

Regulations made under powers in the Civil Aviation Act 1982 and the Air Navigation Order 2016

Published for the use of those concerned with air navigation,
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CAP 393



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Foreword

1 Status

1.1 This work sets out various Regulations made under powers in the Civil Aviation Act 1982 and the Air Navigation Order 2016 namely:

- The Rules of the Air Regulations;
- The Air Navigation (General) Regulations;
- The Air Navigation (Cosmic Radiation) (Keeping of Records) Regulations;
- The Air Navigation (Dangerous Goods) Regulations;
- Various Permanent Air Navigation (Restriction of Flying) Regulations; and
- The Civil Aviation Authority Regulations.:

1.2 Users must bear in mind that this is an unofficial version of this legislation, and the authoritative versions (which Courts of Law will refer to) is the Queen's Printer's Edition of Statutory Instruments available at www.legislation.gov.uk

2 Enquiries

2.1 Any comments or other communication relating to the contents of CAP 393 should be addressed to the CAA's Office of the General Counsel
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SECTION 2

The Rules of the Air Regulations 2015

Made: 17 March 2015

Coming into force: 30 April 2015

The Secretary of State, in exercise of the powers conferred by article 160(1) of the Air Navigation Order 2009^(a), makes the following Regulations.

Citation and commencement

1. These Regulations may be cited as the Rules of the Air Regulations 2015 and come into force on 30th April 2015.

Rules of the Air

2. The Rules of the Air in Schedule 1 have effect and may be cited as the Rules of the Air 2015.

Review

3.—(1) The Secretary of State must from time to time—

- (a) carry out a review of the Rules in Schedule 1 to these Regulations;
- (b) set out the conclusions of the review in a report; and
- (c) publish the report.

(2) The report must in particular—

- (a) set out the objectives to be achieved by the Rules;
- (b) assess the extent to which those objectives have been achieved; and
- (c) assess whether those objectives remain appropriate and, if so, the extent to which they could be achieved by a system of lesser regulation.

(3) The first report under this regulation must be published before 30th April 2020.

(4) Reports under this regulation are to be published at intervals not exceeding five years.

Revocation

4. The Regulations listed in Schedule 2 are revoked.

^(a) S.I. 2009/3015; amended by S.I. 2014/3302. There are other amendments to the Order but none is relevant.

SCHEDULE 1

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Section 1

Interpretation

Interpretation

- 1.—(1) In these Rules “anti-collision light” means—
- (a) in relation to rotorcraft, a flashing red light; and
 - (b) in relation to any other aircraft, a flashing red or flashing white light,
- in either case showing in all directions.
- (2) Subject to paragraph (3), terms used in these Rules which are defined in article 2 of the Standardised European Rules of the Air Regulation^(a) have the same meaning as given in that article.
- (3) The term “aerodrome traffic zone” has the same meaning as given in article 5 of the Air Navigation Order 2016^(b).
- (4) References in these Rules to “SERA” followed by a number refer to the provision with the corresponding number in SERA^(c).

Section 2

Application and compliance

Application of Rules to aircraft

2. Subject to rule 6 and to articles 249(3) and 22(1) of the Air Navigation Order 2016 and insofar as these Rules apply to aircraft they apply—
- (a) to all aircraft within the United Kingdom; and
 - (b) to all aircraft registered in the United Kingdom, wherever they may be^(d).

-
- (a) Commission Implementing Regulation (EU) No. 923/2012 of the European Parliament and of the Council of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (O.J. No.L281 of 13.10.2012, p.1).
 - (b) [S.I. 2016/765](#).
 - (c) The definition of the term “SERA” was inserted into article 255(1) of the Air Navigation Order 2009 by article 76 of S.I. 2014/3302 and means the Annex to the Standardised European Rules of the Air Regulation.
 - (d) Article 160(3) of the Air Navigation Order 2009 provides that it is lawful for any of the Rules of the Air to be departed from to the extent necessary for avoiding immediate danger, complying with the law of any country other than the United Kingdom within which the aircraft then is or for complying with Military Flying Regulations or Flying Orders to Contractors issued by the Secretary of State. Article 252(1) of the Air Navigation Order 2009 provides that nothing in the Order applies to military aircraft apart from certain

Permissions

3. Wherever in these Rules there is provision for a permission to be granted by the CAA^(a) for the purposes of a rule, it may be granted—

- (a) in respect of classes of aircraft, persons or vehicles generally or in respect of any particular aircraft, person or vehicle or class of aircraft, person or vehicle; and
- (b) subject to such conditions as the CAA thinks fit.

specified articles, including article 160(1)(a). A “military aircraft” is defined in article 255(1) of the Air Navigation Order 2009.

(a) The CAA is a body corporate, called the Civil Aviation Authority, constituted under section 2 of the Civil Aviation Act 1982 (c.16). Section 2 is amended by section 95 of the Civil Aviation Act 2012 (c.19).

Section 3

General rules, collision avoidance and protection of persons and property

Aerobatic flights

4. Aerobatic flight is not permitted—
- (a) over the congested area of any city, town or settlement; or
 - (b) within notified controlled airspace^(a) other than with the consent of the air traffic control unit notified as serving that airspace.

Landing and taking off within congested areas and near open-air assemblies

5.—(1) An aircraft must not take off or land within a congested area of any city, town or settlement except—

- (a) at an aerodrome in accordance with procedures notified by the CAA; or
- (b) at a landing site which is not an aerodrome in accordance with the permission of the CAA.

(2) An aircraft must not land or take-off within 1,000 metres of an open-air assembly of more than 1,000 persons except—

- (a) at an aerodrome in accordance with procedures notified by the CAA; or
- (b) at a landing site which is not an aerodrome in accordance with procedures notified by the CAA and with the written permission of the organiser of the assembly.

Test flying over congested areas

6.—(1) Subject to paragraph (2), an aircraft to which this rule applies must not fly over a congested area of any city, town or settlement other than to the extent necessary in order to take off or land in accordance with normal aviation practice.

(2) Paragraph (1) does not apply if the CAA has given its written permission for the flight over the congested area.

(3) This rule applies to an aircraft that—

- (a) does not have a valid certificate of airworthiness in force; and
- (b) is flying for the purpose of—
 - (i) experimenting with or testing—
 - (aa) the aircraft; or
 - (bb) any engines or equipment installed or carried in the aircraft; or
 - (ii) enabling the aircraft to qualify for—
 - (aa) the issue or validation of a certificate of airworthiness;
 - (bb) the approval of a modification of the aircraft; or
 - (cc) the issue of a permit to fly.

(a) "Notified" and "controlled airspace" are defined in article 255(1) of the Air Navigation Order 2009. The classification of airspace in the United Kingdom is notified in the Aeronautical Information Publication which is published by the CAA.

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

7.—(1) An aircraft must not take off from an aerodrome with tow ropes, banners or similar articles towed by it except in accordance with arrangements made with the air traffic control unit at the aerodrome or, if there is no such unit, the person in charge of the aerodrome.

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

- (a) in accordance with arrangements made with the 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 20(7), but only when the aircraft is flying in the direction appropriate for landing.

Avoiding aerial collisions

8. For the purposes of SERA.3201, SERA.3205 and SERA.3210 a glider and a flying machine which is towing it are to be considered to be a single aircraft under the command of the commander of the flying machine.

Order of landing

9.—(1) If an air traffic control unit has communicated to any aircraft an order of priority for landing, the aircraft must approach to land in that order.

(2) If the commander of an aircraft which has previously been given permission to land gives way to another aircraft that is making an emergency landing at night, that commander must not attempt to land until the commander has received further permission to do so.

Landing and take-off

10.—(1) Subject to paragraph (4), a flying machine or glider must not land on a runway at an aerodrome if there are other aircraft on the runway.

(2) If take-offs and landings are not confined to a runway—

- (a) when landing, a flying machine or glider must leave clear on its left any aircraft which has landed, is already landing or is about to take off;
- (b) a flying machine or glider which is about to turn must turn to the left if the commander of the aircraft is satisfied that such action will not interfere with other traffic movements; and
- (c) a flying machine which is about to take off must 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.

(3) Subject to paragraph (4), a flying machine must move clear of the landing area as soon as it is possible to do so after landing.

(4) Paragraphs (1) and (3) do not apply if the air traffic control unit at the aerodrome otherwise authorises the flying machine or glider.

Flight within aerodrome traffic zones

11.—(1) This rule applies in relation to such aerodromes described in Column 1 of Table 1 as are notified for the purposes of this rule and at such times as are specified in Column 2 of the Table.

Table 1

<i>Table Column 1</i>	<i>Column 2</i>
(a) A Government aerodrome.	At such times as are notified.
(b) An aerodrome having an air traffic control unit or flight information service centre.	During the notified hours of watch of the air traffic control unit or the flight information service centre.
(c) A national licensed aerodrome or an EASA certificated aerodrome having an air/ground communications service unit with aircraft.	During the notified hours of watch of the air/ground communications service unit.

(2) An aircraft must not fly, take off or land within the aerodrome traffic zone of an aerodrome unless the commander of the aircraft has complied with paragraphs (3), (4) or (5), as appropriate.

(3) If the aerodrome has an air traffic control unit the commander must obtain the permission of that unit to enable the flight to be conducted safely within the aerodrome traffic zone.

(4) If the aerodrome provides a flight information service the commander must obtain information from the flight information centre to enable the flight to be conducted safely within the aerodrome traffic zone.

(5) If there is no flight information centre at the aerodrome the commander must obtain information from the air/ground communication service to enable the flight to be conducted safely within the aerodrome traffic zone.

(6) The commander of an aircraft flying within the aerodrome traffic zone of an aerodrome must—

- (a) cause a continuous watch to be maintained on the appropriate radio frequency notified for communications at the aerodrome; or
- (b) if this is not possible, cause a watch to be kept for such instructions as may be issued by visual means; and
- (c) if the aircraft is fitted with means of communication by radio with the ground, communicate the aircraft's position and height to the air traffic control unit, the flight information centre or the air/ground communications service unit at the aerodrome (as the case may be) on entering the aerodrome traffic zone and immediately prior to leaving it.

Movement of aircraft on uncontrolled aerodromes

12.—(1) An aircraft must not taxi on the apron or the manoeuvring area of an uncontrolled aerodrome without the permission of either—

- (a) the person in charge of the aerodrome; or
- (b) the flight information centre notified as being on watch at the aerodrome.

(2) In this rule “uncontrolled aerodrome” means an aerodrome at which no air traffic control service is provided to aerodrome traffic regardless whether or not an air traffic zone exists.

Access to and movement of persons and vehicles on the aerodrome

13.—(1) Unless there is a public right of way over it, a person or vehicle must—

- (a) not go onto any part of an aerodrome without the permission of the person in charge of that part of the aerodrome; and
- (b) comply with any conditions subject to which that permission may be granted.

(2) A person or vehicle must—

- (a) not go onto or move on the manoeuvring area of an aerodrome which provides an air traffic control service or a flight information service without the permission of the person providing that service; and
- (b) comply with any conditions subject to which that permission may be granted.

Section 4

Lights to be displayed by aircraft

Stationary helicopters on offshore or renewable energy installations

14. Notwithstanding SERA.3215 a helicopter may, when stationary on an offshore or renewable energy installation, switch off the red anti-collision light as long as that is done in accordance with a procedure contained in the operations manual of the helicopter operator 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.

Failure of anti-collision and navigation lights

15.—(1) If any light required to be displayed by SERA.3215 fails during flight at night and cannot be immediately repaired or replaced, the aircraft must land as soon as it can safely do so, unless authorised by the appropriate air traffic control unit to continue its flight.

(2) An aircraft may continue to fly during the day in the event of a failure of an anti-collision light provided the light is repaired at the earliest practicable opportunity.

Airships by day

16.—(1) An airship flying during the day in any of the circumstances referred to in paragraph (2) must 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.

(2) The circumstances are that—

- (a) the airship is not under command;
- (b) the airship has voluntarily stopped its engines; or
- (c) the airship is being towed.

(3) For the purposes of this rule an airship is not under command when it is unable to execute a manoeuvre which it may be required to execute by these Rules.

Section 5

Aerodrome visual signals and markings

Aerodrome Visual Signals and Markings

17. Within the United Kingdom any signal or marking which is specified in these Rules and which is given or displayed—

- (a) by any person in an aircraft;
- (b) at an aerodrome; or
- (c) at any other place which is being used by aircraft for landing or take-off,

has the meaning assigned to it by this section.

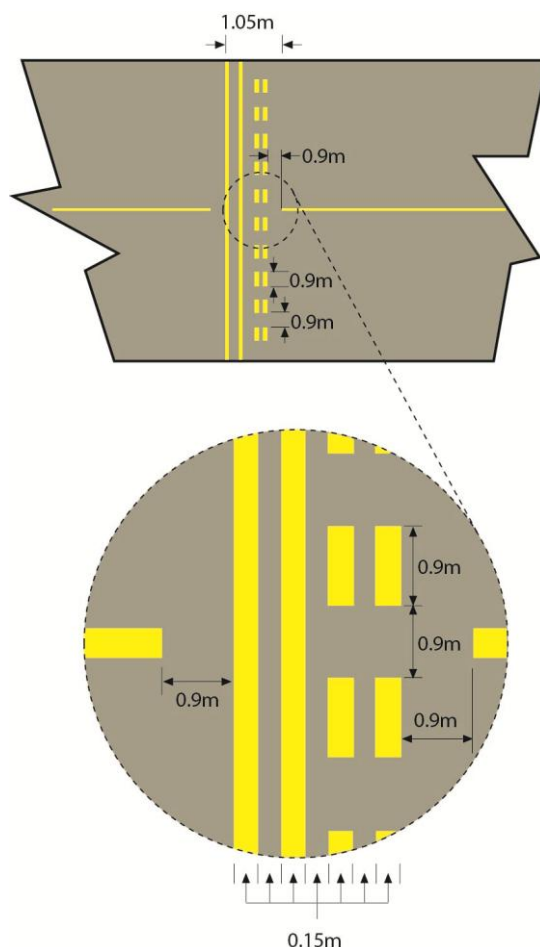
Misuse of signals and markings

18. A person in an aircraft or on an aerodrome or at any place at which an aircraft is taking off or landing must not—

- (a) make any signal which may be confused with a signal specified in SERA.3301 and Appendix 1 to SERA; or
- (b) except with lawful authority, make any signal which the person 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.

Markings for paved runways and taxiways

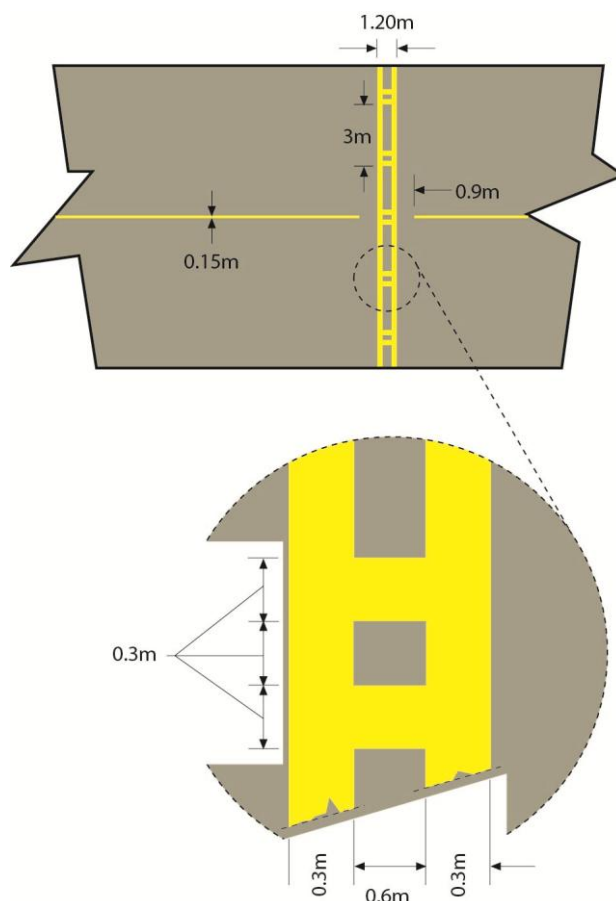
19.—(1) Subject to paragraph (2), two yellow broken lines and two yellow continuous lines, as illustrated in the diagrams in this paragraph—



signify the designated visual holding position associated with a runway beyond which no part of a flying machine or vehicle must project in the direction of the runway without permission from the air traffic control unit at the aerodrome during the notified hours of watch of that unit.

(2) Outside the notified hours of watch of that unit or where there is no air traffic control unit at the aerodrome the markings referred to in paragraph (1) signify the position closest to the runway beyond which no part of a flying machine or vehicle must project in the direction of the runway when the flying machine or vehicle is required to give way to aircraft which are taking off from or landing on that runway.

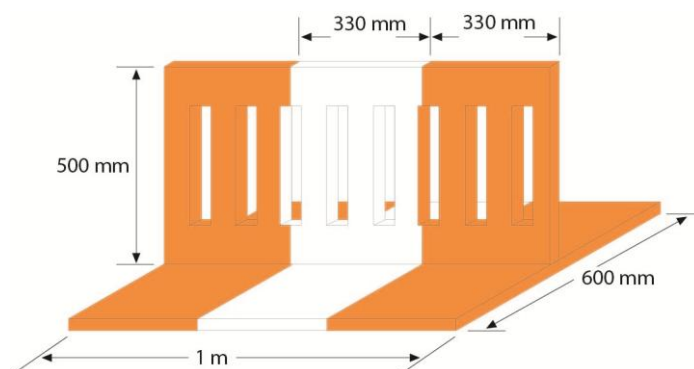
(3) Subject to paragraph (4), a marking, consisting of two yellow, parallel perpendicular lines intersected by horizontal yellow lines, as illustrated in the diagrams in this paragraph—



signifies a holding position other than that closest to the runway beyond which no part of a flying machine or vehicle must project in the direction of the runway without permission from the air traffic control unit at the aerodrome during the notified hours of watch of that unit.

(4) Outside the notified hours of watch of that unit or where there is no air traffic control unit at the aerodrome the marking referred to in paragraph (3) may be disregarded.

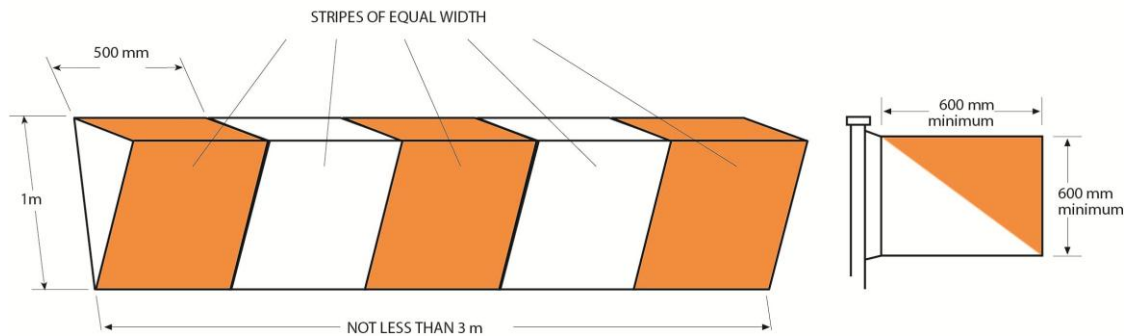
(5) Orange and white markers spaced not more than 15 metres apart, as illustrated in the diagram in this paragraph—



signify the boundary of that part of a paved runway, taxiway or apron which is unfit for the movement of aircraft.

Supplementary markings for use on unpaved manoeuvring areas

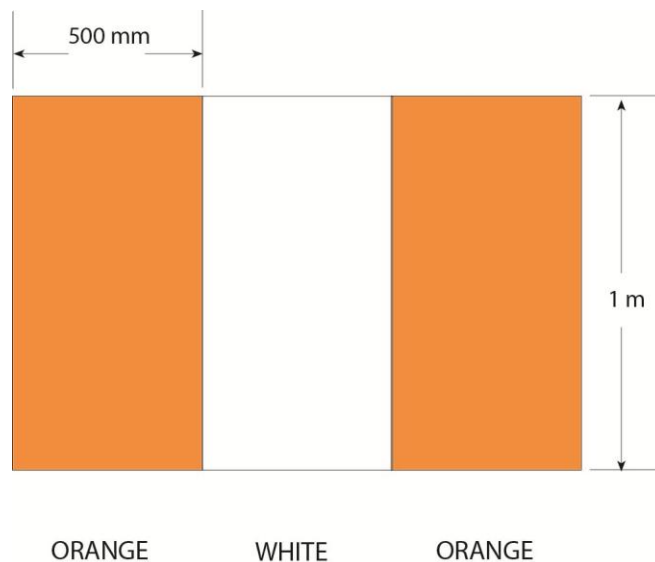
20.—(1) Markers with orange and white stripes of an equal width of 50 centimetres, with an orange stripe at each end, alternating with flags 60 centimetres square showing equal orange and white triangular areas, spaced not more than 90 metres apart, as illustrated in the diagram in this paragraph—



indicate the boundary of an area unfit for the movement of aircraft.

(2) Striped markers, as specified in paragraph (1), 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 50 centimetres, with an orange stripe at each end, spaced not more than 45 metres apart, as illustrated in the diagram in this paragraph—

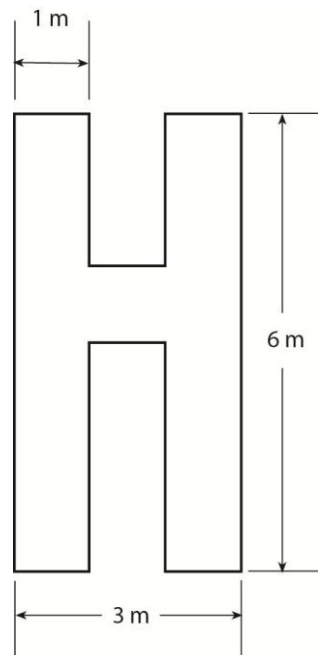


indicate the boundary of an aerodrome.

(4) The pattern of the marker referred to in sub-paragraph (3) must be visible from inside and outside the aerodrome and the marker must be affixed not more than 15 centimetres from the top of the structure.

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

(6) A white letter H, as illustrated in the diagram in this paragraph—



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

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

(8) A white letter 'T', as specified in SERA, Appendix 1, paragraph 3.2.5.1, placed at the left-hand side of a runway (when viewed from the direction of landing), also indicates the runway to be used for take-off and landing.

Signals visible from the ground

21. 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.

Section 6

Visual Meteorological Conditions, Visual Flight Rules, Special VFR and Instrument Flight Rules

Classification of airspaces and rules for flight

22. Subject to rule 23, all aircraft must be flown in accordance with the requirements for flight in airspace that have been notified in accordance with the airspace classifications and flight rules specified in SERA.6001 and in Appendix 4 of SERA.

Flight in Class C airspace in VMC

23.—(1) Subject to paragraph (2), an aircraft flying in visual meteorological conditions—

(a) in Class C airspace above flight level 195; or

(b) along a Class C ATS route at any level,

must be flown in accordance with the instrument flight rules^(a).

(2) Paragraph (1) does not apply to an aircraft which is flying in accordance with a permission issued by the CAA.

(3) In this Rule “Class C ATS route” means a route notified as such.

Use of radio navigation aids

24.—(1) Subject to paragraph (2), the commander of an aircraft must not make use of a radio navigation aid without complying with such restrictions and procedures as may be notified in relation to that aid.

(2) The commander of an aircraft is not required to comply with this rule if—

(a) the aircraft is required to comply with an air traffic control clearance issued for the flight; or

(b) the commander is otherwise authorised by an air traffic control unit.

Air traffic control clearance for flights by aircraft without radio equipment

25.—(1) An aircraft without radio equipment must not fly in Class B, Class C or Class D airspace during the notified hours of watch of the appropriate air traffic control unit unless it has been authorised to do so by that unit and complies with the conditions in paragraph (3).

(2) An aircraft without radio equipment and flown in accordance with the instrument flight rules must not fly in Class E airspace during the notified hours of watch of that unit unless it has been authorised to do so by the unit and complies with the conditions in paragraph (3).

(3) The conditions are that the aircraft must—

(a) only fly during the day;

(b) only fly within controlled airspace notified for the purpose of this paragraph;

(c) remain at least 1,500 metres horizontally and 1,000 feet vertically away from cloud and in a flight visibility of at least 5 km; and

(d) comply with any conditions or requirements specified by the appropriate air traffic control unit.

(a) The instrument flight rules are prescribed by Section 5 of SERA.

Schedule 2

Regulation 4

Revocations

<i>Regulations revoked</i>	<i>Reference</i>
The Rules of the Air Regulations 2007	S.I. 2007/734
The Rules of the Air (Amendment) Regulations 2007	S.I. 2007/1371
The Rules of the Air (Amendment) Regulations 2008	S.I. 2008/669
The Rules of the Air (Amendment) Regulations 2009	S.I. 2009/2169
The Rules of the Air (Amendment) Regulations 2010	S.I. 2010/841

SECTION 3**The Air Navigation (General) Regulations 2006**

Statutory Instruments

2006 No. 601**Civil Aviation****The Air Navigation (General) Regulations 2006**

Made: 6th March 2006

Coming into force: 30th March 2006

Arrangement of Regulations**Part 1 General**

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Schedule 2 Helicopter performance

The Secretary of State for Transport, in exercise of his powers under articles 16(7)(a), 20(2), 20(4), 42(1)(c)(ii), 43(5), 44(5), 44(6), 45(1), 56(1), 57(1), 58(b), 131(1), 142(6), 143(2) and 155(1) of, and paragraphs 4 and 5(1) of Schedule 5 to, the Air Navigation Order 2005(a), makes the following Regulations.

Part 1

General

1 Citation and commencement

These Regulations may be cited as the Air Navigation (General) Regulations 2006, and shall come into force on 30th March 2006.

2 Revocation

The Air Navigation (General) Regulations 2005(b) are revoked.

3 Interpretation

In these Regulations:

- (a) “the Order” means the Air Navigation Order 2005;
- (b) references to an “article” mean an article of the Order; and

- (c) other expressions used in these Regulations shall have the same respective meanings as in the Order.

Part 2

Load Sheets and Weighing Requirements

4 Particulars of load sheet

Every load sheet required by article 43(5) shall contain the following particulars—

- (a) the nationality mark of the aircraft to which the load sheet relates, and the registration mark assigned to that aircraft by the CAA;
- (b) particulars of the flight to which the load sheet relates;
- (c) the total weight of the aircraft as loaded for that flight;
- (d) the weights of the several items from which the total weight of the aircraft, as so loaded, has been calculated including in particular the weight of the aircraft prepared for service and the respective total weights of the crew (unless included in the weight of the aircraft prepared for service), passengers, baggage and cargo intended to be carried on the flight;
- (e) the manner in which the load is distributed;
- (f) the position of the centre of gravity of the aircraft resulting from the particulars mentioned in sub-paragraphs (c), (d) and (e) which may be given approximately if and to the extent that the relevant certificate of airworthiness so permits; and
- (g) a certificate at the foot or end of the load sheet, signed by the person referred to in article 43(1) as responsible for the supervision of the loading of the aircraft, that the aircraft has been loaded in accordance with the written instructions furnished to him by the operator of the aircraft pursuant to article 43(1).

Weighing requirements—passengers, crew and hand baggage

5

- (1) Subject to paragraph (2), for the purpose of calculating the total weight of the aircraft the respective total weights of the passengers and crew together with their hand baggage entered in the load sheet shall be computed from the actual weight of each person and their hand baggage and for that purpose each person and their hand baggage shall be separately weighed.
- (1) The total weights of the passengers and crew together with their hand baggage may, in accordance with paragraphs (3) to (8) and subject to regulation 7, be

calculated at not less than the appropriate weights shown in Tables 1 or 2 and the load sheet shall bear a notation to that effect.

- (2) Subject to paragraph (4) where the total number of passenger seats available on an aircraft is 20 or more, the weights for males and females in columns 1 and 2 of Table 1 shall be applicable.
- (3) Where the total number of passenger seats available is 30 or more, the “all adult” weights in column 3 of Table 1 may be used for passengers over the age of 12 years.
- (4) For the purpose of Table 1, ‘holiday charter’ means a flight by an aircraft for the carriage of passengers each of whom is carried pursuant to an agreement which provides for carriage by air to a place outside the United Kingdom and back from that place, or from another place to the United Kingdom (whether or not on the same aircraft) and for accommodation at a place outside the United Kingdom.

Table 1

Aircraft with 20 or more passengers			
	Passenger Seats Available		
	20 or more	30 or more	
	Column 1	Column 2	Column 3
	Male	Female	All adult
Passengers on all flights except holiday charters	88kg	70kg	84kg
Passengers on holiday charters	83kg	69kg	76kg
Children (between 2–12 years) or infants under 2 years of age if occupying a separate seat	35kg	35kg	
Infants under 2 years of age if sharing a seat with an adult	0kg	0kg	
Flight crew	85kg	85kg	
Cabin crew	75kg	75kg	

- (5) Where the total number of passenger seats available on an aircraft is 19 or less the weights in Table 2 shall be applicable.

Table 2

Aircraft with fewer than 20 passenger seats			
	Passenger Seats Available		
	1—5	6—9	10—19
Male passengers	104kg	96kg	92kg
Female passengers	86kg	78kg	74kg
Children (between 2-12 years) or infants under 2 years of age if occupying a separate seat	35kg	35kg	35kg
Infants under 2 years of age if sharing a seat with an adult	0kg	0kg	0kg
Flight crew	85kg	85kg	85kg
Cabin crew	75kg	75kg	75kg

- (6) On flights where no hand baggage is carried or where such hand baggage is accounted for separately, 6 kg may be deducted from the weight of passengers over 12 years of age when using Table 2.
- (7) Where an immersion suit is worn or carried by a passenger or crew member, 3kg shall be added to the appropriate weight shown in Table 1 or 2 in each such case.

Weighing requirements—hold baggage and cargo

6

- (1) Subject to paragraph (2), for the purpose of calculating the total weight of the aircraft the respective total weights of the hold baggage and cargo entered in the load sheet shall be computed from the actual weight of each piece of baggage, cargo or cargo container and for that purpose each piece or container shall be separately weighed.
- (2) In the case of an aircraft where the total number of passenger seats available is 20 or more, the total weights of the hold baggage may, subject to regulation 7, be calculated at not less than the weights shown in Table 3 and the load sheet shall bear a notation to that effect.

Table 3

Hold Baggage

Journey made by aircraft	Hold baggage per aircraft
Domestic journey	11kg
European journey	13kg
Intercontinental journey	15kg

- (3) For the purposes of Table 3:
- (4) a 'domestic journey' means a journey made by an aircraft which is confined within an area enclosed by rhumb lines joining successively the points shown in Table 4 but excluding any journey to or from Shannon;

Table 4

Domestic journey				
N6100.00	W01100.00		N6100.00	E00200.00
N5105.00	E00200.00		N4930.00	W00400.00
N4930.00	W01100.00		N6100.00	W01100.00

a 'European journey' is a journey made by an aircraft, not being a domestic journey, which is confined within an area enclosed by the rhumb lines joining successively the points shown in Table 5;

Table 5

European journey				
N7200.00	E04500.00		N4000.00	E04500.00
N3500.00	E03700.00		N3000.00	E03700.00
N3000.00	W00600.00		N2700.00	W00900.00
N2700.00	W03000.00		N6700.00	W03000.00
N7200.00	W01000.00		N7200.00	E04500.00

an 'intercontinental journey' is a journey made by an aircraft which is neither a domestic journey nor a European journey.

7 Loading—additional provisions

- (1) If it appears to the person supervising the loading of the aircraft that any of the circumstances described in paragraph (2) arise he shall, if he considers it necessary in the interests of the safety of the aircraft, or if the CAA has so directed in the particular case, require any such person and his hand baggage, passenger or hold baggage, as the case may be, to be weighed for the purpose of the entry to be made in the load sheet.
- (2) The circumstances referred to in paragraph (1) are:
- (a) any person and his hand baggage to be carried exceeds the weights set out in Tables 1 or 2;
 - (b) where regulation 5(7) applies, any passenger to be carried exceeds the weights set out in Table 2 as adjusted in accordance with that paragraph;
- or

- (c) any hold baggage to be carried exceeds the weights set out in Table 3.
- (3) If any person and his hand baggage, passenger or any hold baggage has been weighed pursuant to paragraph (1), the weights entered in the load sheet shall take account of:
 - (a) the actual weight of that person and his hand baggage, that passenger or that hold baggage, as the case may be; or
 - (b) the weight determined in accordance with regulation 5(2) or regulation 6(2), whichever weight shall be the greater.

Part 3

Aircraft performance

8 Aeroplanes to which article 44(5) applies

- (1) Aeroplanes to which this regulation applies shall comply with Schedule 1.
- (2) This regulation applies to aeroplanes for which the CAA has granted a permission under article 44(5) except any aeroplane flying solely for the purpose of training persons to perform duties in aeroplanes.

9 Helicopters to which article 45(1) applies

- (1) Helicopters to which this regulation applies shall comply with Schedule 2.
- (2) This regulation applies to helicopters to which article 45(1) applies except any helicopter flying solely for the purpose of training persons to perform duties in helicopters.

10 Weight and performance—general provisions

- (1) The assessment of the ability of an aeroplane to comply with the requirements of Schedule 1 and of a helicopter to comply with the requirements of Schedule 2 shall be based on the specified information as to its performance.
- (2) In assessing the ability of an aeroplane to comply with sub-paragraphs (9), (12), (15) and (17) of paragraph 1 of Schedule 1, with sub-paragraphs (8) and (12) of paragraph 6 of Schedule 1 and with sub-paragraph (15) of paragraph 7 of Schedule 1, account may be taken of any reduction of the weight of the aeroplane which may be achieved after the failure of a power unit by such jettisoning of fuel as is feasible and prudent in the circumstances of the flight and in accordance with the flight manual relating to the aircraft.
- (3) In this Part and in Schedules 1 and 2:

 'specified' in relation to an aircraft means, unless otherwise stated, specified in, or ascertainable by reference to:

- (a) the certificate of airworthiness in force in respect of that aircraft; or
- (b) the flight manual or performance schedule for that aircraft;

'the accelerate-stop distance' means the distance from the point on the surface of the aerodrome at which the aeroplane can commence its take-off run to the nearest point in the direction of take-off at which the aeroplane cannot roll over the surface of the aerodrome and be brought to rest in an emergency without the risk of accident;

'the landing distance available' means the distance from the point on the surface of the aerodrome at which the aeroplane can commence its landing, having regard to the obstructions in its approach path, to the nearest point in the direction of landing at which the surface of the aerodrome is incapable of bearing the weight of the aeroplane under normal operating conditions or at which there is an obstacle capable of affecting the safety of the aeroplane;

'the take-off distance available' means either the distance from the point on the surface of the aerodrome at which the aeroplane can commence its take-off run to the nearest obstacle in the direction of take-off projecting above the surface of the aerodrome and capable of affecting the safety of the aeroplane, or one and one half times the take-off run available, whichever is the less;

'the take-off run available' means the distance from the point on the surface of the aerodrome at which the aeroplane can commence its take-off run to the nearest point in the direction of take-off at which the surface of the aerodrome is incapable of bearing the weight of the aeroplane under normal operating conditions.

(4) For the purposes of Schedules 1 and 2:

- (a) the weight of the aircraft at the commencement of the take-off run or of the take-off shall be taken to be its gross weight including everything and everyone carried in or on it at the commencement of the take-off run or of the take-off;
- (b) the landing weight of the aircraft shall be taken to be the weight of the aircraft at the estimated time of landing allowing for the weight of the fuel and oil expected to be used on the flight to the aerodrome of intended destination or any alternate aerodrome, as the case may be;
- (c) where any distance referred to in paragraph (3) has been declared in respect of any aerodrome by the authority responsible for regulating air navigation over the territory of the Contracting State in which the aerodrome is situated, and in the case of an aerodrome in the United Kingdom, notified, that distance shall be deemed to be the relevant distance.

Part 4

Noise and vibration, maintenance and aerodrome facilities

11 Noise and vibration caused by aircraft on aerodromes

For the purposes of article 131(1), the conditions under which noise and vibration may be caused by aircraft (including military aircraft) on Government aerodromes, licensed aerodromes or on aerodromes at which the manufacture, repair or maintenance of aircraft is carried out by persons carrying on business as manufacturers or repairers of aircraft, shall be as follows:

- (a) the aircraft is taking off or landing; or
- (b) the aircraft is moving on the ground or water; or
- (c) the engines are being operated in the aircraft;
- (d) for the purpose of ensuring their satisfactory performance;
- (e) for the purpose of bringing them to a proper temperature in preparation for, or at the end of, a flight; or
- (f) for the purpose of ensuring that the instruments, accessories or other components of the aircraft are in a satisfactory condition.

12 Pilots maintenance—prescribed repairs or replacements

For the purposes of article 16(7)(a), the following repairs or replacements are prescribed:

- (a) replacement of landing gear tyres, landing skids or skid shoes;
- (b) replacement of elastic shock absorber cord units on landing gear where special tools are not required;
- (c) replacement of defective safety wiring or split pins excluding those in engine, transmission, flight control and rotor systems;
- (d) patch-repairs to fabric not requiring rib stitching or the removal of structural parts or control surfaces, if the repairs do not cover up structural damage and do not include repairs to rotor blades;
- (e) repairs to upholstery and decorative furnishing of the cabin or cockpit interior when repair does not require dismantling of any structure or operating system or interfere with an operating system or affect the structure of the aircraft;
- (f) repairs, not requiring welding, to fairings, non-structural cover plates and cowlings;

- (g) replacement of side windows where that work does not interfere with the structure or with any operating system;
- (h) replacement of safety belts or safety harnesses;
- (i) replacement of seats or seat parts not involving dismantling of any structure or of any operating system;
- (j) replacement of bulbs, reflectors, glasses, lenses or lights;
- (k) replacement of any cowling not requiring removal of the propeller, rotors or disconnection of engine or flight controls;
- (l) replacement of unserviceable sparking plugs;
- (m) replacement of batteries;
- (n) replacement of wings and tail surfaces and controls, the attachments of which are designed to provide for assembly immediately before each flight and dismantling after each flight;
- (o) replacement of main rotor blades that are designed for removal where special tools are not required;
- (p) replacement of generator and fan belts designed for removal where special tools are not required;
- (q) replacement of VHF communication equipment, being equipment which is not combined with navigation equipment.

**13 Aeroplanes flying for the purpose of public transport of passengers—
aerodrome facilities for approach to landing and landing**

- (1) This regulation shall apply to every aeroplane registered in the United Kingdom engaged on a flight for the purpose of public transport of passengers on a scheduled journey and to every aeroplane so registered whose maximum total weight authorised exceeds 5,700 kg engaged on a flight for such a purpose otherwise than on a scheduled journey.
- (2) For the purposes of article 42(1)(c)(ii), the following manning and equipment are prescribed in relation to aerodromes intended to be used for landing or as an alternate aerodrome by aircraft to which this regulation applies—
 - (a) air traffic control service or aerodrome flight information service, including the reporting to aircraft of the current meteorological conditions at the aerodrome;
 - (b) very high frequency radiotelephony;

- (c) at least one of the following radio navigation aids, either at the aerodrome or elsewhere, and in either case for the purpose of assisting the pilot in locating the aerodrome and in making an approach to landing there:
 - (i) radio direction finding equipment utilising emissions in the very high frequency bands;
 - (ii) a non-directional radio beacon transmitting signals in the low or medium frequency bands;
 - (iii) very high frequency omni-directional radio range;
 - (iv) radar equipment.
- (3) Subject to paragraph (4), an aircraft to which this regulation applies shall not land or make an approach to landing at any aerodrome unless:
 - (a) one of the services and the equipment prescribed by paragraph (2) are provided and are in operation at that aerodrome;
 - (b) such services and equipment can be made use of by that aircraft; and
 - (c) in the case of the navigation aids specified in paragraph (2)(c), instructions and procedures for the use of the aid are included in the operations manual relating to the aircraft.
- (4) A person shall be deemed not to have contravened paragraph (3) if he proves that:
 - (a) for the time being use could not be made of the radio navigation aids provided under paragraph (2)(c) whether by reason of those aids not being in operation or of the unserviceability of equipment in the aircraft itself; and
 - (b) the approach to landing was made in accordance with instructions and procedures appropriate to that circumstance and included in the operations manual relating to the aircraft.

Part 5

Mandatory reporting

14 Reportable occurrences – time and manner of reporting and information to be reported

- (1) For the purposes of article 142(6) but subject to paragraph (2) it is prescribed that a report containing the information referred to in paragraph (3) shall be made to the CAA by post, telex, electronic, facsimile transmission or other similar means which produces a document containing a text of the

communication (written in English) within 96 hours of the reportable occurrence coming to the knowledge of the person making the report.

- (2) If at the expiry of the time allowed by paragraph (1) for making the report any of the information referred to in that paragraph is not in the possession of the person making the report, he shall despatch the report to the CAA by post, telex, electronic, facsimile transmission or other similar means which produces a document containing a text of the communication (written in English) within 96 hours of the information coming into his possession.
- (3) For the purposes of article 142(6), a report shall, as far as possible, contain the following information—
 - (a) the type, series and registration marks of the aircraft concerned;
 - (b) the name of the operator of the aircraft;
 - (c) the date of the reportable occurrence;
 - (d) if the person making the report has instituted an investigation into the reportable occurrence, whether or not this has been completed;
 - (e) a description of the reportable occurrence, including its effects and any other relevant information;
 - (f) in the case of a reportable occurrence which occurs during flight:
 - (i) the Co-ordinated Universal Time of the occurrence;
 - (ii) the last point of departure and the next point of intended landing of the aircraft at that time; and
 - (iii) the geographical position of the aircraft at that time;
 - (g) in the case of a defect in or malfunctioning of an aircraft or any part or equipment of an aircraft, the name of the manufacturer of the aircraft, part or equipment, as the case may be, and, where appropriate, the part number and modification standard of the part or equipment and its location on the aircraft;
 - (h) the signature and name in block capitals of the person making the report, the name of his employer and the capacity in which he acts for that employer; and
 - (i) in the case of a report made by the commander of an aircraft or a person referred to in sub-paragraphs (f), (g) or (h) of article 142(5), the address or telephone number at which communications should be made to him, if different from that of his place of employment.

15 Mandatory reporting of birdstrikes – time and manner of reporting and information to be reported

- (1) Subject to paragraph (2), for the purposes of article 143(2) a report containing the information referred to in paragraph (3) shall be made to the CAA by post, telex, electronic, facsimile transmission or other similar means which produce a document containing a text of the communication (written in English) within 96 hours of the birdstrike occurrence coming to the knowledge of the person making the report.
- (2) If at the expiry of the time allowed by paragraph (1) for making the report any of the information referred to in that paragraph is not in the possession of the person making the report, he shall despatch the report to the CAA by post, telex, electronic, facsimile transmission or other similar means which produce a document containing a text of the communication (written in English) within 96 hours of the information coming into his possession.
- (3) For the purposes of article 143(2) a report shall, as far as possible, contain the following information:
 - (a) the type, series and registration marks of the aircraft concerned;
 - (b) the name of the operator of the aircraft;
 - (c) the date and the Co-ordinated Universal Time of the birdstrike occurrence;
 - (d) the last point of departure and the next point of intended landing of the aircraft at that time;
 - (e) a description of the birdstrike occurrence, including the part(s) of the aircraft affected, the effect on flight and any other relevant information;
 - (f) the bird species/description;
 - (g) the weather at the time of the occurrence;
 - (h) the runway in use (where relevant);
 - (i) the height and speed of the aircraft;
 - (j) the phase of flight;
 - (k) the position (if en route) of the aircraft at the time of the birdstrike;
 - (l) any other reporting action taken;
 - (m) the signature and name in block capitals of the person making the report;
 - (n) the name of his employer and the capacity in which he acts for that employer; and

- (o) the address or telephone number at which communications should be made to him.

Part 6

Navigation performance and equipment

16 Minimum navigation performance and height keeping specifications

- (1) For the purposes of article 56(1) the following navigation performance capability is prescribed, that is to say, a capability to ensure that—
 - (a) the standard deviation of lateral errors in the track of the aircraft is not more than 6.3 nautical miles;
 - (b) the proportion of the flight time of the aircraft during which the actual track of the aircraft is 30 nautical miles or more off the track along which it has been given an air traffic control clearance to fly is less than 5.3×10^{-4} , and;
 - (c) the proportion of the flight time of the aircraft during which the actual track of the aircraft is between 50 and 70 nautical miles off the track along which it has been given an air traffic control clearance to fly is less than 13×10^{-5} .
- (2) For the purposes of article 57(1), the following height keeping performance capability is prescribed, that is to say, a capability to ensure that—
 - (a) altimetry system error shall be in compliance with paragraph 2.1.1(2) of Document 7030/4-NAT Part 1 Rules of the Air, Air Traffic Services and Search and Rescue (ICAO Regional Procedures, Fourth Edition—1987);
 - (b) in respect of aircraft first registered in a Contracting State on or after 1st January 1997 altitude can be automatically controlled within a tolerance band of $+ / - 65$ feet; and
 - (c) in respect of aircraft first registered in a Contracting State before 1st January 1997 altitude can be automatically controlled within a tolerance band of $+ / - 130$ feet.

17 North Atlantic Minimum Navigation Performance Specification Airspace

For the purposes of articles 56(1) and 155(1), the following airspace is prescribed as North Atlantic Minimum Navigation Performance Specification airspace, that is to say, the airspace from flight level 285 to flight level 420 within the area defined by rhumb lines joining successively the following points:

North Atlantic Minimum		Navigation Performance		Specification airspace	
N3410.00	W01748.00	North Pole		N4152.00	W06700.00
N3630.00	W01500.00	N8200.00	W06000.00	N3900.00	W06700.00
N4200.00	W01500.00	N7800.00	W07500.00	N3835.00	W06853.00
N4300.00	W01300.00	N7600.00	W07600.00	N3830.00	W06915.00
N4500.00	W01300.00	N6500.00	W05745.00	N3830.00	W06000.00
N4500.00	W00800.00	N6500.00	W06000.00	N2700.00	W06000.00
N5100.00	W00800.00	N6400.00	W06300.00	N2700.00	W04000.00
N5100.00	W01500.00	N6100.00	W06300.00	N2218.00	W04000.00
N5400.00	W01500.00	N5700.00	W05900.00	N1700.00	W03730.00
N5434.00	W01000.00	N5300.00	W05400.00	N2400.00	W02500.00
N6100.00	W01000.00	N4900.00	W05100.00	N3000.00	W02500.00
N6100.00	00000.00	N4500.00	W05100.00	N3000.00	W02000.00
N8200.00	00000.00	N4500.00	W05300.00	N3139.00	W01725.00
N8200.00	E03000.00	N4336.00	W06000.00		

and from there by that part of the arc of a circle radius 100 nautical miles centred on N3304.00 W01621.00 to N3410.00 W01748.00.

18 Airborne Collision Avoidance System

For the purposes of paragraph 5(1) of Schedule 5 to the Order the prescribed requirements for an airborne collision avoidance system shall be the requirements for ACAS II equipment set out in Volume IV (Third Edition—July 2002), Chapter 4, of Annex 10 to the Chicago Convention.

19 Mode S Transponder

- (1) For the purposes of paragraph 4 of Schedule 5 to the Order, the capability and functionality prescribed for Mode S Elementary Surveillance shall be that specified for a level 2 transponder in Volumes III (First Edition—July 1995) and IV (Third Edition—July 2002) of Annex 10 (Third Edition) to the Chicago Convention together with the additional functionality specified in paragraph (3).
- (2) For the purposes of paragraph 4 of Schedule 5 to the Order, the capability and functionality prescribed for Mode S Enhanced Surveillance shall be that specified for a level 2 transponder in Volumes III (First Edition—July 1995) and IV (Third Edition—July 2002) of Annex 10 (Third Edition) to the Chicago Convention together with the additional functionality specified in paragraph (3) and the additional downlinked parameters specified in paragraph (4).
- (3) The additional functionality referred to in paragraphs (1) and (2) is—

- (a) capability to support the Interrogator Identifier (II) Code and Surveillance Identifier (SI) Code functionality;
 - (b) Extended Squitter Functionality which, for this purpose, means functionality that supports Mode S Elementary Surveillance and Mode S Enhanced Surveillance to provide Automatic Dependant Surveillance–Broadcast, using unsolicited transponder broadcasts;
 - (c) ACAS Active Resolution Advisory.
- (4) The additional downlinked parameters referred to in paragraph (2) are—
- (a) reporting of the Magnetic Heading Downlinked Aircraft Parameter;
 - (b) reporting of the Indicated Airspeed Downlinked Aircraft Parameter;
 - (c) reporting of the Mach Number Downlinked Aircraft Parameter;
 - (d) reporting of the Vertical Rate Downlinked Aircraft Parameter;
 - (e) reporting of the Roll Angle Downlinked Aircraft Parameter;
 - (f) reporting of the Track Angle Rate Downlinked Aircraft Parameter;
 - (g) reporting of the True Track Angle Downlinked Aircraft Parameter;
 - (h) reporting of the Ground Speed Downlinked Aircraft Parameter;
 - (i) reporting of the Selected Vertical Intent Downlinked Aircraft Parameter (including Barometric Pressure Setting).

Signed by authority of the Secretary of State for Transport

Karen Buck

Parliamentary Under Secretary of State Department for Transport

6th March 2006

Schedule 1

Aeroplane performance

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1 Weight and performance of public transport aeroplanes specified as aeroplanes of performance group A or performance group B

- (1) For the purposes of article 44(6) an aeroplane registered in the United Kingdom, in respect of which there is in force under article 44(5) a permission specifying the aeroplane as being of performance group A or performance group B, shall not fly for the purpose of public transport unless the weight of the aeroplane at the commencement of the take-off run is such that the requirements of sub-paragraphs (2), (3), (5), (9), (12), (15), (17), (18) and (19) are met.
- (2) That weight shall not exceed the maximum take-off weight specified for the altitude and the air temperature at the aerodrome at which the take-off is to be made.
- (3) Subject to sub-paragraph (4), the take-off run, take-off distance and the accelerate-stop distance respectively required for take-off, specified as being appropriate to:
 - (a) the weight of the aeroplane at the commencement of the take-off run;
 - (b) the altitude at the aerodrome;
 - (c) the air temperature at the aerodrome;
 - (d) the condition of the surface of the runway from which the take-off will be made;
 - (e) the slope of the surface of the aerodrome in the direction of take-off over the take-off run available, the take-off distance available and the accelerate-stop distance available, respectively; and
 - (f) not more than 50 per cent. of the reported wind component opposite to the direction of take-off or not less than 150 per cent. of the reported wind component in the direction of take-off,

shall not exceed the take-off run, the take-off distance and the accelerate-stop distance available, respectively, at the aerodrome at which the take-off is to be made.
- (4) In ascertaining the accelerate-stop distance available required pursuant to sub-paragraph (3), the point at which the pilot is assumed to decide to discontinue the take-off shall not be nearer to the start of the take-off run than the point at which, in ascertaining the take-off run required and the take-off distance required, he is assumed to decide to continue the take-off, in the event of power unit failure.
- (5) Subject to sub-paragraphs (6), (7) and (8), the net take-off flight path of the aeroplane with one power unit inoperative, specified as being appropriate to:

- (a) the weight of the aeroplane at the commencement of the take-off run;
- (b) the altitude at the aerodrome;
- (c) the air temperature at the aerodrome;
- (d) not more than 50 per cent. of the reported wind component opposite to the direction of take-off or not less than 150 per cent. of the reported wind component in the direction of take-off,

which is plotted from a point 35 feet above the end of the take-off distance required at the aerodrome at which the take-off is to be made to a height of 1,500 feet above the aerodrome, shall show that the aeroplane will clear any obstacle in its path by a vertical interval of at least 35 feet.

- (6) If it is intended that the aeroplane shall change its direction of flight by more than 15° before reaching 1,500 feet above the aerodrome the net take-off flight path of the aeroplane referred to in sub-paragraph (5) shall:
 - (a) be plotted from a point 50 feet above the end of the take-off distance required at the aerodrome at which the take-off is to be made to a height of 1,500 feet above the aerodrome; and
 - (b) show that the aeroplane will clear any obstacle in its path by a vertical interval of at least 50 feet during the change of direction.
- (7) For the purpose of sub-paragraphs (5) and (6) an obstacle shall be deemed to be in the path of the aeroplane if the distance from the obstacle to the nearest point on the ground below the intended line of flight of the aeroplane does not exceed:
 - (a) a distance of 60 metres plus half the wing span of the aeroplane plus one eighth of the distance from such point to the end of the take-off distance available measured along the intended line of flight of the aeroplane; or
 - (b) 900 metres,
 whichever is least.
- (8) In assessing the ability of the aeroplane to satisfy sub-paragraphs (5) and (6), it shall not be assumed the aeroplane will make a change of direction of a radius less than the specified radius of steady turn.
- (9) Subject to sub-paragraphs (10) and (11), the aeroplane shall:
 - (a) in the meteorological conditions expected for the flight;
 - (b) in the event of any one power unit becoming inoperative at any point on its route or on any planned diversion from it; and

- (c) with the other power unit or units operating within the specified maximum continuous power conditions,

be capable of continuing the flight, clearing obstacles within 10 nautical miles either side of the intended track by a vertical interval of at least 2,000 feet, to an aerodrome at which it can comply with sub-paragraph (19); and on arrival over such aerodrome the gradient of the specified net flight path with one power unit inoperative shall not be less than zero at 1,500 feet above the aerodrome.

- (10) In assessing the ability of the aeroplane to satisfy sub-paragraph (9) it shall not be assumed to be capable of flying at an altitude exceeding the specified maximum permissible altitude for power unit restarting.
- (11) If the operator of the aeroplane is satisfied, taking into account the navigation aids which can be made use of by the aeroplane on the route, that the commander of the aeroplane will be able to maintain his intended track on that route within a margin of 5 nautical miles, sub-paragraph (9) shall have effect as if 5 nautical miles were substituted for 10 nautical miles.
- (12) Subject to sub-paragraphs (13) and (14), if the aeroplane has three or more power units, it shall:
 - (a) in the meteorological conditions expected for the flight; and
 - (b) in the event of any two power units becoming inoperative at any point:
 - (c) along the route; or
 - (d) on any planned diversion from the route which is more than 90 minutes flying time in still air, at the all power units operating economical cruise speed, from the nearest aerodrome at which it can comply with sub-paragraph (19),

be capable of continuing the flight with all other power units operating within the specified maximum continuous power conditions, clearing by a vertical interval of at least 2,000 feet obstacles within 10 nautical miles either side of the intended track to such an aerodrome; and on arrival over such an aerodrome the gradient of the specified net flight path with two power units inoperative shall not be less than zero at 1,500 feet above the aerodrome.

- (13) In assessing the ability of the aeroplane to satisfy sub-paragraph (12) it shall not be assumed to be capable of flying at an altitude exceeding the specified maximum permissible altitude for power unit restarting.
- (14) If the operator of the aeroplane is satisfied, taking into account the navigation aids which can be made use of by the aeroplane on the route, that the commander of the aeroplane will be able to maintain his intended track on that

route within a margin of 5 nautical miles, sub-paragraph (12) shall have effect as if 5 nautical miles were substituted for 10 nautical miles.

(15) Subject to sub-paragraph (16), if the aeroplane:

- (a) has two power units and a maximum total weight authorised which exceeds 5,700 kg; and
- (b) is not limited by its certificate of airworthiness to the carriage of less than 20 passengers,

it shall, in the meteorological conditions expected for the flight, be not more than 60 minutes flying time, at the normal one engine inoperative cruise speed in still air, from the nearest aerodrome at which it can comply with sub-paragraph (19) at any point along the route or any planned diversion from it.

(16) Sub-paragraph (15) shall not apply to an aeroplane flying under, and in accordance with, the terms of a written permission granted by the CAA to the operator under this sub-paragraph.

(17) If the aeroplane has:

- (a) two power units and a maximum total weight authorised of 5,700kg or less; or
- (b) two power units and a maximum total weight authorised of more than 5,700kg but is limited by its certificate of airworthiness to the carriage of less than 20 passengers,

it shall, in the meteorological conditions expected for the flight, be not more than 90 minutes flying time in still air, at the all power units operating economical cruise speed, from the nearest aerodrome at which it can comply with sub-paragraph (19).

(18) The landing weight of the aeroplane shall not exceed the maximum landing weight specified for the altitude and the expected air temperature for the estimated time of landing at the aerodrome of intended destination and at any alternate aerodrome.

(19) Subject to sub-paragraphs (20) and (21), the landing distances required for an aeroplane powered by turbine-jet, turbine propeller or piston engines, respectively specified as being appropriate to:

- (a) the aerodrome of intended destination; and
- (b) any alternate aerodrome,

shall not exceed the landing distance available on the most suitable runway for a landing in still air conditions and the landing distance available on the runway

that may be required for landing because of the forecast wind conditions at the aerodrome of intended destination or any alternate aerodrome.

- (20) If an alternate aerodrome is designated in the flight plan, the specified landing distance required may be that appropriate to that alternate aerodrome when assessing the ability of the aeroplane to satisfy sub-paragraph (19) at the aerodrome of intended destination.
- (21) For the purposes of sub-paragraphs (19) and (20) the specified landing distance required shall be that specified as being appropriate to:
 - (a) the landing weight;
 - (b) the altitude of the aerodrome;
 - (c) the temperature in the specified international standard atmosphere appropriate to the altitude at the aerodrome;
 - (d) a level surface in the case of runways usable in both direction; or the average slope of the runway in the case of runways usable in only one direction; and
 - (e) still air conditions in the case of the most suitable runway for a landing in still air conditions and not more than 50 per cent. of the forecast wind component opposite to the direction of landing or not less than 150 per cent. of the forecast wind component in the direction of landing in the case of the runway that may be required for landing because of the forecast wind conditions.

2 Weight and performance of public transport aeroplanes specified as aeroplanes of performance group C

- (1) For the purposes of article 44(6), an aeroplane registered in the United Kingdom in respect of which there is in force under article 44(5) a permission specifying the aeroplane as being of performance group C shall not fly for the purpose of public transport unless the weight of the aeroplane at the commencement of the take-off run is such that the requirements of subparagraphs (2), (3), (4), (8), (12), (14), (15) or, as an alternative to subparagraph (15), (17) are met.
- (2) The weight of the aeroplane shall not exceed the maximum take-off weight specified for the altitude and the air temperature at the aerodrome at which the take-off is to be made.
- (3) The take-off run required and the take-off distance required, specified as being appropriate to:
 - (a) the weight of the aeroplane at the commencement of the take-off run;

- (b) the altitude at the aerodrome;
- (c) the air temperature at the aerodrome;
- (d) the average slope of the surface of the aerodrome in the direction of take-off over the accelerate-stop distance available; and
- (e) not more than 50 per cent. of the reported wind component opposite to the direction of take-off or not less than 150 per cent. of the reported wind component in the direction of take-off,

shall not exceed the take-off run available and the accelerate-stop distance available, respectively, at the aerodrome at which the take-off is to be made.

- (4) Subject to sub-paragraphs (5), (6) and (7), the net take-off flight path of the aeroplane, with all power units operating, specified as being appropriate to:
 - (a) the weight of the aeroplane at the commencement of the take-off run;
 - (b) the altitude of the aerodrome;
 - (c) the air temperature at the aerodrome;
 - (d) not more than 50 per cent. of the reported wind component opposite to the direction of the take-off or not less than 150 per cent. of the reported wind component in the direction of take-off,

which is plotted from a point 50 feet above the end of the take-off distance required at the aerodrome at which the take-off is to be made to a height of 1,500 feet above the aerodrome, shall show that the aeroplane will clear any obstacle in its path by a vertical interval of not less than 35 feet.

- (5) If it is intended that the aeroplane shall change its direction of flight by more than 15° before reaching 1,500 feet above the aerodrome the vertical interval referred to in sub-paragraph (4) shall be not less than 50 feet during the change of direction.
- (6) For the purpose of sub-paragraph (4) an obstacle shall be deemed to be in the path of the aeroplane if the distance from the obstacle to the nearest point on the ground below the intended line of flight of the aeroplane does not exceed 75 metres.
- (7) In assessing the ability of the aeroplane to satisfy sub-paragraph (4), it shall not be assumed the aeroplane will make a change of direction of a radius less than the specified radius of steady turn.
- (8) Subject to sub-paragraphs (9), (10) and (11), if the aeroplane is intended to be flown for any period before reaching a height of 1,500 feet above the aerodrome from which the take-off is to be made in conditions which will not ensure that