

AIR LAW 1

GROUND SCHOOL

LECTURE ONE: AIR LAW

1. The History of Air Law
2. Doc 7300 – the basis of all Air Law
3. The UK Rules of the Air Regulations

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WHERE DOES AVIATION LAW COME FROM?

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      ICAO[INTERNATIONAL CIVIL AVIATION ORGANISATION (ICAO)] --> EASA[EUROPEAN AVIATION SAFETY ADMINISTRATION (EASA)]
      EASA --> CAA[CIVIL AVIATION AUTHORITY (CAA)]
      EASA --> UKP[UNITED KINGDOM PARLIAMENT]
      CAA --> UKIP[UK AERONAUTICAL INFORMATION PACKAGE]
      UKP --> ANO[AIR NAVIGATION ORDER]
      UKP --> RUA[RULES OF THE AIR]
      UKP --> ANR[AIR NAVIGATION REGULATIONS]
  
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INTERNATIONAL CIVIL AVIATION ORGANISATION (ICAO)

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Paris Convention 1919

Mainly European nations to establish post-war principles for aviation law and procedures



Chicago Convention 1944

International authorities place moral obligation to provide safe and efficient ground and flight organisations within territories



Montreal 1947

International Civil Aviation Organisation (ICAO) established to promote aviation standards and a standard set of practices



INTERNATIONAL CIVIL AVIATION ORGANISATION (ICAO)

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Although standardised procedures there are some big differences!

For example

Eastern Europe	height based on metres
Western countries	height based on feet

Broad principles are laid down in DOC 7300

It is up to each country whether they implement each article

Of 96 articles there are a few that are important to the private pilot...



DOC 7300

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Art 1 - Sovereignty

Each contracting state has exclusive sovereignty over the airspace above its territory

Art 2 - Territory

Territory is both land and territorial waters over which the nation has sovereignty

Art 5 - Right of non-scheduled flight

Each state will allow aircraft from all other contracting states to land without permission (non-scheduled) or to overfly their territory. They may require over-flights to follow specific routeings.

Art 10 - Customs airports

A state may require a aircraft entering their territory to land, or if departing airspace to take-off, at a customs airport



DOC 7300 - continued

GROUND SCHOOL

Art 11 – Applicability of regulations

An aircraft must obey the regulations of the state it is flying in

Art 12 – Rules of the Air

Each state will ensure that all aircraft follow their rules of the air.
Over high seas the convention law applies.

Art 13 – Entry and Clearance Regulations

All regulations regarding entry, clearance, immigration, passports, customs and quarantine must be adhered to by pilots, passengers, crew and cargo

Art 16 – Search of Aircraft

Every state has the right to search an aircraft landing from another state or prior to its departure and to check documents



DOC 7300 - continued

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Art 22 – Facilitation of Formalities

Each state will ensure that formalities do not delay an aircraft unduly

Art 23 – Customs and Immigration Procedures

Each state shall establish customs and immigration procedures which are in accordance with international principles

Art 24 – Customs Duty

Fuel, Oil, Spare Parts and regular equipment on board an aircraft (and not being unloaded) shall be exempt from duty.

Art 29 – Documents to be Carried on Aircraft

All aircraft on international flights shall carry:
Certificate of Registration, Certificate of Airworthiness,
Crew Licences, Journey Logbook, Radio Licences,
Passenger List, Cargo Manifest



DOC 7300 – nearly there!

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Art 30 – Aircraft Radio Equipment

Radio equipment must be licensed by the state of registration and should only be used by crew members licensed to do so

Art 31 – Certificate of Airworthiness

Aircraft shall have a valid C of A from their State of Registration

Art 32 – Licences of Personnel

Pilots shall have licences from the state of aircraft registration. Each state has the right to recognise flight crew licences from other states.

Art 33 – Recognition of certificates and licences

If standards are ICAO then states should recognise C of As and Flight crew licences from other contracting states

Art 34 – Journey Logbooks

All aircraft flying internationally shall carry details of aircraft, crew and each journey



DOC 7300 – destination in sight...

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Art 35 – Cargo Restrictions

Weapons or munitions of war must not be carried. On grounds of safety or public order other items may be prohibited by a state.

Art 36 – Photographic Equipment

States may choose to prohibit or restrict airborne photography over its territory

Art 37 – Adoption of International Standards and Procedures

Each state will do its best to implement a uniform set of regulations, standards and procedures

Art 39 – Endorsement of Certificates and Licences

Any failure to meet international standards shall be endorsed on aircraft documents and/or flight crew licences

Art 40 – Validity of Endorsed Certificates and Licences

If a licence permits it, a licence may be used internationally



DOC 7300 – Annex 7

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Aircraft Registration



All aircraft shall display nationality markings

The format, font and size of the lettering is laid down and shall appear on the underside of the left wing as well as on the fuselage on both sides

Identification plates with the aircraft identity on are required and must be made from fireproof material and should be near the main entrance



DOC 7300 – Annex 8

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The Certificate of Airworthiness confirms that an aircraft is considered airworthy in terms of design, construction, materials, equipment and flying performance

The C of A is valid for 3 years

Under EASA C of As are non-expiring and are maintained in force by an Airworthiness Review Certificate (ARC)

Operating limitations will be noted in the flight manual or placarded on the aircraft. These may be loading, structural, or powerplant.



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PRACTICE QUESTION!

"If you want to fly your aircraft internationally, your licence must be issued (or rendered valid by) who?"

The State of Registry



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PRACTICE QUESTION!

"If you land in another country, do they have the right to search your aircraft?"

Yes, but without causing undue delay



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PRACTICE QUESTION!

"If an aircraft lands in the territory of a contracting state, are the oil and spare parts on board subject to duty?"

No



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PRACTICE QUESTION!

"Where would you find the limitations of an aircraft as approved?"

In the flight manual and on placards in the cockpit



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UK INTEGRATED AERONAUTICAL PACKAGE

NOTAM	AIP	AIC
Part 1 General (GEN)	Part 2 En-Route (ENR)	Part 3 Aerodromes (AD)
GEN 0	ENR 0	AD 0
GEN 1 National Regulations & Requirements	ENR 1 Rules & Procedures	AD 1 Aerodromes / Heliports Introduction
GEN 2 Tables and Codes	ENR 2 ATS Airspace	AD 2 Aerodromes
GEN 3 Services	ENR 3 ATS Routes	AD 3 Heliports
GEN 4 Charges for Aerodromes / Heliports & Air Nav Services	ENR 4 Navigation Aids	
	ENR 5 Nav Warnings	
	ENR 6 En-route charts	



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RULES OF THE AIR REGULATIONS



Annex 2 of the ICAO Convention on Civil Aviation

Applies to all aircraft within UK

Applies to all UK registered aircraft



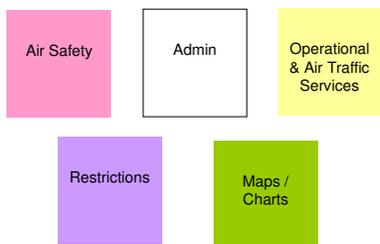
UK Rules of the Air Regulations 2007



UNITED KINGDOM INTEGRATED AERONAUTICAL PACKAGE

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The AIP then has Aeronautical Information Circulars – (AIC)



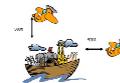
LOW FLYING 1

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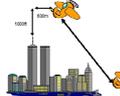
(Rules of the Air Regulations 2007, regulation 5)



FAILURE OF A POWER UNIT
An aircraft shall fly high enough to be able to land without causing damage to persons or property in the event of a power unit failure



500 FOOT RULE
An aircraft shall not fly closer than 500 feet to any person, vessel, vehicle or structure



1000 FOOT RULE
An aircraft shall not fly within 1000 feet of the highest fixed obstacle within 600m of the aircraft in a congested area



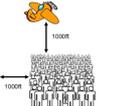
LOW FLYING 2

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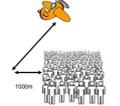
(Rules of the Air Regulations 2007, regulation 5)



LAND CLEAR RULE
An aircraft shall fly at a height to enable it to land clear of a congested area in the event of a power unit failure



FLYING OVER OPEN-AIR ASSEMBLIES
An aircraft shall not fly within 1000 feet of an open-air assembly of 1000 people or more and be able to glide clear



TAKING-OFF OR LANDING NEAR OPEN-AIR ASSEMBLIES
An aircraft shall not take off or land within 1000 metres of an open-air assembly of 1000 people or more unless at an aerodrome



LOW FLYING - EXCEPTIONS

(Rules of the Air Regulations 2007, regulation 6)

The low flying rules would appear to make it illegal to land! There are exceptions:

500 FT RULE – Does not apply when landing or taking off in accordance with normal aviation practice
Does not apply to police aircraft
Does not apply to gliders hill soaring
Does not apply to an aircraft legally dropping articles
Does not apply to helicopters operating with normal practice

1000 FT RULE – Does not apply to Special VFR flights
Does not apply to police aircraft
Does not apply to balloons / helicopters

Also authorised display aircraft are exempt from the 500 ft rule if they are within 1000m of the spectators



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COLLISION AVOIDANCE

(Rules of the Air Regulations 2007, regulation 8)



Give way to:

No aircraft shall fly in such proximity to another aircraft as to create a danger of collision



Give way to:

No formation flying unless both agree!



Give way to:

The aircraft with right of way should maintain height and speed



Aircraft give way to less manoeuvrable aircraft

Glider-Tug combinations are seen as 1 aircraft

Police aircraft are exempt



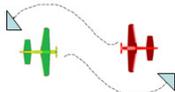
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RIGHT OF WAY - AIRBORNE

(Rules of the Air Regulations 2007, regulations 9-11)

CONVERGING

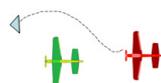
The aircraft with the other on its right shall give way



APPROACHING HEAD ON
Both aircraft shall turn to the right

OVERTAKING

The aircraft being overtaken has right of way. The overtaking aircraft shall pass clear to the right



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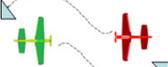
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RIGHT OF WAY – ON THE GROUND

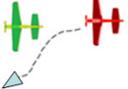
(Rules of the Air Regulations 2007, regulation 42)



CONVERGING
The aircraft with the other on its right shall give way



APPROACHING HEAD ON
Both aircraft shall turn to the right



OVERTAKING
The aircraft being overtaken has right of way. The overtaking aircraft shall pass clear to the left



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LANDING AND TAKING OFF

(Rules of the Air Regulations 2007, regulation 14)

Take-off and Landing shall be as indicated (or into wind if no direction indicated)

An aircraft shall not land on a runway which is occupied by another aircraft unless specifically cleared

Unless cleared, an aircraft shall move clear of the runway as soon as possible

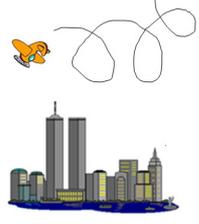
Where landing or taking off is not confined to a runway, aircraft shall keep to the LEFT of other aircraft on the ground



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AEROBATICS

(Rules of the Air Regulations 2007, regulation 15)



An aircraft shall not carry out any aerobatic manoeuvre over a congested area of a town, city or settlement

An aircraft requires permission of ATC to conduct aerobatics within controlled airspace



RIGHT HAND TRAFFIC RULE

(Rules of the Air Regulations 2007, regulation 16)



When following a line feature (coast, road, railway line etc) an aircraft shall fly so that the feature is on its left

i.e. Fly on the right!

Does not apply in controlled airspace if given an instruction



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SPEED LIMITS

(Rules of the Air Regulations 2007, regulation 21)

No more than 250 knots below FL 100

Unless:



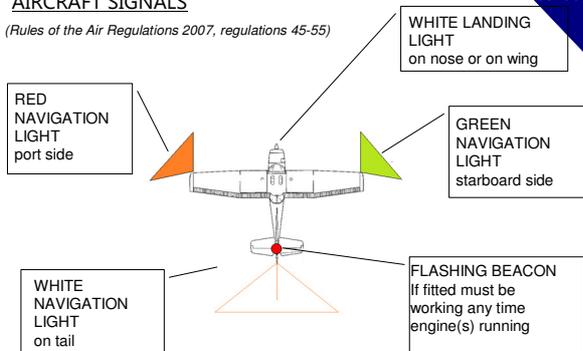
- Class A airspace
- Class B airspace
- Class C airspace
- Class D airspace IFR
- Flying exhibitions / displays
- With CAA permission



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AIRCRAFT SIGNALS

(Rules of the Air Regulations 2007, regulations 45-55)



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AIRCRAFT SIGNALS GROUND SCHOOL

Rear Anti-Collision Light must be on and working when engine(s) are running if fitted to the aircraft

If any light fails that is required the aircraft must not get airborne.

If already airborne, aircraft must land as soon as is practical

70° either side 360°

OTHER AIRCRAFT LIGHTS FOR NIGHT GROUND SCHOOL

GLIDERS
Steady red light visible in all directions

HOT AIR BALLOONS
5m and 10m steady red lights visible in all directions

AIRSHIPS
Lights as per aeroplanes

AIRCRAFT SIGNALS GROUND SCHOOL

Knowing the lights on aircraft is important for collision avoidance at night

"Green to green all is serene"

"Green to red you could be dead"

AIRCRAFT INTERCEPTION

ICAO Convention article 9

CAA Safety Sense Leaflet 11 contains all the ICAO interception procedures

Schedule 11 of the ANO requires all UK aircraft to carry a copy of these interception procedures on all international flights



Interception procedures are a "last resort" for security purposes.



However, being shot down is the next step. So not exactly a "last resort"!

Ensure you are familiar with this leaflet if you are making an international flight



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PRACTICE QUESTION!

"On a Special VFR Flight (SVFR) which of the low flying rules does not apply?"

The 1000 ft rule



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Lecture Complete
Any Questions?