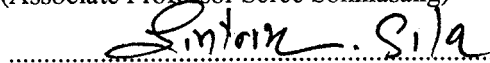
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ABSTRACT

This operations research aimed to develop the new traffic light control system at the intersection between Klang Muang and Srichandara road intersection, and to solicit the opinions about the new system among the traffic control policemen in Khon Kean Municipality Area. Indicators used in this research to show improvement in the traffic light control system was waiting times of all vehicles at the intersection.

Research interventions developed in this study were training of policemen who were in charge of traffic light control during the months of July and August, 1998. Collected data were analyzed in order to compare the opinions of policemen before and after interventions by McNemar test. In addition, t-test was employed to judge the significance of average reduction in waiting time of all vehicles before and after system development.

The results from the analyses of data indicated that the policemen who were in charge of traffic control had more knowledge about traffic control and knew more about how to operate the traffic light control device. They were of the opinion that the new traffic light control

system provided a more efficient control of traffic volume than before. This improvement was statistically significant at 0.05 level.

Of particular interest, was the finding that the new traffic control system was able to reduce the average waiting time at the traffic light intersection for the motorists. It was also found that the motorists were able to reduce their waiting time as much as 16.5 percent. Similarly, this was a statistical significant improvement at 0.05 level.