

## Order on the exposure of crew members to noise (Noise Order)<sup>1)</sup>

In pursuance of subsections 1 and 2 of § 40 g, cf. subsections 7 and 10 of § 149 of the Danish Air Navigation Act, cf. Consolidated Act no. 1484 of 19 December 2005, the Civil Aviation Administration - Denmark hereby stipulates as follows on the authority of the Ministry of Transport and Energy, cf. Order no. 795 of 3 September 2001 on delegation of authorities to the Civil Aviation Administration - Denmark and on publication of the regulations issued by the Administration:

### Chapter 1

#### *Aim and scope*

**§ 1.** The aim of this Order is to lay down minimum requirements for the protection of crew members from harmful effects arising from exposure to noise during work.

**§ 2.** The Order applies to work for an employer performed by crew members on duty on board an aircraft where the employee is or may be exposed to noise in connection with the work

(2) The Order contains regulations supplementing the Aviation Working Environment Order.

### Chapter 2

#### *Definitions*

**§ 3.** In this Order the following shall mean:

- 1) *Employer:*  
Any physical or legal person having established working relations with the crew member and being responsible for the undertaking.
- 2) *Working Environment Order for Aviation:*  
The Civil Aviation Administration - Denmark's Order no. 918 of 18 November 2003 on working environment conditions for crew members performing duty on board aircraft and for their employers.
- 3) *Working Environment Council:*  
The working environment council for aviation established by the minister of transport and energy in pursuance of § 40 h in the Air Navigation Act.

1) This Order implements Directive 2003/10/EC of the European Parliament and of the Council of 6 February 2003 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise) (Seventeenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) (OJ 2003 L 42, p. 38) (OJ 1989 L 183, p. 1).

- 4) *Workplace assessment:*  
The assessment of the workplace made by the employer in cooperation with the safety committee or the employees in accordance with the Working Environment Order for Aviation.
- 5) *Crew member:*  
A person holding a licence issued or approved by the Civil Aviation Administration - Denmark under the terms of the Danish Air Navigation Act or regulations drawn up in pursuance of the said Act.
- 6) *Daily noise exposure level ( $L_{EX,8h}$ ):*  
Time-weighted average of the noise exposure levels for a normal eight-hour working day in dB(A) called  $L_{EX,8h}$ . It covers all noises present at work, including impulsive noise
- 7) *Impulsive noise (maximum noise pressure called  $L_{p,peak}$ ):*  
Short strong sounds (maximum value of the C-frequency weighted (measuring expression) instantaneous noise pressure).

### Chapter 3

#### *Obligations of employers*

#### *Limit values*

**§ 4.** Under no circumstance may any crew member be exposed to noise exceeding the limit values in (2).

(2). The limit value of the daily noise exposure is 87 dB(A) and for impulse noise 140 dB.

(3). When using the limit values in (2) effect of hearing protector shall be taken into consideration.

**§ 5.** If, in spite of the measures taken under this Order, crew members are exposed to noise exceeding the limit values, cf. § 4 (2), the employer shall

- 1) immediately take measures to bring the noise below the limit value,
- 2) state the causes that the limit values were exceeded, and
- 3) adjust the measures under this Order to avoid that the limit values are exceeded again.

### *Upper action values*

**§ 6.** If crew members are exposed to noise exceeding the upper action values as stated in (2), the employer shall,

- 1) on the basis of the workplace assessment, stipulate and implement a programme with technical or organizational measures aiming at limiting the exposure to noise, taking especially into account the considerations stipulated in § 13, and
- 2) implement the measures stipulated in §§ 14 and 20 (2).

(2). The upper action value for the daily noise exposure is 85 dB(A) and for impulse noise 137 dB.

(3). If crew members are exposed to noise equalling or exceeding the upper action values stipulated in (2) they shall be under the obligation to use personal hearing protector.

### *Lower action values*

**§ 7.** If crew members are exposed to noise exceeding the lower action values as stated in (2), the employer shall

- 1) at any time make available personal hearing protectors, and
- 2) implement the measures stipulated in §§ 18 and 20 (3).

(2) The lower action value for the daily noise exposure is 80 dB(A) and for impulse noise 135 dB.

**§ 8.** When using the action values in §§ 6 and 7, the use of hearing protector shall not be taken into consideration.

### *Workplace assessment*

**§ 9.** As part of the workplace assessment the employer shall, at suitable intervals, carefully assess and if necessary measure the exposure of crew members to noise.

(2) The methods and noise measuring apparatus shall be adapted to the prevailing conditions, particularly in the light of the characteristics of the noise to be measured, the length of exposure, ambient factors and the characteristics of the measuring apparatus.

(3) The methods and noise measuring apparatus shall make it possible to determine the physical parameters defined in § 3 regarding noise and to decide whether the values fixed in §§ 4, 6 and 7 have been exceeded.

(4) The methods used may include sampling, which shall be representative of the personal exposure of a crew member.

(5) The assessment of the measurement results shall take into account the measurement inaccuracies determined in accordance with common measuring technical practice.

**§ 10.** The employer shall give particular attention, when carrying out the workplace assessment, to the following:

- 1) The level, type and duration of noise, including the crew member's exposure to impulsive noise.
- 2) The limit values and the action values laid down in this Order, cf. §§ 4, 6 and 7.
- 3) Negative effects concerning the health and safety of crew members who may be particularly sensitive to noise (particularly sensitive risk groups).
- 4) Any effect on the employee's safety and health relating from the interactions between noise and vibrations and

between noise and work-related organic solvents harming the hearing.

- 5) Any indirect effects on the crew member's safety and health resulting from noise concealing warning signals or other sounds that need to be observed in connection with the work.
- 6) Information on noise emission provided by manufacturers of work equipment in accordance with the relevant Community directives.
- 7) The existence of alternative work equipment designed to reduce the crew member's exposure to noise.
- 8) The extension of exposure to noise beyond normal working hours under the employer's responsibility.
- 9) Appropriate information obtained following health surveillance.
- 10) The availability of hearing protectors with adequate attenuation characteristics.

**§ 11.** The employer shall identify in the workplace assessment which measures must be taken in accordance with §§ 12-15 of this Order.

(2) The workplace assessment shall be recorded on a suitable medium and kept up to date, particularly if there have been significant changes, or if the Civil Aviation Administration - notifies that the results of the health surveillance show it to be necessary, cf. § 21 (2).

### *Planning and organisation of the work*

**§ 12.** The work shall be planned and organised so that unnecessary noise exposure is avoided. Noise during work shall be eliminated at its source and be reduced to a minimum, taking into account the technical progress.

**§ 13.** The risk of health problems shall be reduced by taking into account in particular:

- 1) Other working methods.
- 2) The choice of appropriate work equipment, taking account of the work to be done, emitting the least possible noise, including work equipment subject to Community provisions with the aim or effect of limiting exposure to noise.
- 3) The design and layout of workplaces and work stations.
- 4) Adequate information and training to instruct workers to use the equipment, technical aids and protectors correctly in order to reduce their exposure to noise to a minimum.
- 5) Noise reduction by technical means:
  - a) Reducing airborne noise, e.g. by shields, enclosures and sound-absorbent coverings.
  - b) Reducing structure-borne noise, e.g. by damping or isolation.
  - c) Appropriate maintenance programmes for work equipment, systems etc. that may add to the noise load.
- 6) Organisation of work to reduce noise:
  - a) Limitation of duration and intensity of crew members' exposure.
  - b) Adequate rest periods.

**§ 14.** On the basis of the workplace assessment the employer shall mark with signs the areas in which crew members are likely to be exposed to noise exceeding the upper action values, cf. § 6 (2). The areas in question shall

be delimited and access to them restricted where this is technically feasible and the risk of exposure so justifies.

(2) Where, owing to the nature of the activity, a crew member has access to use rest facilities under the responsibility of the employer, noise in these facilities shall be reduced to a level compatible with their purpose and the conditions of use.

§ 15. The employer shall adapt the measures referred to in §§ 12-14 to the requirements of crew members belonging to particularly sensitive risk groups.

#### *Personal noise protection*

##### *Hearing protectors*

§ 16. If the risks of health problems arising from exposure to noise cannot be prevented by other means, the employer shall make available to the crew members appropriate, properly fitting individual hearing protectors, cf. also §§ 6-7.

(2) The individual hearing protectors shall be so selected as to eliminate the risk to hearing or to reduce the risk to a minimum.

§ 17. Hearing protectors shall be used in accordance with § 38 of the Working Environment Order for Aviation.

(2) The employer shall ensure that crew members wear hearing protectors in accordance with this Order, and that the hearing protectors are effective.

#### *Training and instruction*

§ 18. The employer shall ensure that crew members who are exposed to noise at work at or above the lower action values, cf. § 7 (2), and/or their representatives, receive information and training relating to health risks resulting from exposure to noise.

(2) The information and instruction in (1) shall be given with particular emphasis on the following:

- 1) The nature of risks resulting from exposure to noise.
- 2) The measures taken in accordance with this Order to eliminate or reduce to a minimum the risks from noise.
- 3) The limit and action values laid down in this Order, cf. § 4 (2), § 6 (2) and § 7 (2).
- 4) The results of the assessments and measurements of the noise carried out in accordance with § 9 of this Order.
- 5) Explanation of the importance of correct use of hearing protectors.
- 6) Why and how to detect and report signs of hearing damage.
- 7) The circumstances in which workers are entitled to health surveillance and the purpose of health surveillance.
- 8) Safe working practices and methods to minimise exposure to noise.

#### *Consultation and participation of crew members*

§ 19. Crew members and/or their representatives shall be consulted in accordance with the Working Environment

Order for Aviation and shall participate in decisions of the matters covered by this Order, in particular:

- 1) The workplace assessment with assessment of risks and identification of measures to be taken.
- 2) The actions aimed at eliminating or reducing risks arising from exposure to noise, referred to in § 13.
- 3) Crew members' right to individual hearing protectors in accordance with this Order, cf. § 16.

#### *Health surveillance*

§ 20. The employer shall ensure that crew members can have a work medical examination in accordance with Order no. 340 of 28 April 1997 on work medical examinations under the Air Navigation Act if the workplace assessment indicates a risk to the crew members' health.

(2) Crew members exposed to noise exceeding the upper action values in § 6 (2) shall always be entitled to a work medical examination.

(3) Crew members exposed to noise exceeding the lower action values in § 7 (2) shall always be entitled to a preventive audiometric examination.

(4) The purpose of the health surveillance is to ensure that the hearing is kept when diagnosed early.

§ 21. The one responsible for the health medical examination shall evaluate whether it is likely that any impair was caused by exposure to noise during work and, should the occasion arise, submit the result to the Civil Aviation Administration - Denmark in accordance with § 6 of Order on work medical examinations under the Air Navigation Act.

(2) The Civil Aviation Administration - Denmark may, on the basis of the results of the health examinations order the employer to implement new measures, including revise the workplace assessment and implement new measures in connection with the planning and carrying out of the work.

## Chapter 4

### *Miscellaneous provisions*

#### *Exemptions*

§ 22. The Civil Aviation Administration - Denmark may in particularly exceptional cases exempt from the provisions in this Order when it is compatible with the considerations on which the provisions in question are based, and from Directive 2002/44/EC on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise).

(2) The Civil Aviation Administration - Denmark may consult the Working Environment Council before an exemption is granted.

(3) The exemption shall be accompanied by conditions ensuring that the risk of health problems is limited to a minimum and that more stringent health control is implemented for the affected crew members.

(4) The exemption shall be reconsidered every four years and shall be revoked as soon as the reasons for the exemption no longer exist.

(5) Every four years the Civil Aviation Administration - Denmark submits to the Commission a list of the

exemptions granted under this Order with information on the reasons for the exemption.

*Punishment*

§ 23. An employer violating §§ 4-7 and §§ 9-20 shall be punished by fine.

(2) If an employer violates the provisions stated in (1), he may be punishable by a fine under § 149 (10) of the Air Navigation Act even though the violation cannot be set against him as wilful or negligent.

(3) An employer omitting to obey an order issued in pursuance of this Order shall be punished by fine. For such a violation the employer may be punishable by a fine even though the violation cannot be set against him as wilful or negligent.

(4) Companies etc. (legal persons) shall be liable to punishment under the rules in Chapter 5 of the Criminal Code, cf. § 149 (14) of the Air Navigation Act.

(5) A crew member violating § 6 (3) shall be punished by a fine.

(6) A medical adviser violating § 21 (1) shall be punished by a fine.

*Entry into force*

§ 24. This Order shall enter into force on 15 February 2006.

*The Faeroe Islands*

§ 25. This Order shall not apply to the Faeroe Islands.

*Civil Aviation Administration - Denmark, 9 January 2006*

KURT LYKSTOFT LARSEN

/Per Veingberg