Appendix B
Bibliography

INTRODUCTORY WORKS AND GRAPHICAL METHODS

Chambers, J., Cleveland, W., Kleiner, B., and P. Tukey (1983), *Graphical Methods for Data Analysis*, Wadsworth & Brooks/Cole, Pacific Grove, CA. A very well-written presentation of graphical methods in statistics.

Freedman, D., Pisani, R., Purves R., and A. Adbikari (1991), *Statistics*, 2nd ed., Norton, New York. An excellent introduction to statistical thinking, requiring minimal mathematical background.

Hoaglin, D., Mosteller, F., and J. Tukey (1983), *Understanding Robust and Exploratory Data Analysis*, John Wiley & Sons, New York. Good discussion and illustration of techniques such as stem-and-leaf displays and box plots.

Tanur, J., et al. (eds.) (1989), *Statistics: A Guide to the Unknown*, 3rd edition, Wadsworth & Brooks/Cole, Pacific Grove, CA. Contains a collection of short nonmathematical articles describing different applications of statistics.

Tukey, J. (1977), *Exploratory Data Analysis*, Addison-Wesley, Reading, MA. Introduces many new descriptive and analytical methods. Not extremely easy to read.

PROBABILITY

Hoel, P. G., Port, S. C., and C. J. Stone (1971), *Introduction to Probability Theory*, Houghton Mifflin, Boston. A well-written and comprehensive treatment of probability theory and the standard discrete and continuous distributions.

Olkin, I., Derman, C., and L. Gleser (1994), *Probability Models and Applications*, 2nd ed., Macmillan, New York. A comprehensive treatment of probability at a higher mathematical level than this book.

Mosteller, F., Rourke, R., and G. Thomas (1970), *Probability with Statistical Applications*, 2nd ed., Addison-Wesley, Reading, MA. A precalculus introduction to probability with many excellent examples.

Ross, S. (1998), *A First Course in Probability*, 5th ed., Macmillan, New York. More mathematically sophisticated than this book, but has many excellent examples and exercises.

MATHEMATICAL STATISTICS

Efron, B., and R. Tibshirani (1993), *An Introduction to the Bootstrap*, Chapman and Hall, New York. An important reference on this useful but computer-intensive technique.

Hoel, P. G. (1984), *Introduction to Mathematical Statistics*, 5th ed., John Wiley & Sons, New York. An outstanding introductory book, well written, and generally easy to understand.

Hogg, R., and A. Craig (1995), *Introduction to Mathematical Statistics*, 5th ed., Prentice-Hall, Englewood Cliffs, NJ. Another classic work on the mathematical principles of statistics; higher level than the Hoel book, but contains excellent discussions of estimation and hypothesis testing.

Larsen, R., and M. Marx (1986), *Introduction to Mathematical Statistics*, 2nd ed., Prentice-Hall, Englewood Cliffs, NJ. Written at a relatively low mathematical level, very readable.

Larson, H. J. (1982), *Introduction to Probability Theory and Statistical Inference*, 3rd ed., John Wiley & Sons, New York. An extremely well-written book that gives broad coverage to many aspects of probability and mathematical statistics.

ENGINEERING STATISTICS

Devore, J. L. (2000), *Probability and Statistics for Engineering and the Sciences*, 5th ed., Duxburg & Brooks/Cole, Pacific Grove, CA. Covers many of the same topics as this text,

but at a slightly higher mathematical level. Many of the examples and exercises involve applications to biological and life sciences.

Hines, W. W., and D. C. Montgomery (1990), *Probability and Statistics in Engineering and Management Science*, 3rd ed., John Wiley & Sons, New York. Covers many of the same topics as this book. More emphasis on probability and a higher mathematical level.

Ross, S. (1987), *Introduction to Probability and Statistics for Engineers and Scientists*, John Wiley & Sons, New York. More tightly written and mathematically oriented than this book, but contains some good examples.

Walpole, R. E., Myers, R. H., and S. L. Myers (2002), *Probability and Statistics for Engineers and Scientists*, 7th ed., Prentice-Hall, Inc., Upper Saddle River, New Jersey. A very well-written book at about the same level as this one.

REGRESSION ANALYSIS

Daniel, C., and F. Wood (1980), *Fitting Equations to Data*, 2nd ed., John Wiley & Sons, New York. An excellent reference containing many insights on data analysis.

Draper, N., and H. Smith (1998), *Applied Regression Analysis*, 3rd ed., John Wiley & Sons, New York. A comprehensive book on regression written for statistically oriented readers.

Montgomery, D. C., Peck, E. A., and G. G. Vining (2001), *Introduction to Linear Regression Analysis*, 3rd ed., John Wiley & Sons, New York. A comprehensive book on regression written for engineers and physical scientists.

Myers, R. H. (1990), *Classical and Modern Regression with Applications*, 2nd ed., PWS-Kent, Boston. Contains many examples with annotated SAS output. Very well written.

Neter, J., Wasserman, W., Nachtsheim, C., and M. Kutner (1996), *Applied Linear Statistical Models*, 4th ed., Richard D. Irwin, Homewood, Ill. The first part of the book is an introduction to simple and multiple linear regression. The orientation is to business and economics.

Younger, M. S. (1985), *A Handbook for Linear Regression*, 2nd ed., Duxburg, Boston. A good presentation of regression methods. The discussion of SAS, BMD, and SPSS computer packages is excellent.

DESIGN OF EXPERIMENTS

Box, G. E. P., Hunter, W. G., and J. S. Hunter (1978), *Statistics for Experimenters*, John Wiley & Sons, New York. An excellent introduction to the subject for those readers desiring a statistically oriented treatment. Contains many useful suggestions for data analysis.

Mason, R. L., Gunst, R. F., and J. F. Hess (1989), *Statistical Design and Analysis of Experiments*, John Wiley & Sons, New York. A comprehensive book covering basic statistics, hypothesis testing and confidence intervals, elementary aspects of experimental design, and regression analysis.

Montgomery, D. C. (2001), *Design and Analysis of Experiments*, 5th ed., John Wiley & Sons, New York. Written at the same level as the Box, Hunter, and Hunter book, but focused on engineering applications.

NONPARAMETRIC STATISTICS

Conover, W. J. (1998), *Practical Nonparametric Statistics*, 3rd ed., John Wiley & Sons, New York. An excellent exposition of the methods of nonparametric statistics, many good examples and exercises.

Hollander, M., and D. Wolfe (1999), *Nonparametric Statistical Methods*, 2nd ed., John Wiley & Sons, New York. A good reference book, with a very useful set of tables.

STATISTICAL QUALITY CONTROL AND RELATED METHODS

Duncan, A. J. (1986), *Quality Control and Industrial Statistics*, 5th ed., Richard D. Irwin, Homewood, Illinois. A classic book on the subject.

Grant, E. L., and R. S. Leavenworth (1988), *Statistical Quality Control*, 6th ed., McGraw-Hill, New York. One of the first books on the subject; contains many good examples.

John, P. W. M. (1990), *Statistical Methods in Engineering and Quality Improvement*, John Wiley & Sons, New York. Not a methods book, but a well-written presentation of statistical methodology for quality improvement.

Montgomery, D. C. (2001), *Introduction to Statistical Quality Control*, 4th ed., John Wiley & Sons, New York. A modern comprehensive treatment of the subject written at the same level as this book.

Nelson, W. (1982), *Applied Life Data Analysis*, John Wiley & Sons, New York. Contains many examples of using statistical methods for the study of failure data; a good reference for the statistical aspects of reliability engineering and the special probability distributions used in that field.

Ryan, T. P. (2000), *Statistical Methods for Quality Improvement*, 2nd ed., John Wiley & Sons, New York. Gives broad coverage of the field, with some emphasis on newer techniques.

Wadsworth, H. M., Stephens, K. S., and A. B. Godfrey (2001), *Modern Methods for Quality Control and Improvement*, 2nd ed., John Wiley & Sons, New York. A comprehensive treatment of statistical methods for quality improvement at a somewhat higher level than this book.

Western Electric Company (1956), *Statistical Quality Control Handbook*, Western Electric Company, Inc., Indianapolis, Indiana. An oldie but a goodie.