

SUGGESTION OF INTEGRATED TROLLEY SYSTEM IN
KUALA LUMPUR INTERNATIONAL AIRPORT



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2. KLIA Management
3. Encik Mohd. Sharif Mohd. Kassim
(Airport Management Centre)
4. KLIA General Worker whom we interviewed
5. Prof. Ismail Abdul Wahab (MEDEC Lecturer)

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Your co-operation and help cannot be valued with money.... Only ALLAH will rewards your deeds.

INTRODUCTION

For the completion of the diploma in Mechanical Engineering course, a final project must be done. The project must be based on the requirement and the syllabus of the course that we are enrolled in. Consequently, we have prepared this project entitled 'Suggestion Of Integrated Trolley System In KLIA'.

There is no man-made system that is fully perfect. Consequently, every system has to be checked and renewed always to keep track with current development. Our project advisor Puan Che Faridah Mat Taib has taken initiative to determine the problems faced by the trolley system in KLIA. We are to do the work conducting the research relating to the above problems and proposing an alternative system should it be needed. The focus of the project is on the trolley system in KLIA. Moreover it considered ideas that can be adapted from other systems available in wholesalers' stores and other places to form a system that not only maintain the advantages offered by the old system but also overcome its problems.

Since the period of the project was just one semester, the research done was limited to explanation about the alternative trolley system as a whole and its combination with Total Airport Management System (TAMS). The project commercial value was also considered since it determines the success of the project. Hopefully, this project will benefit anyone who wishes to apply it.

1.0 TROLLEY SYSTEM BACKGROUND

1.1 Trolley System Background In KLIA.

KLIA is located in Sepang, Selangor Darul Ehsan which has been officially opened by Yang Dipertuan Agong Tuanku Ja'afar on 27 June 1998. The current trolley system has been applied since its opening. Currently the KLIA airport is utilizing Total Airport Management System(TAMS) in its operations.

The system used is manual kind of system where the task of retrieving and arranging the trolleys in specific sites is fully done by the workers. Shift system is used where there are three shifts of workers i.e from 7.00 a.m to 3.00 p.m, 3.00 p.m until 11.00 p.m and 11.00 p.m to 7.00 a.m. There are a total of 54 workers placed throughout the Main Terminal Building (MTB). They are required to retrieve the trolleys left by KLIA users and put it to the trolley nests scattered in KLIA areas.

KLIA trolleys have some special characteristics compared to trolleys in wholesalers stores. One of them is that it has a brake placed on the rear wheel. The picture of the brake is shown in appendix B. It is also equipped with stopper on its lower left and right side. The picture of the stopper is in appendix C.

The system is divided into two components, i.e arrival department and departure department. For both departments, there are two kinds of trolleys used i.e complimentary luggage and hand luggage trolley. These trolleys can be obtained without charge and customers are free to use the trolley within MTB and up to the nearby car park. There is a crossing connecting MTB and the hotel building beside it equipped with walkalator for the convenience of the users. The picture of walkalator is attached in appendix B.

There are facilities offered by KLIA for the customers to keep left luggage especially for customers with excess load which is difficult to handle. This service is also suitable for customers who want to keep their goods for longer period of time. The picture of left luggage counter is attached in appendix B.

1.1.1 Arrival Department

Arrival Department is situated in level three MTB. The passenger of aeroplanes arriving at Satellite A will have to board the aerotrain to reach the MTB. Arrival at the MTB would be on the Mezzanine level (level 4) and access to the arrival level would be via lifts or escalators. These are located a short distance away from the Aerotrain. There are a total of 48 Immigration counters for arriving passengers and another 16 for transfer passengers. All foreigners are required to complete a disembarkation card before reaching this counter. (The map of arrival level is shown in appendix D.

Complimentary luggage trolleys are available within the baggage reclaim area. Hand luggage trolleys are available outside arrival gates. The pictures of the trolleys are attached in appendix B. The customers are allowed to use the trolleys freely to carry their belongings to specific sites like the hotel nearby or catch taxi and board buses at the arrival level kerbside or go to car park pick-up zones. Walkalator or travellator is used in the crossing that connects the MTB and the nearby hotel.