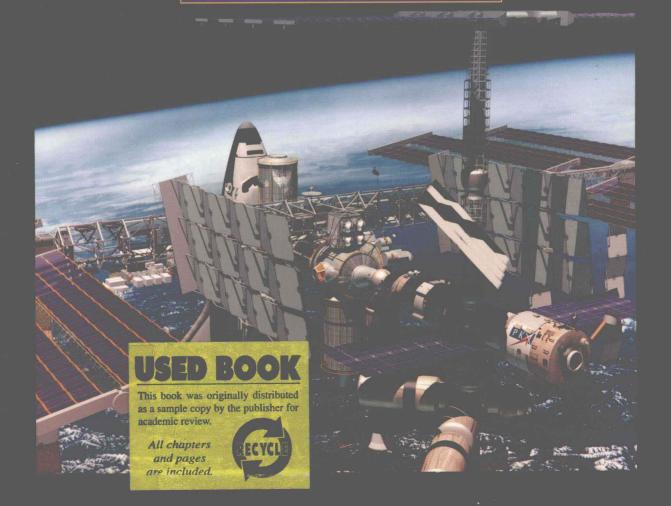
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REPORTING TECHNICAL INFORMATION

NINTH EDITION



9th EDITION III



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Cover: The New International Space Station (ISS), slated for completion early next century. See pages 11, 117, 187, 321, and 609 for more photos and information about this project.

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Preface

We are gratified to be able to offer this new, ninth edition of *Reporting Technical Information*. Its development has been guided, as always, by the needs of our readers. As electronic technology becomes more widely available on college and university campuses and continues to dominate the technical workplace, students and teachers have a growing need to understand and work with electronic media. To satisfy that need, we have updated and amplified our instruction on using these media, largely through the work of our new contributor, Sam Dragga. In his new Chapter 7 on Electronic Communication and in his additions to Chapter 3, Writing Collaboratively, and Chapter 12, The Strategies and Communications of the Job Hunt, Professor Dragga draws upon his experience as manager of the listserv and World Wide Web site for the Association of Teachers of Technical Writing to explain the fundamentals of using the Internet successfully. In addition, Janice C. Redish, President of Redish & Associates, Inc., contributing author for Chapter 8, Document Design, has thoroughly updated and revised the material to incorporate suggestions and instructions for designing online documents. In preparing her contribution, Dr. Redish relied on her extensive research in the field and her experience as a consultant for business and industry. Finally, Chapter 10, Graphical Elements, contains many new electronically generated figures, and the Handbook provides updated instruction on documenting electronic sources.

We have made numerous other improvements in this edition in response to our readers' changing needs. These are detailed below in Major Changes in the Ninth Edition.

Plan of the Book

The organization of this edition remains similar to that of the eighth edition. Key changes are noted below.

Chapter 1, An Overview of Technical Writing. This introductory chapter defines technical writing and describes workplace writing—the forms that technical reporting takes and the problems that writers of technical information encounter.

Part I: Basics. The chapters in this part emphasize the composing process. Chapter 2, Composing, discusses how to analyze a writing situation, discover the information required, and then write, revise, and edit effectively. With this chapter begins the emphasis on audience that is central to this book. Chapter 3, Writing Collaboratively, deals with how to compose technical writing in collaboration with others. Chapter 4, Writing for Your Readers, discusses some of the ways writers can adapt their work for various audiences, including international readers. Finally, Chapter 5, Achieving a Readable Style, shows how attention to elements of style at the paragraph, sentence, and language level can make writing more readable.

Part II: Techniques. The chapters in this part build on the basic concepts introduced in Part I. Chapter 6, Arrangement Strategies, now incorporates material formerly contained in three separate chapters. It describes and demonstrates techniques for informing, describing, defining, and arguing, emphasizing ways that writers can apply these techniques to arrange, draft, and revise various types of technical documents, including instructions, proposals, and feasibility reports. Like the chapters in Part I, this chapter emphasizes the need to consider audience and purpose no matter what technique a writer chooses. Chapter 7, Electronic Communication, describes the role that new channels of communication such as e-mail, electronic discussion lists, synchronous discussion groups, FTP (file transfer protocol) sites, and World Wide Web sites play in the workplace, detailing their limitations as well as their virtues. This chapter will help writers make informed decisions about which medium is most effective for each task they undertake as technical communicators.

Part III: Document Design. Part III deals with document design and graphics. Good design—creating a format that helps readers find information and read selectively—is vitally important in technical writing. Chapter 8, Document Design, deals with the format and appearance of both electronic and print documents. Chapter 9, Design Elements of Reports, shows how to construct all those elements that full reports need, such as covers, tables of contents, introductions, discussions, and summaries. Chapter 10, Graphical Elements, suggests ways to use tables, graphs, drawings, and photographs in technical documents to inform readers about concepts, processes, trends, relationships, and objects. Many of the new figures in this chapter were originally captured from World Wide Web sites or generated using the popular Powerpoint TM electronic graphics package.

Part IV: Applications. The chapters in Part IV put all the information on basics, techniques, design features, and graphics of the first three parts to work. These chapters discuss correspondence (Chapter 11), the job hunt (Chapter 12), and various types of technical documents, including feasibility reports, instructions, progress reports, and proposals. Chapters 13 and 14 stress prin-

ciples common to all types of reports, no matter what they are called. Chapter 15 discusses how to write effective instructions. Chapter 16 covers the preparation of proposals and progress reports. Chapter 17 discusses how to put the principles and techniques of this book to work in oral reports.

Part V: Handbook. Any living language is a growing, flexible instrument. Its rules are constantly being changed through use by speakers and writers. Nevertheless, at any point in a language's development, certain conventions of usage are in force, and violating them can brand writers as uneducated and make their communications difficult to interpret. The Handbook primarily deals with these conventions and errors. In this edition, the Handbook contains information on documentation—including electronic sources—as well as sections on outlining and sexist language. To make the Handbook easy to use, we have arranged it in alphabetical order and have included an abbreviated reference tag for each convention and error. These tags are reproduced on the back end papers, along with some of the more important proofreading symbols used by college writing instructors.

Appendixes. Appendix A includes reference sources in a spectrum of technical fields. Appendix B is a bibliography that suggests additional sources for the many subjects covered in *Reporting Technical Information*.

Major Changes in the Ninth Edition

This ninth edition of *Reporting Technical Information* explores the world of electronic communication. Chapter 3, Writing Collaboratively, discusses the use of e-mail, FTP sites, and synchronous discussions in collaboration. The new Chapter 7, Electronic Communication, suggests ways to use e-mail, electronic discussion groups, synchronous discussion groups, file transfer protocol (FTP) sites, and World Wide Web (WWW) sites in the workplace. Chapter 8, Document Design, discusses design of online as well as print documents. Chapter 10, Graphical Elements, notes the capabilities of electronic graphics programs and includes many new figures generated with electronic technology. Chapter 12, The Strategies and Communications of the Job Hunt, tells the reader how to use the Internet in seeking employment.

The ninth edition adds a new dimension to *Reporting Technical Information*'s long-standing emphasis on audience awareness: a focus on international communication. In discussions throughout the text, students learn that North American attitudes about individualism, time, and style are culturally dependent and may not be shared by people from other backgrounds. Writing that fails to take cultural differences into account can hinder rather than promote communication. Throughout, the text offers guidance on how to adapt communication to different cultures, including substantial discussions in Chapter 4, Writing for Your Readers, and in Chapter 11, Correspondence.

Chapter 6, Arrangement Strategies, is a major revision and condensation of three chapters in the eighth edition that dealt with informing, defining and describing, and arguing. The new chapter covers the same topics in a complete but succinct fashion that allows both students and teachers to proceed to the material in Part IV, Applications, more quickly.

The documentation section has been moved to the Handbook and has been greatly expanded. It now provides instruction and extensive examples on how to document using three widely used styles—those of the Modern Language Association, *The Chicago Manual of Style*, and the American Psychological Association. In addition, a section has been added on how to document material taken from the Internet.

Beginning with the first edition of *Reporting Technical Information*, our touchstone has been that all writing is subject to infinite improvement. In this edition we have made many small changes in style and substance, clarifying explanations and freshening examples in response to suggestions from readers and reviewers. We have also updated our Appendix on Technical Reference Books and Guides to make it yet more useful.

Supplements for Reporting Technical Information, Ninth Edition

Allyn & Bacon CompSite on the World Wide Web http://www.abacon.com/compsite. Resources that support technical communication activities for both students and instructors are evolving constantly at this site. Student resources include features and exercises on using Internet research, opportunities for interactive conversations with other student writers, and hot links to related Web sites. Resources for instructors include strategies for teaching in the computer classroom, hot links to Internet teaching sites, and a forum for trading teaching tips with instructors around the globe.

Acknowledgments

The Chapter Notes provide detailed acknowledgments of the many sources we have used in this edition. We also want to thank the colleagues who took time to review our work and make so many useful suggestions: Carol M. Barnum, Southern Polytechnic State University; Alma G. Bryant, University of South Florida; Ernest Hakanen, Drexel University; Dan Jones, University of Central Florida; Sue Locke, Milwaukee School of Engineering; Richard Shrubb, Milwaukee School of Engineering; Katherine Staples, Austin Community College; and Thomas L. Warren, Oklahoma State University.

In addition to the contributors we have already mentioned, we wish to acknowledge Donald J. Barrett, Chief Reference Librarian, United States Air Force Academy, who has once again revised our appendix on Technical Reference Books and Guides, and Professor James Connolly, University of Minnesota, who has again contributed to the section on visual aids found in Chapter 17, Oral Reports.

This ninth edition of *Reporting Technical Information* has again benefited from the wisdom and experience of Eben Ludlow, Vice President of Allyn and Bacon, who directed the project. We owe much to Senior Developmental Editor Marlene Ellin for overseeing the manuscript's development and to Editorial-Production Administrator Susan Brown for helping to transform our manuscript into print. Finally, we express our love and gratitude to our spouses, Anne and William Jene, for their loving and loyal support.

An Invitation

We invite students and teachers to send comments and suggestions about *Reporting Technical Information*, Ninth Edition directly to Tom Pearsall at his email address: tpearsall@aol.com

Thomas E. Pearsall Elizabeth Tebeaux

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COPY NOT TO

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- 2 Composing 12
- 3 Writing Collaboratively 44
- 4 Writing for Your Readers 61
- 5 Achieving a Readable Style 92

Part II Techniques 117

- 6 Arrangement Strategies 118
- 7 Electronic Communication 161

Part III Document Design 187

- 8 Document Design 188
- **9** Design Elements of Reports 236
- 10 Graphical Elements 270

Part IV Applications 321

- 11 Correspondence 322
- 12 The Strategies and Communications of the Job Hunt 362
- 13 Development of Reports 400
- 14 Development of Analytical Reports 418
- 15 Instructions 491
- 16 Proposals and Progress Reports 529
- 17 Oral Reports 579

Part V Handbook 609

Appendix A Technical Reference Books and Guides 669 Appendix B A Selected Bibliography 685 Chapter Notes 687 Index 693

| Contents

Preface xxiii

An Overview of Technical Writing

Some Matters of Definition 1

The Substance of Technical Writing 2

The Nature of Technical Writing 3

The Attributes of Good Technical Writers 5 The Qualities of Good Technical Writing 6

A Day in the Life of Two Technical Writers 7

Marie Enderson: Computer Specialist and Occasional

Technical Writer 7

Ted Freedman: Technical Writer and Company Editor 8

Exercises 10

PART I BASICS

Composing 12

Situational Analysis 14

Topic and Purpose 14 Audience and Persona 15

Discovery 19

Brainstorming 19

Using Arrangement Patterns for Discovery 20

Other Successful Discovery Techniques 21

Arrangement 21

Drafting and Revising 22

The Rough Draft 22

Revision 25

Editing 27

Checking Mechanics 28

Checking Documentation 28

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11

Helping Readers through Your Report 68

Be Directive 69

Provide an Appropriate Context 69

Organize around Audience Reading Habits 70

CONTENTS XIII

SOLD

Style 72

Plain Language 73

Human Interest 73

Technical Shorthand 75

Qualifications 76

Graphics 77

Discourse Communities 77
The Combined Audience 81

Illustrative Example 82

Other Situations 83

International Readers 84

Cultural Differences 86

Dealing with Cultural Differences 87 Planning and Revision Checklists 88

Exercises 90

6 Achieving a Readable Style 92

The Paragraph 93

The Central Statement 93

Paragraph Length 94

Transitions 94
Lists and Tables 95

Clear Sentence Structure 96

Sentence Length 97

Sentence Order 97

Sentence Complexity and Density 99

Active Verbs 102

Active and Passive Voice 103

First-Person Point of View 104

A Caution about Following Rules 105

Specific Words 105

Pomposity 106

Empty Words 107

Elegant Variation 107

Pompous Vocabulary 108

See See Stone of Second Second

Electronic Discussion Lists 166

Using Discussion Lists on the Job 167

Discussion List Etiquette 167

Synchronous Discussion Groups 169

Using Synchronous Discussions on the Job 171

Synchronous Discussion Etiquette 172

Documents 224

Use Page Numbers and Headers or Footers in Print

xvi

CONTENTS

Appreciating the Importance of Document Design 226

Planning and Revision Checklists 227 Exercises 229

9 Design Elements of Reports 236

Prefatory Elements 236

Letter of Transmittal and Preface 237

Cover 238

Title Page 240

Table of Contents 241

List of Illustrations 244

Glossary and List of Symbols 247

Abstracts and Summaries 247

Main Elements 253

Introduction 253

Discussion 257

Ending 258

Appendixes 263

Planning and Revision Checklists 264

Exercises 266

10 Graphical Elements 270

Choosing Graphics 272

Designing Tables 280

Designing Graphs 282

Bar Graphs 286

Circle Graphs 291

Line Graphs 295

Combined Line and Bar Graphs 298

Designing Other Forms of Graphics 300

Photographs 300 .

Line Drawings 300

Flowcharts 302

Integrating Text and Visuals 303

Designing Graphics for Accuracy and Effectiveness 304

SOLD

Choosing the Best Graphic for the Information and

the Audience 311

Choosing Graphics Checklist 311

Planning and Revision Checklists 313

Exercises 315 336

321

11 Correspondence 322

Composing Letters and Memorandums 323

Topic and Purpose 323

Audience 324

Style and Tone 325

Clear Style 325

Human Tone 325

Format 327

Heading 332

Date Line 333

Inside Address 333

Attention Line 334

Reference Line 335

Subject Line 335

Salutation 336

Body 336

Complimentary Close 336

Signature Block 336

End Notations 337

Continuation Page 337

E-Mail 337

International Correspondence 338

Letters of Inquiry 340

Identification 341

Inquiry 342

Need 342

Choice of Recipient 342

Courteous Close 343

Sample Letter 343

Replies to Letters of Inquiry 343

Letters of Complaint and Adjustment 345

Letter of Complaint 345

Letter of Adjustment 345

Sample Letter 347

Letter and Memorandum Reports 349

Introduction 350

Summary 350