



Airline Pilot Technical Interviews

A STUDY GUIDE

Ronald D. McElroy
Fourth Edition

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by Ronald D. McElroy

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Disclaimer: This book is a general information book on how to prepare for a professional pilot technical interview. It is understood that the information contained in this book does not guarantee success. The author and publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this book. None of the material in this book supersedes any operational documents or procedures issued by the Federal Aviation Administration, aircraft and avionics manufacturers, flight schools, or the operators of aircraft.

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Contents

| | |
|---|------------|
| Introduction | v |
| A Note from Cheryl Cage | vi |
| 1. Rising to the Challenge | 1 |
| 2. Mental Math Methods | 7 |
| 3. Just Another Approach Plate | 37 |
| 4. Understanding AIM | 51 |
| 5. Defining the FARs | 69 |
| 6. If You Don't Like the Weather... | 79 |
| 7. Using Your Hands to Fly | 93 |
| 8. Aero 101 | 101 |
| 9. Summary | 111 |
| 10. Staying On Course: Advice from Cheryl Cage | 113 |
| Glossary | 117 |
| Index | 129 |
| About the Author | 135 |

Introduction

The decision to write this study guide stemmed from a couple of very simple and natural ideas.

For the past year I had been conducting technical mock interviews for Cheryl Cage. The reception and feedback was overwhelmingly positive. My first goal was to capture in writing the process and information that I had been presenting during these technical mock interviews with Cage Consulting.

Second, I had worked hard to polish my natural teaching ability through the many years of flight and ground instruction of new and seasoned pilots. The knowledge was already in place from years of repetition in the classrooms and briefing rooms plus line flying. I just had to get my knowledge on paper. I felt confident the words would flow easily to the keyboard.

I hope you enjoy my presentation of the material. But, more important, I hope by the time you finish this book you will be able to more easily review and grasp the subjects discussed. Not only will your reviews ensure better performance during a technical interview or test, but I hope you learn something new that will help you fly the line a little better.

Ronald D. McElroy

A Note from Cheryl Cage

Even though I have been in the business of assisting pilots with preparing for the airline interviewing process since 1988 it still never ceases to amaze me how much dedication and planning is needed to secure, and maintain, a smooth professional pilot career. For this reason we are constantly looking for new products and services to assist our pilot clients preparing for their highest career goals.

Toward this end we began offering Technical Practice Study Groups. To find the best people to teach these study groups I asked pilot friends who worked in the training departments of various major airlines for recommendations of individuals who might fit my stringent requirements. Out of the numerous pilots I interviewed, I hired two. One of those pilots was Ron McElroy.

Over the course of the next year I became more and more impressed with not only Ron's technical knowledge, but with his obvious passion for teaching, and his unwavering desire to help our clients succeed.

I approached Ron about writing a technical interview study guide. He immediately said yes. And, within two months, he presented me with the manuscript for *Airline Pilot Technical Interviews*.

There are various ways for an interviewer to test your technical knowledge. Some airline interviewers ask technical questions while conducting the simulator ride, some ask technical questions during the Human Resources side of the interview—or, your technical interview could be conducted as a straightforward oral. Whatever format you encounter, *Airline Pilot Technical Interviews* will help you prioritize the areas that need to be reviewed, and offer inventive and easy-to-use tips on maintaining your focus no matter how the airline chooses to test your technical knowledge.

I am proud to have been the driving force behind the first publication. I know you will enjoy and appreciate the remarkable job Ron has done in presenting the information you will need to score high marks in your technical interviews.

Good luck!
Cheryl A. Cage
President
Cage Consulting, Inc

Chapter 1

Rising to the Challenge

Hey—you made it! You’ve been accumulating hours and have made the decision to charge ahead toward the airline career you’ve sacrificed for. No matter what your professional level, you feel ready to break into the ranks of the regionals or the major airlines. Whatever your **immediate** goals, you are ready to start preparing for the airline interviewing process. Congratulations!

But wait! Are you really ready? No matter what your background, your education, or your aviation experience, there’s always room for a little extra wisdom and knowledge to help you ultimately land that mega-million dollar, major airline career.

Not to worry! Getting that extra wisdom and knowledge is part of my job and my promise to you: if you make a commitment to focus on the right stuff—which I’ll feature here in this study guide—you will be as ready as you can possibly be for the technical part of any airline interview process.

Please understand that as we go through *Airline Pilot Technical Interviews*, I am making the assumption that you are current and actively flying airplanes and that you have a grasp of basic math and science concepts and formulas including aerodynamics. As such, this guide will make reference to the materials that all of us studied in the past while preparing for our commercial, flight instructor, multi-engine, instrument, ATP, flight engineer, and type ratings.

Here's what I recommend for your personal library to prepare you for the airline technical interview:

- ***Aeronautical Information Manual (AIM)***. Make sure it contains the latest revisions. Available through aviation bookstores, the Government Printing Office (GPO), and online at www.faa.gov.
- **Federal Aviation Regulations (FAR)** to include Parts 1, 61, and 91 as a minimum. Pilots current in Part 121/135 air carrier operations, or who possess an Airline Transport Pilot certificate, will be expected to be knowledgeable in the appropriate sections. Available through aviation bookstores, the GPO, and online at www.ecfr.gov.
- ***Aviation Weather, Advisory Circular 00-6***, published jointly by the FAA and the National Weather Service. Available at aviation bookstores, the GPO, and online at www.faa.gov.
- **Airline Transport Pilot (ATP) Test Prep**. A study guide for the FAA knowledge test. Available through aviation bookstores.
- **Flight Engineer (FEX) test prep software**. A study guide for the FAA knowledge test. Available through aviation bookstores.

- **Checklist for Success: A Pilot’s Guide to the Successful Airline Interview** by Cheryl A. Cage. A guide to understanding and preparing for the competitive professional pilot interviews. Available on the ASA website at www.asa2fly.com.

A special note: You must ensure that all test preps, regulations, and *AIM* are up-to-date. These references are quickly outdated. **You must have** the latest revisions—it will save you an embarrassing moment at the interviews! All the publications mentioned above are available from ASA (www.asa2fly.com).

Q: *How much time should you dedicate to this technical interview preparation?*

A: Your study habits determine that answer, but let me suggest the following:

| | |
|--|----------|
| <i>AIM</i> | 10 hours |
| FARs | 10 hours |
| Approach plates | 2 hours |
| Enroute charts | 1 hour |
| Aviation weather | 2 hours |
| Current aircraft systems, limits, and procedures | 2 hours |
| Basic aerodynamics | 2 hours |
| Company OPSPECs or military flight regulations ... | 1 hour |
| <i>Airline Pilot Technical Interviews</i> | 30 hours |
| ATP Test prep..... | 5 hours |
| FEX Test prep | 5 hours |
| <hr/> | |
| TOTAL | 70 hours |

This study plan assumes that you are current and flying and only need to brush up on these subject areas. If you've been away from active flying for even a short time, if you consider yourself a "study-challenged" pilot, or if you are new to many of these subject areas (as a new pilot), plan on spending lots more time and definitely consider getting a tutor or mentor. But, as I said earlier, this study guide will help you focus on the right stuff and steer you in the right direction for your studies.

Just to be clear, this study guide contains all of the study areas that, based on Cage Consulting's work with pilot applicants, are being used for the technical interviews or testing. As such, this study guide may not be as comprehensive as those you used to study for the commercial, instrument, or ATP certificates. So, don't be alarmed at the brevity of the explanations. My primary goal is to review and teach you what you will need to shine in the **technical** portion of the interview. Additional material is offered solely as a basis for background information to help support your understanding of the answer. If your airline interviewer uses a variation of the question, you'll be able to more easily adapt to the new content of the question and thereby figure out the answer.

Be aware that in your studies you may discover differences between your company operation specifications (OPSPECs) and the FARs, *AIM*, or my explanations in this study guide. Source documents from the FAA such as the FARs, *AIM*, and TERPs (United States Standard for Terminal Instrument Procedures) **always** supersede my explanations. And, of course, your company OPSPECs can be more restrictive (and sometimes out of date) for specific types of operations. My answers and explanations refer to the most current revisions available from government source documents.

The purpose of the additional personal study with your own library references that I mentioned is to ensure that you have a broad enough understanding to avoid even the appearance of being spoon-fed the answers and the resulting lack of confidence when presented with a question that has been slightly varied from the questions you'll see here.

There are three additional areas of preparation that I strongly encourage, yet I will not be able to adequately cover them in this guide. They include a thorough study and understanding of the flight manual of your current airplane, independent study and review of approach plates and enroute charts with an emphasis on understanding the legend and symbols, and a commitment to schedule a mock interview with qualified and competent airline consultants.

This last step will give you the confidence to excel at the most important interview ever!

Imagine yourself getting that prize-winning envelope today in the mail with the return address showing the logo of the airline of your dreams! Hurrah! Yes, they've invited you in for the interview. But wait—it's a week from today—and you have a trip to fly between now and then. **Don't wait to prepare. Start now!** Information gained in last minute cram courses has a way of deserting you when you need it most. **I repeat. Don't wait until the last minute!** That means starting your personal study, scheduling the mock interview well in advance, and showing up in plenty of time and prepared for the mock interview. Trust me when I tell you that a pilot who is not prepared for the interview, just as in flying, is easy to spot. Don't be that unprepared pilot.

So, what do you think? Is 70 hours of prep time worth it? Consider this: if this airline job of your dreams were to put an additional one or two million dollars into your paycheck

and pension over the next 15 to 30 years, would that make a difference to you? That's a "paycheck" of \$20,000 per study hour!

Well, that's as good a flight plan I can give you. It's up to you to get started and get airborne.

Study well. Good Luck!

Airline Pilot Technical Interviews

A STUDY GUIDE

for a Successful Airline Checkride

Fourth Edition

All kinds of technical questions can be asked in an airline interview, yet there is a specific approach pilot applicants should take to successfully prepare for this part of the hiring process. In this expanded fourth edition of the book, author Ron McElroy gives readers an abundance of preparatory exercises in the areas of mental math, approach plates, regulations and procedures, weather, systems and aerodynamics, and cockpit situations to analyze and resolve. You will also be acquainted with 14 CFR Part 111 Pilot Records Database so that you are aware of the information sharing that occurs between employers.

Using McElroy's tips and methods, aspiring professional pilots will be prepared to display their flying skills during the simulator ride as well as their aeronautical knowledge during the face-to-face oral questioning. This study and practice will not only ensure better performance during a technical interview or test but will help pilots fly the line a little better.



Ron McElroy has been an Air Force test pilot, flight, ground, and simulator instructor, charter pilot, skydive pilot, maintenance/ferry pilot, photo and chase plane pilot, and line pilot for two airlines. Ron has been at the controls of more than 190 types of aircraft.



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