Civil Aviation (Examination Procedures) General Directions Notice 2009

Pursuant to section 27G of the Civil Aviation Act 1990, the Director, after having consulted the persons, health professionals with aviation medical experience, representative groups within the aviation industry or elsewhere, government departments, and Crown agencies that the Director considers appropriate, gives the following notice.

Contents

Notice

1 Title

This notice is the Civil Aviation (Examination Procedures) General Directions Notice 2009.

2 Commencement

This notice comes into force on 01 March 2009.

Part 1
Purpose and interpretation

3 Purpose

The purpose of this notice is —

(a) to provide for the conduct of examinations of applicants and licence holders, and the reporting of the results of those examinations to the Director; and

(b) to specify the requirements (if any) of examinations or other clinical matters, including-

(i) the medical content of examinations:

(ii) the interpretation and analysis of results of examinations:

(iii) the significance of results of examinations for the purpose of determining whether or not an applicant is eligible for a medical certificate under section 27B of the Act.

4 Interpretation

(1) In this notice, unless the context otherwise requires,—

Act means the Civil Aviation Act 1990

AS/NZS 1269.4: 2005 means the Joint Australian and New Zealand Standard on Occupational noise management – Auditory assessment

ISO 8253 means the International Organization for Standardization Standard on Acoustics-Audiometric test methods

non-routine examinations —

(a) means the examinations that an applicant for a class of medical certificate must have as part of the general medical examination for that class of medical certificate; but

(b) does not include a routine examination

other applicable routine examinations has the same meaning as in clause 4(1) of the Civil Aviation (Timing of Routine Examinations) General Directions Notice 2008

routine examinations has the same meaning as in clause 4(1) of the Civil Aviation (Timing of Routine Examinations) General Directions Notice 2008

Rules means the Civil Aviation Rules.

(2) A term or expression that is defined in the Act or the Rules and used, but not defined, in this notice has the same meaning as in the Act or the Rules, as the case may require.

5 Status of examples

(1) An example used in this notice is only illustrative of the provision to which it relates. It does not limit the provision.

(2) If an example and the provision to which it relates are inconsistent, the provision prevails.

Part 2
Examination procedures

6 Routine examinations

Schedule 1 sets out the requirements of the Rules for each of the routine examinations contained in that schedule.

7 Non-routine examinations

Schedules 2 to 13 set out the requirements of the Rules for the non-routine examinations to which each of those schedules applies.

Schedule 1
Routine examinations

Section 1: General medical examination

1.1 Definition

A general medical examination means the general medical examination referred to in rule 67.57(l)(i) of the Rules.

1.2 Conduct of examination

1.2.1 A general medical examination consists of the following examinations:

(a) a clinical examination:

(b) any other applicable routine examination that may be required in accordance with the Civil Aviation (Timing of Routine Examinations) General Directions Notice 2006:

(c) any non-routine examination that may be clinically indicated.

1.2.2 Other applicable routine examinations (for example, a chest X-ray or audiometry) may be conducted by the medical or paramedical personnel specified in the relevant requirements set out in these general directions or in any other general directions for those other applicable routine examinations.

1.2.3 If clause 1.2.2 does not apply, the other applicable routine examinations may be conducted by a person who is suitably qualified and experienced and who is acceptable to the medical examiner.

1.2.4 Any non-routine examination that is clinically indicated (for example, a neurologist's review, a stress myocardial perfusion scan, or a psychologist's review) may be conducted by the medical or paramedical personnel specified in the relevant requirements set out in these general directions or in any other general directions for that non-routine examination.

1.2.5 If clause 1.2.4 does not apply, a non-routine examination that is clinically indicated may be conducted by a person who is suitably qualified and experienced and who is acceptable to the medical examiner.

1.3 Interpretation of results

The results of a general medical examination must be interpreted in accordance with current best medical practice that applies in New Zealand.

1.4 Reporting requirements

A medical examiner must ensure that the results of each examination that constitutes a general medical examination are —

(a) recorded and reported in accordance with the relevant general directions (if any); and

(b) included with the report made under section 27D(1) of the Act.

1.5 Period of validity of results

The period of validity for each examination that comprises a general medical examination is relevant.

Section 2: Clinical examination

2.1 Definition

Clinical examination means the physical and mental medical examination of an applicant by a medical examiner.

2.2 Conduct of examination

2.2.1 An applicant who must have a clinical examination must produce one of the following documents as evidence of his or her identity:

(a) a current New Zealand passport:

(b) a current New Zealand driver licence:

(c) an equivalent form of photographic identification that is acceptable to the Director (for example, a credit card, an airport identity card, or a firearms licence).

2.2.2 A clinical examination of an applicant must-

(a) record the applicant's history on the basis of information provided by the applicant; and

(b) include a general medical examination of the applicant, including height, weight, pulse, and sitting blood pressure. If the applicant's sitting blood pressure is outside the range 100-140/70-90 mm of Hg, the applicant's blood pressure must also be recorded in lying and standing positions; and

(c) include an examination of all the applicant's systems, including —

(i) an examination of the eyes, including distant vision (using 6 m charts) and near vision, without correction, with primary correction, and with standby correction; and

(ii) an examination of visual fields (by confrontation), eye movements, and cover tests; and

(iii) an examination of ears, nose, and throat, and the conducting of a conversational voice test; and

(iv) a general psychiatric screening; and

(v) an examination of the applicant's speech (any element of dysarthria to be documented); and

(vi) documentation of derived parameters (for example, body mass index or cardiovascular risk estimation); and

(vii) any other examinations that may be clinically indicated by the applicant's history or the results of other examinations.

2.3 Interpretation of results

The results of a clinical examination must be interpreted in accordance with current best medical practice that applies in New Zealand.

2.4 Reporting requirements

2.4.1 The results of a clinical examination must be documented on the report made under section 27D(l) of the Act (form CAA 24067/002), which must be signed and dated by the medical examiner.

2.4.2 If an applicant has any history, symptoms, or signs of any conditions, the appropriate form on the Authority's website must be used. The forms must be signed and dated by the medical examiner. The forms that must be used are as follows:

(a) for respiratory conditions, the respiratory examination report (form CAA 24067/213):

(b) for headaches, the headache investigation report (form CAA 24067/215):

(c) for hypertension, the blood pressure examination report (form 24067/214):

(d) for diabetes mellitus, the special report-diabetes (form MOT 1140):

(e) for applicants older than 70 years, the ageing pilot report (form CAA 24067/217).

2.4.3 The document produced by an applicant as evidence of his or her identity must be recorded on the report that under section 27D(l) of the Act (form CAA 24067/002) records the results of the clinical examination.

2.5 Period of validity of results

The results of a clinical examination are valid for a period of 90 days from the date of the examination.

Section 3: 12-1ead ECG

3.1 Definition

12-1ead ECG means a 12-lead electrocardiogram that uses standard techniques to record the electrical activity of an applicant's heart.

3.2 Conduct of examination

An electrocardiogram (ECG) trace must be conducted as follows:

(a) the sensitivity must be set at 10 mm/mV:

(b) the recording speed must be set at 25 mm/s:

(c) the baseline calibration must be shown:

(d) the trace must be displayed in the following order:

Types	Leads required
Bipolar leads	I, II, and III
Unipolar leads	aVR, aVL, and aVF
Precordial leads	VI-6
Rhythm strip	II

3.3 Interpretation of results

3.3.1 Interpretation of a 12-lead ECG may be conducted by a self-reporting ECG machine.

3.3.2 If the machine-generated report is not normal, or if there is no machine-generated report, the results must be interpreted by a cardiologist or a specialist medical physician.

3.4 Reporting requirements

The report made under section 27D(l) of the Act (form CAA 24067/002) must —

(a) include, if applicable, the machine-generated report; and

(b) include, if applicable, the report of the cardiologist or specialist medical physician who interpreted the results of the 12-lead ECG; and

(c) include the ECG tracing, which, —

(i) if a single-channel recorder is used, must be cut, mounted, and labelled on the report made under section 27D(l) of the Act (form CAA *24067/002);* and

(ii) if a multi-channel recorder is used, must be presented in an A4 format; and

(d) be signed and dated by the medical examiner.

3.5 Period of validity of results

The results of a 12-lead ECG are valid for a period of one year from the date of the examination.

Section 4: Cardiovascular risk estimation

4.1 Definition

Cardiovascular risk estimation, in relation to an applicant, means the calculation of the applicant's 5-year risk of a cardiovascular event based on medical information.

4.2 Conduct of examination

4.2.1 The 5-year risk of a cardiovascular event must be calculated using the cardiovascular risk assessment procedure described at pages xxi to xxiii of the New Zealand Guidelines Group evidence-based best practice guideline titled The Assessment and Management of Cardiovascular Risk (ISBN 0-476-00091-2) (which can be downloaded from the New Zealand Guidelines Group website at www.nzgg.org.nz) or other similar tool approved by the Director.

4.2.2 For the purposes of cardiovascular risk estimation, —

(a) an applicant with impaired glucose tolerance (but not impaired fasting glucose) will be regarded as diabetic:

(b) the most recent blood lipids estimation to which the relevant table in the Civil Aviation (Timing of Routine Examinations) General Directions Notice 2006 applies must be used:

(c) a smoker means someone who has smoked tobacco in the last 12 months:

(d) an applicant with risk factors outside the range of coverage of the cardiovascular risk assessment tool specified in section 4.2.1 is to be considered as having a 5-year risk of greater than 10%.

4.3 Interpretation of results

4.3.1 A 5-year risk of less than 10% may be interpreted as not being of aeromedical significance.

4.3.2 A 5-year risk of or over 10% must be interpreted as being of aeromedical significance unless the presence of ischaemic heart disease has been excluded.

4.4 Reporting requirements

4.4.1 The results of the cardiovascular risk estimation referred to in section 4.2.1 must clearly indicate the percentage risk (eg 10% over 5 years) over which the risk estimation applies. The results must also indicate-

(a) the values of the all of the risk factors that were utilised in the calculation; and

(b) the cardiovascular risk assessment tool that was used.

4.4.2 The results of the cardiovascular risk estimation must be reported in, or attached to, the medical examiner's report made under section 27D(1) of the Act (form CAA 24067/002).

4.5 Period of validity of results

The results of cardiovascular risk estimation are valid for a period of one year from the date of the examination.

Section 5: Blood lipids estimation

5.1 Definition

Blood lipids estimation means the estimation of serum venous lipids carried out on a fasting sample of venous blood.

5.2 Conduct of examination

A fasting sample of venous blood must be used for blood lipids estimation.

5.3 Interpretation of results

The results of blood lipids estimation must be interpreted in accordance with the New Zealand Guidelines Group evidence-based best practice guideline titled *The Assessment* and Management of Cardiovascular Risk (ISBN 0476-00091-2) (which can be downloaded from the New Zealand Guidelines Group website at www.nzgg.org.nz).

5.4 Reporting requirements

The laboratory reports must be attached to the examination report made under section 27D(l) of the Act (form CAA 24067/002).

5.5 Period of validity of results

The results of blood lipids estimation are valid for a period of one year from the date of the examination.

Section 6: Chest X-ray

6.1 Definition

Chest X-ray means a radiographic examination of the lungs, heart, and other tissues and organs of the chest and upper abdomen.

6.2 Conduct of examination

6.2.1 An applicant who must have a chest X-ray must produce one of the following documents as evidence of his or her identity:

(a) a current New Zealand passport:

(b) a current New Zealand driver licence:

(c) an equivalent form of photographic identification that is acceptable to the Director (for example, a credit card, an airport identity card, or a firearms licence).

6.2.2 A chest X-ray must be conducted by a suitably qualified and experienced radiography technician, radiologist, or other medical practitioner using standard published methodologies.

6.2.3 The chest X-ray required is a postero-anterior view in full inspiration.

6.3 Interpretation of results

A chest X-ray must be interpreted by a qualified radiologist.

6.4 Reporting requirements

6.4.1 The report of the chest X-ray must identify the facility used and the reporting radiologist.

6.4.2 The report format used by the reporting radiologist is acceptable.

6.4.3 The report of the chest X-ray, but not the X-ray plates, must be included in or accompany the report made under section 27D(l) of the Act (form CAA 24067/002).

6.4.4 The document produced by an applicant as evidence of his or her identity must be recorded on the report that under section 27D(1) of the Act records the results of the chest X-ray.

6.5 Period of validity of results

The results of a chest X-ray are valid for a period of one year from the date of the examination.

Section 7: Spirometry

7.1 Definition

Spirometry means the examination and measurement of breathing performance and lung volume.

7.2 Conduct of examination

7.2.1 An applicant who must have spirometry must produce one of the following documents as evidence of his or her identity:

(a) a current New Zealand passport:

(b) a current New Zealand driver licence:

(c) an equivalent form of photographic identification that is acceptable to the Director (for example, a credit card, an airport identity card, or a firearms licence).

7.2.2 Spirometry is to be performed —

(a) in the manner described by the manufacturer of the spirometer; or

(b) in accordance with published procedures or codes of practice.

7.2.3 Spirometry must include the following measurements:

(a) FVC (forced vital capacity):

(b) FEV_1 (forced expired volume in 1 second):

(c) FEV_1/VC, which is the FEV_1 expressed as the percentage of the VC or FVC (whichever volume is larger):

(d) PEF (peak expiratory flow):

(e) $FEF_{25-75\%}$ (average expired flow over the middle half of the FVC manoeuvre) is to be recorded if available.

7.2.4 If there is no past or present history of respiratory disease, and if the FEV_1 is less than 80% of predicted, the readings must be repeated after a bronchodilator.

7.2.5 All indices of ventilatory function should be reported at body temperature and pressure saturated with water vapour (BTPS).

7.3 Interpretation of results

7.4.1 If there is no past or present history of respiratory disease and all parameters are within the published normal range for the applicant's age, gender, and weight, the spirometry results may be interpreted as not being of aeromedical significance.

7.4 Reporting requirements

7.4.1 The report made under section 27D(I) of the Act (form CAA 24067/002) must-

(a) include the results of spirometry, which must be reported as a table with the measurements given in section 7.2.3 and the predicted values, and as a percentage of predicted values; and

(b) state whether the results of spirometry are normal, or show some degree of restriction or obstruction; and

(c) if available, include either of the following graphic methods:

(i) a normal maximal expiratory and inspiratory flow-volume curve; or

(ii) a normal spirogram; and

(d) be signed and dated by the person who conducted the examination, if the examination has not been carried out by a medical examiner.

7.4.2 The document produced by an applicant as evidence of his or her identity must be recorded on the report that under section 27D(I) of the Act records the results of spirometry.

7.5 Period of validity of results

The results of spirometry are valid for a period of one year from the date of the examination.

Section 8: Blood sugar estimation

8.1 Definition

Blood sugar estimation means the estimation of serum venous glucose carried out on a fasting sample of venous blood.

8.2 Conduct of examination

The examination must be performed following an 8-hour fast.

8.3 Interpretation of results

The results are to be interpreted in accordance with the New Zealand Guidelines Group Diagnostic Guidelines for Diabetes.

8.4 Reporting requirements

The laboratory reports are to be attached to the examination report.

8.5 Period of validity of results

The results of blood sugar estimation are valid for a period of one year from the date of the examination.

Section 9: Audiometry

9.1 Definition

Audiometry means the examination of pure-tone, air-conduction audiometry.

9.2 Conduct of examination

9.2.1 An applicant who must have audiometry must produce one of the following documents as evidence of the person's identity:

(a) a current New Zealand passport:

(b) a current New Zealand driver licence:

(c) an equivalent form of photographic identification that is acceptable to the Director (for example, a credit card, an airport identity card, or a firearms licence).

9.2.2 A medical examiner must ensure that audiometry is conducted in accordance with —

(a) ISO 8253; or

(b) AS/NZS 1269.4: 2005; or

(c) any other equivalent published standard that is acceptable to the Director.

9.3 Interpretation of results

Except as otherwise expressly provided in any other general directions issued under section 27G of the Act, the results of audiometry may be interpreted as a pass if the hearing deficit measured in either ear is not more than —

(a) 35 dB at any of the frequencies of 500 Hz, 1 000 Hz, or 2 000 Hz; or

(b) 50 dB at the frequency of 3 000 Hz.

9.4 Reporting requirements

9.4.1 The results of audiometry must be reported on the pure tone audiometry report (form CAA 24067/203).

9.4.2 The document produced by an applicant as evidence of his or her identity must be recorded on the report that under section 27D(1) of the Act (form CAA 24067/002) records the results of audiometry.

9.5 Period of validity of results

The results of audiometry are valid for a period of one year from the date of the examination.

Section 10: Special vision examination

10.1 Definition

Special vision examination means a comprehensive assessment of vision.

10.2 Conduct of examination

10.2.1 An applicant who must have a special vision examination must produce one of the following documents as evidence of his or her identity:

(a) a current New Zealand passport:

(b) a current New Zealand driver licence:

(c) an equivalent form of photographic identification that is acceptable to the Director (for example, a credit card, an airport identity card, or a firearms licence).

10.2.2 The following must be included in the special vision examination:

(a) history of visual problems or occupational exposure:

(b) general eye examination:

(c) examination of distant and near vision without correction:

(d) examination of distant and near vision with primary correction (if applicable):

(e) examination of distant and near vision with standby correction (if applicable):

(f) examination of visual fields (by confrontation):

(g) examination of eye movements and muscle balance:

(h) examination of ocular muscle balance:

(i) examination to detect and quantify phorias and tropias:

(j) measurement of intraoccular tension:

(k) dilated fundus examination:

(l) colour-vision screening examination:

(m) any other examinations that may be clinically indicated by the applicant's history or other examinations.

10.3 Interpretation of results

The results of a special vision examination must be interpreted in accordance with current best medical practice that applies in New Zealand.

10.4 Reporting requirements

10.4.1 The history and findings of the special vision examination must be documented on the special eye report (form CAA 240671211), and signed and dated by the examining ophthalmologist/CAA-accredited optometrist.

10.4.2 The document produced by an applicant as evidence of his or her identity must be recorded on the report that under section 270(1) of the Act (form CAA 24067/002) records the results of the special vision examination.

10.5 Period of validity of results

The results of a special vision examination are valid for a period of one year from the date of the examination.

Section 11: Colour-vision screening examination (Ishihara)

11.1 Definition

Colour-vision screening examination (Ishihara) means the screening examination using the Ishihara pseudoisochromatic plates.

11.2 Conduct of examination

An applicant for a colour vision screening examination (Ishihara) must produce one of the following documents as evidence of his or her identity:

(a) a current New Zealand passport:

(b) a current New Zealand driver licence:

(c) an equivalent form of photographic identification that is acceptable to the Director (for example, a credit card, an airport identity card, or a firearms licence).

The following requirements apply:

(a) screening must be done in daylight or illuminant 065 (provided by a Philips 96 fluorescent tube light):

(b) plates must be presented perpendicularly to the applicant's line of sight:

(c) the distance should be not be less than 75 cm beyond the applicant's fingertips:

(d) all plates from plate number 2 to 17 must be presented to the applicant, and the plates after plate number 2 must be presented randomly.

11.3 Interpretation of results

11.3.1 An applicant who identifies all of the Ishihara plates 2 to 17, or incorrectly identifies no more than 1 plate, may be treated as having no deficit of colour vision to an extent that is of aeromedical significance.

11.3.2 Except as otherwise expressly provided in any other general directions issued under section 27G of the Act, an applicant who incorrectly identifies 2 or more of the Ishihara plates 2 to 17 must be treated as having a deficit of colour vision to an extent that is of aeromedical significance.

11.4 Reporting requirements

11.4.1 The medical examiner must ensure that any plate numbers that the applicant has identified incorrectly are recorded in the appropriate place in the report required under section 27D of the Act (form CAA 24067/002).

11.4.2 The document produced by an applicant as evidence of his or her identity must be recorded on the report that under section 27D(1) of the Act records the results of the colour-vision screening examination (Ishihara).

11.5 Period of validity of results

The results of a colour-vision screening examination (Ishihara) are valid for a period of one year from the date of the examination.

Schedule 2
Non-routine examinations: general

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(b) (general), rule 67.105(b) (general), or rule 67.107(b) (general), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 3
Non-routine examinations: nervous system

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(c) (nervous system), rule 67.105(c) (nervous system), or rule 67.107(c) (nervous system), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 4

Non-routine examinations: cardiovascular system

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(d) (cardiovascular system), rule 67.105(d) (cardiovascular system), or rule 67.107(d) (cardiovascular system), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 5
Non-routine examinations: respiratory system

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(e) (respiratory system), rule 67.105(e) (respiratory system), or rule 67.107(e) (respiratory system), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 6

Non-routine examinations: alimentary and endocrine systems

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(f) (alimentary and endocrine systems), rule 67.105(f) (alimentary and endocrine systems), or rule 67.107(f) (alimentary and endocrine systems), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 7

Non-routine examinations: reticuloendothelial and immune systems

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(g) (reticuloendothelial and immune systems), rule 67.105(g) (reticuloendothelial and immune systems), or rule 67.107(g) (reticuloendothelial and immune systems), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 8

Non-routine examinations: genitourinary system

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(h) (genitourinary system), rule 67.105(h) (genitourinary system), or rule 67.107(h) (genitourinary system), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 9

Non-routine examinations: reproductive system

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(i) (reproductive system), rule 67.105(i) (reproductive system), or rule 67.107(i) (reproductive system), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 270 of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 10

Non-routine examinations: musculoskeletal system

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(j) (musculoskeletal system), rule 67.105(j) (musculoskeletal system), or rule 67.107(j) (musculoskeletal system), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 11

Non-routine examinations: ear, nose, and throat

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(k) (ear, nose, and throat), rule 67.105(k) (ear, nose, and throat), or rule 67.107(k) (ear, nose, and throat), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Schedule 12
Non-routine examinations: hearing

Section 1: Conversational voice test

1.1 Definition

Conversational voice test means a screening examination of an individual's ability to hear and recognise spoken words.

1.2 Conduct of examination

1.2.1 A medical examiner must ensure that the applicant is able to hear an average conversational voice in a quiet room, using both ears without any hearing aids, at a distance of 2 m from the examiner, with the back turned to the examiner.

1.2.2 The examiner who uses his or her voice to test an applicant's hearing must know how well his or her own voice is heard at different distances and how to vary his or her voice intensity so that each applicant is tested under similar conditions.

1.2.3 Testing may begin with a very low whisper, with the lips about half a metre from the applicant's ear and directed towards the ear.

1.2.4 The examiner exhales and then whispers.

1.2.5 In a quiet room an applicant with normal hearing can repeat what is said by the examiner.

1.2.6 If the applicant cannot understand a low whisper, the examiner uses a medium whisper, and finally a loud whisper.

1.2.7 The examiner gradually increases the intensity of his or her voice until the applicant responds correctly.

1.2.8 Care must be taken in the choice of words used to test hearing.

1.2.9 Avoid questions that can be answered by "yes" or "no".

1.2.10 It is better to have the applicant repeat familiar bisyllabic words (known as "spondee words") such as snowball, cowboy, and mousetrap, or to ask a question such as "How many singers constitute a quartet?".

1.2.11 It is important that the applicant cannot read the examiner's lips.

1.3 Interpretation of results

The results of a conversational voice test are interpreted as a pass when the medical examiner is satisfied that the applicant is, without the assistance of any hearing aids, able to hear an average conversational voice in a quiet room, using both ears, at a distance of 2 m from the examiner, with the back turned to the examiner.

1.4 Reporting requirements

The results of a conversational voice test must be documented in the appropriate section of the report made under section 27D(l) of the Act (form CAA 24067/002).

1.5 Period of validity of results

The results of a conversational voice test are valid for a period of 90 days from the date of the examination.

Section 2: Bone-conduction audiometry

2.1 Definition

Bone-conduction audiometry means the examination of pure-tone, bone-conduction audiometry.

2.2 Conduct of examination

A medical examiner must ensure that bone-conduction audiometry is conducted in accordance with —

(a) ISO 8253; or

(b) AS/NZS 1269.4: 2005; or

(c) any other equivalent published standard that is acceptable to the Director.

2.3 Interpretation of results

There are no pass or fail criteria for bone-conduction audiometry. The results of bone-conduction audiometry must be interpreted in conjunction with all other findings.

2.4 Reporting requirements

The results of bone-conduction audiometry must be reported on the pure-tone audiometry report (form CAA 240671203).

2.5 Period of validity of results

The results of bone-conduction audiometry are valid for a period of 90 days from the date of the examination unless, in exceptional circumstances, an extension has been obtained from the Director.

Section 3: Mean hearing loss

3.1 Definition

Mean hearing loss means a calculation based on the results of audiometry.

3.2 Conduct of examination

The mean hearing loss value for each frequency is the arithmetic mean of the hearing loss measured for each ear during the most recent audiometry.

Example

A measured hearing deficit of 50 dB at the frequency of 3000Hz for the right ear and a measured hearing deficit of 40 dB at the frequency of 3 000 Hz for the left ear = a mean hearing loss value of 45 dB at the frequency of 3000 Hz.

3.3 Interpretation of results

Except as otherwise expressly provided in general directions issued under section 27G of the Act, the results of mean hearing loss calculations may be interpreted as a pass if the mean hearing loss is not more than —

(a) 35 dB at any of the frequencies of 500 Hz, 1 000 Hz, or 2 000 Hz; or

(b) 50 dB at the frequency of 3 000 Hz.

3.4 Reporting requirements

The results of mean hearing loss calculations must be documented on the report made under section 27D(I) of the Act (form CAA 24067/002).

3.5 Period of validity of results

The results of mean hearing loss calculations are valid for a period of 90 days from the date of the examination unless, in exceptional circumstances, an extension has been obtained from the Director.

Section 4: Speech audiometry

4.1 Definition

Speech audiometry means an examination of an applicant's ability to hear and recognise spoken words.

4.2 Conduct of examination

A medical examiner must ensure that speech audiometry is conducted in accordance with —

(a) ISO 8253; or

(b) any other equivalent published standard that is acceptable to the Director.

4.3 Interpretation of results

Except as otherwise expressly provided in general directions issued under section 27G of the Act, the results of speech audiometry may be interpreted as a pass if more than 90% of the test stimuli are correctly identified.

4.4 Reporting requirements

The results of speech audiometry must be reported in writing by the person who performs the speech audiometry.

4.5 Validity period of results

The results of speech audiometry are valid for a period of 90 days from the date of the examination unless, in exceptional circumstances, an extension has been obtained from the Director.

Section 5: Hearing-in-operational-conditions (in-flight) examination

5.1 Definition

Hearing-in-operational-conditions (in-flight) examination means a hearing test undertaken in operational conditions similar to those experienced during flight.

5.2 Conduct of examination

A hearing-in-operational-conditions (in-flight) examination may only be performed by an examiner who is acceptable to the Director.

5.3 Interpretation of results

There are no pass or fail criteria for a hearing-in-operational-conditions (in-flight) examination. The results of a hearing-in-operational-conditions (in-flight) examination must be interpreted in conjunction with all other findings.

5.4 Reporting requirements

The person who performs a hearing-in-operational-conditions (in-flight) examination must provide the medical examiner with a written report, which includes the following:

(a) the results of the examination (including relevant findings and observations):

(b) how the examination was performed.

5.5 Validity period of results

The results of a hearing-in-operational-conditions (in-flight) examination are valid for a period of 90 days from the date of the examination.

Section 6: Hearing-in-operational-conditions (ATC) examination

6.1 Definition

Hearing-in-operational-conditions (ATC) examination means a hearing test undertaken in operational conditions similar to those experienced during air traffic control operations.

6.2 Conduct of examination

A hearing-in-operational-conditions (ATC) examination may be performed only by an examiner who is acceptable to the Director.

6.3 Interpretation of results

There are no pass or fail criteria for a hearing-in-operational-conditions (ATC) examination. The results of a hearing-in-operational-conditions (ATC) examination must be interpreted in conjunction with all other findings.

6.4 Reporting requirements

The person who performs a hearing-in-operational-conditions (ATC) examination must provide the medical examiner with a written report, which includes the following:

(a) the results of the examination (including relevant findings and observations):

(b) how the examination was performed.

6.5 Validity period of results

The results of a hearing-in-operational-conditions (ATC) examination are valid for a period of 90 days from the date of the examination.

Schedule 13
Non-routine examinations: vision

1 If an applicant must have a non-routine examination that may be clinically indicated and that relates to the standard prescribed in rule 67.103(m) (vision), rule 67.105(m) (vision), or rule 67.107(m) (vision), a medical examiner must ensure that the things listed in clause 2 comply with —

(a) the Act; and

(b) Part 67 of the Rules; and

(c) any general directions notice issued under section 27G of the Act; and

(d) current best medical practice that applies in New Zealand, except to the extent that any of paragraphs (a) to (c) applies.

2 The things are —

(a) the conduct of the non-routine examination:

(b) the interpretation of the results of the non-routine examination:

(c) the reporting requirements for the non-routine examination:

(d) the period of validity of the results of the non-routine examination.

Signed at Petone on the 9th day of January 2009.

S Douglas

Director.

Explanatory note

This note is not part of the notice, but is intended to indicate its general effect.

This notice —

- provides for the conduct of examinations of applicants and licence holders, and the reporting of the results of those examinations to the Director; and
- specifies the requirements of examinations or other clinical matters, including,—

- the medical content of examinations:
- the interpretation and analysis of results of examinations:
- the significance of results of examinations for the purpose of determining whether or not an applicant is eligible for a medical certificate under section 27B of the Civil Aviation Act 1990.

Schedule 1 sets out requirements for routine examinations.

The requirements for non-routine examinations are set out in Schedules 2 to 13. Each schedule relates to the standard prescribed in the Civil Aviation Rules for each system.

From time to time it is intended that further requirements for specified non-routine examinations will be included in each of those schedules using a format similar to that used in Schedule 1 (routine examinations) and Schedule 12 (non-routine examinations: hearing).

The timing requirements for routine examinations are set out in the Civil Aviation (Timing of Routine Examinations) General Directions Notice 2009.

These general directions will be incorporated in a medical manual issued by the Director, and made available on the website of the Civil Aviation Authority.

Issued under the authority of the Acts and Regulations Publication Act 1989.

This notice is administered by the Civil Aviation Authority.
