

P Discovery Project

Using Statistical Process Control to Improve Air Traffic Processes

1. Choose two cities of interest and research/report actual flight times over a particular weekend, Friday through Sunday. Data sets should include at least ten observations and should be organized in a table for later use.
2. Create a Pareto chart for your flight times.
3. Identify the Upper and Lower Control Limits for any of the three days and draw a graph to represent findings.
4. Calculate the mean and standard deviation of flight times for each day and draw an \bar{x} chart.
5. Create a quality control workflow chart to present to air traffic clients on ways to improve tracking data. Ideas can include measurement improvements,
6. Think about Deming's points 7-9. How can you, as a leader, use statistical processes to improve the effectiveness of flight times?
7. Creatively organize all results and write a summary of your findings to be presented to a board for statistical improvement of air traffic processes.
 - a. Include charts and label properly.
 - b. Interpret your results from parts 1-4.
 - c. Use parts 5-6 to write the narrative of your presentation.
 - d. Identify different types of variation and reasons for such data points.