Air Law

Chicago Convention

The Convention on International Civil Aviation, also known as the Chicago Convention, established the International Civil Aviation Organization (ICAO).

The Convention establishes rules of airspace, aircraft registration and safety, and details the rights of the signatories in relation to air travel.

The document was signed on December 7, 1944 and has since been revised 8 times. Last in 2006.

Some of the Main Articles of the Convention...

Article 1: Every state has complete and exclusive sovereignty over airspace above its territory.

Article 3: Every State must refrain from resorting to the use of weapons against civil aircraft in flight.

Article 5: The aircraft of states, other than scheduled international air services, have the right to make flights across state's territories and to make stops without obtaining prior permission. However, the state may require the aircraft to make a landing.

Some of the Main Articles of the Convention...

Article 6: (Scheduled air services) No scheduled international air service may be operated over or into the territory of a contracting State, except with the special permission or other authorization of that State.

Article 10: (Landing at customs airports): The state can require that landing to be at a designated customs airport and similarly departure from the territory can be required to be from a designated customs airport.

Some of the Main Articles of the Convention...

Article 12: Each state shall keep its own rules of the air as uniform as possible with those established under the convention, the duty to ensure compliance with these rules rests with the contracting state.

Article 13: (Entry and Clearance Regulations) A state's laws and regulations regarding the admission and departure of passengers, crew or cargo from aircraft shall be complied with on arrival, upon departure and whilst within the territory of that state.

Some of the Main Articles of the Convention...

Article 16: The authorities of each state shall have the right to search the aircraft of other states on landing or departure, without unreasonable delay...

Article 24: Aircraft flying to, from or across, the territory of a state shall be admitted temporarily free of duty. Fuel, Oil, spare parts, regular equipment and aircraft stores retained on board are also exempt custom duty, inspection fees or similar charges.

Some of the Main Articles of the Convention...

Article 29: Before an international flight, the pilot in command must ensure that the aircraft is airworthy, duly registered and that the relevant certificates are on board the aircraft. The required documents are:

Certificate of Registration

Certificate of Airworthiness

Crew licences

Radio Licence

Cargo manifest

Journey Logbook

Passenger names, place of boarding and destination

Some of the Main Articles of the Convention...

Article 30: The aircraft of a state flying in or over the territory of another state shall only carry radios licensed and used in accordance with the regulations of the state in which the aircraft is registered. The radios may only be used by members of the flight crew suitably licensed by the state in which the aircraft is registered.

Article 32: the pilot and crew of every aircraft engaged in international aviation must have certificates of competency and licences issued or validated by the state in which the aircraft is registered.

Some of the Main Articles of the Convention...

Article 33: (Recognition of Certificates and Licences) Certificates of Airworthiness, certificates of competency and licences issued or validated by the state in which the aircraft is registered, shall be recognised as valid by other states. The requirements for issue of those Certificates or Airworthiness, certificates of competency or licences must be equal to or above the minimum standards established by the Convention.

Some of the Main Articles of the Convention...

Article 40: No aircraft or personnel with endorsed licenses or certificate will engage in international navigation except with the permission of the state or states whose territory is entered. Any license holder who does not satisfy international standard relating to that license or certificate shall have attached to or endorsed on that license information regarding the particulars in which he does not satisfy those standards.

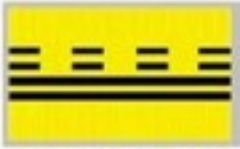
Airfield Signs

Mandatory signs. These red signs are designed to stand out above all others. They denote runway entrances, critical areas, or areas where entrance by aircraft is prohibited. The sign identifying a runway typically has a number only, as in 28 for Runway 28, and is found at the end of the taxiway leading directly to the beginning of the takeoff end of the runway.

Location signs. These simply identify either the taxiway or runway on which the aircraft is located. Sometimes these signs are used in conjunction with red runway holding position signs, or they may be positioned to help pilots determine which runway they are on, especially where runways converge. Yellow on Black

Direction signs. These are easy to identify because they always include one or more arrows. These are especially helpful at large airports with many taxiways and are usually seen in conjunction with taxiway location signs. The signs with yellow lettering on a black background tell you which taxiway you are on. The signs with black lettering and arrows tell you that you are approaching the intersection between the taxiway you are currently on and another taxiway. The arrows indicate the direction in which you must turn in order to access the identified taxiway when you reach the upcoming intersection. Black on Yellow.

ILS critical area holding position sign
When the ILS is in use ATC may hold you short of this sign so your aircraft does not interfere with the ILS signal.



Runway boundary sign
This sign faces the runway and is visible to pilots exiting the runway. Taxi past this sign to be sure you are clear of the runway.

Runway approach area holding position sign
You must hold at this sign until cleared to cross the runway, to avoid interference with runway operations.

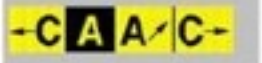
Taxiway ending marker
This sign indicates the termination of the taxiway. It is located at the far end of the intersection.

Taxiway location sign
This sign indicates which taxiway you're on. It may be posted next to direction or holding position signs.

Closed runway and taxiway marking
Located at both ends of permanently closed runways and at 1,000-foot intervals. It is also placed at taxiway entrances if they are permanently closed.

Runway holding position sign
Until cleared onto the runway you must hold at this sign. In this example, the runway 15 threshold is to the left and the runway 33 threshold is to the right.

Direction sign for runway exit
This sign will indicate the approaching taxiway while on the runway. In this example, taxiway Bravo is approaching to the left.



Destination signs and location sign
This sign indicates current position and direction to other taxiways. In this example, you are on taxiway Alpha. Taxiway Charlie passes from right to left and Alpha continues ahead to the right.

ILS critical area boundary sign
Indicates when you are safely clear of the ILS critical area. It is located directly beside the ILS holding position markings. While ILS approaches are in use, taxi past the sign before stopping on the taxiway.

Outbound destination sign
This sign indicates directions to common taxi routes. In this example, runway 27 and 33 are to the right. The dot in the middle separates destinations identified on the sign.

Holding position and location signs
In this example you are on taxiway Alpha; runway 5-23 passes perpendicular to your position. Runway 9-27 passes at an angle starting ahead and left of your position to behind and right of your position.

Inbound destination sign
This sign directs pilots to destinations on the airport. This example indicates that the military installation is to the right.

Runway location sign
This sign identifies the runway on which your aircraft is located.

Areas of the Airport

A manoeuvring area or manoeuvring area is that part of an aerodrome to be used by aircraft for takeoff, landing, and taxiing, excluding aprons and areas designed for maintenance of an aircraft

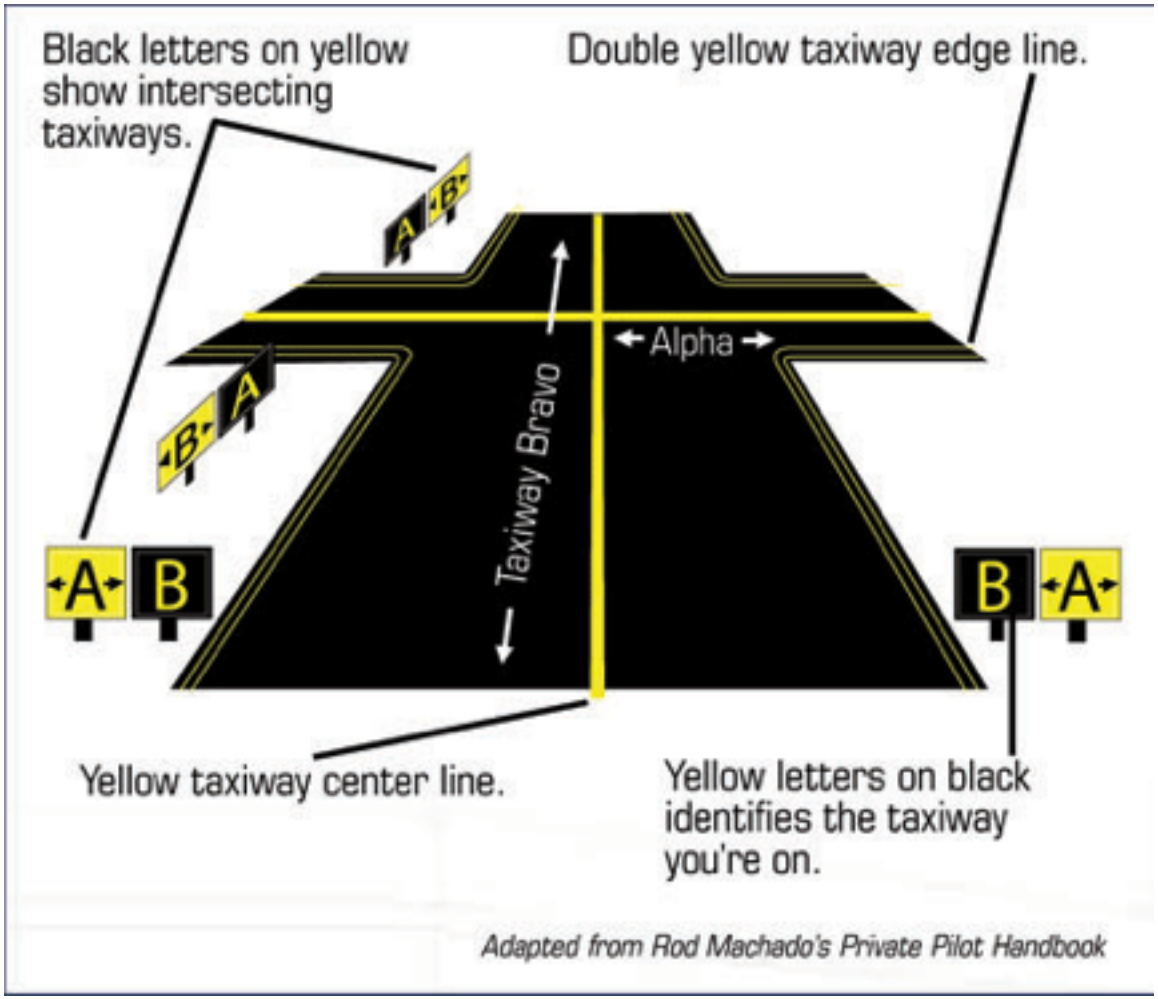
The airport apron is the area of an airport where aircraft are parked, unloaded or loaded, refuelled, or boarded.

Airport Lighting

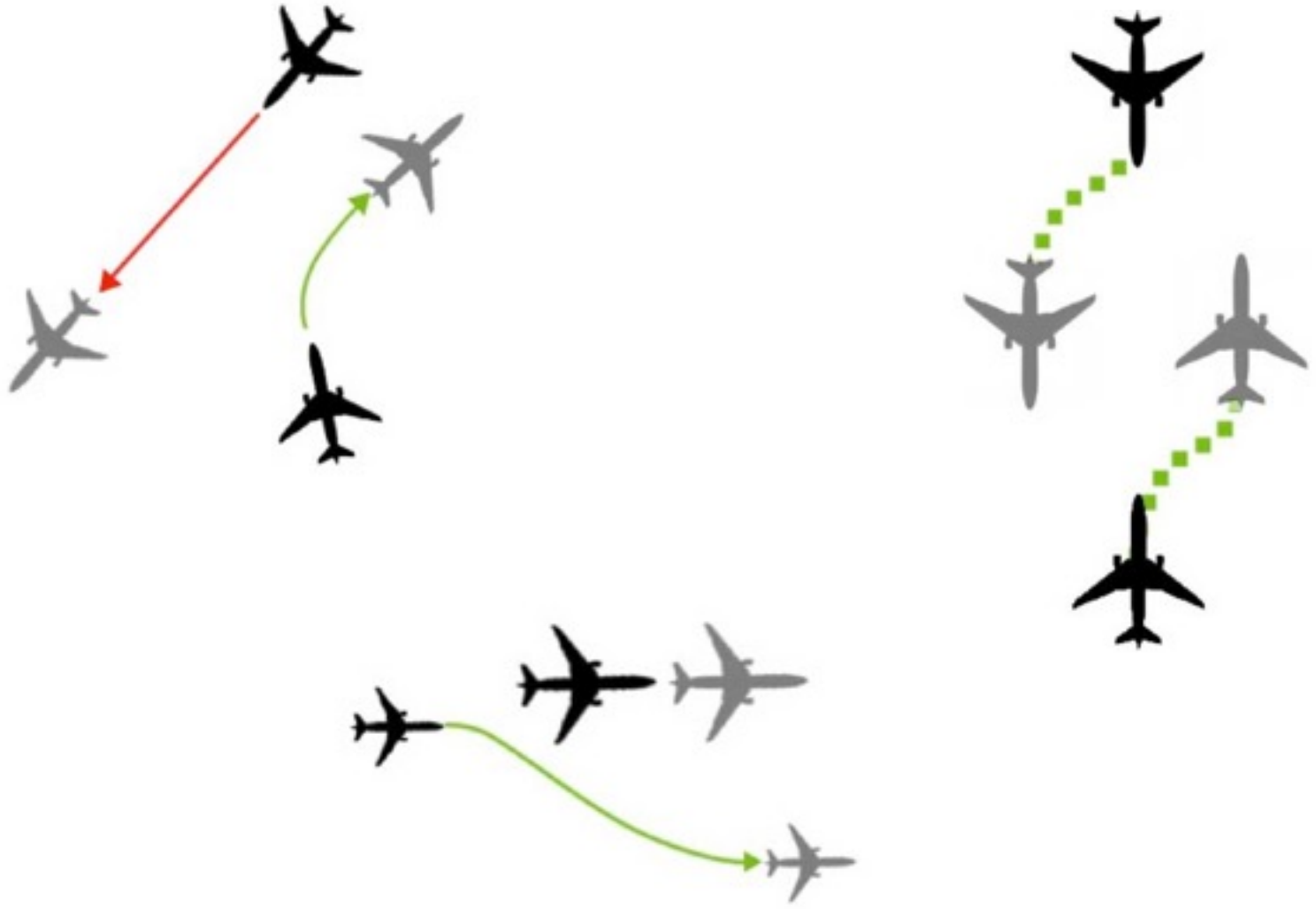
The most basic component of Airport Lighting is the white runway edge lights.

Runway end lighting. As you approach the runway from the air, these lights appear green to indicate the beginning of the runway. If you face the opposite direction on the runway, these lights appear red, to mark the end of the runway.

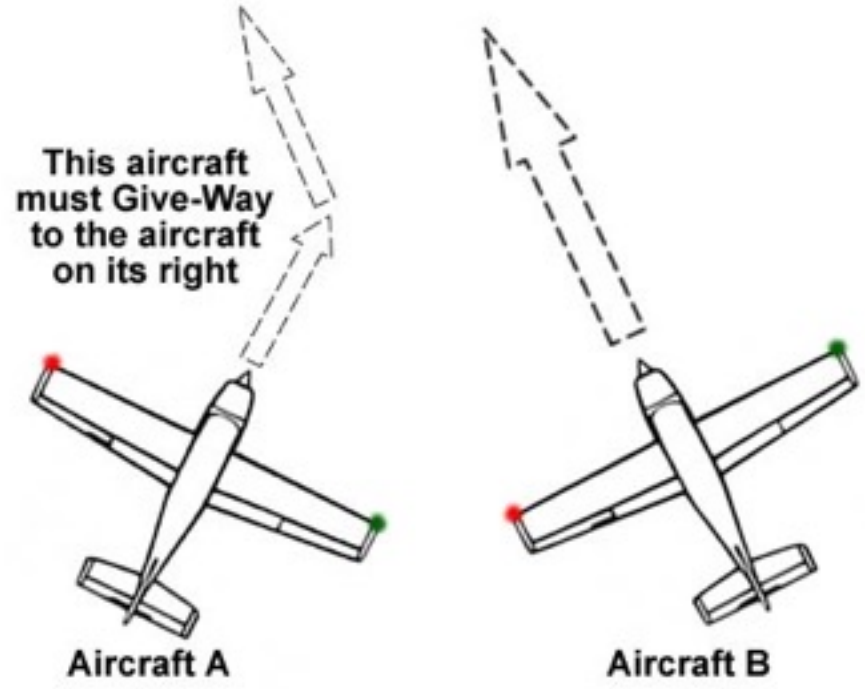
Blue Edge Lights are used to border taxiways and ramp areas.

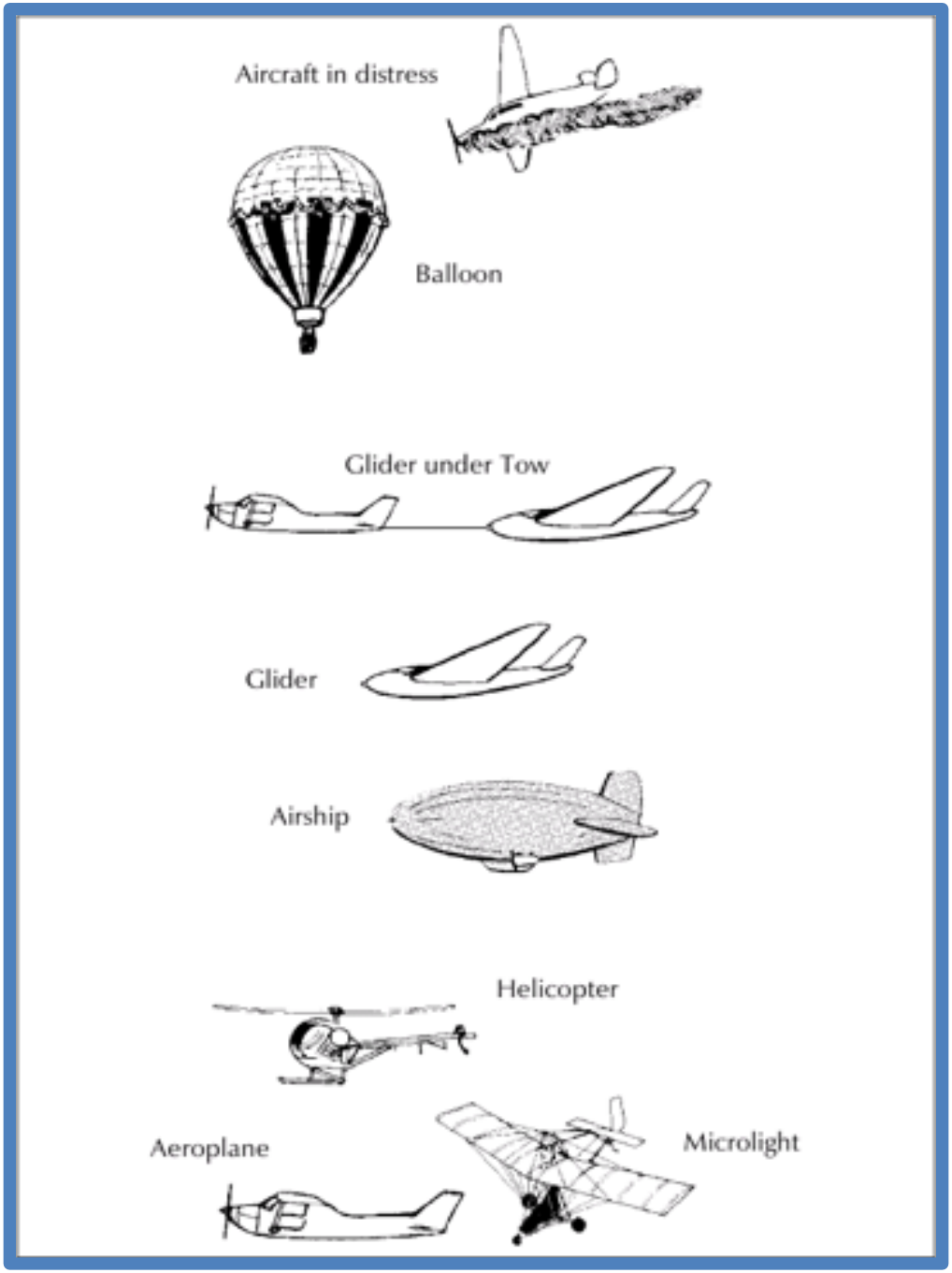

Black letters on yellow show intersecting taxiways.
Double yellow taxiway edge line.
A
B
B
A
Alpha
Taxiway Bravo
A
B
B
A
Yellow taxiway center line.
Yellow letters on black identifies the taxiway you're on.
Adapted from Rod Machado's Private Pilot Handbook

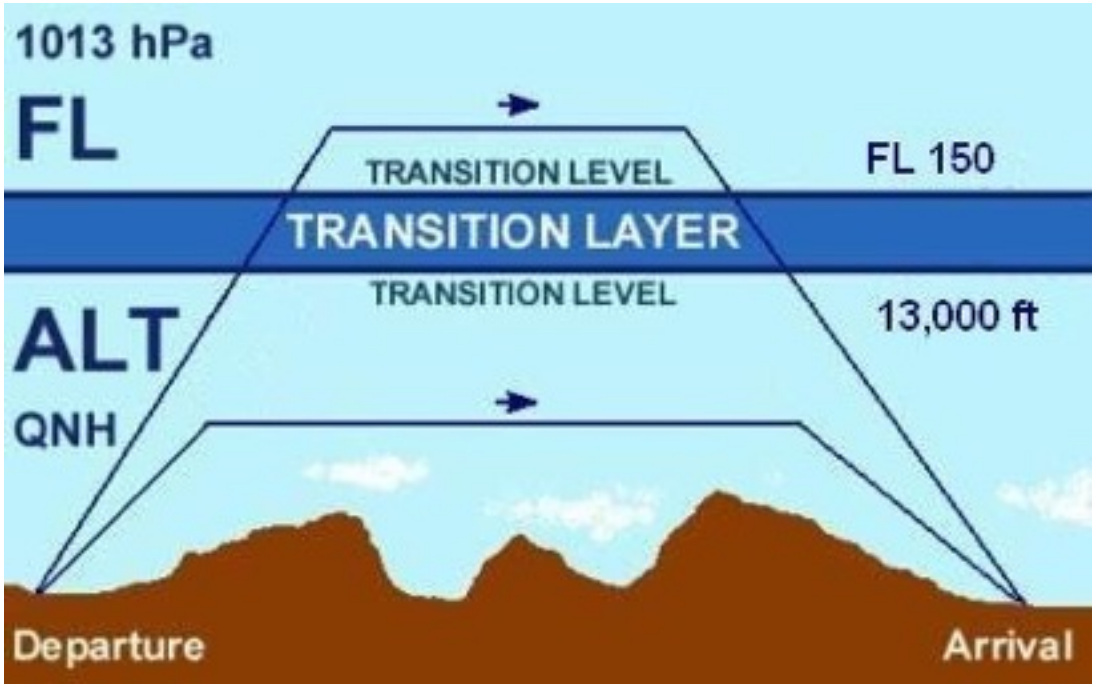
Aircraft Rights of Way.




Giving way in the air
Gives way to
Gives way to
Gives way to


This aircraft must Give-Way to the aircraft on its right
Aircraft A
Aircraft B


Aircraft in distress
Balloon
Glider under Tow
Glider
Airship
Helicopter
Aeroplane
Microlight


1013 hPa
FL
TRANSITION LEVEL
FL 150
TRANSITION LAYER
TRANSITION LEVEL
ALT
13,000 ft
QNH
Departure
Arrival

Requirements for VFR flights

Weather minima for VFR flight within Controlled Airspace (Classes C to E Airspace).

(a) At and above FL 100

8 km flight visibility#

1500m horizontally from cloud*

1000ft vertically from cloud*.

(b) Below FL 100

5 km flight visibility#

1500m horizontally from cloud*

1000ft vertically from cloud*.

(c) At or below 3000ft

As in (b) above

for fixed wing aircraft operating at 140kt or less:

5 km flight visibility#

Clear of cloud and in sight of the surface.

For helicopters:

Clear of cloud and in sight of the surface.

Weather minima for VFR flight outside Controlled Airspace (Classes F and G Airspace)
(a) At and above FL 100
8km flight visibility
1500 m horizontally from cloud
1000ft vertically from cloud.
(b) Below FL 100
5
5km flight visibility
1500 m horizontally from cloud
1000ft vertically from cloud.
(c) At or below 3000ft
As in (b) above or:
for any aircraft:
5 km flight visibility
Clear of cloud and with the surface in sight
or
for an aircraft, other than a helicopter, operating at 140kt or less:
1500 m flight visibility
Clear of cloud and with the surface in sight
or
for helicopters:
1500m horizontally from cloud

ATC Clearance and ATC Instructions

(a) ATC Clearance is required for flight in all Controlled Airspace except Class E, and compliance with ATC instructions is mandatory.

(b) In Class E Controlled Airspace pilots of VFR flights are strongly recommended to make their presence known to the appropriate
ATC Unit and comply with ATC instructions.

(c) Outside Controlled Airspace an aircraft receiving a service from an ATC Unit is expected to comply with ATC instructions unless
the pilot advises otherwise.

ATC Responsibility for VFR Flights Inside Controlled Airspace:

Class C: Separation provided between IFR and VFR flights;
Traffic Information and instructions in respect of other VFR flights to enable pilots to effect avoidance and integration.

Class D: Traffic Information and instructions to enable pilots to effect avoidance and integration.

Class E: As for Class D as far as is practicable for known flights.

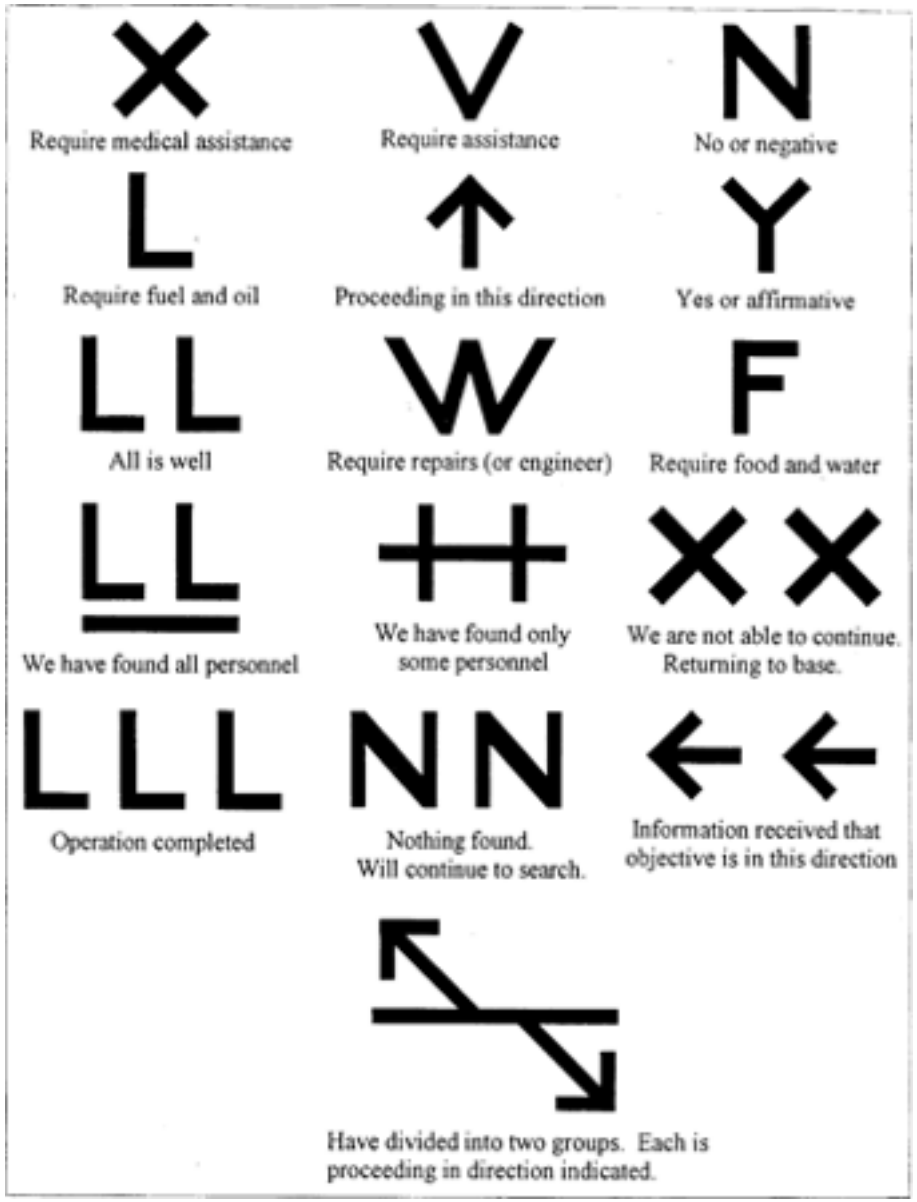
Emergency Squawks

One of the biggest problems in emergencies is the pilots failure to properly communicate the emergency. Knowing the emergency transponder squawk codes can help ATC evaluate your situation and notify help sooner or aid in getting you to the nearest airport.
Below are the 3 squawk codes every pilot should commit to memory:

7500 – Hijack
7600 – Lost Communication (radio failure)
7700 – Emergency

An easy way to remember this:
75 taken alive, 76 technical glitch, 77 going to heaven.

Ground Search and Rescue Signals



Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
Steady green	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
Flashing green	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
Steady red	Stop	Stop	Give way to other aircraft and continue circling
Flashing red	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
Flashing white	Return to starting point on airport	Return to starting point on airport	Not applicable
Alternating red and green	Exercise extreme caution!!!!	Exercise extreme caution!!!!	Exercise extreme caution!!!!

AAIB
Air Accidents Investigation Branch

"Accident" means an occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight and such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

a person is fatally or seriously injured as a result of:

- being in the aircraft
- direct contact with any part of the aircraft, including parts which have become detached from the aircraft
- direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew

the aircraft sustains damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes) or minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike.

the aircraft is missing or is completely inaccessible.

AAIB
Air Accidents Investigation Branch

Definition of serious injury

"Serious injury" means an injury which is sustained by a person in an accident and which involves one of the following:

hospitalisation for more than 48 hours, commencing within 7 days from the date the injury was received;

a fracture of any bone (except simple fractures of fingers, toes, or nose);

lacerations which cause haemorrhage, nerve, muscle or tendon damage;

injury to any internal organ;

second or third degree burns, or any burns affecting more than 5% of the body surface;

verified exposure to infectious substances or harmful radiation.

AAIB
Air Accidents Investigation Branch

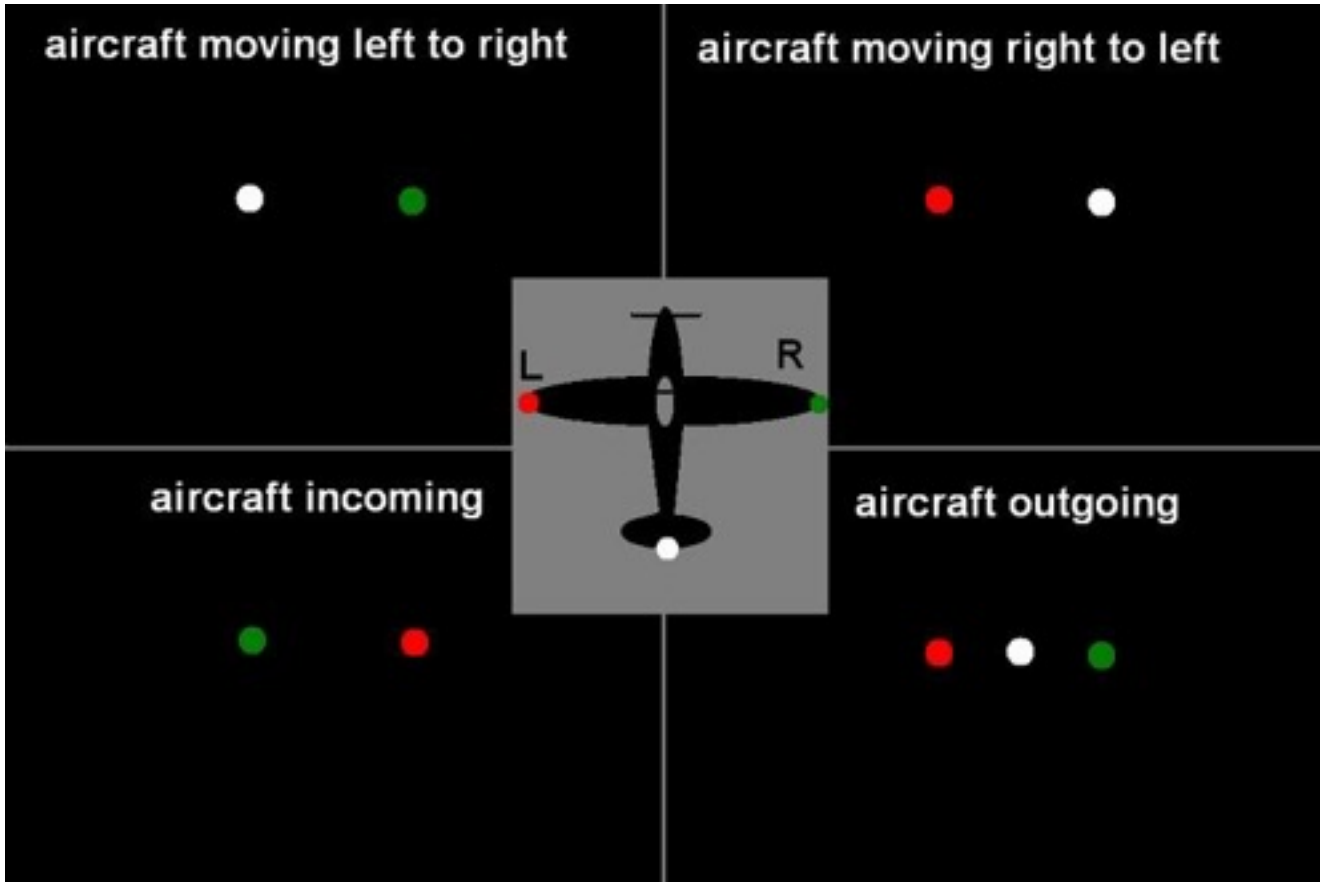
“Serious Incident” means an incident involving circumstances indicating that there was a high probability of an accident and is associated with the operation of an aircraft, which in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down.

The incidents listed below are typical examples of serious incidents. The list is not exhaustive and only serves as a guide to the definition of ‘serious incident’.

A near collision requiring an avoidance manoeuvre or when an avoiding manoeuvre would have been appropriate to avoid a collision or an unsafe situation.
Controlled flight into terrain (CFIT) only marginally avoided.
An aborted takeoff or a takeoff using a closed or engaged runway, a taxiway or unassigned runway.
A landing or attempted landing on a closed or engaged runway, a taxiway or unassigned runway.
Gross failure to achieve predicted performance during takeoff or initial climb.
All fires and/or smoke in the cockpit, in the passenger compartment, in cargo compartments or engine fires, even though such fires were extinguished with extinguishing agents.
Any events which require the emergency use of oxygen by the flight crew.
Aircraft structural failure or engine disintegration, including uncontained turbine engine failure, which is not classified as an accident.
Multiple malfunctions of one or more aircraft systems that seriously affect the operation of the aircraft.
Any case of flight crew incapacitation in flight.
Any fuel state which would require the declaration of an emergency by the pilot.
Runway incursions classified with severity A. The ‘Manual on the Prevention of Runway Incursions’ (Doc 9870) contains information on the severity classifications.
Takeoff or landing incidents, such as undershooting, overrunning or running off the side of runways.
System failures, weather phenomena, operation outside the approved flight envelope or other occurrences which caused or could have caused difficulties controlling the aircraft.
Failure of more than one system in a redundancy system which is mandatory for flight guidance and navigation.
The unintentional or, as an emergency measure, the intentional release of a slung load or

Night Flying

- Official Night is the period between - 30 Minutes after Sunset until 30 Minutes before Sunrise.



Medical

For Medical Certificate Validity Period – see back of Medical Certificate.

Should you become aware of a decrease in your Medical Fitness you should seek the advice of the Authority or a Medical Examiner.

UK Aeronautical Information Publication (AIP)
Static information, updated every 28 days, containing information of lasting (permanent) character essential to air navigation.

UK AIP Supplements (SUPs)
Temporary changes to the AIP, usually of long duration, containing comprehensive text and/or graphics.

Aeronautical Information Circulars (AICs) Notices relating to safety, navigation, technical, administrative or legal matters.

NOTAM Notices concerning the condition or change to any facility, service or procedure notified within the AIP. NOTAM are available in the form of Pre-Flight Information Bulletins (PIB) using a live database.

AIS Information Line on tel: 0500 354802 or +44(0)20 8750 3939 This service is offered by AIS to supplement the information available from the Website. A recorded message allows you to obtain up to date information on specific NOTAM, and will include Restricted Areas (Temporary), Airspace Upgrades & Emergency Restrictions of Flying.

VFR Chart Newsletter & Update Service Full list of amendments to current charts, email/ RSS notification service and other information relating to VFR charting.

UK Foreign IAIP Library Access to foreign aeronautical information, available to interested parties for flight planning purposes.