

A Discuss Of Boarding: Detailed Optimal Strategy Of Boarding Process

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A general theory is founded by us with the goal of which is to make the boarding process most profitable for airlines and real pleasure with comfort and rapidity for passengers, which explains and calculates the optimal model of boarding. Not satisfied with giving and testing an optimal order, we go forward one by one to develop our model of the boarding order and also design the optimal strategies of the airlines' set-off. Enough simplified assumptions are appointed of which it is the most important that we insist on that the boarding should be arranged in the order of seats' distribution. With those assumptions we found an ideal model and after that wide analysis is made in three parallel conditions, each of which has its particular extra assumptions and revision, and on which we set up three model revisions as below:

Revised Model with Random Personal Operation Time

Revised Model with Random Behavior Inside the Cabin

Revised Model with Off-Time

In these three models, analysis is based on kinds of random conditions that may yield in practical boarding, and we selectively make some simulations. The effect on the boarding time from those kinds of random delays is well expressed in our model, while the result of computation shows a high degree of agreement.

Integrating all our former parallel discussion, we finally set up a comprehensive semi-experiential theory which gives a more practical direction to the airlines pretty flexible for selecting. Comparison of our model with previous work, our original idea with specialty is not only to confirm and insist the boarding mechanism in order, but also strictly set up an optimal mechanism of boarding on the order boarding.