



THE IMPACT OF UNSCHEDULED MAINTENANCE TO AN AIRLINE'S ON TIME PERFORMANCE

Peter O'Reilly*, Augusto Dalazen*, Beatriz Ponzoni**, Giovanna Simoes***, Burak Cankaya*

*Embry-Riddle Aeronautical University

**Azul Linhas Aéreas

***Latam Airlines

* Corresponding author e-mail address: oreillyp@erau.edu

PAPER ID: SIT164

ABSTRACT

During the taxi-out phase of a flight, the pilots might find different potential malfunctions. There are multiple methods to address these malfunctions. One approach is to have pilots perform the proper maintenance dispatch of an inoperative item, known as Crew Applied MEL dispatch. That dispatch procedure must be made under an aircraft's manuals and coordinated with the airline's maintenance control center. However, unlike European and American agencies, the Brazilian regulatory agency currently lacks the proper regulation to support the application of this Crew Applied MEL procedure. In this study, we have statistically presented the outcomes of this procedure change and the impact that these malfunctions might have on an airline's "on-time performance". Our study showed that this proposed procedure could be safely utilized with little or no direct costs related to the implementation. This research study also revealed that with proper implementation of this dispatch system, significant time could be saved while diminishing any losses to an airline's performance and brand image. It can enhance customers' loyalty as well. We believe this new procedure can improve the synergy between pilots and airlines, reduce flight delays, cut costs, and improve flight safety.

Keywords: Flight Planning, Unscheduled Maintenance, Brazilian Aviation Procedures