

Reliability Matters



Completion Rate Myth

Volume 1, Issue 2 June 2004

Airlines typically use a variety of reliability measures to assess performance of their operations, one of which, and the most widely quoted in press releases is Completion Rate.

Completion rate, a function of cancellations and diversions, while averaging above 99.00%, does not accurately portray the complete picture of an Airline's performance. To realize the true operational performance, costs incurred, and customer satisfaction, one must review this metric in conjunction with aircraft punctuality and equipment substitution.

Anytime an aircraft experiences a delay it impacts the passenger, the Airline operation, and all parties that support/interface with the operation.

Take, for example, a moderately sized Airline with a completion rate of 99.30%, operating a 150 seat aircraft, with 15,000 flights per month with a 70% load factor and an ontime performance of 81.50%. Even with this high completion rate, 105 flights were cancelled impacting 11,025 passengers.

Analyses of delays, solely due to events within an Airline's control, indicate that 4.50% or 675 flights were delayed greater than 15 minutes, impacting 70,875 passengers. In addition, a significant number of passengers experienced delays due to weather, ATC, and security issues; events, which are outside an Airline's direct control.

For the Airline to achieve a high completion rate, what measures are undertaken and at what cost? Here are some factors to consider when addressing this question; How many operational spares are required for substitutions to avoid cancellations? How many additional aircraft and crew movements are performed to control cancellations? How many passengers are rescheduled onto other flights or airlines to minimize the impact? What is the total staff overtime required to complete these flights? What is the passenger compensation for those impacted by the cancelled flights?

To gain a better understanding of the health of an Airline's operation, several key metrics must be analyzed together, for example, on-time performance, station performance, component and operational reliability and number of spare aircraft. Identifying root causes of controllable events and the timely implementation of their corrective actions, provides the Airline the opportunity to minimize future events. This continuous process of root cause analysis, followed up with corrective actions will lead to improved costs and reliability while providing greater value to the customer.

 In March 2004, 18 US carriers reported a total of 5.0 million minutes in delays

 BTS data for the 9 months ending March 04 show that delays attributed to Airlines on average are 51 minutes in duration

• Ground delay of 15 minutes for an A320 costs 340 USD

 Airborne delay of 15 minutes for an A320 costs 620 USD

For additional information please contact Paul Vascotto at pvascotto@rcmaeroservices.com