

CONTENTS

Acknowledgments ix

- 1 The Railroad Industry (as Seen through Accidents) 1
 - 2 How Trains Crash, Then and Now 9
 - 3 Moderate-Speed Passenger Train Collisions 23
 - 4 Freight Train Collisions 47
 - 5 Avoiding Collisions 65
 - 6 Positive Train Control 100
 - 7 Moving at the Wrong Speed 123
 - 8 Bearing Failures 156
 - 9 Gravity: It's the Law 190
 - 10 More Runaways: Brake Failure 225
 - 11 Broken Rail 257
 - 12 Buckled Track 281
- Epilogue: Safety in the Modern Era 304
- Notes* 307
References 317
Index 351