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