## Contents

Preface ix  
Acknowledgments xiv  
List of Abbreviations xvii  

One  The Inheritance  


Two  Planetary Exploration Triumphant 17  
Three  Planetary Exploration in Extremis 42  
Four  External Relations and the Internal Environment 59  
Five  Diversification 78  
Six  Return to the Military 93  
Seven  Space Technology 108  

**Part II. Restoration: The Allen Years, 1982–1991**  

Eight  The Rise and Decline of Defense Programs 125  
Nine  The Dividends of Defense Programs 142  
Ten  Space and Earth Science 155  
Eleven  JPL under Allen 165  
Twelve  Recovery of Flight Projects 175  
Thirteen  Voyager Redux, Galileo, and Magellan 186

FOURTEEN Faster, Better, Cheaper 207
FIFTEEN Reengineering JPL 228
SIXTEEN The Tilting Triangle and Commercialization 242
SEVENTEEN A Break in the Storm 256
EIGHTEEN Annus Miserabilis 276

NINETEEN Epilogue, 2001–2004 287
TWENTY Conclusion 298

Notes 315
Index 383