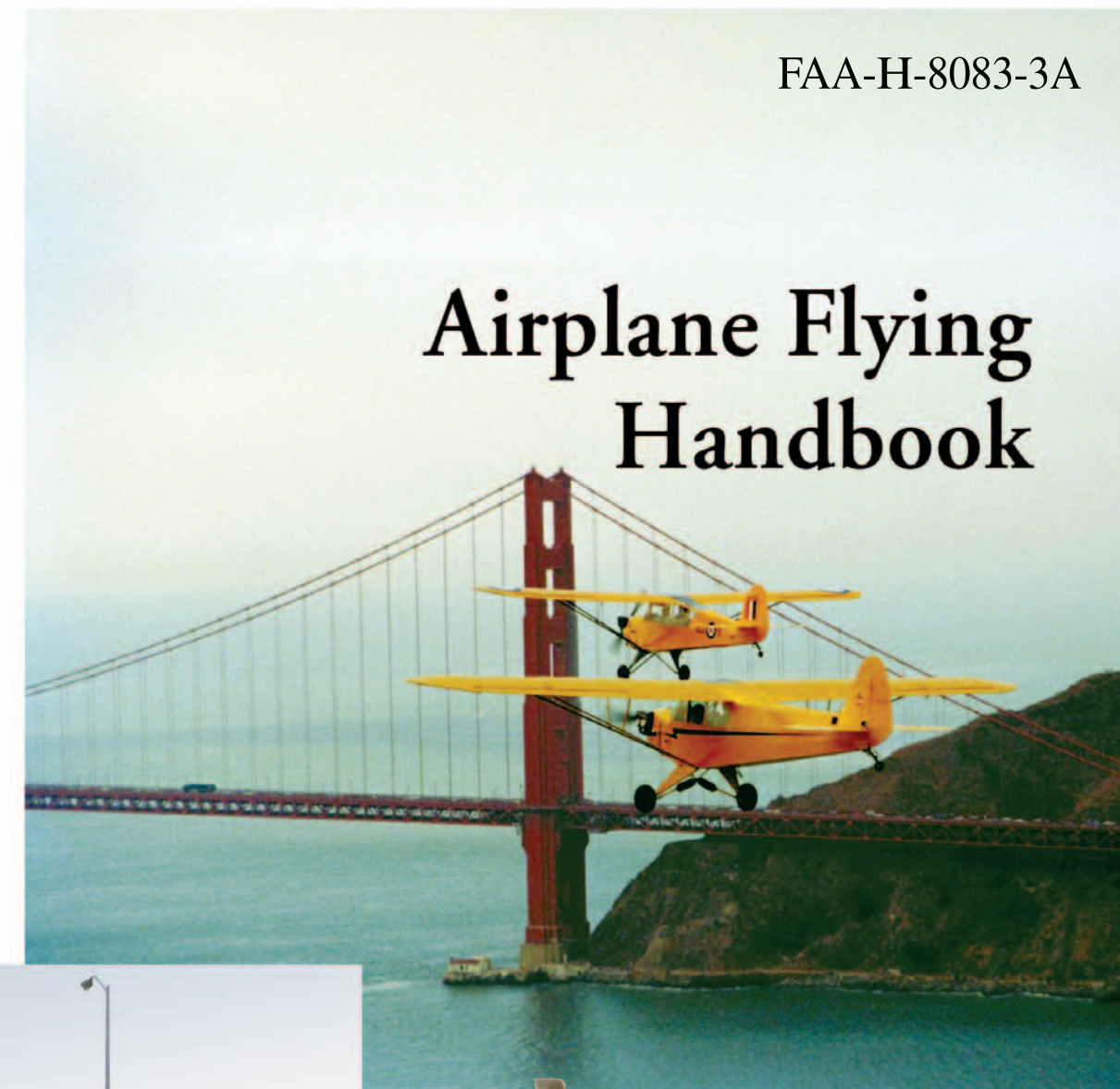


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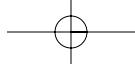
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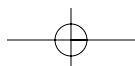
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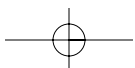
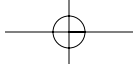


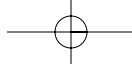
AIRPLANE FLYING HANDBOOK

2004

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Flight Standards Service**







PREFACE

The *Airplane Flying Handbook* is designed as a technical manual to introduce basic pilot skills and knowledge that are essential for piloting airplanes. It provides information on transition to other airplanes and the operation of various airplane systems. It is developed by the Flight Standards Service, Airman Testing Standards Branch, in cooperation with various aviation educators and industry.

This handbook is developed to assist student pilots learning to fly airplanes. It is also beneficial to pilots who wish to improve their flying proficiency and aeronautical knowledge, those pilots preparing for additional certificates or ratings, and flight instructors engaged in the instruction of both student and certificated pilots. It introduces the future pilot to the realm of flight and provides information and guidance in the performance of procedures and maneuvers required for pilot certification. Topics such as navigation and communication, meteorology, use of flight information publications, regulations, and aeronautical decision making are available in other Federal Aviation Administration (FAA) publications.

This handbook conforms to pilot training and certification concepts established by the FAA. There are different ways of teaching, as well as performing flight procedures and maneuvers, and many variations in the explanations of aerodynamic theories and principles. This handbook adopts a selective method and concept of flying airplanes. The discussion and explanations reflect the most commonly used practices and principles. Occasionally the word “must” or similar language is used where the desired action is deemed critical. The use of such language is not intended to add to, interpret, or relieve a duty imposed by Title 14 of the Code of Federal Regulations (14 CFR).

It is essential for persons using this handbook to also become familiar with and apply the pertinent parts of 14 CFR and the *Aeronautical Information Manual (AIM)*. The AIM is available online at <http://www.faa.gov/atpubs>. Performance standards for demonstrating competence required for pilot certification are prescribed in the appropriate airplane practical test standard.

The current Flight Standards Service airman training and testing material and subject matter knowledge codes for all airman certificates and ratings can be obtained from the Flight Standards Service Web site at <http://av-info.faa.gov>.

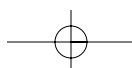
The FAA greatly acknowledges the valuable assistance provided by many individuals and organizations throughout the aviation community whose expertise contributed to the preparation of this handbook.

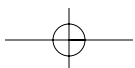
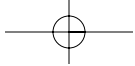
This handbook supersedes FAA-H-8083-3, *Airplane Flying Handbook*, dated 1999. This handbook also supersedes AC 61-9B, *Pilot Transition Courses for Complex Single-Engine and Light Twin-Engine Airplanes*, dated 1974; and related portions of AC 61-10A, *Private and Commercial Pilots Refresher Courses*, dated 1972. This revision expands all technical subject areas from the previous edition, FAA-H-8083-3. It also incorporates new areas of safety concerns and technical information not previously covered. The chapters covering transition to seaplanes and skiplanes have been removed. They will be incorporated into a new handbook (under development), FAA-H-8083-23, *Seaplane, Skiplane and Float/Ski Equipped Helicopter Operations Handbook*.

This handbook is available for download from the Flight Standards Service Web site at <http://av-info.faa.gov>. This web site also provides information about availability of printed copies.

This handbook is published by the U.S. Department of Transportation, Federal Aviation Administration, Airman Testing Standards Branch, AFS-630, P.O. Box 25082, Oklahoma City, OK 73125. Comments regarding this handbook should be sent in e-mail form to AFS630comments@faa.gov.

AC 00-2, Advisory Circular Checklist, transmits the current status of FAA advisory circulars and other flight information publications. This checklist is available via the Internet at http://www.faa.gov/aba/html_policies/ac00_2.html.





CONTENTS

Chapter 1—Introduction to Flight Training

Purpose of Flight Training.....	1-1
Role of the FAA	1-1
Role of the Pilot Examiner.....	1-2
Role of the Flight Instructor.....	1-3
Sources of Flight Training.....	1-3
Practical Test Standards.....	1-4
Flight Safety Practices.....	1-4
Collision Avoidance.....	1-4
Runway Incursion Avoidance.....	1-5
Stall Awareness.....	1-6
Use of Checklists.....	1-6
Positive Transfer of Controls.....	1-6

Chapter 2—Ground Operations

Visual Inspection	2-1
Inside the Cockpit.....	2-2
Outer Wing Surfaces and Tail Section	2-4
Fuel and Oil.....	2-5
Landing Gear, Tires, and Brakes.....	2-6
Engine and Propeller	2-6
Cockpit Management.....	2-7
Ground Operations	2-7
Engine Starting	2-7
Hand Propping.....	2-8
Taxiing	2-9
Before Takeoff Check.....	2-11
After Landing	2-11
Clear of Runway	2-11
Parking.....	2-11
Engine Shutdown.....	2-12
Postflight.....	2-12
Securing and Servicing.....	2-12

Chapter 3—Basic Flight Maneuvers

The Four Fundamentals.....	3-1
Effects and Use of the Controls	3-1
Feel of the Airplane	3-2
Attitude Flying.....	3-2
Integrated Flight Instruction.....	3-3
Straight-and-Level Flight	3-4
Trim Control.....	3-6
Level Turns.....	3-7
Climbs and Climbing Turns	3-13
Normal Climb.....	3-13
Best Rate of Climb	3-13
Best Angle of Climb.....	3-13
Descents and Descending Turns.....	3-15
Partial Power Descent	3-16
Descent at Minimum Safe Airspeed.....	3-16

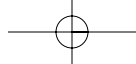
Glides.....	3-16
Pitch and Power.....	3-19

Chapter 4—Slow Flight, Stalls, and Spins

Introduction	4-1
Slow Flight	4-1
Flight at Less than Cruise Airspeeds.....	4-1
Flight at Minimum Controllable Airspeed.....	4-1
Stalls	4-3
Recognition of Stalls	4-3
Fundamentals of Stall Recovery	4-4
Use of Ailerons/Rudder in Stall Recovery	4-5
Stall Characteristics	4-6
Approaches to Stalls (Imminent Stalls) —Power-On or Power-Off	4-6
Full Stalls Power-Off.....	4-7
Full Stalls Power-On	4-8
Secondary Stall.....	4-9
Accelerated Stalls	4-9
Cross-Control Stall	4-10
Elevator Trim Stall	4-11
Spins	4-12
Spin Procedures	4-13
Entry Phase.....	4-13
Incipient Phase.....	4-13
Developed Phase	4-14
Recovery Phase	4-14
Intentional Spins.....	4-15
Weight and Balance Requirements.....	4-16

Chapter 5—Takeoff and Departure Climbs

General.....	5-1
Terms and Definitions	5-1
Prior to Takeoff.....	5-2
Normal Takeoff.....	5-2
Takeoff Roll.....	5-2
Lift-Off	5-3
Initial Climb.....	5-4
Crosswind Takeoff.....	5-5
Takeoff Roll.....	5-5
Lift-Off	5-6
Initial Climb.....	5-6
Ground Effect on Takeoff.....	5-7
Short-Field Takeoff and Maximum Performance Climb.....	5-8
Takeoff Roll.....	5-9
Lift-Off	5-9
Initial Climb.....	5-9
Soft/Rough-Field Takeoff and Climb.....	5-10



Takeoff Roll.....5-10
 Lift-Off5-10
 Initial Climb.....5-10
 Rejected Takeoff/Engine Failure5-11
 Noise Abatement.....5-11

Chapter 6—Ground Reference Maneuvers

Purpose and Scope.....6-1
 Maneuvering By Reference
 to Ground Objects6-1
 Drift and Ground Track Control.....6-2
 Rectangular Course6-4
 S-Turns Across a Road6-6
 Turns Around a Point6-7
 Elementary Eights6-9
 Eights Along a Road.....6-9
 Eights Across a Road.....6-11
 Eights Around Pylons6-11
 Eights-On-Pylons (Pylon Eights)6-12

Chapter 7—Airport Traffic Patterns

Airport Traffic Patterns and Operations7-1
 Standard Airport Traffic Patterns7-1

Chapter 8—Approaches and Landings

Normal Approach and Landing8-1
 Base Leg8-1
 Final Approach8-2
 Use of Flaps.....8-3
 Estimating Height and Movement.....8-4
 Roundout (Flare)8-5
 Touchdown8-6
 After-Landing Roll8-7
 Stabilized Approach Concept8-7
 Intentional Slips.....8-10
 Go-Arounds (Rejected Landings).....8-11
 Power8-11
 Attitude8-12
 Configuration.....8-12
 Ground Effect8-13
 Crosswind Approach and Landing8-13
 Crosswind Final Approach8-13
 Crosswind Roundout (Flare)8-15
 Crosswind Touchdown8-15
 Crosswind After-Landing Roll8-15
 Maximum Safe
 Crosswind Velocities8-16
 Turbulent Air Approach and Landing8-17
 Short-Field Approach and Landing8-17
 Soft-Field Approach and Landing8-19
 Power-Off Accuracy Approaches8-21
 90° Power-Off Approach.....8-21
 180° Power-Off Approach.....8-23

360° Power-Off Approach.....8-24
 Emergency Approaches and
 Landings (Simulated)8-25
 Faulty Approaches and Landings8-27
 Low Final Approach.....8-27
 High Final Approach8-27
 Slow Final Approach8-28
 Use of Power8-28
 High Roundout8-28
 Late or Rapid Roundout8-29
 Floating During Roundout.....8-29
 Ballooning During Roundout8-30
 Bouncing During Touchdown8-30
 Porpoising.....8-31
 Wheelbarrowing8-32
 Hard Landing8-32
 Touchdown in a Drift or Crab8-32
 Ground Loop8-33
 Wing Rising After Touchdown.....8-33
 Hydroplaning8-34
 Dynamic Hydroplaning8-34
 Reverted Rubber Hydroplaning.....8-34
 Viscous Hydroplaning8-34

Chapter 9—Performance Maneuvers

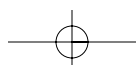
Performance Maneuvers9-1
 Steep Turns9-1
 Steep Spiral.....9-3
 Chandelle9-4
 Lazy Eight9-6

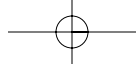
Chapter 10—Night Operations

Night Vision.....10-1
 Night Illusions10-2
 Pilot Equipment10-3
 Airplane Equipment and Lighting10-3
 Airport and Navigation Lighting Aids10-4
 Preparation and Preflight.....10-4
 Starting, Taxiing, and Runup.....10-5
 Takeoff and Climb10-5
 Orientation and Navigation10-6
 Approaches and Landings10-6
 Night Emergencies10-8

Chapter 11—Transition to Complex Airplanes

High Performance
 and Complex Airplanes11-1
 Wing Flaps.....11-1
 Function of Flaps11-1
 Flap Effectiveness.....11-2
 Operational Procedures.....11-2
 Controllable-Pitch Propeller11-3
 Constant-Speed Propeller11-4





Takeoff, Climb, and Cruise	11-4
Blade Angle Control	11-5
Governing Range	11-5
Constant-Speed Propeller Operation	11-5
Turbocharging	11-7
Ground Boosting vs. Altitude Turbocharging	11-7
Operating Characteristics	11-8
Heat Management	11-8
Turbocharger Failure	11-9
Overboost Condition	11-9
Low Manifold Pressure	11-9
Retractable Landing Gear	11-9
Landing Gear Systems	11-9
Controls and Position Indicators	11-10
Landing Gear Safety Devices	11-10
Emergency Gear	
Extension Systems	11-10
Operational Procedures	11-12
Preflight	11-12
Takeoff and Climb	11-13
Approach and Landing	11-13
Transition Training	11-14

Chapter 12—Transition to Multiengine Airplanes

Multiengine Flight	12-1
General	12-1
Terms and Definitions	12-1
Operation of Systems	12-3
Propellers	12-3
Propeller Synchronization	12-5
Fuel Crossfeed	12-5
Combustion Heater	12-6
Flight Director / Autopilot	12-6
Yaw Damper	12-6
Alternator / Generator	12-7
Nose Baggage Compartment	12-7
Anti-Icing / Deicing	12-7
Performance and Limitations	12-8
Weight and Balance	12-10
Ground Operation	12-12
Normal and Crosswind	
Takeoff and Climb	12-12
Level Off and Cruise	12-14
Normal Approach and Landing	12-14
Crosswind Approach and Landing	12-16
Short-Field Takeoff and Climb	12-16
Short-Field Approach	
and Landing	12-17
Go-Around	12-17
Rejected Takeoff	12-18
Engine Failure After Lift-Off	12-18
Engine Failure During Flight	12-21

Engine Inoperative Approach	
and Landing	12-22
Engine Inoperative Flight Principles	12-23
Slow Flight	12-25
Stalls	12-25
Power-Off Stalls	
(Approach and Landing)	12-26
Power-On Stalls	
(Takeoff and Departure)	12-26
Spin Awareness	12-26
Engine Inoperative—Loss of	
Directional Control Demonstration	12-27
Multiengine Training Considerations	12-31

Chapter 13—Transition to Tailwheel Airplanes

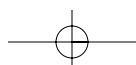
Tailwheel Airplanes	13-1
Landing Gear	13-1
Taxiing	13-1
Normal Takeoff Roll	13-2
Takeoff	13-3
Crosswind Takeoff	13-3
Short-Field Takeoff	13-3
Soft-Field Takeoff	13-4
Touchdown	13-4
After-Landing Roll	13-4
Crosswind Landing	13-5
Crosswind After-Landing Roll	13-5
Wheel Landing	13-6
Short-Field Landing	13-6
Soft-Field Landing	13-6
Ground Loop	13-6

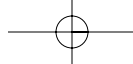
Chapter 14—Transition to Turbopropeller Powered Airplanes

General	14-1
The Gas Turbine Engine	14-1
Turboprop Engines	14-2
Turboprop Engine Types	14-3
Fixed Shaft	14-3
Split-Shaft / Free Turbine Engine	14-5
Reverse Thrust and	
Beta Range Operations	14-7
Turboprop Airplane	
Electrical Systems	14-8
Operational Considerations	14-10
Training Considerations	14-12

Chapter 15—Transition to Jet Powered Airplanes

General	15-1
Jet Engine Basics	15-1
Operating the Jet Engine	15-2
Jet Engine Ignition	15-3
Continuous Ignition	15-3





Fuel Heaters.....	15-3	General.....	16-2
Setting Power.....	15-4	Attitude and Sink Rate Control	16-3
Thrust to Thrust Lever Relationship	15-4	Terrain Selection.....	16-3
Variation of Thrust with RPM.....	15-4	Airplane Configuration.....	16-3
Slow Acceleration of the Jet Engine	15-4	Approach	16-4
Jet Engine Efficiency.....	15-5	Terrain Types	16-4
Absence of Propeller Effect	15-5	Confined Areas	16-4
Absence of Propeller Slipstream	15-5	Trees (Forest).....	16-4
Absence of Propeller Drag	15-6	Water (Ditching) and Snow	16-4
Speed Margins.....	15-6	Engine Failure After Takeoff (Single-Engine).....	16-5
Recovery from Overspeed Conditions	15-8	Emergency Descents	16-6
Mach Buffet Boundaries.....	15-8	In-Flight Fire	16-7
Low Speed Flight	15-10	Engine Fire	16-7
Stalls	15-10	Electrical Fires.....	16-7
Drag Devices	15-13	Cabin Fire	16-8
Thrust Reversers.....	15-14	Flight Control Malfunction / Failure.....	16-8
Pilot Sensations in Jet Flying	15-15	Total Flap Failure	16-8
Jet Airplane Takeoff and Climb.....	15-16	Asymmetric (Split) Flap.....	16-8
V-Speeds.....	15-16	Loss of Elevator Control	16-9
Pre-Takeoff Procedures	15-16	Landing Gear Malfunction	16-9
Takeoff Roll.....	15-17	Systems Malfunctions	16-10
Rotation and Lift-Off.....	15-18	Electrical System.....	16-10
Initial Climb.....	15-18	Pitot-Static System	16-11
Jet Airplane Approach and Landing.....	15-19	Abnormal Engine	
Landing Requirements.....	15-19	Instrument Indications	16-11
Landing Speeds	15-19	Door Opening In Flight.....	16-12
Significant Differences.....	15-20	Inadvertent VFR Flight Into IMC	16-12
The Stabilized Approach	15-21	General.....	16-12
Approach Speed.....	15-21	Recognition.....	16-14
Glidepath Control	15-22	Maintaining Airplane Control	16-14
The Flare.....	15-22	Attitude Control.....	16-14
Touchdown and Rollout	15-24	Turns	16-15
		Climbs.....	16-15
		Descents.....	16-16
		Combined Maneuvers.....	16-16
		Transition to Visual Flight.....	16-16
Chapter 16—Emergency Procedures		Glossary	G-1
Emergency Situations.....	16-1	Index	I-1
Emergency Landings	16-1		
Types of Emergency Landings	16-1		
Psychological Hazards.....	16-1		
Basic Safety Concepts.....	16-2		

