Business and Corporate Aviation Management

Second Edition

John J. Sheehan

New York Chicago San Francisco Lisbon London Madrid
Mexico City Milan New Delhi San Juan Seoul
Singapore Sydney Toronto

Contents

Foreword to the Second Edition xv
Foreword to the First Edition xvii
Acknowledgments for the Second Edition xix
Acknowledgments for the First Edition xxi
Introduction to the Second Edition xxiii
Introduction to the First Edition xxv

Chapter 1. Setting the Scene 1
On-Demand Air Transportation 1
On-Demand Air Transportation Defined 1
Personal Aviation 3
Business Aviation 4
The Beginnings 7
Travel Is Important for Business 8
The Reasons 9
How Companies Use Aircraft 12
Justifying Business Aviation 20
Business Aviation: The Sign of a Well-Managed Company 25
Safety 25
Aircraft 26
Aircraft Characteristics 26
On-Demand Aviation Methods 33
Owner/Employee-Flown 33
In-House Flight Department Using Owned/Leased Aircraft 34
Management Company 34
Joint Ownership 35
Interchange 35
Time Share 35
Charter 35
Fractional Ownership 36
Choosing the Best Method 36

Chapter 2. Determining the Need 39
Air Transportation Needs 39
Why Individuals and Companies Use On-Demand Air Transportation 40
Defining the Requirement 41
Air Transportation Analysis 44
Travel History 44
The Future 48
Solutions 50

Choosing the Method 55
What Users Want in On-Demand Air Transportation 55
Methods 58
Running the Numbers 66
Cost Components 66
Evaluating the Options 69

Chapter 3. Getting Started 75
First Things 75
Aircraft Use Policy 75
Chargebacks 78
IS-BAO 83
Oversight 84
Staying Informed 87
Owner/Employee-Flown Operations 88
Purpose of the Business Aircraft 88
Learning to Fly 88
Role of the Owner/Employee-Pilot 89
Acquiring the Aircraft 90
Acquisition Assistance 91
Insurance 92
Flight Records 94
Standards 96
The Business of Safety 97
Training 98
Duty Time 99
Limitations 101
Maintenance 101
Aircraft Charter 103
Checking the Record 104
Charges 105
Evaluation 105
Fractional Ownership 106
Investigating the Service 107
Managing It 108
In-House Aircraft 109
Finding the Right People 110
Basing the Operation 117
Acquiring the Aircraft 118
Management Company 121
The Contract 122
Performance Measures/Reports 124
Joint Ownership 125
Other Methods 126

Chapter 4. Running the Business 129
It Really Is a Business 129

Planning 131
Mission Control 131
The Plans 132
Organization 134
Scheduling 136
Personnel 136
Policy 137
Procedure 138
Scheduling Software 138
International 139
Administration 140
Administrative Practice 140
Developing Practices 141
Talking with the Folks Downtown 142
Organizational Conflict 143
Get Them on Your Side 144
Making House Calls 145
Finance and Accounting 146
Taxes 147
Financial Planning 147
Budgets 148
Building the Budget 151
Capital Budgets 154
Controlling/Tracking Budgets 154
Budget Justification 155
Personnel 156
Hiring 156
Motivation 157
Communicating Expectations 158
Performance Evaluation 159
Human Resources 160
Career Development 161
Leadership 162
Flight Department Performance 163
Efficiency versus Effectiveness 163
Ratios 164
Tracking It 164
Comparisons 165
Presenting the Information 166
Information versus Data 166
Reports 166
Flight Department Evaluation 168
Saving Money 173
Marketing the Flight Department 174
Why Sell? 174
The Name of the Game 175

Marketing versus Selling 175
Political Realities 176
Company Operations 176
The Plan 176
The Tools 177
The Presentation 177
The Sale 178
Customer Relationship Management, the Other CRM 178
Customer as King 179
Who Are Your Passengers? 179
Knowing Your Passengers 180
The Database 180
Cultivating Passengers 181
Relationships 181
Preparing to Provide Good Service 182
The Small Flight Department 183
Communications 183
Support Staff 184
Networking 185
Think Backup 186
Planning 186

Chapter 5. Flight Department Management 187
Management 101 188
The Basics 188
Planning 189
Execution 189
Feedback 191
No Shortcuts 191
Theories of Management 192
The Beginnings 192
Behavioral Approaches 192
Modern Theories 193
Future Theories 194
Learning It 194
Management Skills 195
Acquiring Skills 196
The Flight Department Manager as a Business Executive 199
What the Boss Should Know 202
Black Art at the Airport 202
Two-Part Challenge 203
Basic Education 203
Regular Updates 204
How Much Is Enough? 205
Communicate 205
Growing the Next Generation—Succession Planning 206
Investing in Employees 206

First Things 207
The Road Ahead 207
Challenges 208
The Plan 208
Possibilities 209
Flight Departments in Trouble 210
Normal Operations 210
Warning Signs 211
Bottom Line 213
Staying Connected 213
It's a Business 214
Reasons to Be Connected 214
Relationships 215
Opportunities 216
Giving Back 216
Is It Worth It? 218
Lessons Learned 218
A Sense of Mission 218
Standards 219
Leadership 219
Rapport with the Company 219
Teamwork 220

Chapter 6. Operations 221
Overview 221
Operations Perspectives 221
Getting Organized 221
Compliance 222
Flight Operations Manual 224
Building It 225
Excuses, Excuses 226
Changes 227
Every Situation? 227
Singing from the Same Hymn Book 230
Standards 230
IS-BAO Sets the Standard 230
Enter IS-BAO 231
Operations 237
Operational Control 237
Setting Limits 238
Flight Crew Scheduling 238
Flight Crew Duty Time Limits 240
How Many Pilots? 241
Checklists 242
The Tyranny of Automation 245
Aircraft Airworthiness 248
Helicopter Operations 249

Chartering Aircraft 250
Knowing the Regulators 251
Training 251
International Operations 255
Being Prepared 255
Airports 256
Involvement 257
Organization 257
Security 258
Assessing and Preventing Security Threats 258

Chapter 7. Maintenance 261
Contract or In-House Maintenance 262
Contract Maintenance 262
In-House Maintenance 265
Organization 266
Small Flight Departments 266
Larger Flight Departments 266
Personnel 268
Maintenance Operations 269
Airworthiness Determination 269
Maintenance Planning 270
Maintenance Control 272
Discrepancies 272
Minimum Equipment List 274
Maintenance Away from Home Base 275
Aircraft Maintenance Reference Materials 275
Parts Inventory and Control 276
Duty Time 276
Quality Control 278
Maintenance Manual 282
Aircraft Handling 282
Security 283
Evaluating Maintenance Performance 283
Recordkeeping 284
Regulations to Comply With 285
Computerized Record Tracking Systems 285
Training 288
Maintenance Resource Management 289
Passenger Handling 289
Safety 290
Safe Hangars for All 291
Solo Technicians 293
Upstairs, Downstairs 294
Know the Regulators 295
Selling Maintenance 296

Chapter 8. Safety **299**
Safety Programs 299
Operational versus Safety Tensions 300
What Is the Problem? 300
Where Accidents Happen 302
Hangar Safety 303
Safety Culture 304
Just Culture 305
Managing Safety 307
Safety Management Systems 308
Why an SMS? 309
Implementing SMS 310
Putting It Together 311
Bringing SMS Down to Earth 313
The Big Picture 314
Risky Business 315
Big Picture 315
Narrowing the Focus 317
Mitigation 317
Changes 319
Perspective 319
Process 319
SMS for the Long Term 321
Passenger Safety 322
Create Expectations 323
Practice Makes Perfect 324
The Name of the Game 325
Flight Attendants 325
Emergency Response Planning 326
The Plan 327
Elements of the Plan 328
Implement It 330

Chapter 9. Putting It All Together **333**
Institutional Flight Departments 333
Most Admired 333
Profit and Loss 335
What Business Are You In? 336
Name of the Game 336
Focus 337
Safety, Service, Value 337
Hard Sell 337
The Mission 338
Doing It 339
Internalizing It 339
The Excellent Flight Department 339

Ways and Means 340
Attainment 342
Safety, Service, Value 343
Safety First, Last, Always 343
Service with a Smile 344
Good Value Creates Job Security 345
Hierarchies 345
When in Doubt 346

Appendix A. Business Aviation Background 347

Appendix B. Air Transportation Requirements 351

Appendix C. Owner Flown Procedures 361

Appendix D. Budget Justification 367

Appendix E. Employee Jobs and Performance 369

Glossary 375

Index 383

CHAPTER 1
Setting the Scene

Four years ago we had four plants and today we have eleven and the only way we have been able to expand our company and to get these locations has been in our own aircraft. —CORPORATE CEO

On-Demand Air Transportation

Within all forms of transportation there are two basic divisions, scheduled and nonscheduled. *Scheduled* is self-explanatory and well understood. Airlines, railroads, buses, and ferry boats operate according to set schedules. *Nonscheduled* requires further explanation; the term expresses a sense of randomness or irregularity, concepts not useful when attempting to define the process. However, *on-demand transportation* is a more descriptive term, signifying that the transportation should be available when requested or needed. Therefore, the purpose of this book is to describe the various types of on-demand air transportation and to tell readers how they can best choose and use the methods comprising it.

Many different people use on-demand air transportation: Individuals, corporate executives, technical troubleshooters, sports teams, entrepreneurs, and families all benefit from the advantages brought by this form of flying. The object for all is to travel to some distant point as safely and comfortably as possible. Some wish to do so in high style, others more economically; some rapidly, others at a more leisurely pace; some doing the flying themselves, others leaving those tasks to professional flight crews. However, all do so because they want to create and maintain their own schedule and control their lives more fully.

This book will examine this form of aviation from two basic perspectives: personal and business aviation. This distinction is made because of the fundamentally different motivation for each, one to serve a personal lifestyle and one to create efficiency in the workplace.

On-Demand Air Transportation Defined

The International Civil Aviation Organization (ICAO) states that all civil aviation operations are divided into three categories: commercial air transportation, general aviation, and aerial work. They are defined as follows:

- *Commercial air transport*—An aircraft operation involving the transport of passengers, cargo, or mail for remuneration or hire.
- *Aerial work*—An aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, or aerial advertisement.
- *General aviation*—An aircraft operation other than a commercial air transport operation or an aerial work operation.

For the purposes of this book, we will consider only the first and last types, since they both provide on-demand air transportation, with the fundamental difference being whether the operation is conducted for compensation or for hire (Fig. 1.1).

On-Demand Air Transportation—The transportation of passengers and cargo by aircraft from one point to another in a manner and at a time designated by the person exercising operational control.

Personal aviation may be provided by the owner-operator's own aircraft or by a commercial venture supplying air transportation on demand. Therefore, personal aviation may be a subset of either commercial or general aviation.

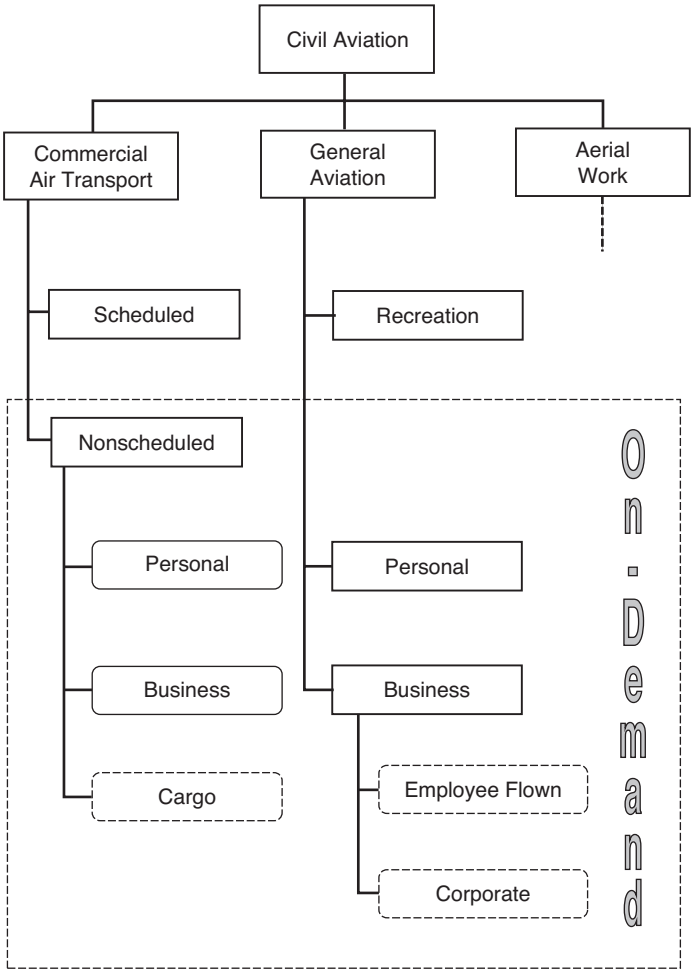

Figure 1.1 Civil aviation elements.

Business aviation covers all types of aircraft operations flown in pursuit of business matters. Within this broad classification are employee-flown and corporate operations. Employee-flown operations are predominately owner-flown aircraft, yet these flights may be piloted by any employee, carrying other employees or customers. The key factors involved in employee-flown operations are that the aircraft is operated by a company using a pilot or pilots not specifically employed or compensated to fly the company aircraft. Corporate aircraft operations are distinct from employee-flown operations in that they are operated by a company for its business purposes, using professional pilots (normally two) compensated specifically for their piloting duties. The National Business Aviation Association (NBAA) defines *corporate aviation* as "aircraft owned or leased and operated by a corporation or business firm for the transportation of personnel or cargo in furtherance of the corporation's or firm's business and which are flown by professional pilots receiving a direct salary or compensation for piloting." Note that in either employee-flown or corporate methods, the aircraft does not necessarily have to be owned or leased by the company; it can be rented or even borrowed (some restrictions apply to these operations, however).

Aircraft charter and fractional ownership also may be used to satisfy business requirements for on-demand air transportation.

Personal Aviation

The best means of explaining this segment of air transportation may be via an analogy. Both buses and automobiles are available to people wishing to travel, yet the automobile dominates our ground transportation for obvious reasons: comfort, convenience, and schedule. The automobile provides ground-based on-demand transportation to individuals and groups willing to pay for the service. This is preferred to public transportation for the reasons listed. Perhaps the most important reason for our preference for the automobile is that we wish to create our own schedule and change it at will. Buses (and airliners) seldom permit us this luxury.

There are approximately 350,000 general aviation and aerial work aircraft worldwide, of which an estimated 150,000 are used at least in part for personal transportation. Perhaps one-third of these are used for true on-demand purposes, possessing the ability to fly in weather and to carry two or more passengers. Therefore, personal air transportation constitutes a significant worldwide activity, complementing other forms of transportation that support the needs of individuals. Whether it be a family seeking the fastest and most hassle-free transportation to the ski slopes, an individual flying to a mountain retreat, or a person seeking the best shopping venue in a major city, personal aviation has come of age. These are just a few of the reasons individuals, families, and friends use aircraft.

Some people use an aircraft for recreational, sightseeing, or sport purposes, but these do not constitute on-demand air transportation, which generally refers to flying people or things from point A to point B.

Personal air transportation uses a wide range of aircraft, from small, four-seat, single-engine, piston-powered aircraft to large, multiengine turbojets carrying scores of people over intercontinental distances. However, in this book I will concentrate on three broad classes of personal air transportation: owner-flown operations, those provided by a company as a service, and in-house flight departments using professional flight crews.

Personal and business aviation are separated by a single factor: *purpose.* The organization, regulations, and mechanics of the two operations are essentially the same; only the

motivation for the on-demand air transportation services is different. At the lower end of aircraft types used, single-engine aircraft capable of carrying more than two passengers during instrument meteorological conditions (IMC), personal aviation generates an estimated 80 percent of usage worldwide; at the upper end of the spectrum, turbine-powered aircraft are used an estimated 90 percent of the time for business purposes.

Yet both types are organized, regulated, and operated in a similar fashion—the principles are the same. Therefore, within this book, business aviation will be used as the predominant example because it often requires the highest level of organization and standards, therefore making it the form more inclusive of the factors to be considered in many aspects of on-demand air transportation. Where differences exist, they will be discussed.

Our aircraft has enabled my family to be together more frequently and to more fully enjoy those times.
—AIRCRAFT OWNER

Business Aviation

In an average year, hundreds of millions of people travel for business purposes worldwide. This is done in an effort to establish firm connections between businesses, to communicate ideas, to act on opportunities, and to establish a face-to-face connection. While many interbusiness communications can be made by telephone, e-mail, fax, and mail, the deals are made, the problems solved, and new frontiers forged by people meeting in person.

Thirty years ago, technology mavens were forecasting a dramatic decrease in business travel due to the advent of cell phones, the Internet, and teleconferencing. Their theory stated that face-to-face meetings were no longer necessary due to the superlative new communications devices; teleconferencing was the next best thing to being there. While these new communications devices did relieve the more routine travel needs, a strange thing happened: Both teleconferencing and business travel increased. Productivity gains provided by communications technology generated the opportunity for more business, which, in turn, generated more business travel. The two connectivity methods worked together to help the productivity of such countries as the United States, Germany, and China become the highest in the world.

The need to be face-to-face in the business world never seems to decrease, only increase. New and important deals are made in person, seldom over the phone or Internet. Customers are cultivated, pampered, listened to, and helped in-person, and new products and services are introduced in-person; business travel is a long-term growth industry. However, there are other means of getting business travelers to their destinations via air.

Most business travel, perhaps two-thirds, is accomplished via the airlines. Every year the world's airlines carry an average of 2.8 billion passengers on 38 million flights worldwide, with roughly one-third of these people traveling for business purposes. The airlines serve thousands of airports, providing frequent, safe, and fairly reliable service to the world's business travelers, yet there are alternatives.

With frequent airline service available to the far corners of the earth, why do we need other aircraft to transport a few people to many of the same destinations? Isn't this much more expensive than the airlines? And how safe is it? These are just a few of the questions asked by both the curious and the critical when considering business aviation.

As this book is being written in 2012, more than 17,000 operators fly in excess of 30,000 turbine (turbojet and turboprop) aircraft worldwide in support of business (Figs. 1.2 and 1.3). Three-quarters of the operators and aircraft are located in North America. In the United

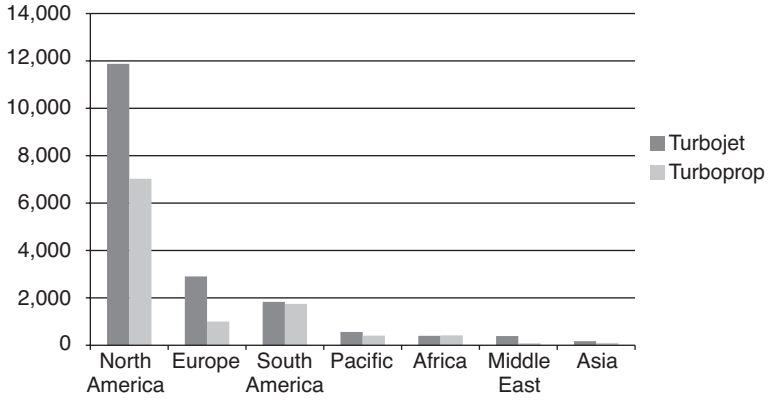

Figure 1.2 World turbine-powered business aircraft distribution. (*Flight International*.)

States, each of the approximately 18,000 turbine aircraft flew an average of 450 hours, transporting an estimated 23 million business travelers in 2011.[1] Interestingly, three-quarters of U.S. business flight operations have just one aircraft.

Of the Fortune 500 companies, only one-quarter choose not to operate at least one corporate aircraft. The productivity, net income, and sales of companies operating corporate aircraft exceed those of comparable nonaircraft operators. These companies use their aircraft as productivity tools, as a means of controlling their busy travel schedules, and as a

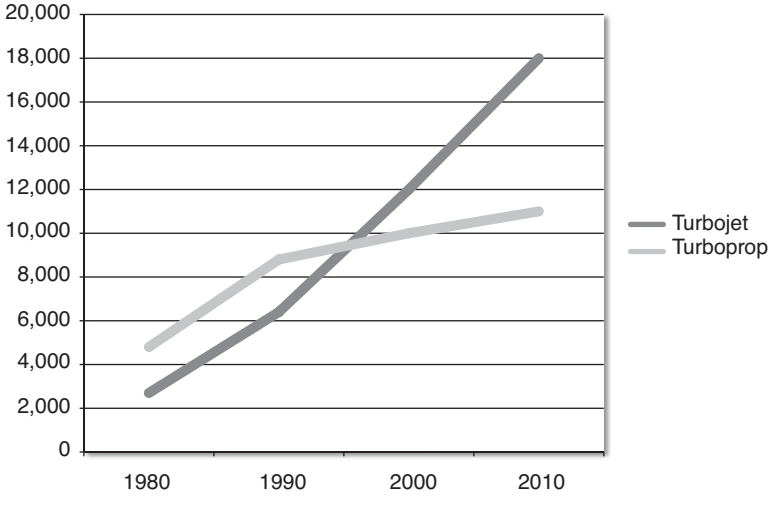

Figure 1.3 Growth of business airplanes worldwide.

The Teal Group, a noted forecasting firm, forecast production of 13,879 business aircraft worth $310.3 billion (in 2012 dollars) over the next ten years (2012–2021). This includes 10,249 traditional business jets worth $249.5 billion, 568 corporate versions of jetliners and regional jets worth a combined total of $42.3 billion, and 3062 business turboprops worth a total of $18.6 billion.

convenience for their executives who need to pack every ounce of productive work into each day. In essence, the aircraft becomes a time machine, a modern magic carpet to safely and rapidly transport executives to the next business opportunity.

On-demand air transportation has become a part of corporate culture and promises to be a fixture in the business world for the foreseeable future. It did not take long for companies to discover that having an aircraft of one's own created advantages that the competition did not have. The time savings, flexibility, efficiency, privacy, and security that corporate aviation offered were convincing enough to justify aircraft devoted to a company's exclusive use. However, softer, more intangible benefits accrued to its use too. Increased time at home, the ability to reach even the most remote locations directly, comfort, and fewer airport hassles became sufficient reasons for most to gravitate toward this type of transportation.

The real clincher, the reason that keeps the board of directors and stockholders happy, is the ability of corporate on-demand air transportation to increase productivity for its executives. The corporate aircraft becomes a time multiplier, offering convenient access to as many as 5000 airports in the United States (compared with just 500 that airlines serve) with turbojet speed and an ease not possible on the airlines. It makes little sense to consume 2 days in getting star corporate performers to and from a remote location when the corporate aircraft can get them there, provide a half-day on site for business, and have them home for dinner, *all in the same day.* It is this measurable productivity multiplier effect that keeps selling corporate aviation every day.

Even the accounting department realizes that business flying makes sense. Studies show that companies using their own aircraft have better sales growth, earnings per share, long-term return to investors, and productivity (sales per employee) than companies that do not use business aircraft. The evidence is compelling: Business aircraft are good for the bottom line. The airlines continue to drive executives to corporate aviation in increasing numbers. As scheduled air transportation is forced to restrict and segment its schedules and routes to be more competitive, as airlines overbook and bump passengers in increasing numbers, and as airline terminals become more unmanageable, corporate aviation can only increase in importance; the airlines may be the best reason for using corporate aircraft.

As the global village increasingly becomes a nation's marketplace, the use of corporate aircraft will facilitate this transition. Intercontinental corporate aviation has been a reality for some years and increasingly will serve our interests abroad. Corporate turbojets having nonstop New York to Tokyo and Los Angeles to Paris range are a reality and the hottest-selling aircraft in the business fleet.

Yet corporate aviation is not immune to the business cycle. The health and well-being of the company flight department may be directly tied to the state of the economy, with boom times signaling increased aviation activity and recessions creating not only less activity but also fewer aircraft, hours, and people as well. There will continue to be good times and bad as the economy pursues its mood swings. Despite the bad times, corporate aviation will