



AVIATION MAINTENANCE TECHNICIAN HANDBOOK



GENERAL

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**U.S. DEPARTMENT OF TRANSPORTATION
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PREFACE

The *Aviation Maintenance Technician Handbook—General* was developed as one of a series of three handbooks for persons preparing for mechanic certification with airframe or powerplant ratings, or both. It is intended that this handbook will provide basic information on principles, fundamentals, and technical procedures in the subject matter areas common to both the airframe and powerplant ratings. Emphasis in this volume is on theory and methods of application.

The handbook is designed to aid students enrolled in a formal course of instruction preparing for FAA certification as a maintenance technician, as well as for current technicians who wish to improve their knowledge.

This volume contains information on mathematics, aircraft drawings, weight and balance, aircraft materials, processes and tools, physics, electricity, inspection, ground operations, and FAA regulations governing the certification and work of maintenance technicians. New to this volume is a section addressing how successful aviation maintenance technicians incorporate knowledge and awareness of ethics, professionalism, and human factors in the field.

Because there are so many different types of airframes and powerplants in use today, it is reasonable to expect that differences exist in the components and systems of each. To avoid undue repetition, the practice of using representative systems and units is implemented throughout the handbook. Subject matter treatment is from a generalized point of view, and should be supplemented by reference to manufacturers' manuals or other textbooks if more detail is desired. This handbook is not intended to replace, substitute for, or supersede official regulations or manufacturer instructions.

The companion handbooks to *Aviation Maintenance Technician Handbook—General* are the *Airframe and Powerplant Mechanics Powerplant Handbook*, AC 65-12A, and the *Airframe and Powerplant Mechanics Airframe Handbook*, AC 65-15A.

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