1961/109



# THE CIVIL AVIATION REGULATIONS 1953, AMENDMENT NO. 6

## COBHAM, Governor-General

ORDER IN COUNCIL

At the Government House at Wellington this 13th day of September 1961

Present:

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL

PURSUANT to the Civil Aviation Act 1948, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

## REGULATIONS

1. (1) These regulations may be cited as the Civil Aviation Regulations 1953, Amendment No. 6, and shall be read together with and deemed part of the Civil Aviation Regulations 1953\* (hereinafter referred to as the principal regulations).

(2) These regulations shall come into force on the day after the date of their notification in the Gazette.

2. Regulation 4 of the principal regulations is hereby amended by inserting in subclause (1), after the definition of the term "operator", the following definition:

"'Permit to fly' means a certificate of authorisation granted by the Director sanctioning the private operation of an aircraft which cannot comply with the requirements for a certificate of airworthiness:".

3. Paragraph (b) of subclause (2) of regulation 12 of the principal regulations is hereby amended by inserting, after the words "certificate of airworthiness", the words "or permit to fly", and by inserting, after the words "the certificate", the words "or permit".

4. (1) Subclause (1) of regulation 19 of the principal regulations is hereby amended by omitting the words "this regulation", and substituting the words "these regulations".

\*S.R. 1953/108 Amendment No. 1: S.R. 1955/143 Amendment No. 2: S.R. 1956/134 Amendment No. 3: S.R. 1959/3 Amendment No. 4: S.R. 1959/158 Amendment No. 5: S.R. 1960/71 (2) Subclause (1) of regulation 19 of the principal regulations is hereby further amended by revoking paragraph (b), and substituting the following paragraph:

"(b) It is certified as airworthy or has been granted a permit to fly and complies with the conditions of its certificate of airworthiness and associated aeroplane flight manual or other approved documents or with the permit to fly, as the case may be:".

(3) Subclause (3) of regulation 19 of the principal regulations is hereby amended by adding the words "or of a permit to fly".

5. Regulation 25 of the principal regulations, as substituted by regulation 6 of the Civil Aviation Regulations 1953, Amendment No. 3, is hereby amended by adding to paragraph (a) the words "or the permit to fly, as the case may be".

6. The principal regulations are hereby amended by revoking regulation 43, and substituting the following regulation:

"43. (1) An aircraft shall not be used for the purpose of towing any other aircraft unless the pilot in command of the first-mentioned aircraft is the holder of a towing rating granted pursuant to these regulations.

"(2) An aircraft shall not be used for the purpose of-

"(a) Towing any aircraft, drogue, banner, or other object; or

"(b) Picking up from the ground while in flight another aircraft or any person, livestock, or articles of any description,

except in accordance with such procedures and under such conditions as may be specified in Civil Aviation Safety Orders.

"(3) Nothing in this regulation shall prevent the reasonable use from an aircraft in flight of trailing radio aerials or any signal apparatus or equipment required or permitted to be displayed by or from an aircraft."

7. Regulation 55A of the principal regulations, as inserted by regulation 18 of the Civil Aviation Regulations 1953, Amendment No. 3, is hereby amended by adding the words "Any requirements of the Director pursuant to this regulation shall be prescribed in Civil Aviation Safety Orders".

**8.** The principal regulations are hereby amended by revoking regulation 65, and substituting the following regulation:

"65. The pilot in command shall ensure that the take-off is started from a point on the runway which makes available sufficient length to meet the aeroplane take-off performance requirements, considering the effects of wind, air temperature, altitude, and runway slope."

9. Subparagraph (i) of paragraph (b) of subclause (1) of regulation 131 of the principal regulations, as substituted by regulation 2 of the Civil Aviation Regulations 1953, Amendment No. 2, is hereby amended by omitting the words "paragraphs (a) or (b)", and substituting the words "paragraphs (a), (b), or (c)".

10. The principal regulations are hereby amended by inserting, after regulation 161, the following heading and regulation:

## "Permit to Fly

"161A. (1) The Director may issue a permit to fly to the owner of a New Zealand aircraft which cannot comply with the requirements prescribed in regulation 161 of these regulations.

- "(2) A permit to fly shall be issued only in respect of an aircraft:
- "(a) Constructed under conditions approved by the Director;
- "(b) Of which the maximum weight does not exceed 1,200 lb;
- "(c) Of which the maximum permissible engine power does not exceed 95 b.h.p.; and
- "(d) Which complies with such further particular requirements as may be specified in New Zealand Civil Airworthiness Requirements.

"(3) A permit to fly shall be granted only in the special category, subdivision (d), as prescribed in regulation 162 hereof, and shall be subject to such further conditions as may be endorsed therein.

"(4) An aircraft in respect of which a permit to fly has been issued shall be maintained in accordance with such procedures as may be specified in New Zealand Civil Airworthiness Requirements."

11. Paragraph (d) of subclause (1) of regulation 162 of the principal regulations, is hereby amended by inserting after the words "Special category", the words "Subdivision (d) – as for the normal category:".

12. Subclause (2) of regulation 163 of the principal regulations is hereby amended by adding the following proviso:

"Provided that the provisions of this subclause shall not apply in the case of aircraft in respect of which a permit to fly is sought or is valid, or in the case of components incorporated or intended for incorporation on any such aircraft."

13. Regulation 165 of the principal regulations is hereby amended as follows:

- (a) By adding to the heading the words "or Permit to Fly":
- (b) By inserting in subclause (1), after the words "certificate of airworthiness", the words "or permit to fly":
- (c) By inserting in subclause (2), after the words "certificate of airworthiness, the words "or permit to fly".

14. (1) Regulation 167 of the principal regulations is hereby amended by revoking the heading, and substituting the following heading:

"Suspension of Certificate of Airworthiness or Permit to Fly"

(2) Regulation 167 of the principal regulations is hereby further amended by inserting, after subclause (1), the following subclause:

"(1A) When an aircraft in respect of which a permit to fly has been issued under this Part suffers damage, the permit to fly shall be deemed to be suspended until such time as the aircraft has been repaired and is again eligible for the granting of a permit to fly."

(3) Subclause (3) of regulation 167 of the principal regulations is hereby amended by inserting after the words "certificate of airworthiness" in each case where they appear, the words "or permit to fly".

15. Subclause (1) of regulation 169 of the principal regulations is hereby amended by inserting, after the word "aircraft", the words "which is subject to a certificate of airworthiness".

16. (1) Paragraph (a) of subclause (1) of regulation 227 of the principal regulations, as amended by regulation 3 of the Civil Aviation Regulations 1953, Amendment No. 5, is hereby further amended by adding the following subparagraphs:

"(xii) Towing rating:

"(xiii) Flight radiotelephone operator rating."

(2) Subparagraph (viii) of subclause (1) of paragraph (b) of regulation 227 of the principal regulations is hereby revoked.

17. Paragraph (b) of subclause (2) of regulation 234 of the principal regulations, is hereby amended by adding the following proviso:

"Provided that the Director may specify limitations in the amount of experience on aircraft subject to a permit to fly which may be credited towards the flight time requirements for the private pilot licence."

18. Regulation 247 of the principal regulations and regulation 71 of the Civil Aviation Regulations 1953, Amendment No. 3, are hereby revoked.

19. Regulation 256 of the principal regulations is hereby revoked.

20. The principal regulations are hereby amended by inserting, after regulation 256B, as inserted by regulation 4 of the Civil Aviation Regulations 1953, Amendment No. 5, the following headings and regulations:

## "Towing Rating

"256c. (1) An applicant for the issue of a towing rating shall be the holder of a pilot licence other than a student pilot licence.

"(2) An applicant for the issue of a towing rating shall meet the following requirements:

"(a) He shall have completed not less than 100 hours flight time of which not less than 80 hours shall have been as pilot in command:

"(b) He shall have acted as pilot in command of a glider under tow:

"(c) He shall demonstrate his ability to perform satisfactorily all normal towing manoeuvres whilst acting as pilot in command of an aeroplane towing a glider.

"(3) A glider towing rating authorises the holder to act as pilot in command of an aeroplane towing a glider.

"(4) An applicant for the renewal of a towing rating shall have completed within the immediately preceding six months not less than six hours flight time including at least three glider towing flights."

#### Flight Radiotelephone Operator Rating

"256D. (1) An applicant for the issue of a flight radiotelephone operator rating shall be the holder of a flight crew licence or of an aircraft maintenance engineer licence issued pursuant to these regulations.

"(2) An applicant for the issue of a flight radiotelephone operator rating shall meet the following requirements:

"(a) He shall pass an examination, which may be written or oral, or both, in the following subjects:

> "(i) The rules and regulations governing civil aviation which are pertinent to the duties of a flight radiotelephone operator:

> "(ii) Those sections of officially recognised publications relating to aeronautical radiotelephone practices and procedures:

"(b) He shall demonstrate his ability to—

"(i) Manipulate and adjust the controls of an aeronautical radiotelephone transmitter and receiver:

"(ii) Transmit and receive spoken messages.

"(3) A flight telephone operator rating authorises the holder to operate in aircraft radiotelephone equipment in which—

- "(a) The unmodulated carrier wave power in the antenna does not exceed 50 watts if the transmitter is not crystal locked:
- "(b) The unmodulated carrier wave power in the antenna does not exceed 250 watts if the transmitter is crystal locked."

21. Regulation 258 of the principal regulations is hereby amended by revoking subclause (2) and substituting the following subclause:

"(2) The Director shall specify in civil aviation safety orders basic flight time limitations and duty hours for daily, weekly, monthly, and quarterly periods, but may approve variations in the daily or weekly totals so specified after having due regard to—

"(a) Route to be flown:

- "(b) Accommodation available at designated stopping places:
- "(c) Facilities for meals:

"(d) Time of day of the flight:

"(e) Flight rules applicable:

"(f) Particulars as to the aircraft concerned, including-

"(i) Type of aircraft:

"(ii) Flight crew composition:

- "(iii) Whether fitted with automatic pilot:
- "(iv) Whether pressurised or non-pressurised."

22. Regulation 261 of the principal regulations is hereby amended by revoking subclauses (2), (3), and (4), and substituting the following subclauses:

"(2) Subject to the provisions of subclause (3) hereof, any person who applies for the grant or renewal of a licence shall comply with the medical requirements indicated hereunder:

Type of Licence	Class of Medical Requirement as prescribed in Third Schedule			
	Physical Number	Visual Number	Colour Perception Number	Hearing Number
Student pilot	3	3	1	2
Private pilot	3	3	1	2
Commercial pilot	1	1	1	1
Senior commercial pilot	1	1	1	1
Airline transport pilot	1	1	1	1
Commercial glider pilot	1	1	1	2
Flight navigator and cadet flight		•		
navigator	2	2	1	1
Flight engineer and cadet flight				
engineer	2	3	1	1
Flight radio operator, restricted				
flight radio operator, and cadet			1	1
flight radio operator	2	3	1	1

"(3) Notwithstanding the provisions of subclause (2) hereof—

"(a) Where a private pilot holds or applies for an instrument rating, he shall comply with the requirement referred to in the Third Schedule hereto as hearing requirement No. 1. "(b) Where the applicant for the granting or renewal of a licence requiring hearing requirement No. 1 fails to comply with that hearing requirement, but has already acquired and demonstrated ability, skill, and experience to the satisfaction of the Director, the licence may be granted provided that—

"(i) He has hearing performance in each ear separately, equivalent to that of a normal person, against a background noise that will represent the masking properties of flight deck noise upon speech and beacon signals; and

"(ii) He is able to hear an average conversational voice in a quiet room, using both ears, at a distance of 2.5 metres (8 ft) from the examiner and with his back turned to the examiner.

"(c) Where the applicant for the granting of a pilot licence fails to comply with the colour perception requirement, he may be granted a private pilot licence restricted to the operation of radio equipped aircraft by day and valid for flying in New Zealand only. Concessions in respect of the colour perception requirement shall not be granted for any other class of licence."

23. Subclause (1) of regulation 264 of the principal regulations, as amended by regulation 5 of the Civil Aviation Regulations 1953, Amendment No. 5, is hereby further amended as follows:

- (a) By omitting from the table thereof the reference to the flight radiotelephone operator licence:
- (b) By adding to the table thereof the words:

24. The principal regulations are hereby amended by revoking the Third Schedule thereto, and substituting the Schedule set out in the Schedule to these regulations.

## SCHEDULE

## "THIRD SCHEDULE

#### MEDICAL REQUIREMENTS FOR FLIGHT-CREW LICENCES

1. General—(1) The requirements prescribed in this Schedule cannot include sufficient detailed specifications to cover all individual conditions and, of necessity, leave many decisions relating to the estimation of medical fitness to the discretion of the medical examiner. The estimation of medical fitness will therefore be made as the result of a complete medical examination conducted throughout in accordance with high standards of medicine and having due regard to the requirements of the licence for which the candidate is applying and the conditions in which he will have to carry out his duties.

(2) The medical examiner will report to the Director any individual case where, in his judgment, already demonstrated ability, skill, and experience of a candidate could compensate for a failure to meet the prescribed medical requirement without adversely influencing the safe performance of his duties when exercising the privileges of the licence.

(3) The candidate will be required by the medical examiner to give a statement, certified by himself, of medical facts relating to his personal family and hereditary history. Provision for this statement is contained in the official medical report forms to be used in respect of all examinations. The candidate should be made aware of the necessity for giving a statement that is as complete and accurate as his knowledge permits and attention should be directed to the provisions of subclause (2) of regulation 259 of these regulations.

(4) The requirements for medical fitness to verify the continuing efficiency of the holder of a licence shall be the same as those prescribed in this Schedule for the initial examination required for the issue of a licence concerned except where relaxations have been specifically provided for in this Schedule.

(5) Where it appears desirable to do so on the evidence of a medical examination, the Director may endorse on a licence special limitations when the safe performance of flight duties is dependent on compliance with any such limitations.

#### PHYSICAL REQUIREMENTS

#### Physical Requirement No. 1

2. The medical examination and assessment shall be based on the following requirements of mental and physical fitness:

- (a) The candidate shall be required to be free from such active or latent, acute, or chronic physical disability, as would entail a degree of functional incapacity which is likely to interfere with the safe handling of an aircraft at any altitude throughout a prolonged or difficult flight:
- (b) Examination of the nervous system—The candidate shall have no history of significant mental or nervous trouble. He shall be required to be free from any mental impairment, or presumptive evidence of latent epilepsy. He shall be required to be free from any progressive disease of the nervous system and from any non-progressive disease of that system, the effects of which are likely to interfere with the safe handling of an aircraft. Cases of past or present insanity and cases in which syphilis, past or present, has affected the central nervous system shall be assessed as permanently unfit.

#### As to Injuries of the Head—

(i) Cases of simple concussion or simple fracture of the skull without associated intracranial injury shall be assessed as temporarily unfit until such time as the medical examiner is satisfied that the effects of the concussion or fracture are no longer likely to jeopardise safety in flight. If the candidate has been incapacitated for a period in excess of one month, a designated medical examiner's decision as to ultimate fitness shall be reached in accordance with the following: When the licence is renewed, it will be valid only for a period of two

months in the first instance, thereafter its validity will be restricted to consecutive periods of two months until the medical examiner reports that the after effects of the concussion or fracture are no longer likely to cause a sudden incapacity in flight:

(ii) Cases of head injury associated with intracranial injuries shall be assessed as permanently unfit if a local lesion of the brain or meninges persists:

(iii) Cases of head injury in which there has been an operation on the skull with loss of bony substance involving the two tables of the cranial vault shall be assessed as permanently unfit.

(c) General Surgical Examination—

(i) The candidate shall neither suffer from any wound, or injury, nor have undergone any operation, nor possess any abnormality, congenital or acquired, which is likely to interfere with the safe handling of an aircraft at any altitude throughout a prolonged or difficult flight. He shall be required to be completely free from hernia:

(ii) Locomotor System—Any active disease of the bones, joints, muscles, or tendons and all serious functional sequelae of congenital or acquired disease shall be assessed as unfit. On issue or renewal of a licence, functional after effects of lesion affecting the bones, joints, muscles, or tendons and certain anatomical defects compatible with safe handling of aircraft at any altitude and throughout a prolonged or difficult flight may be assessed as fit:

(iii) Digestive Tract—Any sequelae of disease or surgical intervention on any part of the digestive tract and its adnexae, liable to cause sudden incapacity in flight, in particular any obstructions due to stricture or compression, shall be assessed, as unfit:

(iv) *Thoracic Cage*—Any extensive mutilation of the chest wall with collapse of the thoracic cage and sequelae of surgical procedures resulting in decreased respiratory efficiency at altitude shall be unfit:

(v) Urinary System—Any sequelae of disease or surgical procedures on the kidneys and the urinary tracts liable to cause sudden incapacity, in particular any obstructions due to stricture or compression, shall be assessed as unfit. Compensated nephrectomy without hypertension or uraemia may be assessed as fit:

(vi) A candidate who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae, or the urinary system, which has involved a total or partial excision or a diversion of any of these organs should be assessed as unfit until such time as the Director considers that the effects of the operation are not liable to cause sudden incapacity in the air:

#### (d) General Medical Examination—

(i) The candidate shall not suffer from any disease or disability which renders him liable suddenly to become unable to handle aircraft safely:

(ii) The heart shall not possess any abnormality, congenital or acquired, which is likely to interfere with safe handling of aircraft. Respiratory arrhythmia, occasional extra systoles which disappear on exercise, increase of pulse rate from excitement or exercise, or a slow pulse not associated with auriculoventricular dissociation may be regarded as coming within "normal" limits. In an examination for the first issue of a licence, electrocardiography shall form part of the heart examination and should be included in re-examinations of candidates, at the discretion of the examiner, and in all doubtful cases:

(iii) The systolic and diastolic blood pressure shall be within normal limits:

(iv) There shall be no significant functional nor structural abnormality of the circulatory system:

(v) There shall be no acute disability of the lungs nor any active disease of the structures of the lungs, mediastinum, or pleura. In the case of an examination for the first issue of a licence, radiography shall form a part of the chest examination and should be repeated at re-examinations at the discretion of the examiner:

(vi) Cases of pulmonary emphysema will be assessed as unfit only if the condition is causing symptoms:

(vii) Cases of active pulmonary tuberculosis, however diagnosed, will be assessed as unfit. Cases of "inactive arrested", and "healed" lesions which are known to be tuberculous or are presumably tuberculous in origin, may be assessed as fit, and in subsequent examinations particular attention should be paid to this aspect of the candidate's history. Cases of "inactive quiescent", or cases of doubt about the activity of a lesion, where symptoms of activity of the disease are lacking clinically, will be assessed as temporarily unfit for a period of not less than six months from the date of the medical examination. At the end of the six months period a further radiographic record will be made and compared with the original. If there are no signs of extension of the disease and there are no general symptoms or signs referable to the chest, the candidate may be assessed as fit, but where the licence is renewed in these circumstances it will be valid only for a period of three months in the first instance. Thereafter, provided there continues to be no sign of activity of the disease as shown by radiological, bacteriological, and physical examination carried out at the end of each three months' period, the validity of the licence will be restricted to consecutive periods of three months. When the candidate has been under observation under this scheme for a total period of at least two years and comparison of all examinations shows no change, the lesion will be regarded as "inactive arrested" or "healed".

Note—"Active" means a condition in which the case cannot be classified as inactive or recovered.

"Arrested" means a condition in which the disease has been inactive for a continuous period of not less than two years.

"Inactive" means a condition in which-

(a) There is no evidence of toxaemia:

(b) No tubercle bacilli have been found in three consecutive bacteriological examinations conducted in accordance with adequate procedures at intervals of not less than one month within the period of six months immediately preceding the classification of the case:

(viii) Cases of disabling disease with important impairment of function of the gastro-intestinal tract and its adnexae shall be assessed as unfit. Cases of significant metabolic, nutritional, or endocrine disorders shall be assessed as unfit. Proven cases of diabetes mellitus shall be assessed as permanently unfit; doubtful cases shall be assessed as unfit until the condition is proven to be non-diabetic:

(ix) Cases of severe and moderate enlargement of the spleen persistently below the costal margin shall be assessed as unfit. Cases of significant localised and generalised enlargement of the lymphatic glands and of diseases of the blood shall be assessed as unfit, but cases due to a transient condition shall be assessed as temporarily unfit:

 $(\mathbf{x})$  Cases presenting any signs of organic diseases of the kidney shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit. The urine shall contain no abnormal element considered by the medical examiner to be pathological. Cases of affections of the urinary passages and of the genital organs shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit:

(xi) A candidate for the first issue of a licence who has a personal history of syphilis shall be required to furnish evidence, satisfactory to the medical examiner, that he has undergone adequate treatment. A candidate showing any clinical signs of active syphilis shall be assessed as temporarily unfit for a period of not less than three months from the date of the medical examination. At the end of the three months' period, provided the candidate furnishes proof, satisfactory to the medical examiner, that he has undergone adequate treatment in the interim and that the serological reaction for syphilis is negative, he may be assessed as fit but where a licence is issued or renewed in these circumstances it shall be valid only for a period of three months in the first instance. Thereafter, provided serological reactions for syphilis continue to be negative at the end of each three months' period, the validity

of the licence shall be restricted to consecutive periods of three months. When the candidate has been under observation under this scheme for a total period of at least three years and the serological reactions have continued to be negative, the restriction on the period of validity of the licence may be removed. In cases where the serological reaction for syphilis remains persistently positive, examinations of the cerebrospinal fluid at the end of each period of six months with negative results may be accepted in lieu of negative serological reactions at the end of each period of three months:

(xii) Candidates of the female sex who have a history of severe menstrual disturbances that have proved unamenable to treatment and that are likely to interfere with the safe handling of aircraft shall be assessed as unfit. In the event of presumed pregnancy the candidate shall be assessed as temporarily unfit. After confinement or miscarriage the candidate shall not be permitted to exercise the privileges of her licence until she has undergone re-examination and has been assessed as fit:

(xiii) Candidates of the female sex who have undergone gynaecological operations should be considered individually:

(e) Eye Examination—The functions of the eyes and their adnexae shall be normal. There shall be no active pathological condition, acute or chronic, of either eye or adnexae which is likely to interfere with its proper function.

Note—The details of the visual requirement are set out in paragraph 5 and those for colour perception in paragraph 6.

(f) Ear Examination—There shall be—

(i) No active pathological process, acute or chronic, of the internal ear or middle ear clefts:

(ii) No unhealed (unclosed) perforation of the tympanic membranes, except that a single small dry perforation of noninfectious origin, need not render the candidate ineligible. The assessment of attic perforations shall be based on the recommendation of an appropriate consultant. Licences shall not be issued or renewed in these circumstances unless the appropriate hearing requirements in paragraph 7 are complied with:

(iii) No permanent obstruction of the Eustachian tubes:

(iv) No permanent disturbances of the vestibular apparatus. Transient conditions may be assessed as temporarily unfit.

Note—The details of the hearing requirements are set out in paragraph 7.

(g) Nose, Throat, and Mouth Examination—There shall be free nasal air entry on both sides. There shall be no serious malformation nor serious, acute, or chronic affection of the buccal cavity or upper respiratory tract. Defects of speech and stuttering shall be assessed as unfit.

#### Physical Requirement No. 2

3. The medical examination and assessment shall be based on the following requirements of mental and physical fitness:

Note—It will be noted that a very close similarity exists between the texts of paragraph 2 and paragraph 3. The essential difference lies in the use in physical requirement No. 2, of phrases such as "safe performance of his duties" in place of the more explicit references of physical requirement No. 1 such as "safe handling of an aircraft". Thus where such clauses are used, the medical examiner might assess a candidate as medically fit for duties when the candidate's condition might have rendered him medically unfit for the duties associated with physical requirement No. 1.

- (a) The candidate shall be required to be free from such active or latent, acute, or chronic physical disability, as would entail a degree of functional incapacity which is likely to interfere with the safe performance of his duties at any altitude throughout a prolonged or difficult flight:
- (b) Examination of the Nervous System—The candidate shall have no history of significant mental or nervous trouble. He shall be required to be free from any mental impairment, or presumptive evidence of latent epilepsy. He shall be required to be free from any progressive disease of the nervous system and from any non-progressive disease of that system, the effects of which are likely to interfere with the safe performance of his duties. Cases of past or present insanity and cases in which syphilis, past or present, has affected the central nervous system, shall be assessed as permanently unfit:

As to Injuries of the Head—

(i) Cases of simple concussion or simple fracture of the skull without associated intracranial injury shall be assessed as temporarily unfit until such time as the medical examiner is satisfied that the effects of the concussion or fracture are no longer likely to jeopardise safety in flight. If the candidate has been incapacitated for a period in excess of one month a designated medical examiner's decision as to ultimate fitness shall be reached in accordance with the following: When the licence is renewed, it shall be valid only for a period of two months in the first instance, thereafter its validity shall be restricted to consecutive periods of two months until the medical examiner reports that the after effects of the concussion or fracture are no longer likely to cause a sudden incapacity in flight:

(ii) Cases of head injury associated with intracranial injuries shall be assessed as permanently unfit if a local lesion of the brain or meninges persists:

(iii) Cases of head injury in which there has been an operation on the skull with loss of bony substance involving the two tables of the cranial vault shall be assessed as permanently unfit:

#### (c) General Surgical Examination—

(i) The candidate shall neither suffer from any wound, or injury, nor have undergone any operation, nor possess any abnormality, congenital or acquired, which is likely to interfere with the safe performance of his duties at any altitude throughout a prolonged or difficult flight. He shall be required to be completely free from hernia:

(ii) Locomotor System—Any active disease of the bones, joints, muscles, or tendons and all serious functional sequelae of congenital or acquired disease shall be assessed as unfit. On issue or renewal of a licence, functional after effects of lesion affecting the bones, joints, muscles, or tendons and certain anatomical defects compatible with the safe performance of his duties at any altitude and throughout a prolonged or difficult flight may be assessed as fit:

(iii) Digestive Tract—Any sequelae of disease or surgical intervention on any part of the digestive tract and its adnexae, liable to cause sudden incapacity in flight, in particular any obstruction due to stricture or compression, shall be assessed as unfit:

(iv) *Thoracic Cage*—Any extensive mutilation of the chest wall with collapse of the thoracic cage and sequelae of surgical procedures resulting in decreased respiratory efficiency at altitude shall be unfit:

(v) Urinary System—Any sequelae of disease or surgical procedures on the kidneys and the urinary tracts liable to cause sudden incapacity, in particular any obstructions due to stricture or compression, shall be assessed as unfit. Compensated nephrectomy without hypertension or uraemia may be assessed as fit:

(vi) A candidate who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae, or the urinary system, which has involved a total or partial excision or a diversion of any of these organs shall be assessed as unfit until such time as the Director considers that the effects of the operation are not liable to cause sudden incapacity in the air:

#### (d) General Medical Examination—

(i) The candidate shall not suffer from any disease or disability which renders him liable suddenly to become unable to perform his duties safely:

(ii) The heart shall not possess any abnormality, congenital or acquired, which is likely to interfere with safe performance of duties. Respiratory arrhythmia, occasional extra systoles which disappear on exercise, increase of pulse rate from excitement or exercise, or a slow pulse not associated with

auriculoventricular dissociation may be regarded as coming within "normal" limits. In an examination for the first issue of a licence, electrocardiography shall form part of the heart examination and should be included at re-examinations of candidates, at the discretion of the examiner, and in all doubtful cases:

(iii) The systolic and diastolic blood pressures shall be within normal limits:

(iv) There shall be no significant functional nor structural abnormality of the circulatory system:

(v) There shall be no acute disability of the lungs nor any active disease of the structures of the lungs, mediastinum, or pleura. In the case of an examination for the first issue of a licence, radiography shall form a part of the chest examination and should be included at re-examinations at the discretion of the examiner:

(vi) Cases of pulmonary emphysema will be assessed as unfit only if the condition is causing symptoms:

(vii) Cases of active pulmonary tuberculosis, however diagnosed, will be assessed as unfit. Cases of "inactive arrested", and "healed" lesions which are known to be tuberculous or are presumably tuberculous in origin, may be assessed as fit, and in subsequent examinations particular attention should be paid to this aspect of the candidate's history. Cases of "inactive quiescent", or cases of doubt about the activity of a lesion, where symptoms of activity of the disease are lacking clinically, will be assessed as temporarily unfit for a period of not less than six months from the date of the medical examination. At the end of the six months' period a further radiographic record will be made and compared with the original. If there are no signs of extension of the disease and there are no general symptoms or signs referable to the chest, the candidate may be assessed as fit, but where the licence is renewed in these circumstances it will be valid only for a period of three months in the first instance. Thereafter, provided there continues to be no sign of activity of the disease as shown by radiological, bacteriological, and physical examination carried out at the end of each three months' period, the validity of the licence will be restricted to consecutive periods of three months. When the candidate has been under observation under this scheme for a total period of at least two years and comparison of all examinations shows no change, the lesion will be regarded as "inactive arrested" or "healed"

Note—"Active" means a condition in which the case cannot be classified as inactive or recovered.

"Arrested" means a condition in which the disease has been inactive for a continuous period of not less than two years.

"Inactive" means a condition in which-

(a) There is no evidence of toxaemia;

(b) No tubercle bacilli have been found in three consecutive bacteriological examinations conducted in accordance with adequate procedures at intervals of not less than one month within the period of six months immediately preceding the classification of the case:

(viii) Cases of disabling disease with important impairment of function of the gastro-intestinal tract and its adnexae shall be assessed as unfit. Cases of significant metabolic, nutritional, or endocrine disorders shall be assessed as unfit. Proven cases of diabetes mellitus shall be assessed as permanently unfit; doubtful cases shall be assessed as unfit until the condition is proven to be non-diabetic:

(ix) Cases of severe and moderate enlargement of the spleen persistently below the costal margin shall be assessed as unfit. Cases of significant localised and generalised enlargement of the lymphatic glands and of diseases of the blood shall be assessed as unfit, but cases due to a transient condition shall be assessed as temporarily unfit:

 $(\mathbf{x})$  Cases presenting any signs of organic disease of the kidney shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit. The urine shall contain no abnormal element considered by the medical examiner to be pathological. Cases of affections of the urinary passages and of the genital organs shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit.

(xi) A candidate shall meet the requirements of paragraph 2 (d) (xi) hereof:

(xii) Candidates of the female sex who have a history of severe menstrual disturbances that have proved unamenable to treatment and that are likely to interfere with the safe performance of her duties shall be assessed as temporarily unfit. In the event of presumed pregnancy the candidate shall be assessed as temporarily unfit. After confinement or miscarriage the candidate shall not be permitted to exercise the privileges of her licence until she has undergone re-examination and has been assessed as fit:

(xiii) Candidates of the female sex who have undergone gynaecological operations shall be considered individually;

(e) Eye Examination—The functions of the eyes and their adnexae shall be normal. There shall be no active pathological condition, acute or chronic, of either eye or adnexae which is likely to interfere with its proper function to an extent that would jeopardise safety in flight:

Note—The details of the visual requirements are set out in paragraph 5 and those for colour perception in paragraph 6.

### (f) Ear Examination—There shall be—

(i) No active pathological process, acute or chronic, of the internal ear or middle ear clefts:

(ii) No unhealed (unclosed) perforation of the tympanic membranes except that a single small dry perforation need not render the candidate ineligible. The assessment of attic perforations shall be based on the recommendation of an appropriate consultant. Licences shall not be issued or renewed in these circumstances unless the appropriate hearing requirements in paragraph 7 are complied with:

(iii) No permanent obstruction of the Eustachian tubes:

(iv) No permanent disturbances of the vestibular apparatus. Transient conditions may be assessed as temporarily unfit:

Note—The details of the hearing requirements are set out in paragraph 7.

(g) Nose, Throat, and Mouth Examination—There shall be free nasal air entry on both sides. There shall be no serious malformation nor serious, acute, or chronic affection of the buccal cavity or upper respiratory tract. Candidates suffering from defects of speech and stuttering shall be assessed as unfit.

#### Physical Requirement No. 3

4. The medical examination and assessment shall be based on the following requirements of mental and physical fitness:

- (a) The candidate shall be required to be free from any congenital or acquired disability causing such degree of functional incapacity as is considered likely to interfere with the safe handling of the aircraft under ordinary conditions:
- (b) Examination of the Nervous System—The candidate shall have no history of significant mental or nervous trouble. He shall be required to be free from any mental impairment, or presumptive evidence of latent epilepsy. He shall be free from any progressive disease of the nervous system and from any non-progressive disease of that system, the effects of which are likely to interfere with the safe handling of an aircraft. Cases of past or present insanity and cases in which syphilis, past or present, have affected the central nervous system, shall be assessed as permanently unfit.

#### As to Injuries of the Head—

(i) Cases of simple concussion or simple fracture of the skull without associated intracranial injury shall be assessed as temporarily unfit until such time as the medical examiner is satisfied that the effects of the concussion or fracture are no longer likely to jeopardise safety in flight:

(ii) Cases of head injury associated with intracranial injuries shall be assessed as permanently unfit if a local lesion of the brain or meningese persists:

(iii) Cases of head injury in which there has been an operation on the skull with loss of bony substance involving the two tables of the cranial vault shall be assessed as permanently unfit; cases repaired by plates ensuring present and future integrity of the central nervous system may be assessed as fit. A one-year period shall expire before the licence is renewed.

## (c) General Surgical Examination—

(i) The candidate shall neither suffer from any wound, or injury, nor have undergone any operation, nor possess any abnormality, congenital or acquired, which is likely to interfere with the safe handling of an aircraft. He shall be required to be free from hernia. Cases in which the medical examiner is satisfied that a well fitted truss will be worn may be assessed as fit.

(ii) Locomotor System—Any active disease of the bones, joints, muscles, or tendons and all serious functional sequelae of congenital or acquired disease shall be assessed as unfit. Certain qualifying functional after effects of lesion affecting the bones, joints, muscles, or tendons and certain anatomical defects compatible with safe handling of aircraft in flight may be assessed as fit:

(iii) Digestive Tract—Any sequelae of disease or surgical intervention on any part of the digestive tract and its adnexae, liable to cause sudden incapacity in flight, in particular any obstructions due to stricture or compression, shall be assessed as unfit:

(iv) *Thoracic Cage*—Any extensive mutilation of the chest wall with collapse of the thoracic cage and sequelae of surgical procedures resulting in decreased respiratory efficiency at altitude shall be assessed as unfit:

(v) Urinary System—Any sequelae of disease or surgical procedures on the kidneys and the urinary tracts liable to cause sudden incapacity, in particular any obstructions due to stricture or compression, shall be assessed as unfit. Compensated nephrectomy without hypertension or uraemia may be assessed as fit:

(vi) A candidate who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae, or the urinary system, which has involved a total or partial excision or a diversion of any of these organs shall be assessed as unfit until such time as the Director considers that the effects of the operation are not liable to cause sudden incapacity in the air:

#### (d) General Medical Examination—

(i) The candidate shall not suffer from any disease or disability which renders him liable suddenly to become unable to handle aircraft safely.

(ii) The heart shall not possess any abnormality, congenital or acquired, which is likely to interfere with safe handling of aircraft. Respiratory arrhythmia, occasional extra systoles which disappear on exercise, increase of pulse from excitement or exercise, or a slow pulse not associated with auriculoventricular dissociation may be regarded as coming within "normal" limits:

(iii) The systolic and diastolic blood pressures shall be within normal limits with due regard to age:

(iv) There shall be no significant functional nor structural abnormality of the circulatory system. The presence of varicosities does not necessarily entail unfitness:

(v) There shall be no acute disability of the lungs nor any active disease of the structures of the lungs, mediastinum, or pleura. Radiography shall form a part of the medical examination in all doubtful clinical cases:

(vi) Cases of pulmonary emphysema will be assessed as unfit only if the condition is causing symptoms:

(vii) Cases of active pulmonary tuberculosis, however diagnosed, will be assessed as unfit. Otherwise the consideration of the history of such cases will be as specified in paragraph 3 (d) (vii):

(viii) Cases of disabling disease with important impairment of function of the gastro-intestinal tract and its adnexae shall be assessed as unfit. Proven cases of diabetes mellitus shall be assessed as unfit; doubtful cases shall be assessed as unfit until the condition is proven to be non-diabetic.

(ix) Cases of significant localised and generalised enlargement of the lymphatic glands and of diseases of the blood shall be assessed as unfit. Cases due to a transient condition shall be assessed as only temporarily unfit:

(x) Cases presenting any signs of organic disease of the kidneys shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit. The urine shall contain no abnormal element considered by the medical examiner to be pathological. Cases of affections of the urinary passages and of the genital organs shall be assessed as unfit; those due to a transient condition may be assessed as temporarily unfit.

(xi) A candidate for the first issue of a licence who has a personal history of syphilis shall be required to furnish evidence, satisfactory to the medical examiner, that he has undergone adequate treatment:

(xii) In the event of presumed pregnancy the candidate shall be assessed as temporarily unfit:

(e) Eye Examination—There shall be no active pathological condition, acute or chronic, of either eye or adnexae which is likely to interfere with its proper function to an extent that would jeopardise safety in flight.

Note—The details of the visual requirements are set out in paragraph 5 and those of colour perception in paragraph 6.

(f) Ear Examination—There shall be—

(i) No active pathological process, acute or chronic, of the internal ear or middle ear clefts:

(ii) No unhealed (unclosed) perforation of the tympanic membranes except that a single small dry perforation need not render the candidate ineligible. The assessment of attic perforations shall be based on the recommendation of an appropriate consultant. Licences shall not be issued or renewed in these circumstances unless the appropriate hearing requirements in paragraph 7 are complied with:

(iii) No permanent disturbances of the vestibular apparatus. Transient conditions may be assessed as temporarily unfit.

NOTE—The details of the hearing requirements are set out in paragraph 7.

(g) Nose, Throat, and Mouth Examination—There shall be no serious malformation nor serious, acute, or chronic affection of the buccal cavity or upper respiratory tract.

#### VISUAL REQUIREMENTS

5. Visual acuity shall be measured by means of a series of black optotypes of the Landolt, Snellen, or similar optotype on a white background illuminated to a level of approximately 50 lux, if in a lighted room whose level of illumination should be one-fifth the test illumination level, or if in a darkened room, or semi-darkened room, the test level should be approximately 15 lux.

The optotypes shall be placed at a distance of 20 ft (six metres) from the candidate, or 16 ft (five metres), as appropriate to the methods of testing adopted.

## Visual Requirement No. 1

The candidate shall be required to have—

(a) A visual acuity of at least 6/9 in each eye separately, without correction:

Provided that if the vision in either or both eyes is less than 6/9 but not less than 6/18 and can be brought up to 6/9 or better in each eye by glasses, the candidate may be assessed fit upon condition that correcting glasses be worn while exercising the privileges of the licence:

- (b) Not more than +2.25 dioptres of hypermetropia, in the case of a candidate for the initial issue of a licence:
- (c) Not more than 1 dioptre of hyperphoria in either eye:
- (d) Not more than 10 dioptres of esophoria:
- (e) Not more than 5 dioptres of exophoria:
- (f) An accommodation of at least Jaeger 3 (V. 1) at 12 in. (30 centimetres) with each eye separately without the use of correcting lenses:

Provided that where the candidate is over 40 years of age and already holds a licence, correcting glasses may be used to provide the same character of near vision.

(g) Normal fields of vision.

#### Visual Requirement No. 2

The candidate shall be required to have-

- (a) A visual acuity of at least 6/12 in each eye separately, without correction:
  - Provided that-
    - (i) In the case of a candidate for the first issue of a licence, if the vision in either or both eyes is less than 6/12 but not less than 6/36 and can be brought up to 6/12 or better in each eye by glasses, the candidate may be assessed as fit upon condition that correcting glasses be worn while exercising the privileges of the licence; and
    - (ii) In the case of a candidate for the renewal of a licence, if the vision in either or both eyes is less than 6/12 but not less than 6/60 and can be brought up to 6/12 or better in each eye by glasses, the candidate may be assessed as fit upon condition that correcting glasses be worn while exercising the privileges of the licence and that a second set of correcting glasses be carried on his person:

(b) Normal fields of vision.

Note—Where errors of refraction exist, due allowance may be made for those areas not covered by the correcting lenses.

#### Visual Requirement No. 3

The candidate shall be required to have—

- (a) A visual acuity of a least 6/12 in each eye without correction: Provided that if the vision in either or both eyes is less than 6/12 but not less than 6/60 and can be brought up to 6/9 or better in each eye by glasses, the candidate may be assessed as fit upon condition that correcting glasses be worn while exercising the privileges of the licence:
- (b) Satisfactory ocular muscle balance:
- (c) Normal fields of vision.

Note—Where errors of refraction exist, due allowance may be made for those areas not covered by the correcting lenses.

## COLOUR PERCEPTION REQUIREMENTS

6. The measure of colour perception will be made by means of pseudoisochromatic plates or a suitable lantern. When a lantern is used it should present the light transmitted by coloured screens lighted at five lux for one second and seen at a distance of 8 ft  $(2\frac{1}{2}$  metres) in an angle of three minutes. The coloured screens should transmit the colours of the lights used in air navigation.

Candidates for all flight-crew licences shall be required to have normal colour perception if tested by pseudo-isochromatic plates or to demonstrate his ability to identify readily coloured lights of signal red, signal green, and white if tested by a lantern.

#### HEARING REQUIREMENTS

7. The measurement of auditory acuity for hearing requirement No. 1 will be made by means of a standard pure-tone audiometer in a quiet room - that is, a room in which the intensity of the background noise is less than 50 decibels as measured by a sound-level meter. The candidate shall be free from any hearing defect which would interfere with the efficient performance of his duties in exercising the privileges of his licence.

(1) Hearing Requirement No. 1—The candidate shall be required not to have a hearing loss, in either ear separately, of more than 25 decibels at any one of the three frequencies 500, 1,000, and 2,000 cycles per second, and not more than 40 decibels at 3,000 cycles per second.

(2) Hearing Requirement No. 2-The candidate shall be able to hear an average conversational voice in a quiet room, using both ears, at a distance of 8 ft (2.5 metres) from the examiner and with his back turned to the examiner."

# T. J. SHERRARD,

Clerk of the Executive Council.

#### EXPLANATORY NOTE

This note is not part of the regulations, but is intended to indicate their general effect.

Regulation 6 requires that the pilot of an aircraft towing another aircraft shall hold a qualification indicating his competency to carry out towing duties; the regulation also empowers the Director of Civil Aviation to prescribe conditions and procedures to be complied with when an aircraft is used for towing aircraft

or other objects. *Regulation* 7 provides that any requirements the Director may specify con-cerning the carriage of cabin attendants in aircraft shall be formally prescribed in Civil Aviation Safety Orders issued pursuant to the Civil Aviation Amendment Act 1960.

Regulation 8: The current regulation requires that aircraft shall make use of the full length of a runway. This introduces substantial penalties in fuel consumption on small aircraft operating from aerodromes with long runways in that much unnecessary taxying to the extremities of runways is required. The new regulation permits the pilot of an aircraft to start take-off on any point on a runway which leaves adequate space for the aircraft to take-off safely.

Regulation 10: Many light aircraft and particularly those of amateur construction are unable to meet the stringent requirements for a certificate of airworthiness are unable to meet the stringent requirements for a certificate of airworthiness which has hitherto been mandatory for all civil aircraft. In view of the high standard of construction of many "homemade" or kitset aircraft and the lack of hazard on their limited operation, provision is made for the issue of a permit to fly instead of a certificate of airworthiness. The permit will restrict aircraft in respect of which it is issued to private flying and it will apply only to aircraft not exceeding specified weight and engine horsepower ratings. *Regulations 2, 3, 4, 5, 11, 12, 13, 14, and 15* make consequential amendments to the principal regulations to meet the introduction of the permit to fly prescribed in regulation 9

prescribed in regulation 9. Regulation 17: The intention of this regulation is to grant the Director the

discretion to place a limitation on the amount of flying experience on ultra-light aircraft which may be credited towards the flight experience requirements for the private pilot licence. It is considered that flying in certain types of ultra-light aircraft may not provide the standard of experience desirable for the licence in question.

Regulations 18 and 19 revoke references in the principal regulations to the flight radiotelephone operator licence. The licence has now been replaced by a rating granting equivalent privileges which can be endorsed on any class of flight-crew or maintenance engineer licence.

*Regulation 20* prescribes firstly the minimum qualifications required by a person who wishes to obtain a rating authorising him to pilot aircraft used for the purpose of towing other aircraft or other objects, and secondly the qualifications required to operate radiotelephone apparatus in aircraft.

*Regulation 21:* The regulation as now amended empowers the Director to specify duty hours of flight crews as well as the maximum flying hours in certain stated periods. In considering relaxations from any requirements specified under this regulation provision is now made for the Director to take into account facilities for meals available to flight crew.

the facilities for meals available to flight crew. Regulations 22 and 24: New Zealand adopts the medical standards for flight crews promulgated by the International Civil Aviation Organisation in Annex 1 to the convention. The standards have recently been reviewed and rewritten. The two regulations give effect to the revised ICAO specifications.

Issued under the authority of the Regulations Act 1936. Date of notification in *Gazette*: 14 September 1961. These regulations are administered in the Air Department.