Chapter Outline

# Chapter 6: Quality Improvement and Control Tools

***See pages: 194-242.***

Operations Profile: Using Technology to Improve the Quality of Helicopter Rescue

 Quality Control Versus Quality Assurance

 Quality Appraisal Tools

 Check Sheets

 Histograms

 Pareto Charts

 Scatter Diagrams

 Cause-and-Effect Diagrams (Fishbone Diagrams)

 Process Flowcharts

 Quality Defect Prevention Tools

 Statistical Process Control (SPC)

 Control Charts

 Process Capability Analysis

 Revisiting Six Sigma: Calculating Six Sigma Quality of a Process

 Quality Design Tools

 The Taguchi Method (Robust Design)

 Chapter Summary

 Key Terms

 Discussion and Review Questions

 Solved Problems

 Problems

 Case Study 6.1: J.D. Power Automobile Surveys: What Does “Quality” Mean, Anyway?

 Video Case

 Critical Thinking Exercise