U.S. Department of Transportation
Federal Aviation Administration

Airman Certification Standards

Remote Pilot

Small Unmanned Aircraft Systems

FAA-S-ACS-10B

U.S. Department
of Transportation

**Federal Aviation
Administration**

Remote Pilot – Small Unmanned Aircraft Systems

Airman Certification Standards

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**Flight Standards Service
Washington, DC 20591**

Acknowledgments

Availability

Foreword

The Federal Aviation Administration (FAA) publishes the Remote Pilot – small Unmanned Aircraft Systems (UAS) Airman Certification Standards (ACS) document to communicate a means to evaluate the aeronautical knowledge standards for certification knowledge testing for a Remote Pilot Certificate with a small UAS rating.

The FAA views the ACS as the foundation of its transition to a more integrated and systematic approach to airman certification. The ACS is part of the Safety Management System (SMS) framework that the FAA uses to mitigate risks associated with airman certification training and testing. Specifically, the ACS, associated guidance, and test question components of the airman certification system are constructed around the four functional components of an SMS:

- Safety Policy that defines and describes aeronautical knowledge, risk management, and flight proficiency as integrated components of the airman certification system;

- Safety Risk Management processes through which both internal and external stakeholders identify changes in regulations, safety recommendations, or other factors. These changes are then evaluated to determine whether they require modification of airman testing and training materials;

- Safety Assurance processes to ensure the prompt and appropriate incorporation of changes arising from new regulations and safety recommendations; and

- Safety Promotion in the form of ongoing engagement with both external stakeholders (e.g., the aviation training community) and FAA policy divisions.

Rick Domingo
Executive Director, Flight Standards Service

Revision History

Document	Description	Revision Date
FAA-S-ACS-10	Remote Pilot – Small Unmanned Aircraft Systems Airman Certification Standards	July 2016
FAA-S-ACS-10A	Remote Pilot – Small Unmanned Aircraft Systems (Certification and Recurrent Knowledge Testing) Airman Certification Standards	June 2018
FAA-S-ACS-10B	Remote Pilot – Small Unmanned Aircraft Systems Airman Certification Standards	April 2021

Major Enhancements to Version FAA-S-ACS-10B

Section	Action	Description
Introduction	Updated	"Airman Certification Standards Concept" subsection
	Updated	Using the ACS subsection
References	Updated	Task references, as necessary
Area of Operation I, Regulations	Added	Knowledge elements K6, K7, and K8 to Task A, General
	Added	Knowledge elements K23, K24, K25, K26, K27, and K28 to Task B, Operating Rules
	Added	Task E, Operations Over People
	Added	Task F, Remote Identification (RID)
Area of Operation II, Airspace Classification and Operating Requirements	Added	Knowledge elements K6, K7, K8, K9, and K10 to Task B, Airspace Operational Requirements
Area of Operation V, Operations	Added	Knowledge element K8 to Task B, Airport Operations
	Added	Knowledge elements K6 and K7 to Task C, Emergency Procedures
	Added	Knowledge elements K8 and K9 to Task E, Physiology
	Added	Knowledge elements K6 and K7 to Task F, Maintenance and Inspection Procedures
Appendices	Updated	Appendix 1: Certification Knowledge Test, Eligibility, and Testing Centers
	Updated	Appendix 3: Airman Knowledge Test Report for Certification
	Updated	Appendix 4: References

Table of Contents

Introduction

Airman Certification Standards Concept

The goal of the airman certification process is to ensure the applicant possesses knowledge consistent with the privileges of the Remote Pilot Certificate with a small Unmanned Aircraft Systems (sUAS) rating, as well as the ability to manage the risks of flight in order to act as a remote pilot-in-command (PIC).

In fulfilling its responsibilities for the airman certification process, the Federal Aviation Administration (FAA) Flight Standards Service (AFS) plans, develops, and maintains materials related to airman certification testing. These materials include several components. The FAA knowledge test measures mastery of the aeronautical knowledge areas listed in Title 14 of the Code of Federal Regulations (14 CFR) parts 89 and 107. Other materials, such as airman knowledge testing supplements in the FAA-CT-8080 series and FAA online training, provide guidance to applicants on aeronautical knowledge and risk management.

The FAA recognizes that safe operations in today's complex National Airspace System (NAS) require a more systematic integration of aeronautical knowledge and risk management. The FAA further recognizes the need to more clearly calibrate knowledge and risk management to the level of the Remote Pilot Certificate with an sUAS rating.

The ACS integrates the elements of knowledge and risk management in 14 CFR parts 89 and 107 for a Remote Pilot Certificate with an sUAS rating. It thus forms the comprehensive standard for what an applicant knows and considers to successfully complete each Task tested on the knowledge test.

In keeping with this integrated and systematic approach, the knowledge Task elements of each Task identify what the applicant should know and understand for sUAS operations conducted under 14 CFR parts 89 and 107. The applicant demonstrates this understanding by passing the knowledge test.

Using the ACS

This Remote Pilot ACS includes Areas of Operation and Tasks for the issuance of a Remote Pilot Certificate with an sUAS rating in accordance with 14 CFR part 107, section 107.65.

Element codes in the ACS divide into four components. For example:

> **UA.I.B.K10:**
> **UA** = ACS (Unmanned Aircraft Systems)
> **I** = Area of Operation (Regulations)
> **B** = Task (Operating Rules)
> **K10** = Knowledge Element (Visual line of sight (VLOS) aircraft operations.)

At the conclusion of a knowledge test, an applicant is given their Knowledge Test Report (KTR). The KTR lists the applicant's name, date of the test, the type of test, a unique test identification number, the score and ACS Codes for questions that were answered incorrectly. The printed ACS Codes guides the applicant to the area(s) that were found to be deficient in the test. The codes are found in this Airman Certification Standards document.

The FAA encourages applicants to use this ACS as a reference while preparing for the certification airman knowledge test. The FAA revises this ACS as circumstances require.

For those applicants who do not pass the knowledge test for certification, remedial instruction and an endorsement from an instructor is not required for retesting. See Appendix 1: Certification Knowledge Tests, Eligibility, and Testing Centers for details on passing the Unmanned Aircraft General – Small (UAG) certification airman knowledge test.

I. Regulations

Task A. General

References	*14 CFR parts 89 and 107, subpart A; AC 107-2; FAA-H-8083-25; FAA-G-8082-22*
Objective	*To determine that the applicant is knowledgeable in the general regulatory requirements of 14 CFR parts 89 and 107.*
Knowledge	*The applicant demonstrates understanding of:*
UA.I.A.K1	Applicability of 14 CFR part 107 to small unmanned aircraft operations.
UA.I.A.K2	Definitions used in 14 CFR part 107.
UA.I.A.K3	The ramifications of falsification, reproduction, or alteration of a certificate, rating, authorization, record, or report.
UA.I.A.K4	Accident reporting.
UA.I.A.K5	Inspection, testing, and demonstration of compliance.
UA.I.A.K6	Multiple category sUAS.
UA.I.A.K7	Record retention.
UA.I.A.K8	Previously manufactured sUAS.
Risk Management	*[Reserved]*
Skills	*[Not Applicable]*

I. Regulations

Task B. Operating Rules

References	*14 CFR parts 47, 48, 89, and 107, subpart B; AC 107-2; FAA-H-8083-25; FAA-G-8082-22*
Objective	*To determine that the applicant is knowledgeable of the operating rules of 14 CFR parts 89 and 107, the registration rules of 14 CFR parts 47 and 48, and other associated operating requirements.*
Knowledge	*The applicant demonstrates understanding of:*
UA.I.B.K1	Registration requirements for sUAS.
UA.I.B.K2	Requirement for the sUAS to be in a condition for safe operation.
UA.I.B.K3	Medical condition(s) that would interfere with safe operation of an sUAS.
UA.I.B.K4	Responsibility and authority of the remote PIC.
UA.I.B.K4a	a. Allowing a person other than the remote PIC to manipulate the flight controls
UA.I.B.K5	Regulatory deviation and reporting requirements for in-flight emergencies.
UA.I.B.K6	Hazardous operations.
UA.I.B.K6a	a. Careless or reckless
UA.I.B.K6b	b. Dropping an object
UA.I.B.K7	Operating from a moving aircraft or moving land- or water-borne vehicle.
UA.I.B.K8	Alcohol or drugs and the provisions on prohibition of use.
UA.I.B.K9	Daylight operations.
UA.I.B.K10	Visual line of sight (VLOS) aircraft operations.
UA.I.B.K11	Requirements when a visual observer is used.
UA.I.B.K12	Prohibition of operating multiple sUAS.
UA.I.B.K13	Prohibition of carrying hazardous material.
UA.I.B.K14	Staying safely away from other aircraft and right-of-way rules.
UA.I.B.K14a	a. See and avoid other aircraft and other potential hazard considerations of the remote PIC
UA.I.B.K15	Operations over human beings (Refer to Area of Operation I, Task E).
UA.I.B.K16	Prior authorization required for operation in certain airspace.
UA.I.B.K17	Operating in the vicinity of airports.
UA.I.B.K18	Operating in prohibited or restricted areas.
UA.I.B.K19	Flight restrictions in the proximity of certain areas designated by notice to airmen (NOTAM).
UA.I.B.K20	Preflight familiarization, inspection, and actions for aircraft operations.
UA.I.B.K21	Operating limitations for sUAS.
UA.I.B.K21a	a. Maximum groundspeed
UA.I.B.K21b	b. Altitude limitations
UA.I.B.K21c	c. Minimum visibility
UA.I.B.K21d	d. Cloud clearance requirements
UA.I.B.K22	Requirements for a Remote Pilot Certificate with an sUAS rating.
UA.I.B.K23	Automated operations.

UA.I.B.K24	Civil twilight operations.	
UA.I.B.K25	Night operations.	
UA.I.B.K26	Transportation of property.	
UA.I.B.K27	ATC transponder equipment prohibition.	
UA.I.B.K28	ADS-B Out prohibition.	
Risk Management	*[Reserved]*	
Skills	*[Not Applicable]*	

This Federal Aviation Administration (FAA) Remote Pilot – Small Unmanned Aircraft Systems Airman Certification Standards (ACS) document provides the aeronautical knowledge standards for remote pilot certification in the small unmanned aircraft system (sUAS) category. This ACS incorporates and supersedes the previous Airman Certification Standards FAA-S-ACS-10A.

The ACS is the guide for students, instructors, and evaluators to understand what applicants must know, do, and consider to pass their FAA Knowledge Exam and practical (checkride) and earn their pilot certificate or rating.

FAA Certification Standards available from ASA:

Airman Certification Standards

- **Private Pilot** Airplane
- **Instrument Rating** Airplane
- **Commercial Pilot** Airplane
- **Airline Transport Pilot** Airplane

Practical Test Standards

- **Sport Pilot** Airplane/Weight-Shift Control/Powered Parachute/Flight Instructor
- **Private Pilot Rotorcraft** Helicopter & Gyroplane
- **Instrument Rating** Helicopter & Powered Lift
- **Commercial Pilot & Flight Instructor** Helicopter
- **Airline Transport Pilot** Dispatcher
- **Flight Instructor** Airplane Single-Engine Land & Sea
- **Flight Instructor** Airplane Multi-Engine Land & Sea
- **Flight Instructor Instrument** Airplane & Helicopter
- **Aviation Mechanic** General, Airframe, Powerplant

Visit www.asa2fly.com/acsupdate for FAA revisions affecting this title.