STATUTORY INSTRUMENTS

1970 No. 823

CIVIL AVIATION

The Air Navigation (Noise Certification) Order 1970

Laid before Parliament in draft

Made - - - - - - - - -	29*th May* 1970
Coming into Operation - - - - -	
(*a*) *for the purpose of making regulations* -	28*th June* 1970
(*b*) *for purposes of Articles* 3, 5, 9 *and* 16 -	27*th August* 1970
(*c*) *for all other purposes* - - - -	1*st January* 1971

At the Court at Buckingham Palace, the 29th day of May 1970

Present,

The Queen's Most Excellent Majesty in Council

Her Majesty, in exercise of the powers conferred upon Her by sections 8, 57, 58, 59 and 61 of the Civil Aviation Act 1949**(a)** and section 19 of the Civil Aviation Act 1968**(b)**, 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 Operation

1. This Order may be cited as the Air Navigation (Noise Certification) Order 1970 and shall come into operation—

(*a*) thirty days after the date hereof, for the purpose of enabling the Board to make regulations thereunder;

(*b*) ninety days after the date hereof for the purposes of Articles 3, 5, 9 and 16; and

(*c*) on 1st January 1971 for all other purposes.

Interpretation

2.—(1) In this Order—

"An International Standard Atmosphere at sea level" has the meaning specified in Schedule 2 to this Order;

"By-pass ratio" means the ratio of the air mass flow through the by-pass ducts of a gas turbine engine to the air mass flow through the combustion chambers calculated at maximum thrust when the engine is stationary in an International Standard Atmosphere at sea level;

(a) 1949 c. 67. (b) 1968 c. 61.

"EPNdB" means the unit for expressing effective perceived noise level determined in accordance with Board of Trade Civil Aviation Publication CAP 335 dated 13th March 1970 with any modifications which may be prescribed ;

"The Convention" means the Convention on International Civil Aviation signed on behalf of the United Kingdom at Chicago on 7th December 1944;

"Noise certificate" means a certificate issued by the competent authority of a State to the effect that the aeroplane to which the certificate relates complies with the applicable noise certification requirements in force in that State ;

"Prescribed" means prescribed by regulations made by the Board under this Order.

(2) Expressions used in this Order shall, unless the context otherwise requires, have the same respective meanings as in the Air Navigation Order 1966**(a)** as amended **(b)**.

(3) The Interpretation Act 1889**(c)** applies for the purpose of the interpretation of this Order as it applies for the purpose of the interpretation of an Act of Parliament.

(4) A power to make regulations under this Order shall include the power to make different provisions with respect to different classes of aeroplanes and with respect to different circumstances and to make such incidental and supplementary provisions as are necessary or expedient for carrying out the purposes of the Order.

Application of Order

3.—(1) This Order shall apply to every aeroplane having turbojet or turbofan engines which—

(*a*) has a maximum total weight authorised of more than 5,700 kg; and

(*b*) in accordance with its certificate of airworthiness requires for take-off at maximum total weight authorised a runway at least 450 metres long; and

(*c*) is incapable of sustaining level flight at a speed in excess of Flight Mach 1; and

(*d*) (i) is powered by engines having a by-pass ratio of 2 or more, or

(ii) is an aeroplane otherwise powered, unless it is of a description exempted by the Board from the application of this Order as being a description of aeroplane which in their opinion is of the same type as an aeroplane in respect of which the authorities of the State of manufacture received an application for a certificate of airworthiness before 1st January 1969 and did not reject that application.

(2) Nothing in this Article shall prejudice Article 16.

Requirement of noise certificate

4. An aeroplane to which this Order applies shall not land or take off in the United Kingdom unless—

(*a*) there is in force in respect of that aeroplane a noise certificate—

(i) issued by the Board under Article 5 of this Order ; or

(a) S.I. 1966/1184 (1966 III, p. 3073).
(b) The relevant amending instrument is S.I. 1969/1082 (1969 II, p. 3153).
(c) 1889 c. 63.

(ii) issued by the competent authority of the country in which the aeroplane is registered, being a country prescribed as one which applies standards which in the opinion of the Board of Trade are substantially equivalent to those required for the issue of a noise certificate by the Board ; or

(iii) issued in pursuance of the Convention by the competent authority of the State in which the aeroplane is registered, and

(*b*) any conditions subject to which the certificate was issued are complied with:

Provided that the foregoing prohibition shall not apply to:—

(*a*) an aeroplane flying in accordance with the "A Conditions" or the "B Conditions" set forth in Schedule 2 to the Air Navigation Order 1966 as amended;

(*b*) an aeroplane flying in accordance with the conditions of a permit to fly issued under the said Order by the Board in respect of that aeroplane;

(*c*) an aeroplane landing or taking off at a prescribed place.

Issue of noise certificate by the Board of Trade and validity of noise certificate

5.—(1) The Board may issue a noise certificate in respect of any aeroplane to which this Order applies if they are satisfied that the aeroplane complies with the standards specified in Schedule 1 to this Order in relation to the noise made by the aeroplane, and for that purpose the applicant for a certificate shall furnish such evidence and submit the aeroplane to such flying trials and other tests as the Board may require.

(2) The Board shall issue every noise certificate subject to a condition as to the maximum total weights at which the aeroplane may take off and land and may issue such a certificate subject to such other conditions relating to standards as to noise as they think fit.

(3) Subject to the provisions of this Article and of Article 8 of this Order, a noise certificate issued under this Article shall remain in force without limit of time.

(4) A noise certificate issued under this Article in respect of an aeroplane registered in the United Kingdom shall cease to be sufficient for the purposes of Article 4 of this Order—

(*a*) if the aeroplane or any part of it is modified, in any way which affects the ability of the aeroplane to comply with the noise standards required by this Order, otherwise than in a manner and with material of a type approved by the Board either generally or in relation to a class of aeroplane or to the particular aeroplane;

(*b*) until the completion of any inspection or test of the aeroplane required by the Board to be made for the purpose of ascertaining whether the aeroplane continues to comply with the noise standards required by this Order.

(5) The Board may, for the purposes of this Article, accept reports furnished to them by a person whom they may approve, either absolutely or subject to such conditions as they think fit, as qualified to furnish such reports.

Noise certificate to be carried

6.—(1) An aeroplane shall not land or take off in the United Kingdom unless it carries any noise certificate which it is required to carry under the law of the country in which it is registered.

(2) An aeroplane registered in the United Kingdom shall, when in flight whether within United Kingdom or elsewhere, carry any noise certificate which is required by this Order to be in force in respect of that aeroplane :

Provided that if the flight is intended to begin and end at the same aerodrome the certificate may be kept at that aerodrome instead of being carried in the aeroplane.

Production of noise certificate

7. The commander of an aeroplane shall, within a reasonable time after being requested to do so by an authorised person, cause to be produced to that person the noise certificate in force in respect of that aeroplane.

Revocation, suspension and variation of noise certificates

8.—(1) The Board may, if they think fit, provisionally suspend any noise certificate, approval, exemption or other document issued under this Order pending investigation of the case. The Board may, after sufficient ground being shown to their satisfaction after due inquiry, revoke, suspend or vary any such certificate.

(2) The holder or any person having the possession or custody of any noise certificate, approval, exemption or other document which has been revoked suspended or varied under this Order shall surrender it to the Board within a reasonable time after being required to do so by them.

(3) The breach of any condition subject to which any noise certificate approval, exemption or other document has been issued under this Order shall render the certificate invalid during the continuance of the breach.

Offences in relation to noise certificates

9.—(1) A person shall not with intent to deceive—

(*a*) use any noise certificate issued or required under this Order which has been forged, altered, revoked or suspended, or to which he is not entitled; or

(*b*) lend any such certificate to, or allow it to be used by, any other person or

(*c*) make any false representation for the purpose of procuring for himself or any other person the issue, renewal or variation of any such certificate

(2) A person shall not purport to issue any noise certificate under this Order unless he has been authorised to do so.

Power to prevent aeroplanes flying

10.—(1) If it appears to the Board or an authorised person that any aeroplane is intended or likely to be flown in such circumstances that Article 4 of this Order would be contravened in relation to the flight, the Board or that authorised person may direct the operator or the commander of the aeroplane that he is not to permit the aeroplane to make the flight or any other flight of such description as may be specified in the direction, until the direction has been revoked by the Board or by an authorised person, and the Board or that authorised person may take such steps as are necessary to detain the aeroplane.

(2) For the purposes of paragraph (1) of this Article, the Board or any authorised person may enter upon and inspect any aeroplane.

Right of access to aerodromes and other places

11. The Board and any authorised person shall have for the purpose of ascertaining whether the provisions of this Order are being complied with, the right of access at all reasonable times—

(*a*) to any aerodrome for the purpose of inspecting any aeroplane on the aerodrome or any document which they have, or he has, power to demand under this Order, and for the purpose of detaining any aeroplane under this Order; and

(*b*) to any place where an aeroplane has landed, for the purpose of inspecting the aeroplane or any document which they have, or he has, power to demand under this Order and for the purpose of detaining the aeroplane under this Order:

Provided that access to a Government aerodrome shall only be obtained with the permission of the person in charge of the aerodrome.

Obstruction of persons

12. A person shall not wilfully obstruct or impede any person acting in the exercise of his powers or the performance of his duties under this Order.

Enforcement of directions

13. Any person who fails to comply with any direction given to him by the Board or by any authorised person under any provision of this Order shall be deemed for the purposes of this Order to have contravened that provision.

Penalties

14.—(1) If any provision of this Order is contravened in relation to an aeroplane, the operator of that aeroplane and the commander thereof, if the operator or, as the case may be, the commander is not the person who contravened that provision shall (without prejudice to the liability of any other person under this Order for that contravention) be deemed for the purposes of the following provisions of this Article to have contravened that provision unless he proves that the contravention occurred without his consent or connivance and that he exercised all due diligence to prevent the contravention.

(2) If it is proved that an act or omission of any person which would otherwise have been a contravention by that person of a provision of this Order was due to any cause not avoidable by the exercise of reasonable care by that person, the act or omission shall be deemed not to be a contravention by that person of that provision.

(3) If any person contravenes any provisions of this Order, not being a provision referred to in paragraphs (4) or (5) of this Article, he shall be liable on summary conviction to a fine not exceeding ten pounds; or in the case of a second or subsequent conviction for the like offence to a fine not exceeding twenty pounds.

(4) If any person contravenes Article 12 of this Order he shall be liable on summary conviction to a fine of fifty pounds; or in the case of a second or subsequent conviction for the like offence to a fine of one hundred pounds, or to imprisonment for a term not exceeding three months or to both such fine and imprisonment.

(5) If any person contravenes Article 4, 9 or 13 of this Order he shall be liable on summary conviction or indictment to a fine not exceeding two hundred pounds or to imprisonment for a term of six months or to both such fine and imprisonment.

Application of Order to the Crown and visiting forces etc.

15.—(1) Subject to the following provisions of this Article, the provisions of this Order shall apply to, or in relation to, aeroplanes belonging to or exclusively employed in the service of Her Majesty, as they apply to or in relation to other aeroplanes and for the purposes of such application the Department or other authority for the time being responsible on behalf of Her Majesty for the management of the aeroplane shall be deemed to be the operator of the aeroplane:

Provided that nothing in this Article shall render liable to any penalty any Department or other authority responsible on behalf of Her Majesty for the management of any aeroplane.

(2) The naval, military and air force authorities and members of any visiting force and any international headquarters and the members thereof and property held or used for the purpose of such a force or headquarters shall be exempt from the provisions of this Order to the same extent as if that force or headquarters formed part of the forces of Her Majesty raised in the United Kingdom and for the time being serving there.

(3) Nothing in this Order shall apply to or in relation to any military aircraft.

Exemption

16. The Board may exempt from any of the provisions of this Order or any regulations made thereunder any aeroplane or persons or classes of aeroplanes or persons, either absolutely or subject to such conditions as they think fit.

Extra territorial effect of the Order

17.—(1) Except where the context otherwise requires, the provisions of this Order,

(*a*) in so far as they apply (whether by express reference or otherwise) to aeroplanes registered in the United Kingdom, shall apply to such aeroplanes wherever they may be ;

(*b*) in so far as they apply as aforesaid to other aeroplanes shall apply to such aeroplanes when they are within the United Kingdom ;

(*c*) in so far as they prohibit, require or regulate (whether by express reference or otherwise) the doing of anything by the commander of any aeroplane registered in the United Kingdom, shall apply to him wherever he may be ; and

(*d*) in so far as they prohibit, require or regulate as aforesaid the doing of anything in relation to any aeroplane registered in the United Kingdom by other persons shall, where such persons are British subjects or citizens of the Republic of Ireland, apply to them wherever they may be.

(2) Nothing in this Article shall be construed as extending to make any person guilty of an offence in any case in which it is provided by section 3(1) of the British Nationality Act 1948(**a**) (which limits the criminal liability of certain persons who are not citizens of the United Kingdom and colonies) that that person shall not be guilty of an offence.

W. G. Agnew.

(**a**) 1948 c. 56.

SCHEDULE 1

Article 5(1)

Noise standards required for issue of a noise certificate

1. In this Schedule—

"the noise certification reference conditions" means conditions in which—

(i) atmospheric pressure at sea level is 1013.25 millibars;

(ii) ambient air temperature is 25°C;

(iii) relative humidity is 70%;

(iv) there is zero wind; and

(v) the maximum take-off and landing weights of the aeroplane are those at which noise certification is requested by the applicant for the certificate.

2. The noise levels required by paragraph 3 of this Schedule shall be measured at the following points:

(*a*) on take-off, at a point on a line parallel to and 650 metres from the extended centre-line of the runway where it appears to the Board that the noise after take-off is greatest;

(*b*) on take-off, at a point on the extended centre-line of the runway, 6500 metres from the start of the take-off run; and

(*c*) on the approach to landing, at a point on the extended centre-line of the runway, 120 metres vertically below the 3° descent path.

3.—(1) Subject to the provisions of paragraph 4 of this Schedule, an aeroplane having the maximum total weight authorised specified in the first column of the following Table shall not, at the points referred to at (*a*), (*b*) and (*c*) of paragraph 2 of this Schedule, exceed, in the noise certification reference conditions, the noise levels specified in relation to those points in the second, third and fourth columns of that Table, as shown by flying trials (whether or not conducted at the maximum total weight authorised).

TABLE

Maximum total weight authorised of aeroplane	*Noise level in EPNdB*		
	At point (*a*)	*At point* (*b*)	*At point* (*c*)
272,000 kg or more	108	108	108
34,000 kg or less	102	93	102

(2) Where the maximum total weight authorised of the aeroplane is between the weights specified in the above Table, the noise levels which are not to be exceeded shall vary linearly according to the logarithm of the maximum total weight authorised of the aeroplane.

(3) The necessary corrections shall be made where the flying trials are carried out in conditions other than the noise certification reference conditions.

4. The noise levels specified in paragraph 3 of this Schedule may be exceeded at one or two of the measuring points specified in paragraph 2 if—

(*a*) the sum of the excess does not exceed 4 EPNdB;

(*b*) at no measuring point is the excess greater than 3 EPNdB; and

(*c*) the excesses are completely offset by reductions at the other measuring points.

Article 2 SCHEDULE 2

"An International Standard Atmosphere at sea level" means an atmosphere having the following characteristics:—

(*a*) the air is a perfect dry gas;

(*b*) the physical constants are:

(i) sea level mean molecular weight:
$M_0 = 28.9644 \times 10^{-3}$ kg. mol^{-1}

(ii) sea level atmospheric pressure:
$P_0 = 1013.250$ millibars
$= 1.013250 \times 10^5$ newtons. m^{-2}

(iii) sea level temperature:
$t_0 = 15$ °C
$T_0 = 288.15$ °K

(iv) sea level atmospheric density:
$\rho_0 = 1.2250$ kg. m^{-3}

(v) temperature of the ice point:
$T_i = 273.15$ °K

(vi) universal gas constant:
$R^* = 8.31432$ joules (°K)$^{-1}$. mol^{-1}

EXPLANATORY NOTE

(*This Note is not part of the Order.*)

This Order applies to turbojet and turbofan aeroplanes having a maximum total weight authorised of more than 5700 kilogrammes and incapable of level supersonic flight or of using a runway of 450 metres or less, and which either have engines with a by-pass ratio of 2 or more, or are otherwise powered and are not exempted as being of types developed before 1st January 1969 (Article 3(1)(*d*)(ii)) or otherwise exempted under Article 16 of the Order.

The Order prohibits an aircraft to which it applies, wherever registered from landing or taking off in the United Kingdom except in accordance with a noise certificate issued by the Board of Trade, or by the competent authority of such countries as may be prescribed by regulations made by the Board, or issued in pursuance of the Chicago Convention of 1944. It makes provision for the issue of noise certificates by the Board of Trade, specifies standards with which an aeroplane must comply in order to obtain such a certificate, and contains ancillary provisions including power to detain aircraft to prevent a contravention of the Order.

The publication CAP 335, referred to in Article 2, can be purchased from H.M. Stationery Office.

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