

A. TASK**CERTIFICATES AND DOCUMENTS****OBJECTIVE**

To determine that the applicant exhibits commercial pilot knowledge of the elements of certificates and documents by explaining:

KEY ELEMENTS

- Requirements for the issuance of Pilot certificates and ratings, and the privilege and limitations of those certificates and ratings
- Medical requirements
- Airworthiness and registration certificates
- Balloon flight manuals
- Balloon maintenance inspection requirements and associated records

SCHEDULE

- Discuss objectives
- Review material
- Development
- Conclusion

EQUIPMENT

- FAR/AIM
- Balloon flight manual
- Maintenance Records
- References
 - 14 CFR parts 43, 61, 91
 - AC 61-23
 - Balloon Flight Manual

INSTRUCTOR ACTIONS

- Discuss lesson objectives
- Present lecture
- Questions

STUDENT ACTIONS

- Participate in discussion
- Take notes

COMPLETION STANDARDS

- Participate in discussion
- Take notes

A. TASK**CERTIFICATES AND DOCUMENTS****INTRODUCTION**

Overview—review objectives and key ideas.

Why—each certificate and medical has different rules. The pilot should know what is required to obtain and maintain the desired certificate, as well as the privileges and limitations associated with it. It is also important to know how medical certificates work, and what training must be logged.

REQUIREMENTS**Student pilot****General requirements****Issuance****STUDENT PILOT**

- must be at least 14 years of age.
- Must be able to read, speak, write and understand the English language.

There is no cost to obtain a Student Pilot certificate. You may start the process by completing an FAA form 8710-1 through IACRA <https://iacra.faa.gov/IACRA/Default.aspx> .

61.19(b)(3)

A student pilot certificate expires 60 months after the month of issuance

**Training
61.87(b)(c)**

A student pilot is now eligible to start flight training under an appropriately rated flight instructor.

**Privileges
61.87(k)**

A student pilots may solo after demonstration to their flight proficiency to their instructor and by passing a written quiz that they are familiar with 14 CFR Part 91 and Part 61 airspace where the solo will take place, the balloons flight characteristics and limitation and are proficient in balloon operation of pre-flight preparation, operation of controls, lift-off and climb, descent and landing and emergency situations.

**Limitations
61.89**

A student pilot may not carry passengers or fly a balloon for hire.

A. TASK**CERTIFICATES AND DOCUMENTS****REQUIREMENTS**

(Continued)

Private pilot
General requirements
61.103Issuance
61.103Training
61.105Flight experience
61.109(h)Privileges
61.87(k)

PRIVATE PILOT

- Must be at least 16 years of age.
- Must be able to read, speak, write and understand the English language.
- At this time no medical certificate is required but that may be changing in the near future

- Must pass a written knowledge exam on items such as
 - Pilot privileges, limitation and flight procedures
 - Use of navigation charts
 - Recognition of weather conditions and use of weather reports
 - Operating procedures with hot air balloons

- Receive logbook endorsements from an authorized instructor for:
 - Aeronautical knowledge 61.105
 - Flight proficiency 61.107(b)(8)
 - Aeronautical experience 61.109(h)

- Must have received instruction on the following pilot operations:
 - Applicable federal aviation regulations relative to privileges limitations on flight operations
 - accident reporting requirements of the NTSB
 - use of aeronautical information manual and advisory circulars
 - use of aeronautical charts and VFR navigation
 - radio communication procedures
 - weather
 - safe and efficient operations of aircraft
 - aeronautical decision-making

- Flight experience must include at minimum:
 - At least **10 hours** in free balloons, which must include
 - **6 flights** under the supervision of an instructor. These flight must include
 - **2 training flights of at least one hour within 60 days** of the scheduled check ride
 - **1 ascent to 2,000 feet** above take off point.
 - Successful completion of a pre solo quiz
 - at least **1 solo flight**

A Private Pilot Certificate allows you to conduct flight operations on your own without an instructor or supervision. You can carry passengers and fly in any airspace where flight operations are allowed. You must follow and conform with

May be freely distributed all FAA regulations that are or would be in effect for the area and place of the

A. TASK**CERTIFICATES AND DOCUMENTS****Private pilot****General requirements
(Continued)****proficiency
61.107(b)(8)**

- Must have received instruction on the following pilot operations:
 - Ground handling and inflation
 - Navigation
 - Airport operations
 - Preflight checks
 - Takeoff and ascents
 - Descents and landings
 - Emergency conditions and procedures
 - Post flight procedures

**Privileges
61.113**

- May carry passengers
- May share operating costs on a pro-rata basis
- Can carry passengers for charitable organization provide they comply with 91.146

**Limitations
61.115**

- You may NOT receive compensation for any flight operation

A. TASK**CERTIFICATES AND DOCUMENTS****REQUIREMENTS**

(Continued)

Commercial pilotGeneral requirements
61.123

Issuance

Training
61.125
61.127Flight experience
61.129

61.89

COMMERCIAL PILOT

- Must be at least 18 years of age.
 - Must be able to read, speak, write and understand the English language.
 - Hold at least a private pilot certificate
 - At this time no medical certificate is required but that may be changing in the near future.
-
- Must pass Commercial written test on the subject matter listed in 14 CFR 61.125,
 - Receive a logbook endorsement for an authorized instructor for:
 - aeronautical knowledge 61.125
 - Flight proficiency 61.127
 - aeronautical experience 61.129
-
- Must have received instruction on the following pilot operations:
 - Fundamentals of Instructing
 - Applicable federal aviation regulations relative to privileges limitations on flight operations
 - accident reporting requirements of the NTSB
 - use of aeronautical information manual and advisory circulars
 - use of aeronautical charts and VFR navigation
 - radio communication procedures
 - weather
 - safe and efficient operations of aircraft
 - aeronautical decision-making
-
- Flight experience must include at minimum:
 - At least 35 hours of flight time
 - 20 hours and balloons
 - 10 flights
 - 2 flights as PIC
 - 10 hours of flight training that includes 10 training flights with an instructor
 - 2 training flights of one hour within 60 days of application
 - 2 solo flights
 - a controlled ascent to 3000 feet above the launch site

A. TASK

CERTIFICATES AND DOCUMENTS

Commercial pilot

General requirements
(Continued)

Privileges
61.133

Limitations
61.133

- May act as PIC carrying persons or property for compensation or higher
 - Give flight and ground training
 - Give endorsements for pilot certification for balloons
 - Endorse student certificate and logbook for solo flights for balloons
 - Give ground and flight training endorsements for flight review
-
- Limited to Balloons only, no fixed wing privileges

Solutions

A. TASK

CERTIFICATES AND DOCUMENTS

MEDICAL REQUIREMENTS

Future medical requirements for Commercial Pilot

2nd class Medical Duration 61.23

An FAA Medical is currently not required for any Hot Air Balloon Licensing however, general health must be taken into consideration:

- You should be in good overall health and a minimum of 48 inches tall.
- You should be able to climb in and out of the 4 foot tall basket unassisted.
- You must be able to stand for a minimum of one hour.
- You should not have recently undergone any surgeries.
- You should not fly if you have back or leg problems.
- You cannot fly if you have a cast on.
- You cannot fly if you are on oxygen.
- You cannot fly if you are pregnant or suspect being pregnant

Regulations are currently under review to require Commercial Pilots to have at least a 2nd Class Medical to exercise commercial privileges.

A 2nd Class Medical can be issued by an AME

To find an AME in your area: <https://www.faa.gov/pilots/amelocator/>

For more information on this topic:

<https://www.faa.gov/newsroom/faa-proposes-medical-requirements-commercial-hot-air-balloon-pilots>

(2) A second-class medical certificate	(i) Any age	an airline transport pilot certificate for second-in-command privileges (other than the operations specified in paragraph (d)(1) of this section), a commercial pilot certificate, or an air traffic control tower operator certificate	12th month after the month of the date of examination shown on the medical certificate.
	(ii) Under age 40	a recreational pilot certificate, a private pilot certificate, a flight instructor certificate (when acting as pilot in command or a required pilot flight crewmember in operations other than glider or balloon), a student pilot certificate, or a sport pilot certificate (when not using a U.S. driver's license as medical qualification)	60th month after the month of the date of examination shown on the medical certificate.
	(iii) Age 40 or older	a recreational pilot certificate, a private pilot certificate, a flight instructor certificate (when acting as pilot in command or a required pilot flight crewmember in operations other than glider or balloon), a student pilot certificate, or a sport pilot certificate (when not using a U.S. driver's license as medical qualification)	24th month after the month of the date of examination shown on the medical certificate.

A. TASK**CERTIFICATES AND DOCUMENTS****AIRWORTHINESS AND
REGISTRATION
CERTIFICATES****What****AIRWORTHINESS**

An airworthiness certificate is an FAA document which grants authorization to operate an aircraft in flight.

Who can apply

A registered owner or owner's agent of an aircraft may apply for an airworthiness certificate.

Classifications

There are two different classifications of FAA airworthiness certificates:

Standard Airworthiness Certificate

- A standard airworthiness certificate (FAA form 8100-2 displayed in the aircraft) is the FAA's official authorization allowing for the operation of type certificated aircraft

Special Airworthiness Certificate.

- The FAA special airworthiness certificate (FAA Form 8130-7) is an FAA authorization to operate an aircraft in the US airspace in one or more of the following categories:
 - Primary
 - restricted
 - multiple
 - limited
 - light sport
 - experimental
 - special flight permit
 - provisional

Certification Process

The FAA's aircraft certification processes are well established and have consistently assured safe aircraft designs. As part of any certification project, we conduct the following:

- Review any proposed designs and the methods that will be used to show that these designs and the overall airplane complies with FAA standards
- Conduct certain ground and flight tests to demonstrate that the airplane meets the FAA standards
- Evaluate the airplane to determine the required maintenance and operational suitability for introduction of the aircraft into service
- Work with other civil aviation authorities on their approval of the aircraft, based primarily on work already completed by the FAA

**Who is authorized to
issue?**

Only FAA Aviation Safety Inspectors and authorized Representatives of the Administrator (i.e. **Designees**), as defined in **14 CFR Part 183**, "Representatives of the Administrator", are authorized to issue an FAA airworthiness certificate.

A. TASK**CERTIFICATES AND DOCUMENTS****AIRWORTHINESS AND
REGISTRATION
CERTIFICATES
(Continued)****Registration
FAR 47.3****Requirement****Requirements:**

No person may operate an aircraft in the United States, unless the aircraft:

- Has been registered by its owner;
- Is carrying aboard the temporary authorization required FAR 47.31(c); or
- Is an aircraft of the Armed Forces of the United States

* The registration certificate is one of the required documents that must be carried aboard an aircraft in order for it to be considered airworthy

Eligibility**Eligibility:**

An aircraft is eligible for U.S. Registration if:

- It is not registered in a foreign country
- The aircraft is owned by either:
 - A U.S. Citizen;
 - A Resident Alien;
 - A U.S. government unit or subdivision (States, District of Columbia, Puerto Rico, a territory, or possession of the U.S.); or,
 - A non-citizen corporation lawfully organized and doing business under the laws of the U.S. or one of the States as long as the aircraft is based and primarily used in the U.S. (60% of all flight hours must be flown from flights starting and ending within the U.S.)

Failure to meet any of the above requirements will invalidate the registration

Issuance**Registration Certificate Issuance:****Initial Registration:**

- Registering an aircraft for the first time requires the following be sent to the Aircraft Registration Branch:
 - An Aircraft Registration Application, AC Form 8050-1 by, and in the legal name of the owner
 - The original Aircraft Bill of Sale (AC Form 8050-2)
 - The registration fee (as per 47.17) made payable to the Federal Aviation Administration
- Once an initial registration has been completed, renewals will be required, every 3 years

A. TASK**CERTIFICATES AND DOCUMENTS****AIRWORTHINESS AND
REGISTRATION
CERTIFICATES
(Continued)****Issuance
(Continued)****Registration Renewal:**

- Renewals are also processed by the Aircraft Registration Branch and require:
 - The Aircraft Registration Renewal Form, AC Form 8050-1B
 - A registration fee (as per 47.17) is required just as it would be for an initial registration
- Renewals may be submitted during the six months preceding the expiration date
- A schedule is published within FAR 47.40

Registration Processing:

- Each application, request, notification, or other communication sent to the FAA under this Part must be mailed to the Registry:
 - Department of Transportation, Post Office Box 25504, Oklahoma City, Oklahoma 73125-0504, or delivered to the Registry at 6425 S. Denning Ave., Oklahoma City, Oklahoma 73169
- If you use a P.O. Box as a mailing address, you must also provide your street or physical location on the application
- Your application for aircraft registration must include the typed or printed name of each applicant with their signature in the signature block
- Aircraft Registration Applications may be obtained from the Aircraft Registration Branch or your local FAA Flight Standards District Office (FSDO)
- An aircraft is registered on the date the Registry determines that the submissions meet the requirements
 - The FAA will return any applications that do not include the printed or typed name of the signer
 - Aircraft will be assigned a registration number
 - The effective date of registration is shown by a date stamp on the Aircraft Registration Application, AC Form 8050-1, and as the date of issue on the Certificate of Aircraft Registration, AC Form 8050-3

A. TASK**CERTIFICATES AND DOCUMENTS****AIRWORTHINESS AND
REGISTRATION
CERTIFICATES
(Continued)****Registration validity****Validity:**

- Registration certificates (AC Form 8050-3) **expire every 3** years after an aircraft was registered, last renewed, or when any of the following occur:
 - The aircraft is registered under the laws of a foreign country
 - Surrendered to the FAA (revocation, cancellation)
 - The aircraft is totally destroyed or scrapped
 - The holder of the certificate loses their U.S. Citizenship
 - 30 days have elapsed since the death of the holder of the certificate
 - Ownership is transferred
 - The owner, if an individual who is not a citizen of the U.S., loses status as a resident alien, unless that person becomes a citizen of the U.S. at the same time

C. TASK**CERTIFICATES AND DOCUMENTS****BALLOON FLIGHT
MANUALS**

A Balloon Flight Manual is issued specifically to the make and model and serial number of that particular system by the manufacturer.

*Must remain in basket during active operations.

Contents:

- General information
- limitations
- emergency procedures
- normal procedures
- weight calculations
- balloon and systems description
- balloon maintenance handling and care
- supplements
- equipment list
- lift calculations
- standard component weights
- basket occupancy
- personal handling

A. TASK**CERTIFICATES AND DOCUMENTS****BALLOON
MAINTENANCE
INSPECTION
REQUIREMENTS AND
ASSOCIATED RECORDS****Who can do:**

The owner or operator of an aircraft is primarily responsible for maintaining that aircraft in an hour the condition including compliance

Owners Operators are allowed to preventative maintenance on their aircraft which includes:

All other mandatory maintenance requirements and repairs must be completed by an appropriate A and P at a certified Balloon Repair Station

REQUIRED INSPECTIONS**Annual
91.409****Annual inspection**

- required every 12 calendar months
- Completed in accordance with part 43

**100 hour
91.409****100 hour inspection**

- No person may operate an aircraft carrying passengers or giving instruction unless a 100 hour inspection has been accomplished

**Records
91.417****MAINTENANCE RECORDS**

Must have:

- Description of maintenance with signature and certification number of person must be recorded
- compliance with airworthiness directives must be recorded
- records must be kept and passed on to new owners
- records must be available for inspection by an FAA administrator or NTSB

A. TASK**CERTIFICATES AND DOCUMENTS****BALLOON
MAINTENANCE
INSPECTION
REQUIREMENTS AND
ASSOCIATED RECORDS
(Continued)****Advisory Circular
14 CFR 39.3****Advisory Circular (AC)**

- Provides guidance on a subject matter
- not found in FAR/AIM
- issued by FAA specific to Aircraft make and model
- very few in ballooning
- available to pilots from government printing offices
- are numbered for subject related to:
 - 20 – Aircraft
 - 60 – airman
 - 70 – airspace
 - 90 – air traffic control and general operations

You can find AC's here:

https://www.faa.gov/regulations_policies/advisory_circulars/

**Airworthiness Directives
14 CFR 39.3****Airworthiness Directives (AD)**

- Notification to owners and operators of certified aircraft that a non-safety deficiency are mandatory
- Owner/operator is responsible for compliance with AD's

You can find, and sign up for notification on AD's here:

https://www.faa.gov/regulations_policies/airworthiness_directives/

A. TASK**CERTIFICATES AND DOCUMENTS**

HANDOUT

CERTIFICATES

A Airworthiness certificate
91.203(a)(1)
must be on board aircraft

R Registration
91.203(a)(2)
must be on board aircraft

O Operating limitations
91.9(b)(1)(2)
found in BFM (on board aircraft)

W Weight and balance
23-1519, 23-1583, 23-1559, & 91.9
found in BFM (on board aircraft)