

PREFACE

The *Rotorcraft Flying Handbook* is designed as a technical manual for applicants who are preparing for their private, commercial, or flight instructor pilot certificates with a helicopter or gyroplane class rating. Certificated flight instructors may find this handbook a valuable training aid, since detailed coverage of aerodynamics, flight controls, systems, performance, flight maneuvers, emergencies, and aeronautical decision making is included. Topics, such as weather, navigation, radio navigation and communications, use of flight information publications, and regulations 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 to flying helicopters and gyroplanes. 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). This handbook is divided into two parts. The first part, chapters 1 through 14, covers helicopters, and the second part, chapters 15 through 22, covers gyroplanes. The glossary and index apply to both parts.

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)*. Performance standards for demonstrating competence required for pilot certification are prescribed in the appropriate rotorcraft practical test standard.

This handbook supersedes Advisory Circular (AC) 61-13B, *Basic Helicopter Handbook*, dated 1978. In addition, all or part of the information contained in the following advisory circulars are included in this handbook: AC 90-87, *Helicopter Dynamic Rollover*; AC 90-95, *Unanticipated Right Yaw in Helicopters*; AC 91-32B, *Safety in and around Helicopters*; and AC 91-42D, *Hazards of Rotating Propeller and Helicopter Rotor Blades*.

This publication may be purchased from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402-9325, or from U.S. Government Bookstores located in major cities throughout the United States.

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 Services web site at <http://av-info.faa.gov>.

Comments regarding this handbook should be sent to U.S. Department of Transportation, Federal Aviation Administration, Airman Testing Standards Branch, AFS-630, P.O. Box 25082, Oklahoma City, OK 73125.

AC 00-2, *Advisory Circular Checklist*, transmits the current status of FAA advisory circulars and other flight information publications. This checklist is free of charge and may be obtained by sending a request to U.S. Department of Transportation, Subsequent Distribution Office, SVC-121.23, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, MD 20785.

AC00-2 also is available on the Internet at <http://www.faa.gov/abc/ac-chklst/actoc.htm>.