

## PREFACE

The purpose of this manual is to help in the explanation, visualization and execution of the flight maneuvers required for Instrument Rating Practical Flight Test. Students preparing for their Instrument Rating will find this manual helpful. Any pilot preparing for a recurrency checkride, such as an Instrument Competency Check, can use this manual as a refresher on maneuvers that you may not have executed in quite some time. Instrument Flight Instructor applicants and Certified Instrument Flight Instructors will find this manual a beneficial teaching aid. Instructors and flight schools can use this manual to develop thorough and standardized lesson plans.

### **Each maneuver is broken into six sections.**

1. **Objective** — the Federal Aviation Administration's goal for a pilot as stated in the practical test standards.
2. **Completion Standards** — are taken from the instrument practical test standards. This details exactly what the Federal Aviation Administration requests of a pilot executing a maneuver. The limitations listed are the tolerances allowed on a Federal Aviation Administration's check ride. If these standards are not met, you will not pass your check ride.
3. **Description** — a brief explanation of the maneuver.
4. **Procedure** — a detailed step by step explanation of how to execute a maneuver as recommended by the Federal Aviation Administration. Each maneuver may vary slightly due to airplane type, manufacturer's recommendations, training environment and level. A Certified Instrument Flight Instructor will provide guidance on how the maneuver should vary for your particular situation.
5. **Reference** — contains the Federal Aviation Administration's Advisory Circulars (AC's) on which the previous sections are based. Page numbers are listed for location of additional information on each flight maneuver.
6. **Profiles** — most maneuvers also contain a graphic representation(s) of each maneuver. This graphic assists in visualizing the maneuver while summarizing the procedures and completion standards. On most profile pages you will have a table where you can fill in your particular aircraft airspeeds, pitch attitudes, bank angles, power settings and configurations.

All airspeeds, pitch attitudes, bank angles, power settings and configurations are referenced from the 1984 Cessna 172P Pilot's Operating Handbook based on sea level, maximum gross weight, and standard atmospheric conditions. All these settings may vary due to altitude, temperature, humidity, winds, airplane weight and configurations. Consult your airplane Pilot's Operating Handbook and/or your flight instructor for the proper airspeeds, pitch attitudes, bank angles, power settings and configurations.

## HOW TO USE THIS MANUAL

Before every flight lesson, know exactly what flight maneuvers will be practiced. Reference your flight syllabus for the maneuvers to study. Divide the list into two sections: **New Maneuvers** for the maneuvers your instructor is going to introduce or teach for the first time; and **Review Maneuvers**, for maneuvers you are familiar with but will be practicing on your next flight lesson.

**New Maneuvers** — Start by reading the maneuver's six sections. If there are questions on a particular step in the maneuver, reference the appropriate Federal Aviation Administration Advisory Circular or other references listed for each maneuver. If an answer cannot be found, write it down and ask your instructor during the pre-flight briefing. Go over the procedure section several times until you every step memorized. Practice the maneuver by "chair flying" the step by step procedure. (Chair Flying - visually flying the maneuver in your comfortable chair at home). By doing all this preparation, you will impress your flight instructor with your knowledge and understanding of the maneuver before you even step into an airplane. Not to mention the money you will save in less dual flying time.

**Review Maneuvers** — The profile section in most cases will continue to refresh your memory on the steps required to complete the maneuver. If it has been several weeks since practicing this maneuver, it may be best to follow the steps listed for a new maneuver. Continue to "chair fly" the maneuver on your off days to maintain your proficiency.