

WORAWUT CHITKACHORNWANICH : DEVELOPMENT OF GROUP ELEVATOR CONTROL
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This thesis describes the development of a group elevator control system. Its emphasis is on the designing of control system structure, the development of calls allocation algorithm and the development of computer program for testing the system. The distributed control system was chosen to be the suitable configuration, and a multidrop current loop transmission was designed to be used in the system. Various methods of hall call assignment algorithm have been studied and compared by the elevator simulation program, then the waiting time minimization methods had been developed. It was found that the waiting time can be reduced by 50% and the probability of long waiting can be decreased 80% when compared to uncontrolled assignment. The method was modified by adding the consideration of probable stopped and passed floor. It was found that the modified methods can reduce the waiting time by 5-15% compared to that of non-modified methods.