Introduction 1

Answer…

Introduction 2

Intent & Purpose: These flashcards are initially based on web content — however some information is added for clarity, added perspective, greater content, and accuracy. Some terms listed here are not found in the 2016 FAA Study Guide nor in 14 CFR Part 107. Because the terms appear on certain web sources they are retained here (for your information (FYI)), and notes are added to indicate if not found on the web or in the study guide. Many of these non-study guide terms are in regular or bold text.

Terms related to the study guide and found in Part 107 are often in this set of flashcards as **bold text in color**. This also helps focus on many terms found in example test questions.

Introduction 3

Please help anyone else to obtain the Flashcards (Note Cards) or the Test Question Cards by referring them to the web link listed here that introduces the flashcard and test question availability:

https://www.windowview.org/zfaa/

Special Request: please don't just send the files to someone else.

First, because the option to give a donation is helpful and in recognition of the effort to make these resources available.

Second, files may be updated since you obtained these files.

Introduction 4

If someone sent you a copy of the Flashcard Hero formatted files for the note cards and study test questions, please visit the website address listed below. Many hours were spent developing these files and updated cards may now exist.

Flashcard and example test question availability:

https://www.windowview.org/zfaa/part107.html

Introduction 5

Flashcard Version (this set of cards): June 2023 - v1.0

Hyperlinks Listing: Obtain the PDF document with links from the flashcard download page.

Encouragements and Input Opportunity:

If you wish to provide a comment, suggest additional and helpful information, you can send an email to:

[redacted]

(remove the spaces when typing the address in your email client program 'email to')

Special Request to all users of the flashcards 6

Please help anyone else to obtain the Flashcards (Note Cards) or the Test Question Cards by referring them to the web link listed here (or YouTube video) that introduces the flashcard and test question availability:

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Aircraft 7

A device that is used or intended to be used for flight in the air.

Airworthy 8

Means that the UAS conforms to its **type certificate (TC)**, if applicable, or has been determined to be in a condition for safe operation.

- **Type certification** is the approval of the design of the aircraft and all component parts (including propellers, engines, control stations, etc.). It signifies the design is in compliance with applicable airworthiness, noise, fuel venting, and exhaust emissions standards.
- Airworthiness is noted in Advisory Circular (AC) 107-2 Small Unmanned Aircraft Systems (sUAS)

Airworthiness Statement 9

Letter from a public UAS applicant specifying self-certification of a UAS in compliance with the criteria of the public entity.

[FYI: This topic is not cited in the FAA Study Guide, but airworthiness certificate is referenced in Part 107. And further, note that this appears to concern a public versus civil applicant; Part 107 sUAS is civil

Airworthiness is noted in Advisory Circular (AC) 107-2 Small Unmanned Aircraft Systems (sUAS)]

Beyond Visual Line Of Sight (BVLOS) 10

Means flight crew members (i.e. remote pilot in command (PIC), the person manipulating the controls, and visual observer (VO), if used) are **not capable of seeing** the aircraft with vision unaided by any device other than corrective lenses (spectacles and contact lenses).

Certificate of Waiver (CoW); 11
Certificate of Authorization (CoA)

A FAA grant of approval for a **specific flight operation**.

COA is **an authorization issued by the Air Traffic Organization to a public operator for a specific UA activity**. After a complete application is submitted, FAA conducts a comprehensive operational and technical review.

https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa

Blanket COA 12

Certificate of Airworthiness

With a Blanket COA, a **drone operator** can fly across different regions of airspace and are not bounded by jurisdictions or locations. However, **drone flight** still needs to be restricted to visual line-of-sight and **flight within 5 miles of an airport will still require prior airspace authorization**. (May 13, 2020)

Chase Aircraft 13

A **manned aircraft** that carries its own PIC and a separate qualified visual observer (VO) flying in proximity to an unmanned aircraft (UA).

Civil Aircraft 14

Aircraft other than public or model 14 CFR part 101 (Title 14 of the Code of Federal Regulations) aircraft.

PART 101 - MOORED BALLOONS, KITES, AMATEUR ROCKETS, AND UNMANNED FREE BALLOONS

Examples: UA Aircraft (model airplane) or Quadcopter (drone)

From web search:

- Government agencies, law enforcement, and public safety entities may qualify to fly UAS as **Public Aircraft** under 49 U.S.C. § 40102(a)(41) and §40125 (See Advisory Circular 00-1.1B (PDF).)
- **Civil aircraft.** Domestic or foreign aircraft **operated by private individuals or corporations**, or foreign government-owned aircraft operated for commercial purposes. This includes: (1) Contract aircraft. Civil aircraft operated under charter or other contract to any U.S. Government department or agency.

Civil Twilight 15

The period of times that begins *30 minutes before* official sunrise and ends at official sunrise; and the period of times that begins at official sunset and ends *30 minutes after* official sunset.

(Added only as FYI: In Alaska, the period of civil twilight is defined in the Air Almanac.The Air Almanac contains the astronomical data required for air celestial navigation. https://aa.usno.navy.mil/publications/aira)

Control Station 16

An **interface** used by the remote pilot to control the flightpath of the small UA. The structure or **system** (ground, ship, or air-based) that **controls the UAS** and its interface to the aircraft and external systems.

Corrective Lenses 17

Means spectacles or contact lenses.

Crew member (UAS) 18

A person assigned to perform an operational duty during operations.

A UAS crew member includes the:

- remote PIC person manipulating the controls, and
- VOs,
- but may include other persons as appropriate or required to ensure safe operation of the UAS.

Crew Resource Management (CRM) 19

The effective use of all available resources including:

- human,
- hardware,
- software, and
- information resources.

Daisy-Chaining 20

The use of multiple, successive Visual Observers (VO) to extend the flight of a UA beyond the direct Visual Line of Sight (VLOS) of the PIC or VO.

Data Link 21

A **wireless communication channel** between one control station and one UA. Its utility may include, but is not limited to:

- uplink Command and Control data,
- downlink telemetry, and
- payload data.

A data link may consist of the following types:

1. Uplink: The transmittal of data from the control station to the UA.
2. Downlink: the transmittal of data from the UA to the control station

Direct Control 22

The capability of a remote pilot to manipulate the flight control surfaces of the **aircraft** in a direct fashion using, for example, a **radio control box with joystick**

or

a ground control station using **conventional type aircraft controls** (such as yoke/stick, rudder pedals, power levers, and other ancillary controls).

This infers a one-to-one correspondence between control input and flight control surface deflection.

Fight Termination 23

The intentional and deliberate process of terminating the flight in ***the event of lost link*, loss of control**, or **other failure** that compromises the safety of flight.

Flyaway 24

An interruption or loss of the control link or when the pilot is unable to effect control of the aircraft and, as a result, the UA is not operating in a predicable or planned manner because lost link procedures are not established or are not being executed by the UA.

Formation Flight 25

Is the disciplined flight of **two or more** aircraft under the command of a ***flight leader*** in either standard or nonstandard formation.

[FYI: clearances can be arranged for UA or drone formations (this statement does not indicate if the leader is directly multiple PICs), however, Part 107 UAS PICs are to fly a single aircraft]

Lost Link 26

An interruption or loss of positive control between the control station and UA, or when the pilot is unable to effect control of the aircraft. This is not considered a flyaway.

Lost Link Procedures 27

Preprogrammed or predetermined mitigation to ensure the continued safe operations of the UA in the event of lost link. In the event positive link cannot be achieved, flight termination must be implemented.

[Note: one example would be the automated return to home (RTH) feature on a drone that once a link is lost for a preset time, the drone initiates the RTH procedure.]

Model Aircraft 28

Means a UA that is:

i. Capable of sustained flight in the atmosphere;

ii. Flown within VLOS of the person operating the aircraft and

iii. Flown exclusively for hobby or recreational purposes.

Off-Airport 29

Any **location used to launch or recover** aircraft that is not considered an airport (e.g. an open field).

Person Manipulating the Controls 30

A person who is controlling an sUAS under the direct supervision of a remote PIC.

Remote Pilot in Command Certification (Remote PIC) 31

A person who holds a remote pilot certificate with a **small Unmanned Aircraft Systems (sUAS)** rating and has the final authority and responsibility for the operation and safety of an sUAS operation conducted under 14 CFR part 107.

Safety Risk Management (SRM) 32

A formalized, proactive approach to system safety.

This methodology ensures:

- hazards are identified;
- risks are analyzed,
- assessed, and prioritized;
- and results are documented for decision makers to transfer, eliminate, accept, or mitigate risk.

Scheduled Maintenance (Routine) 33

The performance of maintenance tasks at prescribed intervals.

[A manufacturer may provide a schedule for a given UA aircraft; but often not provided, for example, for drones that should be run through a pre-flight checklist as precaution and possibly determine some type of attention is necessary before any further flight use.]

Unscheduled Maintenance (Non-Routine) 34

The performance of maintenance tasks when mechanical irregularities occur.

[A manufacturer may provide a schedule for a given UA aircraft; but often not provided and thus a UA owner may develop their own schedule. However, for example, drones should be run through a pre-flight checklist as precaution and possibly determine some type of attention is necessary before any further flight use.]

Maintenance schedule 35

You're supposed to have one, even though most drones can't be user-repaired and don't provide a schedule.

Small Unmanned Aircraft (sUAS) 36

A UA weighing less than 55 pounds on takeoff, including everything that is onboard or otherwise attached to the aircraft.

The aircraft and its associated elements (including communication links and the components that control the aircraft) that are required for the safe and efficient operation of the aircraft in the NAS (including launch and recovery systems and equipment).

[Note: Registration not required for (recreational flyers who own and fly) a sUAS weighing less than 0.55 pounds on takeoff, including everything that is onboard or otherwise attached to the aircraft.]

Tethered UAS 37

A UA that is restrained by a cable and attached to the ground or an object thereon.

Unmanned Aircraft (UA) 38

Means an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft.

A UA and associated elements (including communication links and the cooperates that control the UA) that are required for the remote PIC to operate safely and efficiently in the NAS.

Visual Line Of Sight (VLOS) 39

Means that any flight crew member is capable of seeing the aircraft with vision unaided by any device other than corrective lenses in order to know the:

- UA's location,
- determine the UA's attitude,
- altitude, and
- direction of flight,
- observe the airspace for other air traffic or hazards, and
- determine that the UA does not endanger the life or property of another.

Visual Observer (VO) 40

A person who is designated by the PIC to assist the report PIC and the person manipulating the flight controls of the sUAS to:

- supplement situational awareness
- Visual Line Of Sight (VLOS),
- assisting with seeing and avoiding other air traffic or objects aloft or on the ground.

1 (one UAS) 41

The number of drones you can fly simultaneously.

400 feet 42

The maximum height you can fly AGL or above a taller building (within a 400-foot radius of that structure).

100 MPH / 87 Knots 43

Fastest you can fly.

0.55 lbs 44

The lightest drone that must be registered.

If less than 0.55 lbs, registration not required for recreational flyer, but is needed for Part 107 flights.

55 lbs 45

Heaviest legal drone (must be less than, not equal to, 55 lbs to qualify as UAS).

0.04 46

Maximum blood alcohol level.

8 hours 47

The time that must pass since you have had alcohol.

(Once the 8 hours passes, the blood alcohol level needs to be less than 0.04)

10 days 48

The maximum time you can take to file an FAA accident report. (Days, not business days!)

30 days 49

The time you have to notify the FAA if you move.

14 CFR Part 47 states: "Within 30 days after any change in a registered owner's mailing address, the registered owner must notify the Registry in writing of the change of address."

90 days 50

The lead time required when requesting an FAA waiver.

Web search notes in Part 107: "We will do our best to review and approve or disapprove *waiver* requests within *90 days* of submission. Processing times will vary based on the complexity of …"

However, updated Part 107 (March 2023) does not include this language … likely due to recent implementation of **LAANC** … **Low Altitude Authorization and Notification Capability**, … If flying a drone and use the LAANC, clearance for a flight can be within much shorter timeframe, for example, within hours or day(s).

1 year 51

Time that must pass after a final narcotics conviction.

Part 107 states: "A conviction for the violation of any Federal or State statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances is grounds for:

(1) Denial of an application for a remote pilot certificate with a small UAS rating for a period of up to 1 year after the date of final conviction; or

(2) Suspension or revocation of a remote pilot certificate with a small UAS rating."

13 years old 52

The youngest person who can register a drone.

24 months 53

How long this certification is good for and then requires recertification (taking a test again).

30 minutes 54

The twilight time before sunrise or after sunset when you can still fly.

However, night flights with Part 107 and pre-approval is now possible. Anti-collision lights are needed.

3 statute miles **3 SM** 55

The distance your anti-collision lights must be visible from when flying during twilight.

Also the minimum visibility you must have while flying in daylight.

500 feet 56

Minimum number of feet below a cloud you must fly.

Ceiling height from weather briefing helps to adjust flight AGL when clouds are low.

2,000 feet 57

Minimum number of feet horizontally from a cloud you must fly.

$500 58

The repair cost of accident damage that requires you to report an accident to the FAA (if total is over $500 and not including damage to the drone)

Level 3 59

The “serious injury” AIS level that requires you to file an accident report (within 10 calendar days).

At least serious injury to any person or any loss of consciousness. A serious injury is an injury that qualifies as Level 3 or higher on the **Abbreviated Injury Scale (AIS)** of the Association for the Advancement of Automotive Medicine (AAAM)

[Part 107 notes ‘serious injury’ without citing level 3. Web search finds the FAA document that notes level 3:

https://www.faa.gov/regulations_policies/policy_guidance/benefit_cost/media/econ-value-section-2-tx-values.pdf

122.9 60

The **MULTICOM** frequency for self-announce procedures.

2000 feet 61

The distance you should operate ***from a tower*** to avoid hitting guy wires.

Stall(s) 62

Occurs when the wing exceeds its critical angle of attack.

Center of Gravity (CG) Limits 63

Supposed to be defined in the Pilot's Operating Handbook or UAS Flight Manual, but those don't exist for drones.

Angle of Attack 64

Determines when the craft stalls.

This doesn't change if the vehicle weight changes.

Load Factor 65

Increases during any maneuver.

Remote PIC 66

This is the answer to any question about who is responsible.

Left 67

Aircraft always turn left when circling a runway, because drivers sit on the left side of the car in the US, and pilots sit on the left of the plane, too. It's easier for them to look out the left window to see the tower.

Risk Management 68

Helps to prevent an accident chain.

Crew Resource Management (CRM) 69

It's how you manage your "crew" and you should integrate it into all phases of the operation.

Systematically scanning to detect other aircraft, etc. 70

Systematically focus on different segments of the sky for short intervals–let your eyes rest in different areas for a while, rather than continuously scanning.

That's how you should scan for traffic

Latitude 71

is like climbing a ladder (north-south)

Degree, minutes, seconds

X° Y' Z"

Y = 60 units of minutes per degree

Z = 60 units of seconds per minute

However, sometimes you will see a number like **47.8** for the latitude … **what is that in degrees and minutes?**

Take 0**.8** and multiply by 60 = 48

So that is **47° 48'** (47 degrees and 48 minutes)

Longitude 72

is the long way around the planet (the Earth is 'fat' as it spins).

Degree, minutes, seconds

X° Y' Z"

Y = 60 units of minutes per degree

Z = 60 units of seconds per minute

Standard briefing 73

Contains the weather forecast.

Pilots can complete their regulatory-compliant preflight briefing by using other automated resources or from Flight Service at ***www.1800wxbrief.com***

https://www.aviationweather.gov/briefing

Or by calling 1-800-WXB-RIEF

Standard Briefing - A standard briefing provides the most complete information and a more complete weather picture.

Abbreviated Briefing - An abbreviated briefing is a shortened version of the standard briefing. It should be requested when a departure has been delayed

Outlook Briefing - An outlook briefing should be requested when a planned departure is 6 hours or more away

CTAF vs UNICOM vs MULTICOM vs AWOS 74

- CTAF is for pilots to talk to each other when there's no tower.
- UNICOM is a base station that broadcasts to pilots when there's no tower. (122.8)
- MULTICOM is used as the CTAF when there's no CTAF (122.9 or 122.95).
- AWOS is automated weather observing system.

Temperature inversion 75

Warm air on top of cold air.

Fog, haze, low clouds, poor visibility, but smooth air.

Turbulence 76

Moist, unstable air (because the air is unstable, comes with visibility), showery precipitation.

Stable air 77

Smooth air, poor visibility, and steady (not showery) precipitation (because stable air is usually humid).

A stable atmosphere makes vertical movement difficult …

Characteristics of stable air are cloud cover, smooth air, uninterrupted precipitation, and low visibility. Cloud cover describes stratiform clouds or fog which moves in a sheet and stay close to the ground so the air does not disturb the atmosphere.

Unstable air 78

Cumuliform clouds, showery precipitation, rough air (turbulence), and good visibility (except in blowing obstructions) are all characteristics of a moist unstable air mass.

… small vertical air movements tend to become larger, resulting in turbulent airflow and convective activity. Instability can lead to significant turbulence, extensive vertical clouds, and severe weather.

… greatest instability occurs when the air is moist and warm, as it is in the tropical regions in the summer. Typically, thunderstorms appear on a daily basis in these regions due to the instability of the surrounding air.

.

Cool + Dry 79

Stable Air

Hot + Humid 80

Unstable Air

High density (altitude) 81

Just means “high altitude.”

Air is thinner, so lift (performance) is decreased.

Nimbus 82

Means a rain cloud.

18004KT 83

Wind is 180 degrees at 4 knots.

The first three digits (**180**) are the compass heading (180). The last two numbers are the wind speed (**04**).

Compass headings 84

A compass needle will always point towards the magnetic north pole. Magnetic north is a datum.

As long as we remember this fact and have a way to see where north is, we can determine which direction we must be pointing in relation to this datum. We call this direction our magnetic heading. Always relative to true North in print, not magnetic North.

Using the **bezel ring** on your compass, adjust the orienting arrow until it points to the value of the local declination value. Then, turn the compass until the needle lines up with the arrow—**the direction of the travel arrow on the compass will point to true north**.

OVC007 85

Sky is overcast at 700 feet.

Remember, Numbers are always in hundreds.

007 = 700 feet

070 = 7,000 feet

700 = 70,000 feet

1 1/2SM 86

Visibility is 1 ½ statute miles (SM).

BLPY, BR, DS 87

Blowing spray,
Mist,
Dust Storm

DU, DZ, FC 88

Widespread Dust,
Drizzle,
Funnel Cloud

+FC, FG, FU 89

Tornado / Water Spout
Fog
Smoke

GR, GS, HZ 90

Hail,
Small Hail / Snow Pellets
Haze

IC, PL, PO 91

Ice Crystals
Ice Pellets
Dust / Sand Whirls

RA, SA, SG 92

Rain
Sand
Snow Grains

SN, SQ, SS 93

Snow
Squall
Sandstorm

UP, VA 94

Unknown Precipitation

Volcanic Ash

CTAF 95

Common Traffic Advisory Frequency is marked with a **C** On a Sectional Chart at an airport.

AWOS 96

is for the weather … **automated weather observing system**

Red flags 97

mark VFR checkpoints which mean more planes might be there.

Tick marks 98

Measure minutes between latitude and longitude degrees.

60 minutes make up one degree.

Each tick is one minute.

Bigger ticks mark 5 minutes.

Charts measurements 99

AGL = (Above Ground Level)

[for example: the parentheses contain the AGL height for an object; where as other numbers above the AGL air MSL height of an object]

[FYI, note:

7^4 = When you see this on a chart … this represents Thousands (7) and Hundreds (4) of feet above Mean Sea Level for that area of the Sectional Chart … pilots fly above this level will not hit an obstruction]

Class B Airspace 100

… is the most restricted

Question: what airspace is not shown on a sectional chart?
Answer: Class A!

Class E Airspace 101

… is the least restricted

Must get ATC (Air Traffic Control) authorization 102

For class B, C, and D.

Class A 103

From **18,000 feet to 60,000 feet**, all over the US.

Class B 104

Surrounding major airports, **0 - 10,000** feet. Consists of multiple layers, like an upside-down wedding cake.

Class C 105

Surrounding airports with a control tower, radar, and over a specific amount of traffic. Usually 5 NM (nautical mile) radius from **0 - 4,000 feet**, and a 10 NM radius from **1,200-4,000 feet**.

Class D 106

Surrounding airports with a control tower. **0 - 2,500** feet, no specific radius, just shaped around flight patterns.

Outside control tower hours, Class D airspace is Class E or G.

Class E 107

Starts at **700** or **1,200** feet and goes up to 18,000 feet.

700 = magenta color within line
1200 = blue color within line

Class G 108

Uncontrolled airspace (below class E airspace).

Prohibited Areas 109

Places like Camp David and the White House.

P-## is designation assigned to a prohibited area

Restricted Areas 110

It's not prohibited, but if you fly here, it could be dangerous.
The government might be testing artillery or missiles or UFOs.

R-### is designation assigned to a restricted area

Warning Areas 111

Domestic and international waters, from 3 NM outward from the US coast.
[not really managed by the US.]

W-### designation assigned to a warning area

Military Operations Areas (MOAs) 112

If MOA is being used, nonparticipating IFR traffic may be cleared through an MOA if IFR separation can be provided by ATC.
Airspace with defined limits established for the purpose of separating certain military training activities from IFR traffic.

Alert Areas 113

Depicted on aeronautical charts with an "A" followed by a number (e.g., A-211) to inform nonparticipating pilots of areas that may contain a high volume of pilot training or an unusual type of aerial activity. Think skydiving training facility.

A-### designation assigned to a warning area

Altitude Numbers 114

Altitude … written in 100s of feet above sea level (MSL).

(like 41/12. So, 41/12 means 4100 ft, 1200 ft. SFC = Surface)

AC 115

Advisory Circulars

ADM 116

Aeronautical Decision Making

AFM 117

Aircraft Flight Manual

AGL 118

Above Ground Level

AIM 119

Aeronautical Information Manual

AIS 120

Abbreviated Injury Scale

ASL 121

Above Sea Level

ASOS 122

Automated Surface Observing System (monitors the weather)

ATC 123

Air Traffic Control

ATCT 124

Air Traffic Control Tower

ATIS 125

Automatic Terminal Information System
(a loop of useful information broadcast over the radio near an airport)

AWC 126

Aviation Weather Center

AWOS 127

Automated Weather Observing System

CFR 128

Code of Federal Regulations

CG 129

Center of Gravity

CoW 130

Certificate of Waiver

CRM 131

Crew Resource Management

CS 132

Control Station (your remote control)

CTAF 133

Common Traffic Advisory Frequency

FAA 134

Federal Aviation Administration

FDC 135

Flight Data Center

FLIP 136

Department of Defense **Fl**ight **I**nformation **P**ublication

FL 137

Flight Level

FSS 138

Flight Service Station

Provides pilot briefings, *en route* communications, search-and-rescue services, help lost aircraft, etc.

FTP 139

Flight Termination Point

IFR 140

Instrument Flight Rules

ILS 141

Instrument Landing System

LOA 142

Letter of Agreement

METAR 143

Aviation Routine Weather Reports

Meteorological Aeronautical Report

MOA 144

Military Operations Area

MSL 145

Mean Sea Level

MTR 146

Military Training Routes

MULTICOM 147

Not an acronym, just the radio frequency (122.9) we use to announce aircraft when there's no ATC.

NAS 148

National Airspace System

NM 149

Nautical Miles

NOTAM 150

Notice to Airman

NTAP 151

Notice to Airman Publication

NTSB 152

National Transportation Safety Board

NWS 153

National Weather Service

OVC 154

Overcast (from METAR)

PIC 155

Pilot In Control. You, flying the UA or drone.

POH 156

Pilot Operating Handbook

RA 157

Rain

SFC 158

Surface

SIDA 159

Secure Identification Display Area.

The part of the airport where you need to be wearing a badge.

SM 160

Statute Miles

SMS 161

Safety Management System

sUAS 162

Small Unmanned Aircraft Systems (aka., drone, UA, UAS)

TAF 163

Terminal Aerodrome Forecast

TFR 164

Temporary Flight Restriction

UA 165

Unmanned Aircraft (aka., drone, sUAS, UAS)

UAS 166

Unmanned Aircraft System (aka., drone, sUAS, UA)

UNICOM 167

A UNICOM (**universal communications**) station is an air-ground communication facility operated by a non-air traffic control private agency to provide advisory service at uncontrolled aerodromes and airports and to provide various non-flight services, such as requesting a taxi, even at towered airports.

122.8

VFR 168

Visual Flight Rules

VLOS 169

Visual Line-of-Sight

VO 170

Visual Observer

VOR 171

Very High Frequency Omnidirectional Range

- navigation beacons
- sectional charts have graphic representations where VORs are situated (near or around an airport)

VR 172

Visual Flight Rules Military Training Routes
On sectional chart … VR-####
(IR also applies to Military Training Routes; IR-####)

Personality factor **Machismo** 173

Taking risks to impress others.

Antidote:
Taking chances is foolish

Personality factor **Impulsivity** 174

Doing something without thinking about it.

Antidote:
Not so fast. Think First.

Personality factor **Invulnerability** 175

Thinking accidents won't happen to you.

Antidote:
It Could happen to me

Personality factor **Resignation** 176

What's the use?

They don't control their destiny

Antidote:
I'm not helpless. I can make a difference.

Personality factor **Anti-authority** 177

Nobody can tell me what to do.

Antidote:
Follow the rules. They are usually right.

Advisory Circular (AC) 178

Type of publication offered by the Federal Aviation Administration (FAA).
Unless they're incorporated into a regulation by specific reference, ACs are issued to inform the public of nonregulatory material and are not binding.

Aeronautical Advisory Stations (UNICOM) 179

Air to ground communication facility employed at airports with a low volume of general aviation traffic and where **no** control tower is active.

Aeronautical Decision Making (ADM) 180

Systematic mental approach to consistently determine the best course of action in a given situation

Aeronautical Information Manual (AIM) 181

Federal Aviation Association (FAA) official guide to basic flight information and Air Traffic Control (ATC) procedures.

Aeronautical Knowledge Test 182

Federal Aviation Association (FAA) exam required to become a Remote Pilot in Command (PIC) for a Small Unmanned Aircraft System (sUAS).

Air Traffic Control (ATC) 183

Responsible for providing the safe, orderly, and expeditious flow of air traffic at airports where the type of operations and/or volume of traffic requires such a service.

Airmen's Meteorological Information (AIRMET) 184

Weather advisory that contains information about weather events that are potentially unsafe. Compared to SIGMETs, AIRMETs cover less severe weather.

Automated Surface Observing System (ASOS) 185

Weather reporting system that provides surface observations up to the minute via digitized voice broadcasts and printed reports

Automated Terminal Information Service (ATIS) 186

Continuous broadcast of recorded aeronautical information in busier airports. Contain essential information such as weather information, active runways, available approaches, and NOTAM.

Standard Pressure altitude 187

What does altimeter 29.92 mean?

When you set your altimeter to 29.92, you're flying at **standard pressure altitude**. This is the altitude of the aircraft above the standard datum plane, the theoretical location where at 15 degrees Celsius the altimeter setting will equal 29.92 inches of mercury.

Abbreviations - 1 188

MSL - Mean Sea level

PIC - Pilot in Command

RPIC - Remote Pilot in Command

ATC - Air Traffic Control

IFR - Instrument Flight Rules

IAPs - Instrument Approach Procedures

NAS - National Airspace System

AIM - Aeronautical Information Manual

AGL - Above Ground Level

MEF - Maximum Elevation Figure

Abbreviations - 2

FL - Flight Level
SAO - Special Area of Operations
MOA - Military Operation Area
VFR - Visual Flight Rules
FSS - Flight Service Station
FIC - Flight Information Center
CFAs - Controlled Firing Areas
LAA - Local Airport Advisory
MTR - Military Training Route
TFR - Temporary Flight Restriction
TRSA - Terminal Radar Service Area

Abbreviations - 3

NSA - National Security Area
ADIZ - Air Defense Identification Zone
DVFR - Defense VFR
FRZ - Flight Restricted Zone
FS - Flight Service
ASOS - Automated Surface Observing System
AWOS - Automated Weather Observing Station
IR & VR - MTRs (Instrument; Visual)
FDC - Flight Data Center
NOTAM - Notice to Airman
BIRDTAM - Bird Notice
B4UFLY - Before You Fly (APP)
ADM - Aeronautical Decision Making

Abbreviations - 4

RVR - Runway Visual Range
METAR - METeorological Aerodrome Reports
PIREPs - (Pilot report - weather)
SPECI - Special Report (METAR related)
ICAO - International Civil Aviation Organization
UTC - Coordinated Universal Time
Z - Zulu Time
AUTO - Automated Source
AO1 - no AUTO precipitation discriminator
AO2 - AUTO with precipitation discriminator
COR - Corrected report
VRB - Variable weather

Abbreviations - 5

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KT - knots
G - gust
V - Variable wind direction
SM - statute miles
VC - Vicinity
TCU - **t**owering **cu**mulus
CB - cumulonimbus
M - minus
“Hg - Altimeter Inches of Mercury
SLP - Sea Level Pressure
R##/#### - R =Runway / distance visibility

Abbreviations - 6

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RMK - Remark
TAF - Terminal Aerodrome Forecast
TAF AMD - TAF amended
TEMPO - temporary
SIGMETs - Convective Significant Meteorological Information
AIRMET - Airmen's Meterological Information
HEM's Tool - Aviation weather
WST - Convective Significant Meteorological Advisories
AOA - Angle of Attack
ISA - International Standard Atmosphere
29.92 “Hg - standard sea level pressure (1,013.2 mb)

Abbreviations - 7

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CG - Center of Gravity
CP - Center of Pressure
Gs - acceleration of gravity
ROT - Rate of Turn
AC - Advisory Circular
CRM - Crew Resource Management
UNICOM - Universal Communications stations
CTAF - Common Traffic Advisory Frequency
MULTICOM - is not an abbreviation or acronym
GA - General Aviation

Abbreviations - 8

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OTC - over-the-counter (i.e., medications)
VO - Visual Observer
FDA - U.S. Food and Drug Administration
FAA - Federal Aviation Administration
IMSAFE - Illness, Medication, Stress, Alcohol, Fatigue, and Emotion
SRM - Single-Pilot Resource Management
RM - Risk Management
AM - Automation Management
CFIT - controlled flight into terrain
SA - situational awareness

Abbreviations - 9 196

PAVE - Pilot, Aircraft, enVirnoment, External pressures
SOPs - standard operating procedures
3P model - Checklist: Perceive, Process, Perform
CARE - Consequences, Alternatives, Reality, External factors
TEAM - Transfer, Eliminate, Accept, or Mitigate
DECIDE - Detect, Estimate, Choose, Identify, Do, Evaluate
ATIS - Automated Terminal Information Service
Minute - A minute of latitude is 1.15 miles or 1 nautical mile
LAANC - Low Altitude Authorization and Notification Capability

MSL applies to: 197

Airports

Feature ### feet height (on sectional chart)

Applies to Class A to E

AGL applies to: 198

Feature (###) feet height (on sectional chart)

Cloud Base (METAR, TAF)

Federal Airways **(i.e., Victor Airway (Blue line on sectional chart) V-## Starts at 1,200 up to 18, 000 MSL)**

Class G airspace

Compass Readings Relate to ... 199

Magnetic > Runway Numbers

True North > METAR, TAF wind direction (Compass headings (in print)

ADDED Study Cards 200

Based on additional searching for help.

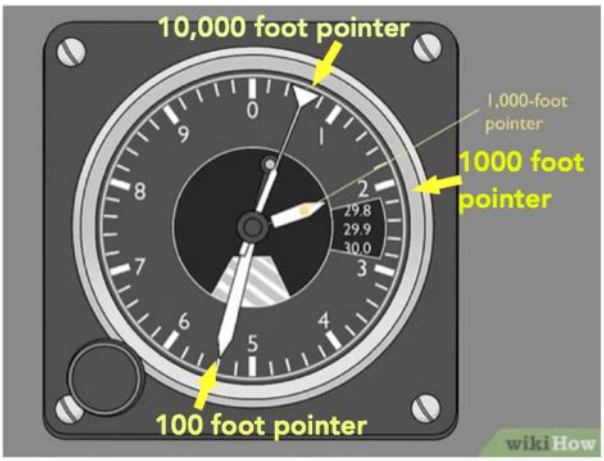
Simple Ways to Read an Altimeter 201

The numbers on the dial each represent 100 feet, **and the 4 indices, or lines, between the numbers each represent 20 feet.** Add the reading from this pointer to the numbers from the others to get your total altitude. For example, if the 100-foot pointer is at the 2nd line past the 5, then you read it as 540 feet.

For a more extended explanation:

Simple Ways to Read an Altimeter - wikiHow:

https://www.wikihow.com/Read-an-Altimeter



How to read Figure 3 altimeters 202

The website for “Century of Flight” has a copyrighted page with a diagram you can refer to.

The dial pictured on their web page is set up exactly as the Figure 3 dials shown in the FAA supplement document used in the test.

On the next card you will find an image, explanation, and what appears to be the reading based on one of the three altimeter images in Figure 3.

See the explanation here:

https://www.century-of-flight.net/aircraft-altimeters-explained/

Reading an altimeter 203

The altimeter dial is not explained in the test supplement document. Looking at the three altimeters pictured there (Figure 3), the dial does not look exactly like most examples on the web. However, the **long needle is for 100 feet**, with tick marks for each 20 feet between the 100s, the **next shorter and fat needle is for 1,000s of feet**; the **smallest and shortest needle inside the inner circle is for 10,000s of feet**. If this appears on the test, look first at the answers first and then refer to the dial.

>>> Additional Terms Found in Various Sources 204

NTIS: National Technical Information Service (Privacy, Policy & Security) If the Part 107 test asks about privacy issues, this is the government service that addresses such issues.

Special Airworthiness Certificates 205

A certificate used for all aircraft that are certificated in categories ***other than standard.***

Nationwide Community - Based Organization 206

Means, in part, a "membership based association that represents the aeromodeling community within the United States; [and] provides its members a comprehensive set of safety guidelines that underscores safe aeromodeling operations within the NAS and the protection and safety of the general public on the ground."

[FYI: this term is not in the 2016 FAA Study Guide not in Part 107]

'External Pilot' 207

A remote pilot who controls the UA from outside of an enclosure.

(FYI: Web search does not come up with this definition. However, the term **Drone Pilot** now seems to associate more so with Part 107 certification as opposed to simply recreational drone flying by non-certified person.

See

https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot

(updated info in 2020)

FAA - Recognized Equivalent 208

FAA recognition that **a public agency** may exercise its own internal processes regarding airworthiness and pilot, aircrew, and maintenance personnel certification and training, and the agency has determined that its UAS are capable of safe operation in the National Airspace system (NAS) when conducting **public aircraft** operations under the Title 49 of the United States Code.

[Note the distinction between public and civil aircraft… UA and sUAS pilots fly civil aircraft. This includes recreational and 107 PICs.]

Optionally Piloted Aircraft (OPA) 209

A **manned aircraft** that can be controlled by a **remote pilot** from a location not onboard the aircraft.

An aircraft having UAS technology and retains the capability of being flown by a Pilot Onboard (PO) using conventional methods.

[FYI, web search comes up with some related info however this term does not appear in the 2016 FAA Study Guide nor in Part 107]

Indirect Control 210

The capability of a remote pilot to affect the trajectory of the aircraft ***through computer input*** to an onboard flight control system.

(FYI not in study guide or Part 107)

'Internal Pilot' 211

A remote PIC who flies from *inside an enclosure* and does not have VLOS with the aircraft.

[FYI: beware … this term appears very inconsistent with FAA and is not in the 2016 FAA Study Guide nor in Part 107]

Reference List: Web Sources 212

CRAM flash cards link:

https://www.cram.com/flashcards/part-107-7440871

Study stack free flashcards link:

https://www.studystack.com/flashcard-3208162

Quizlet flashcard link:

https://quizlet.com/146247802/faa-107-flash-cards/

… and you can do a web search for additional sources. The above cited references have provided information that in many cased in this set of flashcards has been updated in content in format.

Plus some new cards have been added here.