STATUTORY INSTRUMENTS

1990 No. 2241

CIVIL AVIATION

The Rules of the Air Regulations 1990

Made - - - -	*12th November 1990*
Coming into force -	*1st December 1990*

The Secretary of State for Transport, in exercise of his powers under article 69(1) of the Air Navigation Order 1989(a) and of all other powers enabling him in that behalf, hereby makes the following Regulations:

1. These Regulations may be cited as the Rules of the Air Regulations 1990, and shall come into force on 1st December 1990.

2. The Rules set forth in the Schedule hereto are hereby prescribed as the Rules of the Air.

3. The following Regulations are hereby revoked, that is to say:

The Rules of the Air and Air Traffic Control Regulations 1985(b);

The Rules of the Air and Air Traffic Control (Amendment) Regulations 1986(c);

The Rules of the Air and Air Traffic Control (Second Amendment) Regulations 1986(d);

The Rules of the Air and Air Traffic Control (Third Amendment) Regulations 1987(e);

The Rules of the Air and Air Traffic Control (Fourth Amendment) Regulations 1987(f)

The Rules of the Air and Air Traffic Control (Fifth Amendment) Regulations 1989(g)

Signed by authority of the
Secretary of State for Transport

Lord Brabazon of Tara
Minister of State,
Department of Transport

12th November 1990

(a) S.I. 1989/2004; the relevant amending instrument is S.I. 2154.
(b) S.I. 1985/1714.
(c) S.I. 1986/544.
(d) S.I. 1986/2121.
(e) S.I. 1987/1145.
(f) S.I. 1987/1812.
(g) S.I. 1989/30.

[DET 0880]

THE SCHEDULE

THE RULES OF THE AIR – ARRANGEMENT OF RULES

		Rules
SECTION I	Interpretation	1
SECTION II	General	2 to 7
SECTION III	Lights and other Signals to be shown or made by Aircraft	8 to 15
SECTION IV	General Flight Rules	16 to 22
SECTION V	Visual Flight Rules	23
SECTION VI	Instrument Flight Rules	24 to 28
SECTION VII	Aerodrome Traffic Rules	29 to 37
SECTION VIII	Miscellaneous Special Rules	38 to 40
SECTION IX	Aerodrome Signals and Markings – Visual and Aural Signals	41 to 50

SECTION 1

INTERPRETATION

1.—(1) In these Rules, unless the context otherwise requires:

"air traffic control clearance" means authorisation by an air traffic control unit for an aircraft to proceed under conditions specified by that unit.

"anti-collision light" means:

(a) in relation to rotorcraft a flashing red light;

(b) in relation to any other aircraft a flashing red or flashing white light;

and in either case showing in all directions for the purpose of enabling the aircraft to be more readily detected by the pilots of distant aircraft.

"apron" means the part of an aerodrome provided for the stationing of aircraft for the embarkation and disembarkation of passengers, the loading and unloading of cargo and for parking.

"ground visibility" means the horizontal visibility at ground level.

"hang glider" means a glider capable of being:

(a) carried,

(b) foot-launched, and

(c) landed solely by the energy and use of a pilot's legs.

"IFR flight" means a flight conducted in accordance with the Instrument Flight Rules in Section VI of these Rules.

"manoeuvring area" means the part of an aerodrome provided for the take-off and landing of aircraft and for the movement of aircraft on the surface, excluding the apron and any part of the aerodrome provided for the maintenance of aircraft.

"the Order" means the Air Navigation Order 1989.

"runway" means an area, whether or not paved, which is provided for the take-off or landing run of aircraft.

"VFR flight" means a flight conducted in accordance with the Visual Flight Rules in Section V of these Rules.

(2) Subject to the provisions of paragraph (1) of this rule expressions used in these Rules shall, unless the context otherwise requires, have the same respective meanings as in the Order.

SECTION II

GENERAL

Application of Rules to aircraft

2. These Rules, in so far as they are applicable in relation to aircraft, shall, subject to the provisions of rule 29 of these Rules, apply in relation to:

(a) all aircraft within the United Kingdom and, for the purposes of rule 5 of these Rules, in the neighbourhood of an offshore installation; and

(b) all aircraft registered in the United Kingdom, wherever they may be.

Misuse of signals and markings

3.—(1) A signal or marking to which a meaning is given by these Rules, or which is required by these Rules to be used in circumstances, or for a purpose therein specified, shall not be used except with that meaning, or for that purpose.

(2) A person in an aircraft or on an aerodrome or at any place at which an aircraft is taking off or landing shall not make any signal which may be confused with a signal specified in these Rules, and, except with lawful authority, shall not make any signal which he knows or ought reasonably to know to be a signal in use for signalling to or from any of Her Majesty's naval, military or air force aircraft.

Reporting hazardous conditions

4. The commander of an aircraft shall, on meeting with hazardous conditions in the course of a flight, or as soon as possible thereafter, send to the appropriate air traffic control unit by the quickest means available information containing such particulars of the hazardous conditions as may be pertinent to the safety of other aircraft.

Low flying

5.—(1) Subject to the provisions of paragraphs (2) and (3) of this rule:

(a) An aircraft other than a helicopter shall not fly over any congested area of a city, town or settlement below:

(i) such height as would enable the aircraft to alight clear of the area and without danger to persons or property on the surface, in the event of failure of a power unit and if such an aircraft is towing a banner such height shall be calculated on the basis that the banner shall not be dropped within the congested area; or

(ii) a height of 1500 feet above the highest fixed object within 2000 feet of the aircraft:

whichever is the higher.

(b) A helicopter shall not fly below such height as would enable it to alight without danger to persons or property on the surface, in the event of failure of a power unit.

(c) Except with the permission in writing of the Authority and in accordance with any conditions therein specified a helicopter shall not fly:

(i) over a congested area of a city, town or settlement below a height of 1500 feet above the highest fixed object within 2000 feet of the helicopter; or

(ii) over the area specified, below such height as would enable it to alight clear of the area in the event of failure of a power unit, that is to say the area bounded by straight lines joining successively the following points:

Kew Bridge (51°29'11"N 00°17'10"W).

The Eastern extremity of Brent Reservoir (51°34'18"N 00°14'01"W).

Gospel Oak Station (51°33'16"N 00°08'58"W).

The South East corner of Springfield Park (51°34'07"N 00°03'12"W).

Bromley-by-Bow Station (51°31'28"N 00°00'39"W).

The South West corner of Hither Green (51°26'43"N 00°00'38"W).

Herne Hill Station (51°27'11"N 00°06'04"W).

Wimbledon Station (51°25'14"N 00°12'16"W).

The North West corner of Castelnau Reservoir (51°28'52"N 00°14'02"W).

Kew Bridge (51°29'11"N 00°17'10"W).

excluding so much of the bed of the River Thames as lies within that area between the ordinary high water marks on each of its banks.

(d) An aircraft shall not fly:

(i) over, or within 3000 feet of, any assembly in the open air of more than 1000 persons assembled for the purpose of witnessing or participating in any organised event, except with the permission in writing of the Authority and in accordance with any conditions therein specified and with the consent in writing of the organisers of the event; or

(ii) below such height as would enable it to alight clear of the assembly in the event of the failure of a power unit and if such an aircraft is towing a banner such height shall be calculated on the basis that the banner shall not be dropped within 3000 feet of the assembly:

Provided that where a person is charged with an offence under the Order by reason of a contravention of this sub-paragraph, it shall be a good defence to prove that the flight of the aircraft over, or within 3000 feet of, the assembly was made at a reasonable height and for a reason not connected with the assembly or with the event which was the occasion for the assembly.

(e) An aircraft shall not fly closer than 500 feet to any person, vessel, vehicle or structure.

(2)(a) The provision of paragraphs (1)(a)(ii) and (1)(c)(i) of this rule shall not apply to an aircraft flying:

(i) on a route notified for the purposes of this rule;

(ii) on a special VFR flight as defined in rule 23 of these Rules in accordance with instructions given for the purposes of that rule by the appropriate air traffic control unit; or

(iii) on a flight in respect of which a special VFR clearance has been given pursuant to rule 36 of these Rules in accordance with instructions given by the appropriate air traffic control unit.

(b) Paragraphs (1)(d) and (1)(e) of this rule shall not apply to an aircraft in the service of the police authority for any area of the United Kingdom.

(c) Paragraphs (1)(d)(i) and (1)(e) of this rule shall not apply to the flight of an aircraft over or within 3000 feet of an assembly of persons gathered for the purposes of witnessing or participating in an event which consists:

(i) wholly or partly of an aircraft race or contest if the aircraft is taking part in such race or contest or is engaged on a flight arranged by, or made with the consent in writing of, the organisers of the event;

(ii) wholly or partly of an exhibition of flying for which a permission under article 56 of the Order is required, if the aircraft is taking part in such exhibition or is engaged on a flight arrangd by or made with the consent of the organisers of the event and the flight is made:

(aa) in accordance with the terms of a permission granted to the organiser of the exhibition of flying under article 56 of the Order; and

(bb) in accordance with the conditions of a display authorisation granted to the pilot under article 56 of the Order; or

(iii) wholly or principally of an exhibition of flying for which a permission under article 56 of the Order is not required, if the aircraft is taking part in such exhibition or is engaged on a flight arranged by or made with the consent of the organisers of the event.

(d) Paragraph (1)(e) of this rule shall not apply to:

(i) any aircraft while it is landing or taking off in accordance with normal aviation practice;

(ii) any glider while it is hill-soaring;

(iii) any aircraft while it is flying in accordance with proviso (f) of article 43(2) of the Order;

(iv) any aircraft while it is flying under and in accordance with the terms of an aerial application certificate granted to the operator thereof under article 45 of the Order; or

(v) any aircraft while it is flying for the purpose of picking up or dropping tow ropes, banners or similar articles at an aerodrome in accordance with article 42(2) or proviso (e) of article 43(2) of the Order.

(3) Nothing in this rule shall prohibit an aircraft from flying in such a manner as is necessary for the purpose of saving life.

(4) Nothing in this rule shall prohibit any aircraft from flying in accordance with normal aviation practice, for the purpose of taking off from, landing at or practising approaches to landing at, or checking navigational aids or procedures at, a Government aerodrome, an aerodrome owned or managed by the Authority or a licensed aerodrome in the United Kingdom or at any aerodrome in any other country:

Provided that the practising of approaches to landing shall be confined to the airspace customarily used by aircraft when landing or taking off in accordance with normal aviation practice at the aerodrome concerned.

(5) Nothing in this rule shall apply to any captive balloon or kite.

Simulated instrument flight

6. An aircraft shall not be flown in simulated instrument flight conditions unless:

(a) the aircraft is fitted with dual controls which are functioning properly;

(b) an additional pilot (in this rule called a "safety pilot") is carried in a second control seat of the aircraft for the purpose of rendering such assistance as may be necessary to the pilot flying the aircraft; and

(c) if the safety pilot's field of vision is not adequate both forward and to each side of the aircraft, a third person, being a competent observer, occupies a position in the aircraft which from his field of vision makes good the deficiencies in that of the safety pilot, and from which he can readily communicate with the safety pilot.

For the purposes of this rule the expression "simulated instrument flight" means a flight during which mechanical or optical devices are used in order to reduce the field of vision or the range of visibility from the cockpit of the aircraft.

Practice instrument approaches

7. Within the United Kingdom an aircraft shall not carry out instrument approach practice when flying in Visual Meteorological Conditions unless:

(a) the appropriate air traffic control unit has previously been informed that the flight is to be made for the purpose of instrument approach practice; and

(b) if the flight is not being carried out in simulated instrument flight conditions, a competent observer is carried in such a position in the aircraft that he has an adequate field of vision and can readily communicate with the pilot flying the aircraft.

SECTION III

LIGHTS AND OTHER SIGNALS TO BE SHOWN OR MADE BY AIRCRAFT

General

8.—(1) For the purposes of this section of these Rules the horizontal plane of a light shown in an aircraft means the plane which would be the horizontal plane passing through the source of that light, if the aircraft were in level flight.

(2) Where by reason of the physical construction of an aircraft it is necessary to fit more than one lamp in order to show a light required by this section of these Rules, the lamps shall be so fitted and constructed that, so far as is reasonably practicable, not more than one such lamp is visible from any one point outside the aircraft.

(3) Where in these Rules a light is required to show through specified angles in the horizontal plane, the lamps giving such light shall be so constructed and fitted that the light is visible from any point in any vertical plane within those angles throughout angles of 90° above and below the horizontal plane, but, so far as is reasonably practicable, through no greater angle, either in the horizontal plane or the vertical plane.

(4) Where in these Rules a light is required to show in all directions, the lamps giving such light shall be so constructed and fitted that, so far as is reasonably practicable, the light is visible from any point in the horizontal plane and on any vertical plane passing through the source of that light.

Display of lights by aircraft

9.—(1) (a) By night an aircraft shall display such of the lights specified in these Rules as may be appropriate to the circumstances of the case, and shall not display any other lights which might obscure or otherwise impair the visibility of, or be mistaken for, such lights.

(b) By day an aircraft fitted with an anti-collision light shall display such a light in flight.

(2) A flying machine on a United Kingdom aerodrome shall:

(a) display by night either the lights which it would be required to display when flying or the lights specified in rule 11(2)(c) of these Rules unless it is stationary on the apron or part of the aerodrome provided for the maintenance of aircraft;

(b) display when stationary on the apron by day or night with engines running a red anti-collision light, if fitted:

Provided that a helicopter to which article 26 of the Order applies may, when stationary on an offshore installation, switch off such an anti-collision light in accordance with a procedure contained in the operations manual of the helicopter as a signal to ground personnel that it is safe to approach the helicopter for the purpose of embarkation or disembarkation of passengers or the loading or unloading of cargo.

(3) Notwithstanding the provisions of this section of these Rules the commander of an aircraft may switch off or reduce the intensity of any flashing light fitted to the aircraft if such a light does or is likely to:

(a) adversely affect the performance of the duties of any member of the flight crew; or

(b) subject an outside observer to unreasonable dazzle.

Failure of navigation and anti-collision lights

10.—(1) In the United Kingdom, in the event of the failure of any light which is required by these Rules to be displayed at night, if the light cannot be immediately repaired or replaced the aircraft shall not depart from the aerodrome and, if in flight, shall land as soon as in the opinion of

the commander of the aircraft it can safely do so, unless authorised by the appropriate air traffic control unit to continue its flight.

(2) In the United Kingdom, in the event of a failure of an anti-collision light when flying by day, an aircraft may continue to fly by day provided that the light is repaired at the earliest practicable opportunity.

Flying machines

11.—(1) A flying machine when flying at night shall display lights as follows:

(a) in the case of a flying machine registered in the United Kingdom having a maximum total weight authorised of more than 5700 kg or any other flying machine registered in the United Kingdom which conforms to a type first issued with a type certificate on or after 1st April 1988 the system of lights in paragraph (2)(b) of this rule;

(b) in the case of a flying machine registered in the United Kingdom which conforms to a type first issued with a type certificate before 1st April 1988 having a maximum total weight authorised of 5700 kg or less, any one of the following systems of lights:

(i) that specified in paragraph (2)(a) of this rule, or that specified in paragraph (2)(b); or

(ii) that specified in paragraph (2)(d), excluding sub-paragraph (ii);

(c) in the case of any other flying machine one of the systems of lights specified in paragraph (2) of this rule.

(2) The systems of lights referred to in paragraph (1) of this rule are as follows:

(a) (i) a steady green light of at least five candela showing to the starboard side through an angle of 110° from dead ahead in the horizontal plane;

(ii) a steady red light of at least five candela showing to the port side through an angle of 110° from dead ahead in the horizontal plane; and

(iii) a steady white light of at least three candela showing through angles of 70° from dead astern to each side in the horizontal plane;

(b) (i) the lights specified in sub-paragraph (a) of this paragraph; and

(ii) an anti-collision light;

(c) the lights specified in sub-paragraph (a) of this paragraph, but all being flashing lights flashing together;

(d) the lights specified in sub-paragraph (a) of this paragraph, but all being flashing lights flashing together in alternation with one or both of the following:

(i) a flashing white light of at least twenty candela showing in all directions;

(ii) a flashing red light of at least twenty candela showing through angles of 70° from dead astern to each side in the horizontal plane.

(3) If the lamp showing either the red or the green light specified in paragraph (2)(a) of this rule is fitted more than 2 metres from the wing tip, a lamp may, notwithstanding the provisions of rule 9(1) of these Rules, be fitted at the wing tip to indicate its position showing a steady light of the same colour through the same angle.

Gliders

12. A glider while flying at night shall display either a steady red light of at least five candela, showing in all directions, or lights in accordance with rule 11(2) and (3) of these Rules.

Free balloons

13. A free balloon while flying at night shall display a steady red light of at least five candela showing in all directions, suspended not less than 5 metres and not more than 10 metres below the basket, or if there is no basket, below the lowest part of the balloon.

Captive balloons and kites

14.—(1) A captive balloon or kite while flying at night at a height exceeding 60 metres above the surface shall display lights as follows:

(a) a group of two steady lights consisting of a white light placed 4 metres above a red light, both being of at least five candela and showing in all directions, the white light being placed not less than 5 metres or more than 10 metres below the basket, or if there is no basket, below the lowest part of the balloon or kite;

(b) on the mooring cable, at intervals of not more than 300 metres measured from the group of lights referred to in sub-paragraph (a) of this paragraph, groups of two lights of the colour and power and in the relative positions specified in that sub-paragraph, and, if the lowest group of lights is obscured by cloud, an additional group below the cloud base; and

(c) on the surface, a group of three flashing lights arranged in a horizontal plane at the apexes of a triangle, approximately equilateral, each side of which measures at least 25 metres; one side of the triangle shall be approximately at right angles to the horizontal projection of the cable and shall be delimited by two red lights; the third light shall be a green light so placed that the triangle encloses the object on the surface to which the balloon or kite is moored.

(2) A captive balloon while flying by day at a height exceeding 60 metres above the surface shall have attached to its mooring cable at intervals of not more than 200 metres measured from the basket, or, if there is no basket, from the lowest part of the balloon, tubular streamers not less than 40 centimetres in diameter and 2 metres in length, and marked with alternate bands of red and white 50 centimetres wide.

(3) A kite flown in the circumstances referred to in paragraph (2) of this rule shall have attached to its mooring cable either:

(a) tubular streamers as specified in paragraph (2) of this rule, or

(b) at intervals of not more than 100 metres measured from the lowest part of the kite, streamers not less than 80 centimetres long and 30 centimetres wide at their widest point and marked with alternate bands of red and white 10 centimetres wide.

Airships

15.—(1) Except as provided in paragraph (2) of this rule, an airship while flying at night shall display the following lights:

(a) a steady white light of at least five candela showing through angles of 110° from dead ahead to each side in the horizontal plane;

(b) a steady green light of at least five candela showing to the starboard side through an angle of 110° from dead ahead in the horizontal plane;

(c) a steady red light of at least five candela showing to the port side through an angle of 110° from dead ahead in the horizontal plane;

(d) a steady white light of at least five candela showing through angles of 70° from dead astern to each side in the horizontal plane; and

(e) an anti-collision light.

(2) An airship while flying at night shall display, if it is not under command, or has voluntarily stopped its engines, or is being towed, the following steady lights:

(a) the white lights referred to in paragraph (1)(a) and (d) of this rule;

(b) two red lights, each of at least five candela and showing in all directions suspended below the control car so that one is at least 4 metres above the other and at least 8 metres below the control car; and

(c) if the airship is making way but not otherwise, the green and red lights referred to in paragraph (1)(b) and (c) of this rule:

Provided that an airship while picking up its moorings, notwithstanding that it is not under command, shall display only the lights specified in paragraph (1) of this rule.

(3) An airship, while moored within the United Kingdom by night, shall display the following steady lights:

(a) when moored to a mooring mast, at or near the rear a white light of at least five candela showing in all directions;

(b) when moored otherwise than to a mooring mast:

(i) a white light of at least five candela showing through angles of 110° from dead ahead to each side in the horizontal plane; and

(ii) a white light of at least five candela showing through angles of 70° from dead astern to each side in the horizontal plane.

(4) An airship while flying by day, if it is not under command, or has voluntarily stopped its engines, or is being towed, shall display two black balls suspended below the control car so that one is at least 4 metres above the other and at least 8 metres below the control car.

(5) For the purposes of this rule:

(a) an airship shall be deemed not to be under command when it is unable to execute a manoeuvre which it may be required to execute by or under these Rules;

(b) an airship shall be deemed to be making way when it is not moored and is in motion relative to the air.

SECTION IV

GENERAL FLIGHT RULES

Weather reports and forecasts

16.—(1) Immediately before an aircraft flies the commander of the aircraft shall examine the current reports and forecasts of the weather conditions on the proposed flight path, being reports and forecasts which it is reasonably practicable for him to obtain, in order to determine whether Instrument Meteorological Conditions prevail or are likely to prevail during any part of the flight.

(2) An aircraft which is unable to communicate by radio with an air traffic control unit at the aerodrome of destination shall not begin a flight to an aerodrome within a control zone if the information which it is reasonably practicable for the commander of the aircraft to obtain indicates that it will arrive at that aerodrome when the ground visibility is less than 5 nautical miles or the cloud ceiling is less than 1500 feet, unless the commander of the aircraft has obtained from an air traffic control unit at that aerodrome permission to enter the aerodrome traffic zone.

Rules for avoiding aerial collisions

17.—(1) General

(a) Notwithstanding that the flight is being made with air traffic control clearance it shall remain the duty of the commander of an aircraft to take all possible measures to ensure that his aircraft does not collide with any other aircraft.

(b) An aircraft shall not be flown in such proximity to other aircraft as to create a danger of collision.

(c) Aircraft shall not fly in formation unless the commanders of the aircraft have agreed to do so.

(d) An aircraft which is obliged by these Rules to give way to another aircraft shall avoid passing over or under the other aircraft, or crossing ahead of it, unless passing well clear of it.

(e) An aircraft which has the right-of-way under this rule shall maintain its course and speed.

(f) For the purposes of this rule a glider and a flying machine which is towing it shall be considered to be a single aircraft under the command of the commander of the towing flying machine.

(2) Converging

(a) Subject to the provisions of paragraphs (3) and (4) of this rule, an aircraft in the air shall give way to other converging aircraft as follows:

(i) flying machines shall give way to airships, gliders and balloons;

(ii) airships shall give way to gliders and balloons;

(iii) gliders shall give way to balloons.

(b) Subject to the provisions of sub-paragraph (a) of this paragraph, when two aircraft are converging in the air at approximately the same altitude, the aircraft which has the other on its right shall give way:

Provided that mechanically driven aircraft shall give way to aircraft which are towing other aircraft or objects.

(3) Approaching head-on

When two aircraft are approaching head-on or approximately so in the air and there is danger of collision, each shall alter its course to the right.

(4) Overtaking

An aircraft which is being overtaken in the air shall have the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering course to the right, and shall not cease to keep out of the way of the other aircraft until that other aircraft has been passed and is clear, notwithstanding any change in the relative positions of the two aircraft:

Provided that a glider overtaking another glider in the United Kingdom may alter its course to the right or to the left.

(5) Flight in the vicinity of an aerodrome

Without prejudice to the provisions of rule 35 of these Rules, a flying machine, glider or airship while flying in the vicinity of what the commander of the aircraft knows or ought reasonably to know to be an aerodrome or moving on an aerodrome shall unless in the case of an aerodrome having an air traffic control unit that unit otherwise authorises:

(a) conform to the pattern of traffic formed by other aircraft intending to land at that aerodrome, or keep clear of the airspace in which the pattern is formed; and

(b) make all turns to the left unless ground signals otherwise indicate.

(6) Order of landing

(a) An aircraft while landing or on final approach to land shall have the right-of-way over other aircraft in flight or on the ground or water.

(b) In the case of two or more flying machines, gliders or airships approaching any place for the purpose of landing, the aircraft at the lower altitude shall have the right-of-way, but it shall not cut in front of another aircraft which is in final approach to land or overtake that aircraft:

Provided that:

(i) when an air traffic control unit has communicated to any aircraft an order of priority for landing, the aircraft shall approach to land in that order; and

(ii) when the commander of an aircraft is aware that another aircraft is making an emergency landing, he shall give way to that aircraft, and at night, notwithstanding that he may have received permission to land, shall not attempt to land until he has received further permission to do so.

(7) Landing and take-off

(a) A flying machine, glider or airship shall take-off and land in the direction indicated by the ground signals or, if no such signals are displayed, into the wind, unless good aviation practice demands otherwise.

(b) A flying machine or glider shall not land on a runway at an aerodrome if the runway is not clear of other aircraft unless, in the case of an aerodrome having an air traffic control unit, that unit otherwise authorises.

(c) Where take-offs and landings are not confined to a runway:

(i) a flying machine or glider when landing shall leave clear on its left any aircraft which has landed or is already landing or about to take off; if such a flying machine or glider is about to turn it shall turn to the left after the commander of the aircraft has satisfied himself that such action will not interfere with other traffic movements; and

(ii) a flying machine about to take off shall take up position and manoeuvre in such a way as to leave clear on its left any aircraft which has already taken off or is about to take off.

(d) A flying machine after landing shall move clear of the landing area as soon as it is possible to do so unless, in the case of an aerodrome having an air traffic control unit, that unit otherwise authorises.

Aerobatic manoeuvres

18. An aircraft shall not carry out any aerobatic manoeuvre:

(a) over the congested area of any city, town or settlement; or

(b) within controlled airspace except with the consent of the appropriate air traffic control unit.

Right-hand traffic rule

19. An aircraft which is flying within the United Kingdom in sight of the ground and following a road, railway, canal or coastline, or any other line of landmarks, shall keep such line of landmarks on its left:

Provided that this rule shall not apply to an aircraft flying within controlled airspace notified for the purposes of rule 21 or airspace notified for the purposes of rule 36 of these Rules in accordance with instructions given by the appropriate air traffic control unit.

Notification of arrival and departure

20.—(1) The commander of an aircraft who has caused notice of its intended arrival at any aerodrome to be given to the air traffic control unit or other authority at that aerodrome shall ensure that the air traffic control unit or other authority at that aerodrome is informed as quickly as possible of any change of intended destination and any estimated delay in arrival of 45 minutes or more.

(2) The commander of an aircraft arriving at or departing from an aerodrome in the United Kingdom shall take all reasonable steps to ensure upon landing or prior to departure, as the case may be, that notice of that event is given to the person in charge of the aerodrome, or to the air traffic control unit or aerodrome flight information unit at the aerodrome.

(3) Without prejudice to the provisions of rule 27 to these Rules, before taking off on any flight from an aerodrome in the United Kingdom, being a flight whose intended destination is more than 40 kilometres from the aerodrome of departure, the commander of an aircraft of which the maximum total weight authorised exceeds 5700 kg shall cause a flight plan containing such particulars of the intended flight as may be necessary for search and rescue purposes to be communicated to the air traffic control unit notified for the purpose of this rule.

(4) Without prejudice to the provisions of rules 20(3), 27 and 39(2) of these Rules the commander of an aircraft who intends to fly or who flies across any boundary of airspace notified as either the London or Scottish Flight Information Region other than the boundary common to each, shall, before so flying, cause a flight plan, containing such particulars of the intended flight as may be necessary for search and rescue purposes, to be communicated to the appropriate air traffic control unit within the London or Scottish Flight Information Region.

Flight in notified airspace

21. Subject to rule 21A of these Rules, in relation to flights in Visual Meteorological Conditions in controlled airspace notified for the purposes of this rule, the commander of an aircraft shall comply with rules 27 and 28 of these Rules as if the flights were IFR flights:

Provided that the commander of the aircraft shall not elect to continue the flight in compliance with the Visual Flight Rules for the purposes of rule 27(3).

Flight by gliders in notified airspace

21A. Rule 21 of these Rules shall not apply to the commander of a glider which is flying in controlled airspace notified for the purposes of this rule if the glider is flown in accordance with conditions such as may also be notified for the purposes of this rule in respect of that controlled airspace.

Choice of VFR or IFR

22. Subject to the provisions of rule 21 of these Rules an aircraft shall always be flown in accordance with the Visual Flight Rules or the Instrument Flight Rules:

Provided that in the United Kingdom an aircraft flying at night:

(a) outside a control zone shall be flown in accordance with the Instrument Flight Rules; or

(b) in a control zone shall be flown in accordance with the Instrument Flight Rules or the provisions of the proviso to rule 23(b) of these Rules.

SECTION V

VISUAL FLIGHT RULES

23. The Visual Flight Rules shall be as follows:

(a) Outside controlled airspace and outside airspace notified pursuant to rule 36

(i) an aircraft flying outside controlled airspace above 3000 feet above mean sea level shall remain at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 5 nautical miles;

(ii) an aircraft other than a helicopter flying outside controlled airspace at or below 3000 feet above mean sea level shall remain at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 3 nautical miles:

Provided that this sub-paragraph shall be deemed to be complied with if the aircraft is flown at a speed which according to its air speed indicator is 140 knots or less and remains clear of cloud, in sight of the surface and in a flight visibility of at least 1 nautical mile;

(iii) a helicopter flying outside controlled airspace at or below 3000 feet above mean sea level shall remain clear of cloud and in sight of the surface, or at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 3 nautical miles.

(b) Within controlled airspace

An aircraft flying within controlled airspace shall remain at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 5 nautical miles:

Provided that in a control zone, in the case of a special VFR flight, the aircraft shall be flown in accordance with any instructions given by the appropriate air traffic control unit.

For the purposes of this rule, "special VFR flight" means a flight made in Instrument Meteorological Conditions or at night in a control zone or in a control zone notified for the purposes of rule 21 of these Rules in respect of which the appropriate air traffic control unit has given permission for the flight to be made in accordance with special instructions given by that unit instead of in accordance with the Instrument Flight Rules.

(c) Within airspace notified pursuant to rule 36

An aircraft flying within airspace notified for the purposes of rule 36 of these Rules shall be flown:

(i) in the case of a flight in respect of which a special VFR clearance has been given by the appropriate air traffic control unit, clear of cloud, within sight of the surface and in accordance with any special instructions given by that unit;

(ii) in the case of any other flight, in accordance with the provisions of paragraph (a) of this rule.

SECTION VI

INSTRUMENT FLIGHT RULES

24. The Instrument Flight Rules shall be as follows:

(a) Outside controlled airspace

In relation to flights outside controlled airspace rules 25 and 26 of these Rules shall apply.

(b) Within controlled airspace

In relation to flights within controlled airspace rules 25, 27 and 28 of these Rules shall apply.

Minimum height

25. Without prejudice to the provisions of rule 5 of these Rules, in order to comply with the Instrument Flight Rules an aircraft shall not fly at a height of less than 1000 feet above the highest obstacle within a distance of 5 nautical miles of the aircraft unless:

(a) it is necessary for the aircraft to do so in order to take off or land;

(b) the aircraft is flying on a route notified for the purposes of this rule;

(c) the aircraft has been otherwise authorised by the competent authority; or

(d) the aircraft is flying at an altitude not exceeding 3000 feet above mean sea level and remains clear of cloud and in sight of the surface.

Quadrantal Rule and semi-circular Rule

26. In order to comply with the Instrument Flight Rules, an aircraft when in level flight above 3000 feet above mean sea level or above the appropriate transition altitude, whichever is the higher, shall be flown at a level appropriate to its magnetic track, in accordance with the appropriate Table set forth in this rule. The level of flight shall be measured by an altimeter set:

(a) in the case of a flight over the United Kingdom, to a pressure setting of 1013.2 millibars; or

(b) in the case of any other flight, according to the system published by the competent authority in relation to the area over which the aircraft is flying:

Provided that an aircraft may be flown at a level other than the level required by this rule if it is flying in conformity with instructions given by an air traffic control unit or in accordance with notified en-route holding patterns or in accordance with holding procedures notified in relation to an aerodrome.

For the purposes of this rule "transition altitude" means the altitude so notified in relation to flight over such area or areas as may be notified.

TABLE I – Flights at levels below 24 500 feet

Magnetic Track	*Cruising Level*
Less than 90°	Odd thousands of feet.
90° but less than 180°	Odd thousands of feet + 500 feet.
180°but less than 270°	Even thousands of feet.
270°but less than 360°	Even thousands of feet + 500 feet.

TABLE II – Flights at levels above 24 500 feet

Magnetic Track	*Cruising Level*
Less than 180°	25 000 feet. 27 000 feet. 29 000 feet or higher levels at intervals of 4000 feet.
180° but less than 360°	26 000 feet. 28 000 feet. 31 000 feet or higher levels at intervals of 4000 feet.

Flight plan and air traffic control clearance

27.—(1) In order to comply with the Instrument Flight Rules, before an aircraft either takes off from a point within any controlled airspace or otherwise flies within any controlled airspace the commander of the aircraft shall cause a flight plan to be communicated to the appropriate air traffic control unit and shall obtain an air traffic control clearance based on such flight plan.

(2) The flight plan shall contain such particulars of the intended flight as may be necessary to enable the air traffic control unit to issue an air traffic control clearance, or for search and rescue purposes.

(3) The commander of the aircraft shall fly in conformity with:

(a) the air traffic control clearance issued for the flight, as amended by any further instructions given by an air traffic control unit; and

(b) the holding and instrument approach procedures notified in relation to the aerodrome of destination, unless he is otherwise authorised by the air traffic control unit there:

Provided that he shall not be required to comply with the foregoing provisions of this paragraph if:

(i) he is able to fly in uninterrupted Visual Meteorological Conditions for so long as he remains in controlled airspace; and

(ii) he has informed the appropriate air traffic control unit of his intention to continue the flight in compliance with Visual Flight Rules and has requested that unit to cancel his flight plan.

(4) If for the purpose of avoiding immediate danger any departure is made from the provisions of paragraph (3) of this rule (as is permitted by article 69(3) of the Order) the commander of the aircraft shall, in addition to causing particulars to be given in accordance with article 69(4) of the Order, as soon as possible inform the appropriate air traffic control unit of the deviation.

(5) The commander of the aircraft after it has flown in controlled airspace shall, unless he has requested the appropriate air traffic control unit to cancel his flight plan, forthwith inform that unit when the aircraft lands within or leaves the controlled airspace.

Position reports

28. In order to comply with the Instrument Flight Rules the commander of an aircraft in IFR flight who flies in or is intending to enter controlled airspace shall report to the appropriate air traffic control unit the time, and the position and level of the aircraft at such reporting points or at such intervals of time as may be notified for this purpose or as may be directed by the air traffic control unit.

SECTION VII

AERODROME TRAFFIC RULES

Application of aerodrome traffic rules

29. The rules in this section of these Rules which are expressed to apply to flying machines shall also be observed, so far as is practicable, in relation to all other aircraft.

Visual signals

30. The commander of a flying machine on, or in the pattern of traffic at, an aerodrome shall observe such visual signals as may be displayed at, or directed to him from the aerodrome by the

authority of the person in charge of the aerodrome and shall obey any instructions which may be given to him by means of such signals:

Provided that he shall not be required to obey the signals referred to in rule 47 of these Rules (Marshalling Signals) if in his opinion it is inadvisable to do so in the interests of safety.

Movement of aircraft on aerodromes

31. An aircraft shall not taxi on the apron or the manoeuvring area of an aerodrome without the permission of the person in charge of the aerodrome or, where the aerodrome has an air traffic control unit for the time being notified as being on watch without the permission of that unit.

Access to and movement of persons and vehicles on the aerodrome

32.—(1) A person or vehicle shall not go onto any part of an aerodrome (not being a part of the aerodrome which is a public right of way) without the permission of the person in charge of that part of the aerodrome, and except in accordance with any conditions subject to which that permission may have been granted.

(2) A vehicle or person shall not go or move on the manoeuvring area of an aerodrome having an air traffic control unit without the permission of that unit, and except in accordance with any conditions subject to which that permission may have been granted.

(3) Any permission granted for the purposes of this rule may be granted whether in respect of persons or vehicles generally, or in respect of any particular person or vehicle or any class of person or vehicle.

Right of way on the ground

33.—(1) This rule shall apply to:

(a) flying machines; and

(b) vehicles

on any part of a land aerodrome provided for the use of aircraft and under the control of the person in charge of the aerodrome.

(2) Notwithstanding any air traffic control clearance it shall remain the duty of the commander of an aircraft to take all possible measures to ensure that his aircraft does not collide with any other aircraft or with any vehicle.

(3) (a) Flying machines and vehicles shall give way to aircraft which are taking off or landing.

(b) Vehicles, and flying machines which are not taking off or landing, shall give way to vehicles towing aircraft.

(c) Vehicles which are not towing aircraft shall give way to aircraft.

(4) Subject to the provisions of paragraph (3) of this rule and of rule 17(7)(c) of these Rules, in case of danger of collision between two flying machines:

(a) when the two flying machines are approaching head-on or approximately so, each shall alter its course to the right;

(b) when the two flying machines are on converging courses, the one which has the other on its right shall give way to the other and shall avoid crossing ahead of the other unless passing well clear of it;

(c) a flying machine which is being overtaken shall have the right-of-way, and the overtaking flying machine shall keep out of the way of the other flying machine by altering its course to the left until that other flying machine has been passed and is clear, notwithstanding any change in the relative positions of the two flying machines.

(5) Subject to the provisions of paragraph (3)(b) of this rule a vehicle shall:

(a) overtake another vehicle so that the other vehicle is on the left of the overtaking vehicle;

(b) keep to the left when passing another vehicle which is approaching head-on or approximately so.

Launching, picking up and dropping of tow ropes, etc.

34.—(1) Tow ropes, banners or similar articles towed by aircraft shall not be launched at an aerodrome except in accordance with arrangements made with an air traffic control unit at the aerodrome or, if there is no such unit, with the person in charge of the aerodrome.

(2) Tow ropes, banners or similar articles towed by aircraft shall not be picked up by or dropped from aircraft at an aerodrome except:

(a) in accordance with arrangements with an air traffic control unit at the aerodrome or, if there is no such unit, with the person in charge of the aerodrome; or

(b) in the area designated by the marking described in rule 44(7) of these Rules, and the ropes, banners or similar articles shall be picked up and dropped when the aircraft is flying in the direction appropriate for landing.

Flight within aerodrome traffic zones

35.—(1) Paragraphs (2) and (3) of this rule shall apply only in relation to such of the aerodrome described in Column 1 of the following Table as are notified for the purposes of this rule and at such times as are specified in Column 2 thereof.

TABLE

(1)	(2)
(a) A Government aerodrome	at such times as are notified
(b) An aerodrome having an air traffic control unit or an aerodrome flight information unit	during the notified hours of watch of the air traffic control unit or the aerodrome flight information unit
(c) A licensed aerodrome having a means of two-way radio communication with aircraft	during the notified hours of watch of the air/ground radio station

(2) An aircraft shall not fly, take off or land within the aerodrome traffic zone of an aerodrome to which this paragraph applies unless the commander of the aircraft has obtained the permission of the air traffic control unit at the aerodrome or, where there is no air traffic control unit, has obtained from the aerodrome flight information unit at that aerodrome information to enable the flight within the zone to be conducted with safety or, where there is no air traffic control unit nor aerodrome flight information unit, has obtained information from the air/ground radio station at that aerodrome to enable the flight to be conducted with safety.

(3) The commander of an aircraft flying within the aerodrome traffic zone of an aerodrome to which this paragraph applies shall:

(a) cause a continuous watch to be maintained on the appropriate radio frequency notified for communications at the aerodrome or, if this is not possible, cause a watch to be kept for such instructions as may be issued by visual means;

(b) where the aircraft is fitted with means of communication by radio with the ground, communicate his position and height to the air traffic control unit, the aerodrome flight information unit or the air/ground radio station at the aerodrome (as the case may be), on entering the zone and immediately prior to leaving it.

Special Rules for certain aerodromes

36.—(1) Paragraphs (3) and (4) of this rule shall apply, in addition to the other rules in this section, to the aerodromes specified in column 1 of the following table to the extent specified in column 2 thereof and for the purposes of this rule each aerodrome specified in the table shall be deemed to comprise the airspace notified in respect of that aerodrome.

TABLE

(1)	(2)
Aerodromes specified	Applicable paragraphs of Rule 36
Aberdeen	(3)(a), (b) and (c)(i) and (ii) (4)(a), (b) and (c)
Belfast/Aldergrove	(3)(a) and (b)
Belfast/Harbour	(3)(a) and (b)
Birmingham	(3)(a) and (b)
Blackpool	(3)(a) and (b)
Bournemouth	(3)(a), (b) and (c)(i) and (ii) (4)(a), (b) and (c)
Bristol	(3)(a) and (b) (4)(a), (b) and (c)
Brize Norton	(3)(a) and (b)
Cardiff	(3)(a) and (b)
East Midlands	(3)(a), (b) and (c)(i)
Edinburgh	(3)(a), (b) and (c)(ii)
Glasgow	(3)(a), (b) and (c)(ii)
Leeds/Bradford	(3)(a), (b) and (c)(i) and (ii) (4)(a), (b) and (c)
Liverpool	(3)(a) and (b)
London City Airport	(3)(a) and (b)
London/Gatwick	(3)(a) and (b)
London/Stansted	(3)(a) and (b)
Luton	(3)(a) and (b)
Lyneham	(3)(a), (b) and (c)(i)
Newcastle	(3)(a), (b) and (c)(i) and (ii)
Prestwick	(3)(a), (b) and (c)(ii)
Southampton/Eastleigh	(3)(a), (b) and (c)(i) and (ii) (4)(a), (b) and (c)
Southend	(3)(a), (b) and (c)(i)
Sumburgh	(3)(a) and (b)
Teesside	(3)(a), (b) and (c)(i)

(2) For the purposes of any paragraph of this rule, "special VFR clearance" means a clearance given by the appropriate air traffic control unit to an aircraft for flight within airspace notified for the purposes of that paragraph if the aircraft remains clear of cloud, within sight of the surface and is flown in accordance with any special instructions given by that unit.

(3) Unless otherwise authorised by the air traffic control unit at the aerodrome:

(a) an aircraft shall not, during the notified hours of watch of the air traffic control unit at the aerodrome, fly within the notified airspace unless the commander of the aircraft, before so flying, obtains the permission of the air traffic control unit at the aerodrome and informs the air traffic control unit, on the notified radio frequency appropriate to the circumstances, of the aircraft's position, level and track;

(b) while an aircraft is within the notified airspace at any time during the notified hours of watch the commander of the aircraft shall cause a continuous watch to be maintained on that frequency and comply with any instructions which the air traffic control unit at that aerodrome may give in the particular case;

(c) provided that except at night and in relation only to airspace notified for the purposes of the paragraphs of this proviso, sub-paragraphs (a) and (b) shall not apply to:

(i) a glider which remains at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 5 nautical miles; or

(ii) a mechanically driven aircraft without radio equipment which remains at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 5 nautical miles, if the commander of the aircraft has previously obtained the permission of the air traffic control unit at the aerodrome to enter the notified airspace.

(4) Unless otherwise authorised by the air traffic control unit at the aerodrome, an aircraft, whilst flying within the notified airspace during the notified hours of watch of the air traffic control unit at the aerodrome, shall remain at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 5 nautical miles, unless the commander of the aircraft holds a licence which includes a valid instrument rating except that:

(a) if the commander of the aircraft holds a Commercial Pilot's Licence, a Senior Commercial Pilot's Licence or an Airline Transport Pilot's Licence which does not include a valid instrument rating and he intends to take off or land within the notified airspace, the aircraft may be flown in accordance with any Special VFR clearance given to it; or

(b) if the aircraft is an aeroplane and the commander thereof being the holder of a Private Pilot's Licence which includes a valid Instrument Meteorological Conditions Rating, intends to land or take-off within the notified airspace, the aircraft may be flown in accordance with any special VFR clearance given to it if it remains in a flight visibility of at last 1½ nautical miles; or

(c) if the aircraft is a helicopter and the commander thereof intends to take off or land within the notified airspace, the aircraft may be flown in accordance with any special VFR clearance given to it.

Special Rules for Upper Heyford Mandatory Radio Area

36A.—(1) This rule shal apply to the airspace notified as the Upper Heyford Mandatory Radio Area.

(2) Subject to paragraphs (3), (4) and (5) of this rule, unless authorised by the air traffic control unit at Upper Heyford:

(a) an aircraft shall not, during the notified hours of watch of that air traffic control unit, enter the notified airspace unless the commander of the aircraft before so flying informs that air traffic control unit on the notified radio frequency appropriate to the circumstances, of the time, position and altitude at which the aircraft will enter the notified airspace;

(b) an aircraft shall not, during the notified hours of watch of that air traffic control unit, leave the notified airspace unless the commander of the aircraft informs that air traffic control unit on the notified radio frequency appropriate to the circumstances, of the time, position and altitude at which the aircraft will leave the notified airspace;

(c) an aircraft shall not, during the notified hours of watch of that air traffic control unit, take off from or land at a point within the notified airspace unless the commander of the aircraft, before taking off or landing, informs that air traffic control unit on the notified radio frequency appropriate to the circumstances or by means of telephone of the time and position of take-off or landing and in the case of a take-off the intended track within the notified airspace; and

(d) whilst an aircraft is within the notified airspace during the notified hours of watch of that air traffic control unit, the commander of the aircraft shall cause a continuous watch to be maintained on the notified radio frequency appropriate to the circumstances.

(3) Paragraph (2) of this rule shall not apply to any balloon or microlight aircraft which is not equipped with a means of communication by radio with the ground but the commander of such an aircraft intending to fly within the notified airspace during the notified hours of watch of the air traffic control unit at Upper Heyford, shall before so flying, inform that air traffic control unit by means of telephone, of the intended points and times of entry to, take off within, landing within, departure from and the intended track and altitude within the notified airspace.

(4) Paragraph (2) of this rule shall not apply to any hang glider which is not equipped with a means of communication by radio with the ground but:

(a) the commander of such an aircraft intending to fly within the notified airspace during the notified hours of watch of the air traffic control unit at Upper Heyford, shall before so flying, inform that air traffic control unit by means of telephone of the intended points and times of entry to, take-off within, landing within, departure from and the intended track within the notified airspace;

(b) the commander of such an aircraft shall not, during the notified hours of watch of the air traffic control unit at Upper Heyford, fly within such airspace as extends from the surface to 3500 feet above mean sea level bounded by straight lines joining successively the following co-ordinates:

51°57'27″N, 001°21'53″W; 51°58'54″N, 001°09'10″W;
51°54'58″N, 001°08'01″W; 51°53'31″N, 001°20'43″W;
51°57'27″N, 001°21'53″W.

(5) Paragraph (2) of this rule shall not apply to any aircraft departing from RAF Bicester flown within such airspace as extends from the surface to 3500 feet above mean sea level bounded by straight lines joining successively the following co-ordinates:

51°56'10″N, 000°57'13″W; 51°57'09″N, 000°57'25″W; 51°53'35″N,
001°28'30″W; 51°52'35″N; 001°26'43″W; 51°56'10″N, 000°57'13″W.

Use of radio navigation aids

37. The commander of an aircraft shall not make use of any radio navigation aid without complying with such restrictions and appropriate procedures as may be notified in relation to that aid unless authorised by an air traffic control unit:

Provided that he shall not be required to comply with this rule if he is required to comply with rule 27 of these Rules.

SECTION VIII

MISCELLANEOUS SPECIAL RULES

Special Rules for Cross-Channel air traffic

38.—(1) Notwithstanding the provisions of rule 22, during the notified hours of watch of the air traffic control unit for the time being notified for the purposes of this rule, the following special rules shall apply to the airspace notified for the purposes of this rule as the Cross-Channel Special Rules Airspace.

(2) The commander of an aircraft who intends to fly within the Cross-Channel Special Rules Airspace shall before so flying cause to be communicated to the appropriate air traffic control unit a flight plan containing particulars of the time at which and the level and track on which the aircraft is intending to pass through the said airspace and such particulars of the intended flight as may be necessary for search and rescue purposes.

(3) The commander of an aircraft shall, before the aircraft enters the Cross-Channel Special Rules Airspace, inform the air traffic control unit serving that part of the said airspace which the aircraft is about to enter on the notified radio frequency appropriate to the circumstances, of the time, position and level at which the aircraft will enter that airspace, and when the aircraft leaves the said airspace, shall inform the air traffic control unit serving the airspace which the aircraft is leaving, on the said frequency of the time, position and level at which the aircraft is leaving the said airspace.

(4) Whilst flying within the Cross-Channel Special Rules Airspace, the commander of an aircraft shall:

(a) cause a continuous watch to be maintained on the notified radio frequency appropriate to the circumstances;

(b) measure the level of flight by means of an altimeter set according to the system notified for the said area; and

(c) comply with any instructions which the appropriate air traffic control unit may give in the particular case.

(5) Paragraphs (3) and (4)(a) of this rule shall not apply to mechanically driven aircraft which are not equipped with radio capable of operating on the radio frequency therein referred to. Such aircraft shall not fly over any part of the English Channel within the Cross-Channel Special Rules Airspace.

(6) These special rules shall not apply to any glider which remains at least 1 nautical mile horizontally and 1000 feet vertically away from cloud, in a flight visibility of at least 5 nautical miles and outside that part of the Cross-Channel Special Rules Airspace between the surface and 4500 feet above mean sea level which falls within the airspace notified for the purposes of this paragraph of this rule.

Special Rules for air traffic in the Upper Flight Information Regions

39.—(1) The following special rules shall apply to the airspace notified for the purposes of this rule as the Upper Airspace Special Rules Area.

(2) The commander of an aircraft who intends to fly within the notified airspace shall, before so flying, cause to be communicated to the appropriate air traffic control unit a flight plan containing particulars of the time at which and level and track on which the aircraft is intended to pass through the notified airspace, and such particulars of the intended flight as may be necessary for search and rescue purposes.

(3) The commander of an aircraft shall, before the aircraft enters the notified airspace, obtain the permission of the appropriate air traffic control unit.

(4) While flying within the notified airspace, the commander of an aircraft shall:

(a) cause a continuous watch to be maintained on the notified radio frequency appropriate to the circumstances;

(b) measure the flight level by means of an altimeter set to 1013.2 millibars; and

(c) comply with any instructions which the appropriate air traffic control unit may give in the particular case.

(5) These special rules shall not apply in relation to any glider flying within the notified airspace.

Special Rules for air traffic in the Scottish Terminal Control Area

40.—(1) For the purposes of this rule "the Scottish Terminal Control Area" comprises the airspace notified as such and "the relevant airspace" means that part of the Scottish Terminal Control Area which is above 6000 feet above mean sea level.

(2) The commander of an aircraft who intends to fly within the relevant airspace shall, before so flying, inform the appropriate air traffic control unit on the notified radio frequency appropriate to the circumstances, of the time, position and level at which the aircraft will enter that airspace and, when the aircraft leaves the relevant airspace, shall inform that unit on that frequency of the time, position and level at which the aircraft is leaving the relevant airspace.

(3) While flying within the relevant airspace, the commander of an aircraft shall:

(a) cause a continuous watch to be maintained on the notified radio frequency appropriate to the circumstances;

(b) measure the level of flight by means of an altimeter set at 1013.2 millibars; and

(c) comply with any instructions which the appropriate air traffic control unit may give in the particular case.

(4) This rule shall not apply in relation to any glider which remains at least 1 nautical mile horizontally and 1000 feet vertically away from cloud and in a flight visibility of at least 5 nautical miles.

SECTION IX

AERODROME SIGNALS AND MARKINGS—VISUAL AND AURAL SIGNALS

General

41.—(1) Whenever any signal specified in this section of these Rules is given or displayed, or whenever any marking so specified is displayed, by any person in an aircraft, or at an aerodrome, or at any other place which is being used by aircraft for landing or take-off, it shall, when given or displayed in the United Kingdom, have the meaning assigned to it in this section.

(2) All dimensions specified in this section of these Rules shall be subject to a tolerance of 10 per cent, plus or minus.

Signals in the signals area

42.—(1) When any signal specified in the following paragraphs of this rule is displayed it shall be placed in a signals area, which shall be a square visible in all directions bordered by a white strip 30 centimetres wide the internal sides measuring 12 metres.

(2) A white landing T, as illustrated in this paragraph,

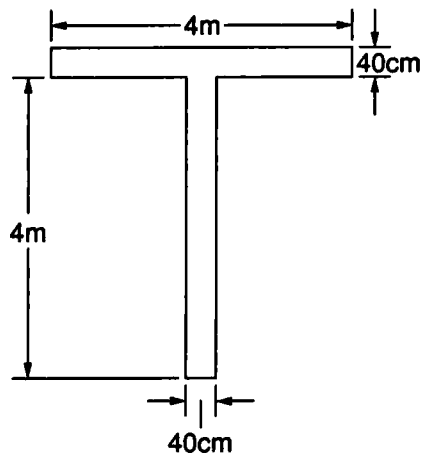


Fig. 1

signifies that aeroplanes and gliders taking off or landing shall do so in a direction parallel with the shaft of the T and towards the cross arm, unless otherwise authorised by the appropriate air traffic control unit.

(3) A white disc 60 centimetres in diameter displayed alongside the cross arm of the T and in line with the shaft of the T, as illustrated in this paragraph,

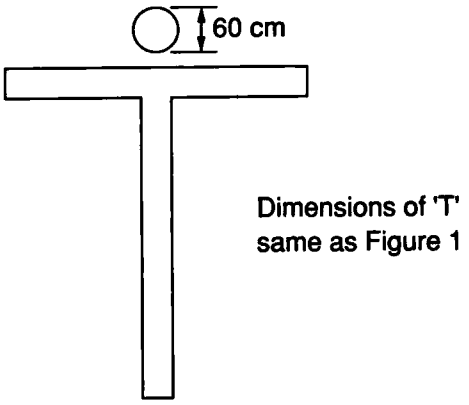


Fig. 2

signifies that the direction of landing and take-off do not necessarily coincide.

(4) A white dumb-bell, as illustrated in this paragraph,

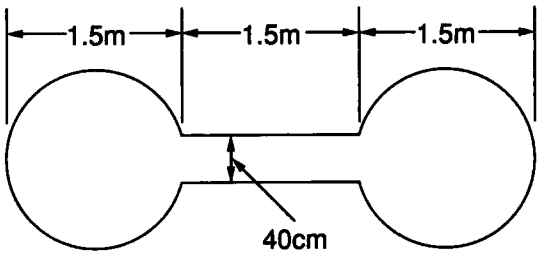


Fig. 3

signifies that movements of aeroplanes and gliders on the ground shall be confined to paved, metalled or similar hard surfaces.

(5) A white dumb-bell as described in (4) above but with a black strip 60 centimetres wide across each disc at right angles to the shaft of the dumb-bell, as illustrated in this paragraph,

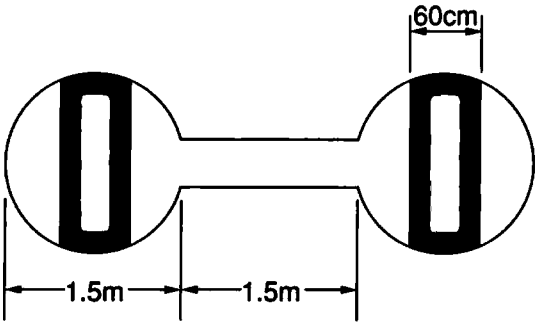


Fig. 4

signifies that aeroplanes and gliders taking off or landing shall do so on a runway but that movement on the ground is not confined to paved, metalled or similar hard surfaces.

(6) A red and yellow striped arrow, as illustrated in this paragraph,

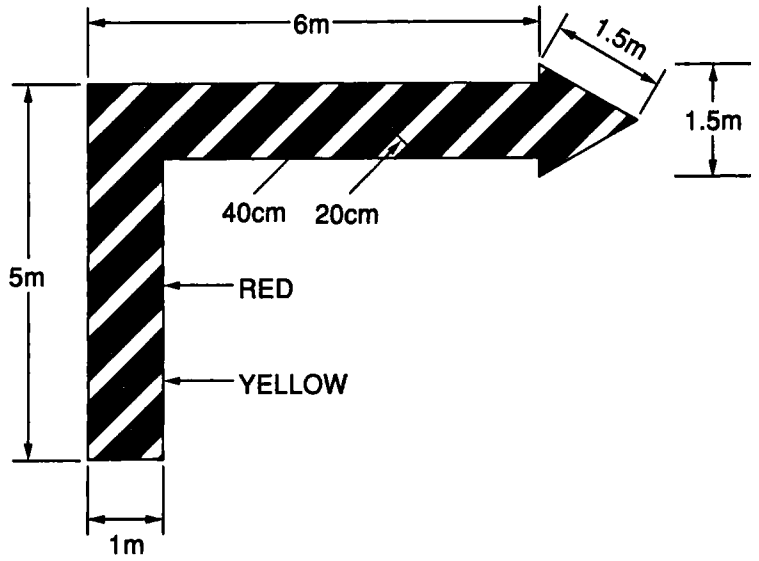


Fig. 5

the shaft of which is at least one metre wide placed along the whole or not less than a total of 11 metres of two adjacent sides of the signals area and pointing in a clockwise direction signifies that a right-hand circuit is in force.

(7) A red panel 3 metres square with a yellow strip along one diagonal at least 50 centimetres wide, as illustrated in this paragraph,

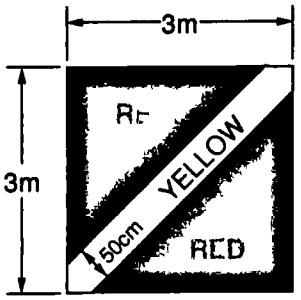
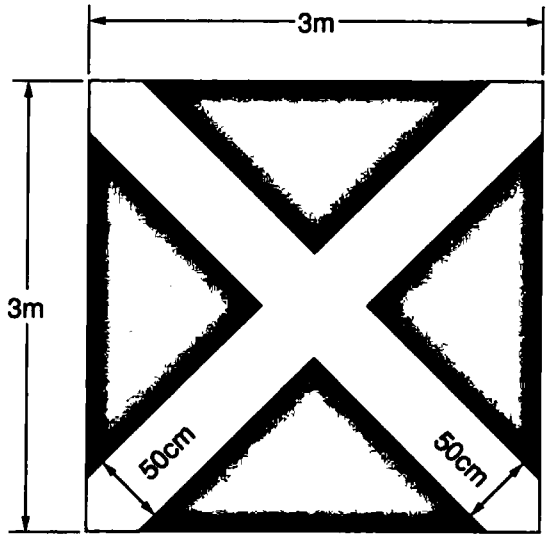


Fig. 6

signifies that the state of the manoeuvring area is poor and pilots must exercise special care when landing.

(8) A red panel 3 metres square with a yellow strip, at least 50 centimetres wide, along each diagonal, as illustrated in this paragraph,



YELLOW STRIPES ON
RED BACKGROUND

Fig. 7

signifies that the aerodrome is unsafe for the movement of aircraft and that landing on the aerodrome is prohibited.

(9) A white letter H, as illustrated in this paragraph,

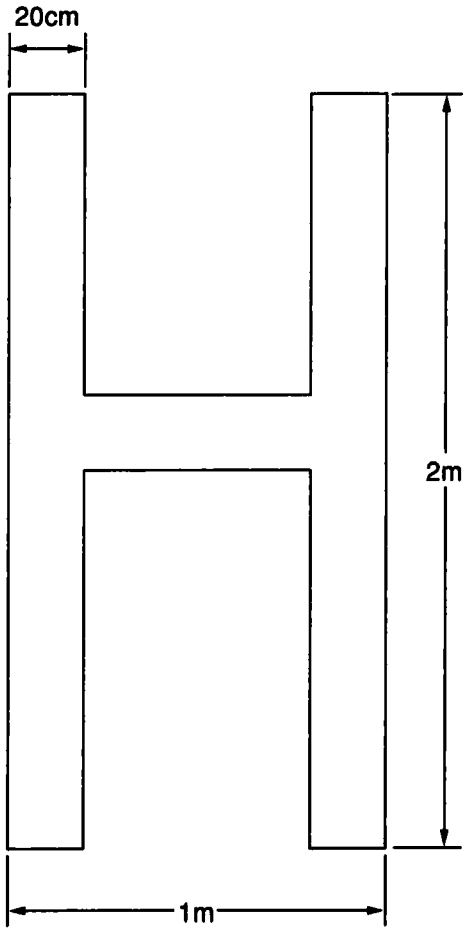


Fig. 8

signifies that helicopters shall take off and land only within the area designated by the marking specified in Rule 44(5) of these Rules.

(10) A red letter L displayed on the dumb-bell specified in paragraphs (4) and (5) of this rule, as illustrated in this paragraph,

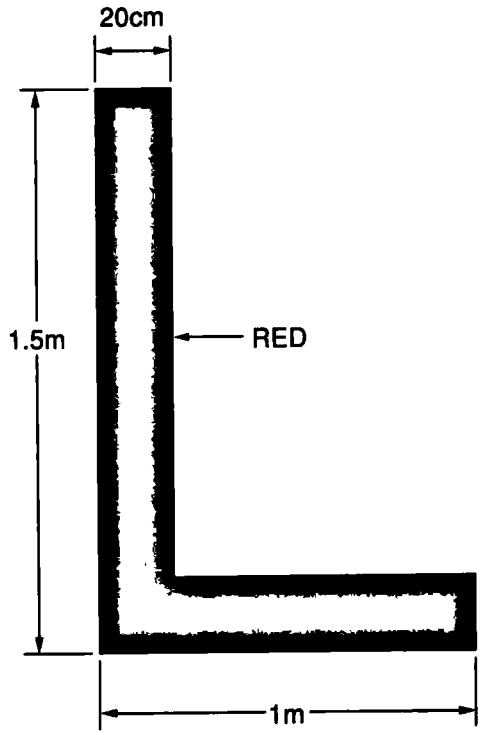


Fig. 9

signifies that light aircraft are permitted to take off and land either on a runway or on the area designated by the marking specified in rule 44(6) of these Rules.

(11) A white double cross, as illustrated in this paragraph,

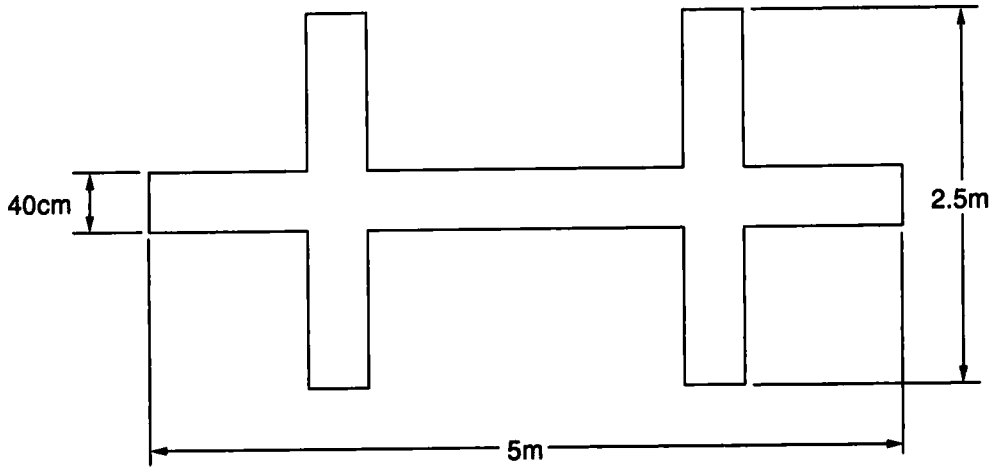


Fig. 10

signifies that glider flying is in progress.

Markings for paved runways and taxiways

43.—(1) Two or more white crosses, as illustrated in this paragraph,

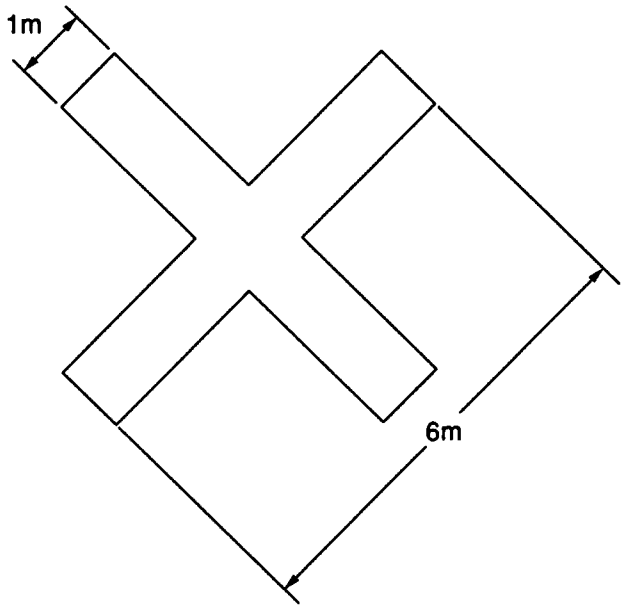


Fig. 11

displayed on a runway or taxiway, with the arms of the crosses at an angle of 45° to the centre line of the runway, at intervals of not more than 300 metres signify that the section of the runway or taxiway marked by them is unfit for the movement of aircraft.

(2) A white broken line and a continuous line, as illustrated in this paragraph,

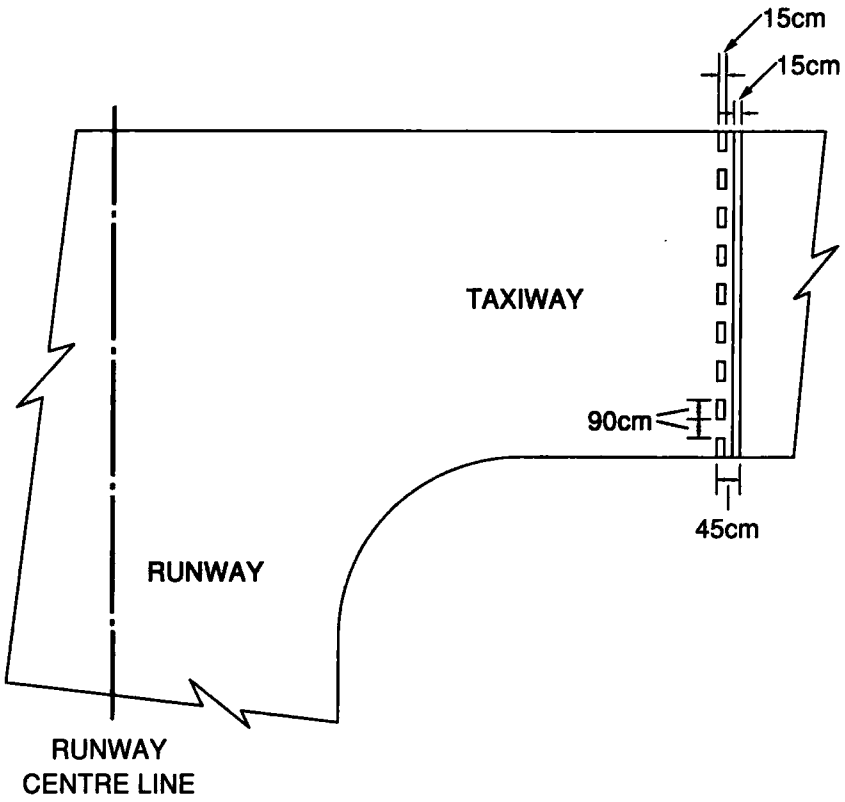


Fig. 12

signify a holding position beyond which no part of an aircraft or vehicle shall project in the direction of the runway without permission from an air traffic control unit.

(3) Orange and white markers, as illustrated in this paragraph,

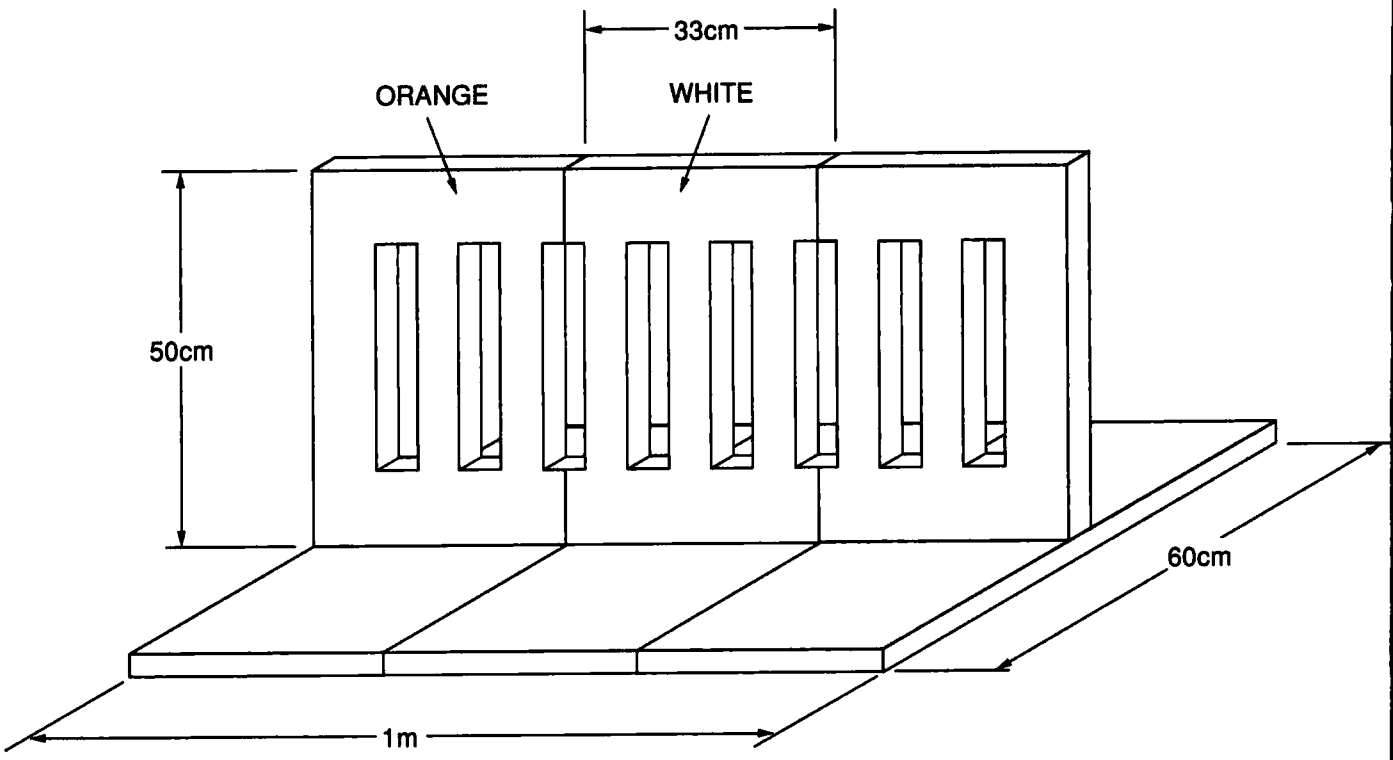


Fig. 13

spaced not more than 15 metres apart, signify the boundary of that part of a paved runway, taxiway or apron which is unfit for the movement of aircraft.

Markings on unpaved manoeuvring areas

44.—(1) Markers with orange and white stripes of an equal width of not less than 50 centimetres, with an orange stripe at each end, as illustrated in this paragraph,

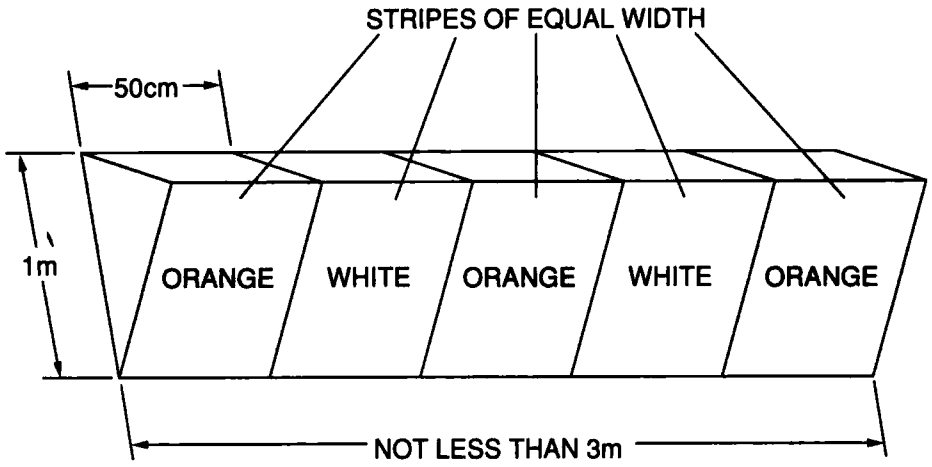


Fig. 14

alternating with flags not less than 60 centimetres square showing equal orange and white triangular areas, indicate the boundary of an area unfit for the movement of aircraft and one or more white crosses as specified in rule 43(1) of these Rules indicate the said area. The distance between any two successive orange and white flags shall not exceed 90 metres.

(2) Striped markers, as specified in paragraph (1) of this rule, spaced not more than 45 metres apart, indicate the boundary of an aerodrome.

(3) On structures, markers with orange and white vertical stripes, of an equal width of not less than 50 centimetres, with an orange stripe at each end, as illustrated in this paragraph,

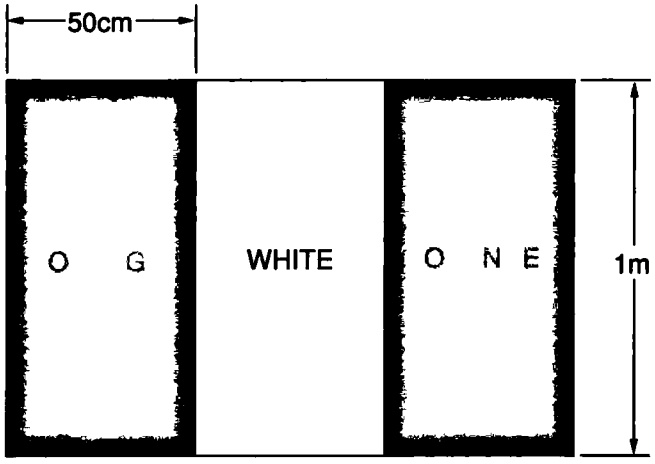


Fig. 15

spaced not more than 45 metres apart, indicate the boundary of an aerodrome. The pattern of the marker shall be visible from inside and outside the aerodrome and the marker shall be affixed not more than 15 centimetres from the top of the structure.

(4) White flat rectangular markers 3 metres long and 1 metre wide at intervals not exceeding 90 metres, flush with the surface of the unpaved runway or stopway, as the case may be, indicate the boundary on an unpaved runway or of a stopway.

(5) A white letter H, as illustrated in this paragraph.

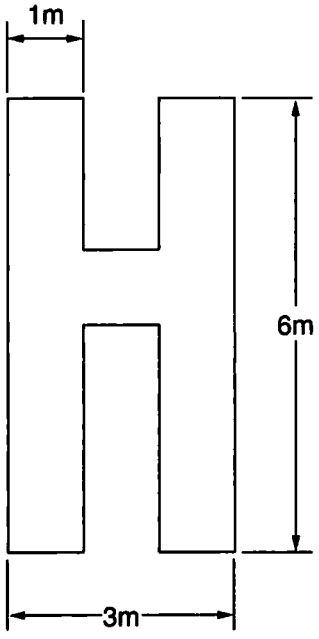


Fig. 16

indicates an area which shall be used only for the taking off and landing of helicopters.

(6) A white letter L, as illustrated in this paragraph,

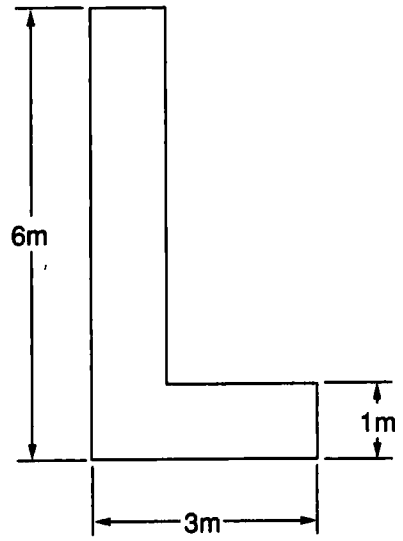


Fig. 17

indicates a part of the manoeuvring area which shall be used only for the taking off and landing of light aircraft.

(7) A yellow cross with two arms 6 metres long by 1 metre wide at right angles, indicates that tow ropes, banners and similar articles towed by aircraft shall only be picked up and dropped in the area in which the cross is placed.

(8) A white double cross, as illustrated in this paragraph,

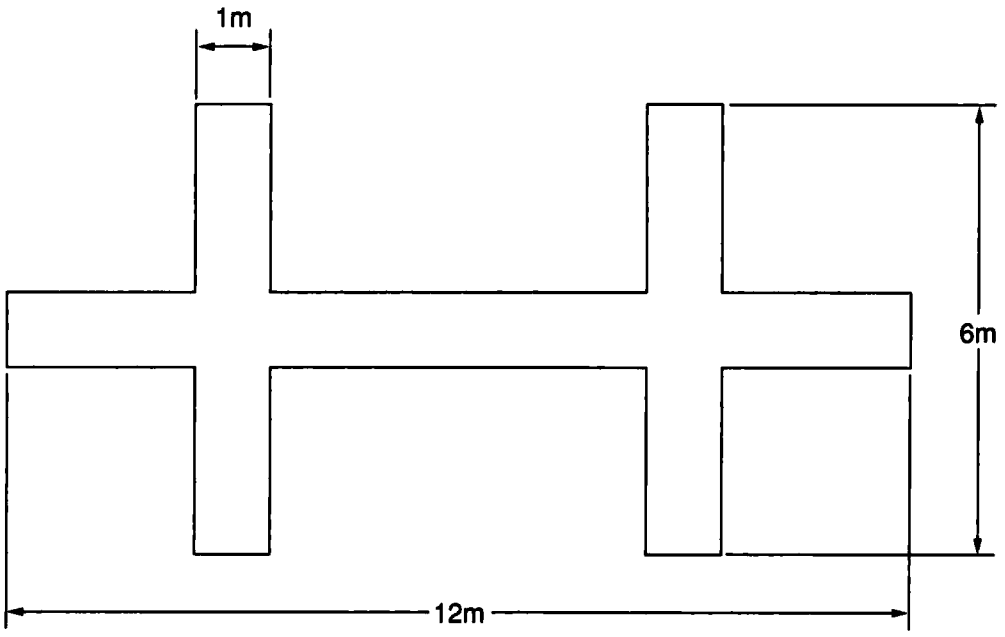


Fig. 18

indicates an area which shall be used only for the taking off and landing of gliders.

(9) A white landing T as specified in rule 42(2) of these Rules placed at the left hand side of the runway when viewed from the direction of landing indicates the runway to be used, and at an aerodrome with no runway it indicates the direction for take-off and landing.

Signals visible from the ground

45.—(1) A black ball 60 centimetres in diameter suspended from a mast signifies that the directions of take-off and landing are not necessarily the same.

(2) A checkered flag or board, 1·2 metres by 90 centimetres containing twelve equal squares, 4 horizontally and 3 vertically, coloured red and yellow alternately, signifies that aircraft may move on the manoeuvring area and apron only in accordance with the permission of the air traffic control unit at the aerodrome.

(3) Two red balls 60 centimetres in diameter, disposed vertically one above the other, 60 centimetres apart and suspended from a mast, signify that glider flying is in progress at the aerodrome.

(4) Black arabic numerals in two-figure groups and, where parallel runways are provided the letter or letters L (left), LC (left centre), C (centre), RC (right centre) and R (right), placed against a yellow background, indicate the direction for take-off or the runway in use.

(5) A black letter C against a yellow background, as illustrated in this paragraph,

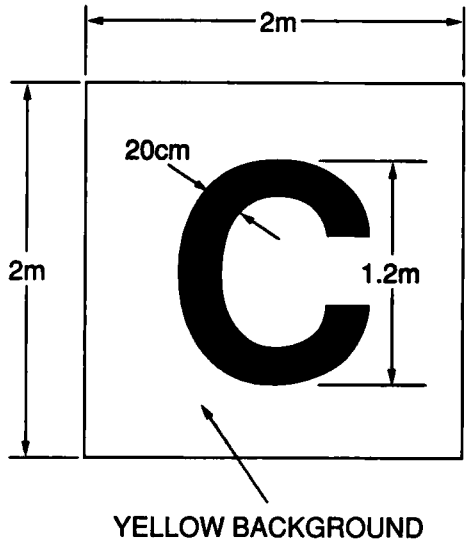


Fig. 19

indicates the position at which a pilot can report to the air traffic control unit or to the person in charge of the aerodrome.

(6) A rectangular green flag of not less than 60 centimetres square flown from a mast indicates that a right hand circuit is in force.

Lights and pyrotechnic signals for control of aerodrome traffic

46. Each signal described in the first column of Table A, when directed from an aerodrome to an aircraft or to a vehicle, or from an aircraft, shall have the meanings respectively appearing in the second, third and fourth columns of that Table opposite the description of the signal.

TABLE A
MEANING OF LIGHTS AND PYROTECHNIC SIGNALS

Characteristic and colour of light beam or pyrotechnic	*From an aerodrome*		*From an aircraft in flight to an aerodrome*
	to an aircraft in flight	*to an aircraft or vehicle on the aerodrome*	
(a) Continuous red light	Give way to other aircraft and continue circling.	Stop	–
(b) Red pyrotechnic light, or red flare	Do not land; wait for permission.	–	Immediate assistance is requested.
(c) Red flashes	Do not land; aerodrome not available for landing.	Move clear of landing area	–
(d) Green flashes	Return to aerodrome; wait for permission to land.	To an aircraft: You may move on the manoeuvring area and apron; To a vehicle: You may move on the manoeuvring area.	–
(e) Continuous green light	You may land.	You may take off (not applicable to a vehicle).	–
(f) Continuous green light, or green flashes, or green pyrotechnic light	–	–	By night: May I land? By day: May I land in direction different from that indicated by landing T?
(g) White flashes	Land at this aerodrome after receiving continuous green light, and then, after receiving green flashes, proceed to the apron.	Return to starting point on the aerodrome.	I am compelled to land.
(h) White pyrotechnic lights. Switching on and off the navigation lights. Switching on and off the landing lights.	–	–	I am compelled to land.

Marshalling signals (from a marshaller to an aircraft)

47. Each of the signals for the guidance of aircraft manoeuvring on or off the ground, described in the first column of Table B, paragraphs (a) to (x) shall, in the United Kingdom, have the meanings set forth in the second column of that Table opposite the description of the signal. By day any such signals shall be given by hand or by circular bats and by night by torches or illuminated wands.

Table B – Meaning of marshalling signals (rule 47)

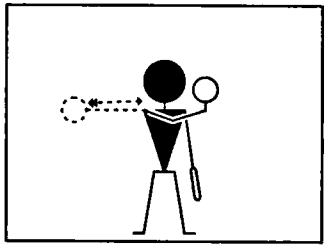
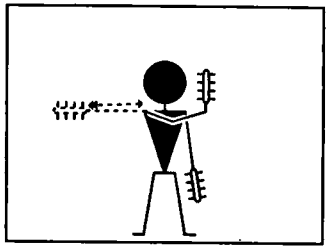
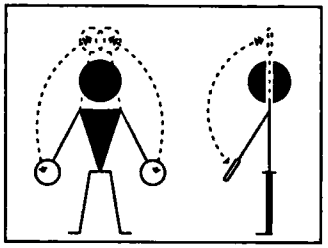
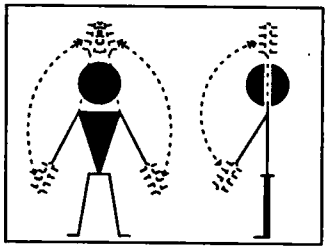
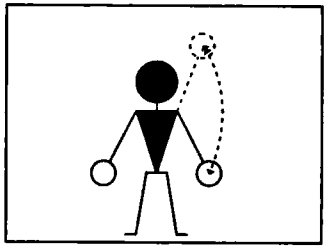
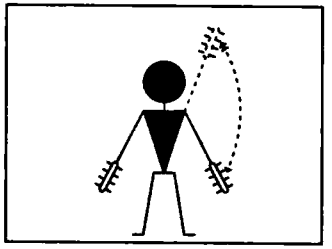
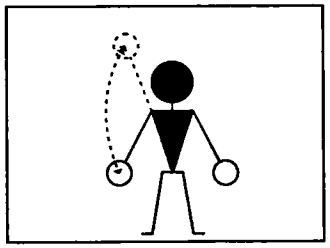
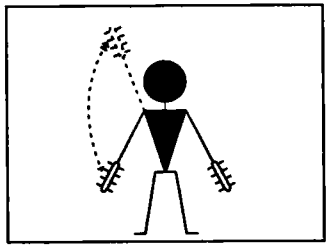
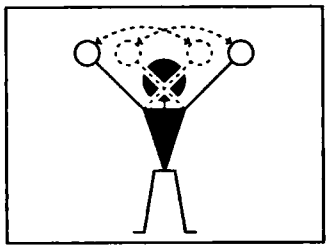
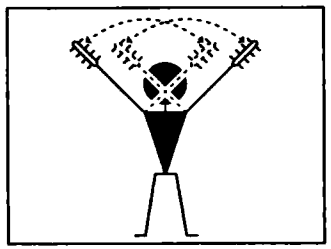
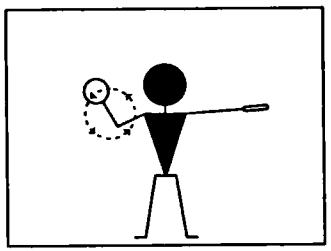
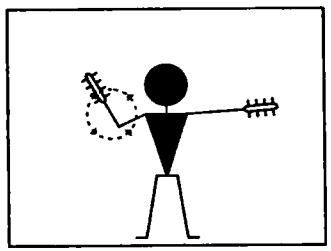
Description of signal	*Meaning of signal*	*In daylight*	*By night*
(a) Right or left arm down, the other arm moved across body and extended to indicate position of the other marshaller.	Proceed under guidance of another marshaller		
(b) Arms repeatedly moved upward and backward, beckoning onward.	Move ahead.		
(c) Right arm down, left arm repeatedly moved upward and backward. The speed of arm movement indicates the rate of turn.	Open up starboard engine or turn to port.		

Table B – *Continued*

Description of signal	*Meaning of signal*	*In daylight*	*By night*
(d) Left arm down, the right arm repeatedly moved upward and backward. The speed of arm movement indicates the rate of turn.	Open up port engine or turn to starboard.		
(e) Arms repeatedly crossed above the head. The speed of arm movement indicates the urgency of the stop.	Stop.		
(f) A circular notion of the right hand at head level, with the left arm pointing to the appropriate engine.	Start engines.		

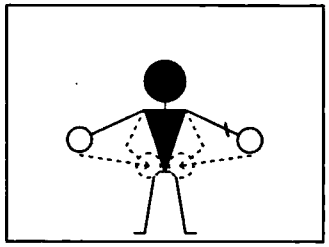
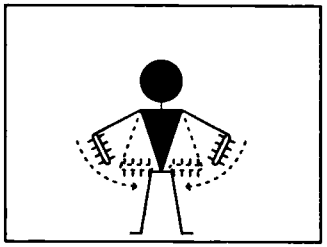
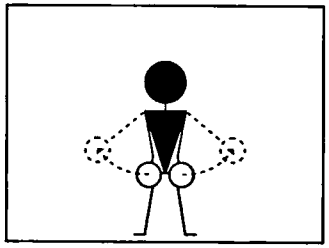
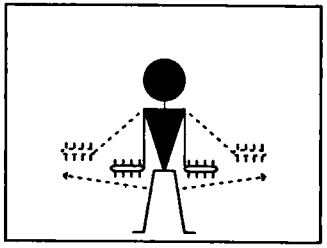
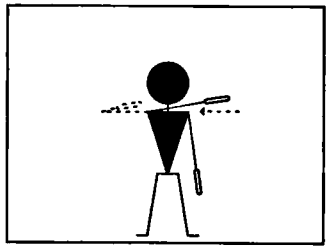
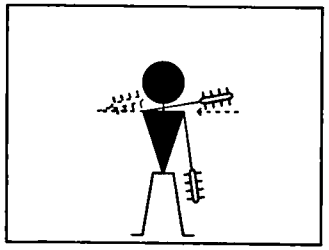
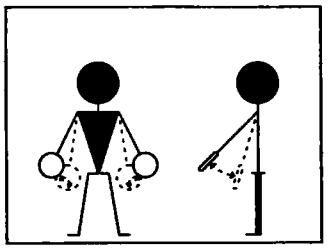
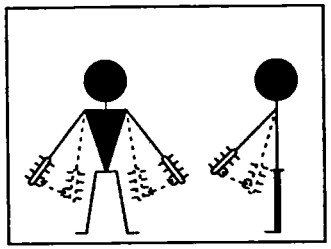
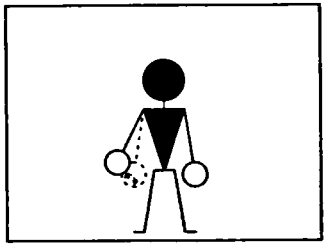
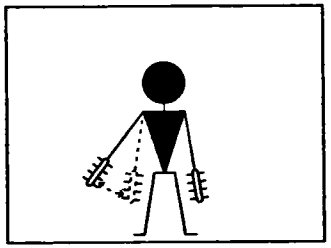
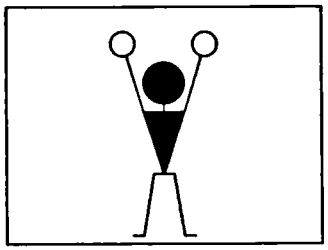
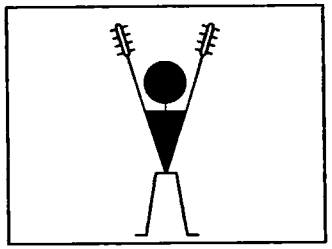
(g) Arms extended, the palms facing inwards, then swung from the extended position inwards.	Chocks inserted.		
(h) Arms down, the palms facing outwards, then swung outwards.	Chocks away.		
(j) Either arm and hand placed level with the chest, then moved laterally with the palm downwards.	Cut engines.		

Table B – *Continued*

Description of signal	*Meaning of signal*	*In daylight*	*By night*
(k) Arms placed down, with the palms towards the ground, then moved up and down several times.	Slow down.		
(l) Arms placed down, with the palms towards the ground, then either the right or left arm moved up and down indicating that the motors on the left or right side, as the case may be, should be slowed down.	Slow down engines on indicated side.		
(m) Arms placed above the head in a vertical position.	This bay.		

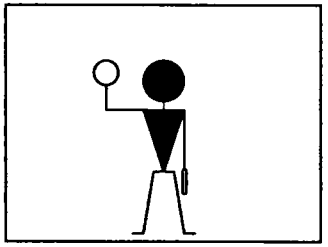
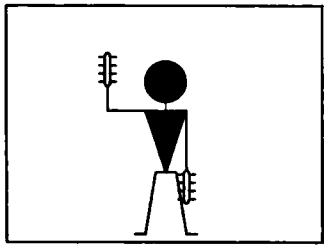
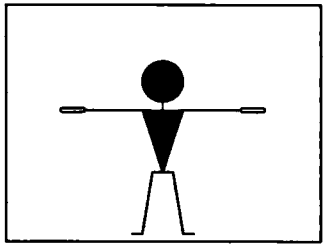
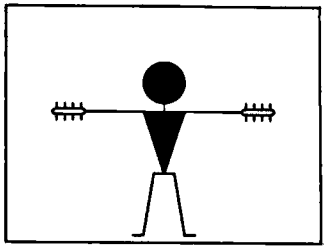
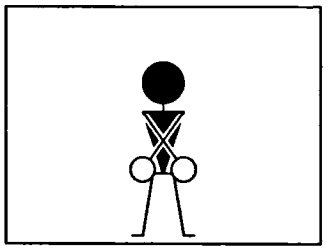
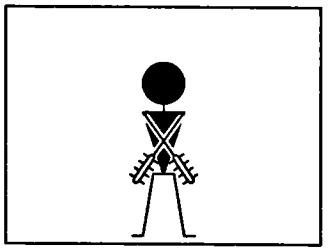
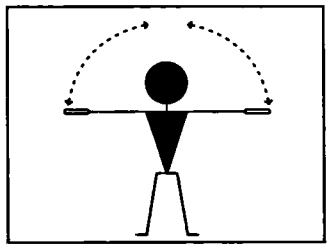
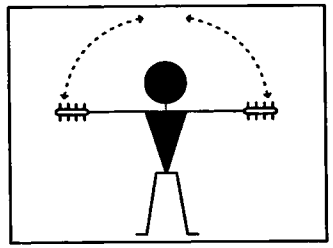
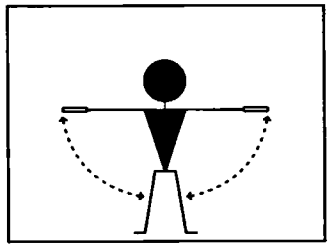
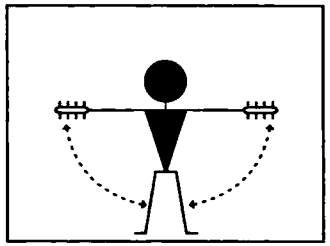
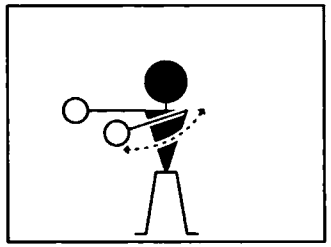
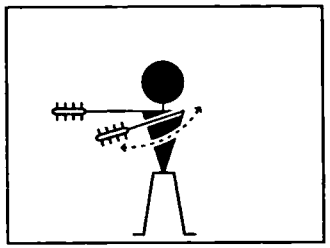
(n) The right arm raised at the elbow, with the arm facing forward.	All clear: marshalling finished.		
(o) Arms placed horizontally sideways.	Hover.		
(p) Arms placed down and crossed in front of the body.	Land.		

Table B – *Continued*

Description of signal	*Meaning of signal*	*In daylight*	*By night*
(q) Arms placed horizontally sideways with the palms up beckoning upwards. The speed of arm movement indicates the rate of ascent.	Move upwards.		
(r) Arms placed horizontally sideways with the palms towards the ground beckoning downwards. The speed of arm movement indicates the rate of descent.	Move downwards.		
(s) Either arm placed horizontally sideways, then the other arm moved in front of the body to that side, in the direction of the movement, indicating that the helicopter should move horizontally to the left or right side, as the case may be; repeated several times.	Move horizontally.		

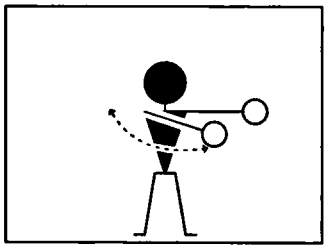
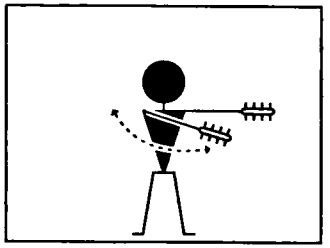
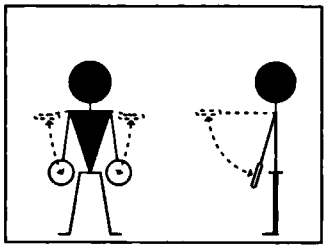
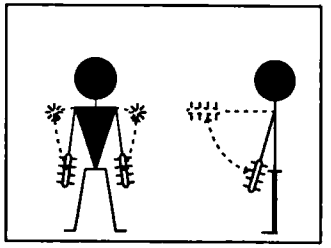
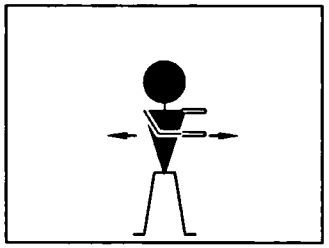
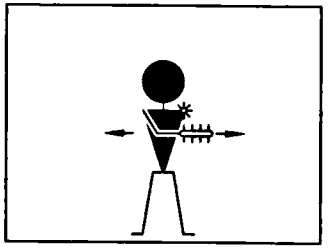
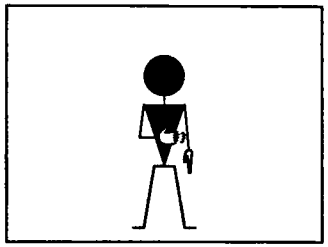
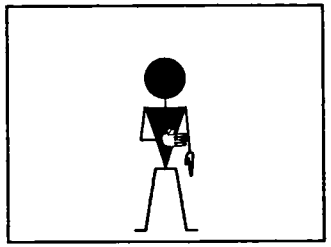
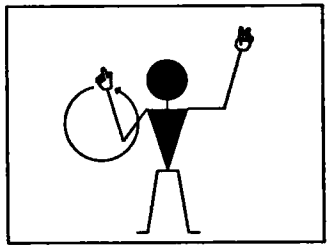
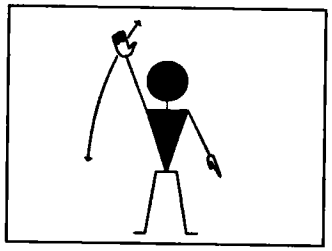
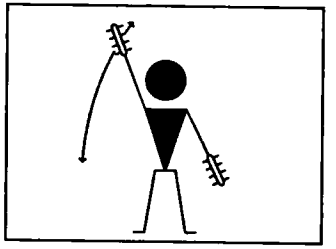
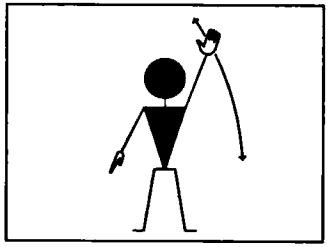
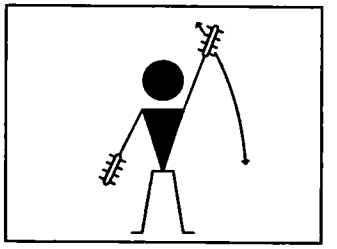
			
(t) Arms placed down, the palms facing forward, then repeatedly swept up and down to shoulder level.	Move back.		
(u) Left arm extended horizontally forward, then right arm making a horizontal slicing movement below left arm.	Release load.		

Table B – *Continued*

Description of signal	*Meaning of signal*	*In daylight*	*By night*
(v) Raise arm, with first clenched, horizontally in front of body, then extend fingers.	Release brakes.		
Raise arm and hand, with fingers extended, horizontally in front of body, then clench fist.	Engage brakes.		
(w) Left hand overhead with the number of fingers extended, to indicate the number of the engine to be started, and circular motion of right hand at head level.	Start engine(s).		

(x) Point left arm down, move right arm down from overhead, vertical position to horizontal forward position, repeating right arm movement.	Back aircraft's tail to starboard.		
Point right arm down, move left arm down from overhead, vertical position to horizontal forward position, repeating left arm movement.	Back aircraft's tail to port.		

Marshalling signals (from a pilot of an aircraft to a marshaller)

48. The following signals made by a pilot in an aircraft to a marshaller on the ground shall respectively have the following meanings:

Description of Signal	*Meaning of Signal*
(a) Raise arm and hand with fingers extended horizontally in front of face, then clench fist.	Brakes engaged.
(b) Raise arm with fist clenched horizontally in front of face, then extend fingers.	Brakes released.
(c) Arms extended palms facing outwards, move hands inwards to cross in front of face.	Insert chocks.
(d) Hands crossed in front of face, palms facing outwards, move arms outwards.	Remove chocks.
(e) Raise the number of fingers on one hand indicating the number of the engine to be started. For this purpose the aircraft engines shall be numbered in relation to the marshaller facing the aircraft, from his right to his left, for example, No. 1 engine shall be the port outer engine, No. 2 engine shall be the port inner engine, No. 3 engine shall be the starboard inner engine and No. 4 engine shall be the starboard outer engine.	Ready to start engines.

Distress, urgency and safety signals

49.—(1) The following signals, given either together or separately before the sending of a message, signify that an aircraft is threatened by grave and imminent danger and requests immediate assistance:

(a) by radiotelephony:
the spoken word "MAYDAY";

(b) visual signalling:
(i) the signal SOS(. . . --- . . .);
(ii) a succession of pyrotechnic lights fired at short intervals each showing a single red light;
(iii) a parachute flare showing a red light;

(c) by sound signalling other than radiotelephony:
(i) the signal SOS (. . . --- . . .);
(ii) a continuous sounding with any sound apparatus.

(2) The following signals, given either together or separately, before the sending of a message, signify that the commander of the aircraft wishes to give notice of difficulties which compel it to land but that he does not require immediate assistance:

(a) a succession of white pyrotechnic lights;

(b) the repeated switching on and off of the aircraft landing lights;

(c) the repeated switching on and off of its navigation lights, in such a manner as to be clearly distinguishable from the flashing navigation lights described in rule 11 of these Rules.

(3) The following signals, given either together or separately, indicate that the commander of the aircraft has an urgent message to transmit concerning the safety of a ship, aircraft, vehicle or other property or of a person on board or within sight of the aircraft from which the signal is given:

(a) by radiotelephony:
the spoken word "PAN PAN";

(b) by visual signalling:
the signal XXX (– . . -- . . -- . . –);

(c) by sound signalling other than radiotelephony:
the signal XXX (– . . -- . . -- . . –).

Warning Signals to aircraft in flight

50. In the United Kingdom, by day or by night, a series of projectiles discharged from the ground at intervals of 10 seconds, each showing, on bursting, red and green lights or stars, shall indicate to the commander of an aircraft that his aircraft is flying in or about to enter an active danger area or an area to which regulations made pursuant to article 74(1)(a)(iii) of the Order relate and that he is required to take such action as may be necessary to leave the area or change course to avoid the area.

EXPLANATORY NOTE

(This Note is not part of the Regulations)

These Regulations consolidate the Rules of the Air and Air Traffic Control Regulations 1985, as amended.

In addition to some minor drafting amendments the following changes are made:–

(1) A public transport helicopter on an offshore installation may, in accordance with a specified procedure, switch off its anti-collision light as a signal that it is safe for persons to approach the helicopter (rule 9(2)(b)).

(2) Section X is deleted in its entirety. Similar provisions are now included in articles 69A and 69B of the Air Navigation Order 1989, as amended by the Air Navigation (Amended) Order 1990.