

1. Record Nr.	UNINA9910796064603321
Autore	Gardner Bob <1928-2021, >
Titolo	The Complete Remote Pilot // Bob Gardner and David Ison
Pubbl/distr/stampa	Newcastle, Washington : , : Aviation Supplies & Academics, Inc., , [2022] ©2022
ISBN	1-64425-209-0
Edizione	[Second edition.]
Descrizione fisica	1 online resource (201 pages)
Disciplina	623.7469
Soggetti	Drone aircraft
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro -- Copyright -- Foreword -- About the Authors -- Getting Started -- 1. Uncrewed Aircraft Systems: Learning the Language of Drones -- A Very Brief History of Uncrewed Aircraft Systems (UAS) -- Terms and Abbreviations -- Types of UAS -- UAS Components -- Common Uses of sUAS -- Summary -- Review Questions -- 2. Regulations: Remote Pilot Certificate sUAS Rating Privileges, Limitations, and Flight Operations -- Government Regulations and Other Procedures Publications -- Chart Supplements U.S. -- Advisory Circulars -- QR Codes -- Notices to Air Missions (NOTAMs) -- Aviation Media -- Review Questions -- 3. Airspace and Navigation -- Aeronautical Charts -- Geographical Coordinates -- Time -- Statute and Nautical Mile Scale -- Magnetic Variation -- Correcting for Wind Drift -- Ground Speed vs. Airspeed -- Chart Reading -- Airspace -- Terminal Radar Service Area -- Special Use Airspace -- Air Defense Identification Zones -- Wildlife Refuge Area -- Review Questions -- 4. Airport and Off-Airport Operations -- The Airport -- Crosswind Operations -- Wake Turbulence -- Operations at Non-Tower Airports -- Operations at Airports with Control Towers -- Off-Airport Operations -- Flying at Night -- Review Questions -- 5. Radio Communication Procedures -- Radio Procedures -- Radio Use at Non-Tower Airports -- Communication at Airports with Operating Towers -- Air Traffic Control Radar Services -- ADS-B -- Remote Identification (RID) -- Radio Communication Phraseology and Technique -- Review

Questions -- 6. Weather: General Weather Theory, Aviation Weather Sources, and Effects of Weather on sUAS Performance -- Fronts -- Stability -- Cloud Families -- Thunderstorms -- Wind Shear -- Fog -- Structural Icing and Frost -- Cold Weather Operations -- Lake Effect Snow -- Using Your Weather Knowledge -- Learning More About Weather -- Overview -- The AWC Home Page. Textual Weather Products -- Automated Weather Reporting Stations -- Other Less Frequently Used Resources -- Practical Sources for the Remote Pilot -- Summary -- Review Questions -- 7. Performance -- A Very Brief Introduction to Aerodynamics -- Weight and Balance -- Weight and Balance Calculations -- Performance -- Density Altitude -- Takeoff and Climb Performance -- Endurance -- Landing Distance -- Aerodynamic Effects -- Vortex Ring State -- Ground Effect -- Trim -- Review Questions -- 8. Emergency Procedures -- Contingency Planning -- Ground Emergencies -- Inflight Emergencies -- Emergency Communications -- Other "Surprises" -- Review Questions -- 9. Human Factors -- Health and Environmental Factors -- Decision-Making and Judgment -- Refresher Training -- Positive Control -- Risk Management and Aeronautical Decision Making -- Review Questions -- 10. Maintenance and Preflight Inspection Procedures -- Regulatory Requirements -- Preflight Inspection Considerations -- Postflight Inspection Considerations -- Inspection Intervals -- Battery Maintenance -- Flight and Maintenance Logs -- Maintenance, Repair, and Replacement of Components -- Review Questions -- Appendix A: Glossary -- Appendix B: Chart Supplements U.S.: Airport/Facility Directory Legend -- Appendix C: Chart Supplements U.S. Excerpts -- Appendix D: Additional Full- Color Illustrations -- Seattle Sectional Chart Excerpts and Legend -- North Alabama Sectional Chart -- Airport Signs -- Index.

Sommario/riassunto

"This textbook is for anyone interested in pursuing and obtaining a Remote Pilot Certificate, which is required in order to operate drones for commercial use. With a friendly and readable style, the authors cover all of the details involved in becoming a competent, responsible, and safe remote pilot, opening up tremendous opportunities for flying increasingly affordable and sophisticated small unmanned aircraft systems (sUAS). An FAA Knowledge Exam is a requirement for earning a Remote Pilot Certificate. The Complete Remote Pilot is designed to not only prepare you for the exam but to teach you about how UAS fly, their components and systems, and the aeronautical knowledge required to fly these systems in the same airspace as manned aircraft. This book covers specifics on the language of drones, regulations, airspace and navigation, airport and off-airport operations, radio communication procedures, weather, aerodynamics and aircraft performance, emergency procedures, human factors, maintenance, and preflight inspection procedures. The required aeronautical knowledge is augmented with specific tips and techniques, checklists and mnemonic devices, and sound advice from personal experience. You'll benefit from the review questions for each chapter similar to the type found on the FAA test, a comprehensive glossary, and index. This practical application of the knowledge needed to pass the FAA Knowledge Exam is not available in any other book! You will gain the knowledge needed to pass the test and understand how to operate safely as a remote pilot in the U.S. National Airspace System"--
