

1978 No. 1627

CIVIL AVIATION

The Air Navigation (Fourth Amendment) Order 1978*Made* - - - - 15th November 1978*Laid before Parliament* 23rd November 1978*Coming into Operation—**for the purposes of**Articles 3(2) and*

3(12) - - - - 1st April 1979

for all other purposes 1st January 1979

At the Court at Buckingham Palace, the 15th day of November 1978

Present,

The Queen's Most Excellent Majesty in Council

Her Majesty, in exercise of the powers conferred on Her by sections 8, 57 and 59 of the Civil Aviation Act 1949(a), as amended by section 20 of the Civil Aviation Act 1968(b), section 8(4) of the Mineral Workings (Offshore Installations) Act 1971(c) and section 62(1) of the Civil Aviation Act 1971(d) and of all other powers enabling Her in that behalf is pleased, by and with the advice of Her Privy Council, to order, and it is hereby ordered, as follows:

Citation and commencement

1. This Order may be cited as the Air Navigation (Fourth Amendment) Order 1978 and shall come into operation for the purposes of Article 3(2) and Article 3(12) on 1st April 1979 and for all other purposes on 1st January 1979.

Interpretation

2. The Interpretation Act 1889(e) shall apply for the purposes of the interpretation of this Order as it applies for the purpose of the interpretation of an Act of Parliament.

Amendment of Air Navigation Order 1976

3. The Air Navigation Order 1976(f), as amended(g), shall be further amended as follows:

(1) In Article 14:

(a) in paragraphs (1), (2), (4) and (5) for the words "radio equipment" wherever they appear there shall be substituted the words "radio and radio navigation equipment";

(a) 1949 c. 67.

(c) 1971 c. 61.

(e) 1889 c. 63.

(g) S.I. 1977/1255, 2160; 1978/284.

(b) 1968 c. 61.

(d) 1971 c. 75.

(f) S.I. 1976/1783.

- (b) in paragraph (3) for the words "special radio equipment" there shall be substituted the words "special radio or radio navigation equipment".
- (2) In Article 20 in paragraph (5) after the words "instrument rating (aeroplanes)" there shall be inserted the words "an instrument rating (helicopters)".
- (3) In Article 20 in sub-paragraph (7)(b) after the words "in a particular case" there shall be inserted the words "or class of case".
- (4) In Article 43:
- (a) after paragraph (5) there shall be inserted the following new paragraph:
- “(5A) On every flight beginning on or after 1st April 1980 by an aircraft to which this Article applies, being an aircraft of which the maximum total weight authorised exceeds 5,700 kg., every exit from such an aircraft intended to be used by passengers in an emergency shall be marked upon the exterior of the aircraft by a band not less than 5 centimetres in width outlining the exit.”;
- (b) in paragraph (6):
- (i) at the beginning of sub-paragraph (b) there shall be inserted the words "except in the case of the markings required by paragraph (5A) of this Article,";
- (ii) after sub-paragraph (b) there shall be inserted the following new sub-paragraph—
- “(bb) in the case of the markings required by paragraph (5A) of this Article, be of a colour clearly contrasting with the background on which it appears.”.
- (5) In Article 64 for paragraph (1) there shall be substituted the following new paragraph:—
- “(1)(a) Where the Secretary of State deems it necessary in the public interest to restrict or prohibit flying by reason of—
- (i) the intended gathering or movement of a large number of persons, or
- (ii) the intended holding of an aircraft race or contest or of an exhibition of flying, or
- (iii) national defence or any other reason affecting the public interest, the Secretary of State may make regulations prohibiting, restricting or imposing conditions on flight,—
- (aa) by any aircraft, whether or not registered in the United Kingdom, in any airspace over the United Kingdom or in the neighbourhood of an offshore installation;
- (bb) by aircraft registered in the United Kingdom, in any other airspace, being airspace in respect of which the United Kingdom has in pursuance of international arrangements undertaken to provide navigation services for aircraft.
- (b) Regulations made under this Article may apply either generally or in relation to any class of aircraft.”.
- (6) In Article 69:
- (a) in paragraph (1) for the words "used for the taking-off" there shall be

substituted the words “used or intended to be used for the taking-off”;

- (b) in paragraph (2) for the words “radar or radio navigation equipment to be used to facilitate an aircraft’s approach to land and landing” there shall be substituted the words “radio communication, radar or radio navigation equipment to be used to facilitate an aircraft’s approach to land or landing”.

(7) In Article 70 in sub-paragraph (1)(a) for the words “installation of radar or radio navigation equipment provided by him and used to facilitate an aircraft’s approach to land and landing” there shall be substituted the words “installation of radio communication, radar or radio navigation equipment provided by him and used to facilitate an aircraft’s approach to land or landing”.

(8) In Schedule 3 in paragraph 2 for the entry relating to the “*Aerial Work Category*” there shall be substituted: —

“*Aerial Work Category*: Any purpose other than public transport.”.

(9) In Schedule 5:

(a) in the Table in paragraph 4:

- (i) for “flying machines” wherever these words appear there shall be substituted “aeroplanes”;
- (ii) there shall be added after sub-paragraph (7) the following new sub-paragraphs:

(8) Helicopters and Gyroplanes	(a) flying for purposes other than public transport; and	A
	(i) when flying by day under Visual Flight Rules with visual ground reference	D
	(ii) when flying by day under Instrument Flight Rules or without visual ground reference	
	(aa) outside controlled airspace	E with E(ii) duplicated
	(bb) within controlled airspace	E with both E(ii) and E (iv) duplicated and F with F(iv) for all weights
	(iii) when flying at night	
	(aa) with visual ground reference	C, E, G(iii) (b) and G(v)
	(bb) without visual ground reference	
	(aaa) outside controlled airspace	C, E with E(ii) duplicated, G(iii) (b) and G(v)

- (*bbb*) within controlled air-space C, E with both E(ii) and E(iv) duplicated, F with F(iv) for all weights, G(iii) (*b*) and G(v)
- (*b*) flying for the purpose of public transport; and
- (i) when flying by day under Visual Flight Rules with visual ground reference D
- (ii) when flying by day under Instrument Flight Rules or without visual ground reference E with both E(ii) and E(iv) duplicated, F(ii), F(iii) and F(v)
- (iii) when flying by night with visual ground reference
- (*aa*) in the case of a helicopter or gyroplane having a maximum total weight authorised not exceeding 2,000 kg. C, E and G
- (*bb*) in the case of a helicopter or gyroplane having a maximum total weight authorised exceeding 2,000 kg. C, E with E(ii) duplicated and either E(iv) duplicated or a radio altimeter, F(ii), F(iii), F(v) and G
- (iv) when flying by night without visual ground reference C, E with both E(ii) and E(iv) duplicated, F(ii), F(iii), F(v) and G
- (v) when flying over water:
- (*aa*) in the case of a helicopter or a gyroplane classified in its Certificate of Airworthiness as being of performance group A2 or B when beyond

- autorotational
 gliding distance
 from land suitable
 for an emergency
 landing E and H
- (bb) in the case of
 a helicopter or a
 gyroplane
 classified in its
 Certificate of
 Airworthiness as
 being of perfor-
 mance group A2
 when beyond 10
 minutes flying
 time* from land E, H, J and T
- (vi) on all flights
 which involve
 manoeuvres on
 water H, I and J
- (vii) when flying at a
 height of 10,000 feet
 or more above sea
 level K
- (viii) on flights when
 the weather reports
 or forecasts available
 at the aerodrome at
 the time of departure
 indicate that
 conditions favouring
 ice formation are
 likely to be met L
- (ix) on all flights on
 which the aircraft
 carries a flight crew
 of more than one
 person N
- (x) on all flights for
 the purpose of the
 public transport of
 passengers Y
- (xi) when flying over
 substantially
 uninhabited land
 areas where, in the
 event of an emergency
 landing, tropical
 conditions are likely
 to be met U
- (xii) when flying over
 substantially
 uninhabited land
 areas where, in the
 event of an emergency
 landing, polar

conditions are likely
to be met V

*For the purpose of this table, flying time shall be calculated on the assumption that the helicopter or gyroplane is flying in still air at the speed specified in the relevant Certificate of Airworthiness as the speed for compliance with regulations governing flight over water."

(b) in paragraph 5;

(i) in Scale D for sub-paragraph (i) there shall be substituted:

“(i)(a) In the case of a helicopter or gyroplane, a slip indicator;

(b) In the case of any other flying machine either—

(aa) a turn indicator and a slip indicator; or

(bb) a gyroscopic bank and pitch indicator and a gyroscopic direction indicator;”;

(ii) in Scale E for sub-paragraph (i) there shall be substituted:

“(i)(a) In the case of a helicopter or gyroplane, a slip indicator;

(b) In the case of any other flying machine, a turn indicator and a slip indicator;”;

(iii) in Scale G:

(aa) at the beginning of sub-paragraph (i) there shall be inserted “In the case of an aircraft other than a helicopter or gyroplane”;

(bb) at the beginning of sub-paragraph (iv) after “In the case of an aircraft” there shall be inserted “other than a helicopter or gyroplane”;

(cc) after sub-paragraph (iv) there shall be added the following new sub-paragraph:

“(v)(a) In the case of a helicopter or gyroplane in respect of which there is in force a certificate of airworthiness designating the helicopter or gyroplane as being of performance group A—either

(aa) two landing lights both of which are adjustable so as to illuminate the ground in front and below the helicopter or gyroplane and one of which is adjustable so as to illuminate the ground on either side of the helicopter or gyroplane; or

(bb) one landing light or, if the maximum total weight authorised of the helicopter or gyroplane exceeds 5,700 kg. one dual filament landing light with separately energised filaments or two single filament lights, each of which is adjustable so as to illuminate the ground in front and below the helicopter or gyroplane; and two parachute flares.

(b) In the case of a helicopter or gyroplane in respect of which there is in force a certificate of airworthiness

designating the helicopter or gyroplane as being of performance group B—either

- (aa) one landing light and two parachute flares; or
- (bb) if the maximum total weight authorised of the helicopter or gyroplane exceeds 5,700 kg. either one dual filament landing light with separately energised filaments or two single filament landing lights; and two parachute flares.”;

(iv) in Scale J, for sub-paragraph (i) there shall be substituted:

- “(i)(a) In the case of a flying machine, other than a helicopter or gyroplane carrying 20 or more persons, liferafts sufficient to accommodate all persons on board;
- (b) In the case of a helicopter or gyroplane carrying 20 or more persons, a minimum of two liferafts sufficient together to accommodate all persons on board.

Each liferaft shall contain the following equipment:

- (a) means for maintaining buoyancy;
- (b) a sea anchor;
- (c) life-lines, and means of attaching one liferaft to another;
- (d) paddles or other means of propulsion;
- (e) means of protecting the occupants from the elements;
- (f) a waterproof torch;
- (g) marine type pyrotechnical distress signals;
- (h) means of making sea water drinkable, unless the full quantity of fresh water is carried as specified in sub-paragraph (i);
- (i) for each four or proportion of four persons the liferaft is designed to carry:

100 grammes of glucose toffee tablets
 $\frac{1}{2}$ litre of fresh water in durable containers;

Provided that in any case in which it is not reasonably practicable to carry the quantity of water above specified as large a quantity of fresh water as is reasonably practicable in the circumstances may be substituted. In no case however shall the quantity of water carried be less than is sufficient, when added to the amount of fresh water capable of being produced by means of the equipment specified in sub-paragraph (h) to provide $\frac{1}{2}$ litre of water for each four or proportion of four persons the liferaft is designed to carry.

- (j) first aid equipment;

Items (f) to (j) inclusive shall be contained in a pack.”.

(a) when flying for the purpose of public transport under Instrument Flight Rules:	
(i) while making an approach to landing	A B C D
(ii) on all other occasions	A B C
(b) exceeding 2,300 kg. maximum total weight authorised when flying for the purpose of public transport under Visual Flight Rules	A B
(c) not exceeding 2,300 kg. maximum total weight authorised when flying for the purpose of public transport under Visual Flight Rules:	
(i) over a route on which navigation is not effected solely by visual reference to landmarks	A B
(ii) over water, beyond gliding distance from any land	A

*Unless the appropriate air traffic control unit otherwise permits in relation to the particular flight and provided that the aircraft complies with any instructions which the air traffic control unit may give in the particular case.

3. The scales of radio and radio navigation equipment indicated in the foregoing Table shall be as follows:

Scale A

Radio equipment capable of maintaining two-way communication with the appropriate aeronautical radio stations.

Scale B

Radio equipment capable of enabling the aircraft to be navigated on the intended route including such equipment as may be prescribed.

Scale C

Radio equipment capable of receiving from the appropriate aeronautical radio stations meteorological broadcasts relevant to the intended flight.

Scale D

Radio equipment capable of receiving signals from one or more aeronautical radio stations on the surface to enable the aircraft to be guided to a point from which a visual landing can be made at the aerodrome at which the aircraft is to land.

Scale E

Secondary surveillance radar equipment.

Scale F

Radio and radio navigation equipment capable of enabling the aircraft to be navigated along the intended route including either—

- (a) (i) automatic direction finding equipment; and
- (ii) distance measuring equipment; and
- (iii) VHF omni-range equipment; or
- (b) equipment, including the Decca Flight Log, which will enable the aircraft to be navigated by means of signals received from

radio navigation land stations forming part of the Decca radio navigation system and which provides the pilot with a visual indication of the aircraft's position relative to the intended route.

Scale G

Radio equipment capable of enabling the aircraft to make an approach to landing using the Instrument Landing System.

Scale H

Radio navigation equipment appropriate to the route, including automatic direction finding equipment and any one of the following:

- (i) equipment which will enable the aircraft to be navigated by means of signals received from radio navigation land stations forming part of the Decca radio navigation system, or
- (ii) VHF omni-range equipment.

4. In this Schedule—

(1) "automatic direction finding equipment" means radio navigation equipment which automatically indicates the bearing of any radio station transmitting the signals received by such equipment; and

(2) "VHF omni-range equipment" means radio navigation equipment capable of giving visual indications of bearings of the aircraft by means of signals received from very high frequency omni-directional radio ranges; and

(3) "distance measuring equipment" means radio equipment capable of providing a continuous indication of the aircraft's distance from the appropriate aeronautical radio stations; and

(4) "secondary surveillance radar equipment" means such type of radio equipment as may be notified as being capable of (a) replying to an interrogation from secondary surveillance radar units on the surface and (b) being operated in accordance with such instructions as may be given to the aircraft by the appropriate air traffic control unit."

(11) In Schedule 9:

(a) In Part A

- (i) in proviso (d) to the privileges of the Private Pilot's Licence (Aeroplanes) after the words "any passenger is carried" there shall be inserted "or give any instruction in flying at night";
- (ii) in proviso (b) to paragraph (2) of the privileges of the Commercial Pilot's Licence (Aeroplanes) after the words "any passenger is carried" there shall be inserted "or give any instruction in flying at night";
- (iii) in proviso (c) to the privileges of the Private Pilot's Licence (Helicopters and Gyroplanes) after the words "any passenger is carried" there shall be inserted "or give any instruction in flying at night";
- (iv) in proviso (a) to paragraph (2) of the privileges of the Commercial Pilot's Licence (Helicopters and Gyroplanes) after the words "any passenger is carried" there shall be inserted "or give any instruction in flying at night".

(b) In Part C in sub-paragraph 3(d) for the words "and shall be conducted in an aircraft in flight" there shall be substituted the words

“and shall where the Authority so specifies in respect of the whole or part of the test be conducted in an aircraft in flight.”.

(12) In Schedule 9:

(a) in Part A—

(i) in the proviso to the privileges of the Private Pilot's Licence (Helicopters and Gyroplanes):

(aa) in paragraph (c) the words “helicopter or” shall be deleted and for the words from “flights, each consisting of” to the words “and a landing” there shall be substituted the words “take-offs and 5 landings”.

(bb) after paragraph (c) there shall be added the following new paragraph—

“(d) he shall not fly as pilot in command of such a helicopter at night on a flight on which any passenger is carried or instruction in flying is given unless:

(i) his licence includes a night rating (helicopters and gyroplanes); and

(ii) his licence includes an instrument rating (helicopters) or he has within the immediately preceding 90 days carried out as pilot in command not less than 5 flights, each consisting of a take-off, a transition from hover to forward flight, a climb to at least 500 feet and a landing, at a time when the depression of the centre of the sun was not less than 12° below the horizon.”;

(ii) for the proviso to paragraph (2) of the privileges of the Commercial Pilot's Licence (Helicopters and Gyroplanes) there shall be substituted the following new proviso—

“Provided that:

(a) he shall not, unless his licence includes an instrument rating (helicopters) fly such a helicopter on any scheduled journey or on any flight for the purpose of public transport in Instrument Meteorological Conditions;

(b) he shall not fly such a helicopter or gyroplane on a flight for the purpose of public transport if its maximum total weight authorised exceeds 5,700 kg;

(c) he shall not fly such a gyroplane at night on a flight on which any passenger is carried or instruction in flying is given unless he has within the immediately preceding 90 days carried out as pilot in command not less than 5 take-offs and 5 landings at a time when the depression of the centre of the sun was not less than 12° below the horizon;

(d) he shall not fly such a helicopter at night on a flight on which any passenger is carried or instruction in flying is given unless his licence includes an instrument rating (helicopters) or he has within the immediately preceding 90 days carried out as pilot in command not less than 5 flights, each consisting of a take-off, a transition from hover to forward flight, a climb to at least 500 feet and a landing, at a time when the depression of the centre of the sun was not less than 12° below the horizon.”

- (b) in Part B in paragraph 1 after the entry relating to the "*Instrument Rating (Aeroplanes)*" there shall be inserted the following new entry—
"*Instrument Rating (Helicopters)* shall entitle the holder of the licence to act as pilot in command or co-pilot of a helicopter in controlled airspace in circumstances which require compliance with the Instrument Flight Rules."
- (c) in Part C in sub-paragraph 4(b) for the words "instrument rating (aeroplanes)" there shall be substituted the words "instrument rating (aeroplanes), an instrument rating (helicopters)."

N. E. Leigh,

Clerk of the Privy Council.

EXPLANATORY NOTE

(This Note is not part of the Order.)

This Order amends the Air Navigation Order 1976, as amended. In addition to minor and drafting amendments the following changes are made:

- (1) On flights beginning on or after 1 April 1980 emergency exits from public transport aircraft of more than 5,700 kg, maximum total weight authorised must be marked on the exterior of the aircraft. (Article 3(4)).
- (2) The Secretary of State may now make regulations prohibiting or restricting flight in the neighbourhood of an offshore installation, and within the United Kingdom Flight Information Region. (Article 3(5)).
- (3) Radio communication equipment may not now be used to facilitate an aircraft's approach to land and landing at aerodromes used or intended to be used by aircraft of more than 2,730 kg maximum total weight authorised flying for the public transport of passengers unless it is approved by the Authority as suitable for the service to be provided. The equipment must also be installed and maintained in a manner approved by the Authority and flight checked, overhauled, repaired or modified only by or under the supervision of a person approved by the Authority. The licensee of the aerodrome must keep a written record in respect of the equipment including particulars of flight tests, overhauls and repairs. (Articles 3(6) and (7)).
- (4) New scales of equipment required to be carried in helicopters and gyroplanes are introduced. (Article 3(9)).
- (5) Secondary surveillance radar equipment and radio must now be carried in an aircraft when flying within a special rules area notified for the purposes of Schedule 6 to the Order. "Notified" means set forth in a document published by the Civil Aviation Authority and entitled "NOTAM—United Kingdom" or "United Kingdom Air Pilot". (Article 3(10)).
- (6) A person may not now act as pilot of a helicopter flying in controlled airspace in circumstances requiring compliance with the Instrument Flight Rules unless his pilot's licence includes an Instrument Rating (Helicopters). (Article 3(11)).

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