EXPLANATORY NOTE

(This note is not part of the Regulations, but is intended to indicate their general purport.)

These Regulations further amend the Cinematograph Films (Distribution of Levy) Regulations, 1957, by—

(1) providing that, for the purpose of computing the amount which the makers of low cost films shall be entitled to receive out of the proceeds of the levy imposed on exhibitors by the Cinematograph Films (Collection of Levy) Regulations, 1957, as amended (S.I. 1957/1341 and S.I. 1958/837), the rentals of such films shall, subject to certain limitations, be doubled ; and

(2) amending the definition of " eligible film " so that, in respect of films registered after 31st December, 1959, it shall apply only to films made by United Kingdom makers.

CIVIL AVIATION

AIR NAVIGATION

1959 No. 731

The Air Navigation (General) (Fourth Amendment) Regulations, 1959

Made - - - -	*17th April,* 1959
Coming into Operation	*1st May,* 1959

The Minister of Transport and Civil Aviation, in exercise of the powers conferred upon him by the Air Navigation Order, 1954(**a**), as amended(**b**), and of all other powers enabling him in that behalf, hereby makes the following Regulations :—

Citation and Operation

1. These Regulations may be cited as the Air Navigation (General) (Fourth Amendment) Regulations, 1959, and shall come into operation on the first day of May, 1959.

Interpretation

2.—(1) In these Regulations, " the Order " means the Air Navigation Order, 1954, as amended, and " the Regulations " means the Air Navigation (General) Regulations, 1954(**c**), as amended by the Air Navigation (General) (Amendment) Regulations, 1956(**d**), the Air Navigation (General) (Second Amendment) Regulations, 1957(**e**), and the Air Navigation (General) (Third Amendment) Regulations, 1957(**f**).

(**a**) S.I. 1954/829 (1954 I, p. 259).
(**b**) S.I. 1956/82, 421, 1212, 1578, 1957/278, 1072, 1370, 2050, 1958/1251 (1956 I, pp. 548, 460, 461, 464; 1957 I, pp. 356, 364, 366, 367; 1958 I, p. 295).
(**c**) S.I. 1954/925 (1954 I, p. 356).
(**d**) S.I. 1956/126 (1956 I, p. 466).
(**e**) S.I. 1957/627(1957 I, p. 368).
(**f**) S.I. 1957/2249 (1957 I, p. 375).

(2) The Interpretation Act, 1889(a), applies for the purpose of the interpretation of these Regulations as it applies for the purposes of the interpretation of an Act of Parliament.

3. Regulation 33 of the Regulations shall be amended by the substitution of the word "in" for the word "is", in the third line from the end of paragraph (6) (*c*) of that Regulation.

4. Regulation 36 of the Regulations shall be deleted and the following shall be substituted therefor :—

"*Requirements as to the Weight and Performance of Public Transport Aeroplanes classified as Aeroplanes of Performance Group A in their Certificates of Airworthiness*

36. With reference to Article 17 (4) of the Order a public transport aeroplane classified in the certificate of airworthiness relating to the aeroplane issued or rendered valid by the Minister as an aeroplane of performance group A shall not fly or attempt to fly unless the weight of the aeroplane at the commencement of the take-off run is such that the following conditions are satisfied :—

(1) Such weight does not exceed the maximum take-off weight for altitude and temperature ascertained by reference to the flight manual relating to the aeroplane issued or rendered valid by the Minister as being appropriate to the altitude and the air temperature at the aerodrome at which the take-off is to be made.

(2) The take-off run required, the take-off distance required and the take-off emergency distance required ascertained by reference to the said flight manual as being appropriate to—

(*a*) the weight of the aeroplane at the commencement of the take-off run ;

(*b*) the altitude at the aerodrome ;

(*c*) the air temperature at the aerodrome ;

(*d*) the slope of the surface of the aerodrome in the direction of take-off over the take-off run available, the take-off distance available and the emergency distance available, respectively ; and

(*e*) not more than 50 per cent of the reported wind component opposite to the direction of take-off or not less than 150 per cent of the reported wind component in the direction of take-off ;

do not exceed the take-off run available, the take-off distance available and the emergency distance available, respectively, at the aerodrome at which the take-off is to be made ; in ascertaining by reference to the said flight manual the emergency distance required, the point at which the pilot is assumed to decide to discontinue the take-off shall not be nearer to the start of the take-off run than the point at which, in ascertaining the take-off run required and the take-off distance required, he is assumed to decide to continue the take-off, in the event of power unit failure.

(3) (*a*) The net take-off flight path with one power unit inoperative, ascertained by reference to the said flight manual as being appropriate to—

(i) the weight of the aeroplane at the commencement of the take-off run ;

(a) 52 & 53 Vict. c. 63.

(ii) the altitude at the aerodrome ;

(iii) the air temperature at the aerodrome ; and

(iv) not more than 50 per cent of the reported wind component opposite to the direction of take-off or not less than 150 per cent of the reported wind component in the direction of take-off,

and plotted from a point 35 feet or 50 feet, as appropriate, above the end of the take-off distance required at the aerodrome at which the take-off is to be made to a height of 1,500 feet above the aerodrome, shows that the aeroplane will clear any obstacle in its path by a vertical interval of at least 35 feet, except that if it is intended that the aeroplane shall change its direction of flight by more than 15° the vertical interval shall not be less than 50 feet during the change of direction.

(*b*) For the purpose of sub-paragraph (*a*) hereof an obstacle shall be deemed to be in the path of the aeroplane if the distance from the obstacle to the nearest point on the ground below the intended line of flight of the aeroplane does not exceed :—

(i) a distance of 200 feet plus half the wing span of the aeroplane plus $\frac{1}{8}$th of the distance from such point to the end of the take-off distance available measured along the intended line of flight of the aeroplane ; or

(ii) 5,000 feet,

whichever is the less.

(*c*) In assessing the ability of the aeroplane to satisfy this condition, it shall not be assumed to make a change of direction of a radius less than the radius of steady turn specified in the said flight manual.

(4) The aeroplane will in the meteorological conditions expected for the flight, in the event of any one power unit becoming inoperative at any point on its route or on any planned diversion therefrom and with the other power units or unit operating within the maximum continuous power conditions specified in the said flight manual, be capable of continuing the flight, clearing by a vertical interval of at least 2,000 feet obstacles within 5 nautical miles either side of the intended track, to an aerodrome at which it can comply with conditions (7) and (8) of this Regulation relating to an alternate aerodrome, and on arrival over such aerodrome the slope of the one power unit inoperative net flight path, ascertained by reference to the said flight manual, shall not be less than zero at 1,500 feet above the aerodrome ; and in assessing the ability of the aeroplane to satisfy this condition it shall not be assumed to be capable of flying at an altitude exceeding the maximum permissible altitude for engine restarting, ascertained by reference to the said flight manual.

(5) The aeroplane will in the meteorological conditions expected for the flight, in the event of any two power units becoming inoperative at any point along the route or on any planned diversion therefrom more than 90 minutes flying time in still air at the all power units operating economical cruising speed from the nearest aerodrome at which it can comply with conditions (7) and (8) of this Regulation, relating to an alternate aerodrome, be capable of continuing the flight with all other power units operating within the maximum continuous power conditions specified in the said flight manual, clearing

by a vertical interval of at least 2,000 feet obstacles within 5 nautical miles either side of the intended track to such an aerodrome, where the slope of the two power unit inoperative net flight path, ascertained by reference to the said flight manual, shall not be less than zero at 1,500 feet above the aerodrome; and in assessing the ability of the aeroplane to satisfy this condition it shall not be assumed to be capable of flying at an altitude exceeding the maximum permissible altitude for engine restarting, ascertained by reference to the said flight manual.

(6) The weight of the aeroplane at the intended time of landing (hereinafter in this Regulation called "the landing weight"), calculated by deducting the estimated weight of the fuel and oil expected to be used on the flight from its weight at the commencement of the take-off run, will not exceed any of the maximum landing weights for altitude and temperature ascertained by reference to the said flight manual as being appropriate to the altitudes and the expected air temperatures for the estimated times of landing at the aerodrome at which it is intended to land and at any alternate aerodrome.

(7) The landing distance required, ascertained by reference to the said flight manual as being appropriate to an aerodrome of destination and to an alternate aerodrome, and to:—

(*a*) the landing weight;

(*b*) the altitude at the aerodrome;

(*c*) the standard temperature appropriate to the elevation of the aerodrome;

(*d*) still air conditions; and

(*e*) (i) a level surface in the case of runways usable in both directions;

(ii) the average slope of the runway in the case of runways usable in only one direction;

does not at the aerodrome at which it is intended to land or at any alternate aerodrome, as the case may be, exceed the landing distance available on the most suitable runway for a landing in still air.

(8) The landing distance required, ascertained by reference to the said flight manual as being appropriate to an aerodrome of destination and to an alternate aerodrome, and to:—

(*a*) the landing weight;

(*b*) the altitude at the aerodrome;

(*c*) the standard temperature appropriate to the elevation of the aerodrome;

(*d*) not more than 50 per cent of the forecast wind component opposite to the direction of landing or not less than 150 per cent of the forecast wind component in the direction of landing; and

(*e*) (i) a level surface in the case of runways usable in both directions;

(ii) the average slope of the runway in the case of runways usable in only one direction,

does not at the aerodrome at which it is intended to land or at any alternate aerodrome, as the case may be, exceed the landing distance available on the runway that may be required for landing because of the expected wind conditions: Provided that if an alternate aerodrome

is designated in the flight plan, the landing distance required, ascertained by reference to the said flight manual, may be that appropriate to an alternate aerodrome."

5.—(1) In condition (8) set forth in Regulation 37 of the Regulations the expression " not less than 150 per cent." shall be substituted for the expression " not more than 150 per cent.".

(2) The following shall be added to Regulation 37 of the Regulations as paragraph (2) thereof :

" An aeroplane classified as aforesaid as an aeroplane of performance group D shall not fly or attempt to fly at night or when the cloud ceiling or visibility prevailing at the aerodrome of departure and forecast for the estimated time of landing at the aerodrome of destination and at any alternate aerodrome are less than 1,000 feet and one mile respectively."

(3) The existing provisions of Regulation 37 of the Regulations shall be numbered (1).

6. The following shall be inserted in the Regulations as Regulations 37A and 37B respectively :—

" *Requirements as to the Weight and Performance of Public Transport Aeroplanes classified as Aeroplanes of Performance Group X in their Certificates of Airworthiness*

37A. With reference to Article 17 (4) of the Order a public transport aeroplane classified in the certificate of airworthiness relating to the aeroplane issued or rendered valid by the Minister as an aeroplane of performance group X shall not fly or attempt to fly unless the weight of the aeroplane at the commencement of the take-off run is such that the following conditions are satisfied :—

(1) (i) The weight of the aeroplane at the commencement of the take-off run does not exceed the weight specified in the flight manual issued or rendered valid by the Minister for the type of aeroplane as being the maximum take-off weight appropriate either to the altitude of the aerodrome at which the take-off is to be made, or to the altitude and the air temperature at such aerodrome, as the case may be.

(ii) The minimum effective take-off runway distance, specified in the said flight manual relating to the aeroplane as being appropriate to :—

(*a*) the weight of the aeroplane at the commencement of the take-off run ;

(*b*) the altitude of the aerodrome ;

(*c*) the air temperature at the time of take off ;

(*d*) the overall gradient of the take-off run available ; and

(*e*) not more than 50 per cent of the reported wind component opposite to the direction of take-off or not less than 150 per cent of the reported wind component in the direction of take-off,

does not exceed the take-off run available at the aerodrome at which the take-off is to be made.

(iii) (*a*) The take-off flight path with one power unit inoperative ascertained by reference to the said flight manual as being appropriate to—

(i) the weight of the aeroplane at the commencement of the take-off run ;

(ii) the altitude of the aerodrome ; and

(iii) the reported head or tail wind component appropriate to the direction of take-off,

and plotted from a point 50 feet above the end of the minimum effective take-off runway distance required at the aerodrome at which the take-off is to be made shows that the aeroplane will thereafter clear any obstacle in its path by a vertical interval of not less than the greater of 50 feet or 35 feet plus 1/100 of the distance from the point on the ground below the intended line of flight of the aeroplane nearest to the obstacle to the end of the take-off distance available, measured along the intended line of flight of the aeroplane, and if it is intended that the aeroplane shall change direction of flight by more than 15 degrees, also shows that the aeroplane while changing its direction will clear any obstacle in its path by a vertical interval of at least 50 feet.

(*b*) for the purpose of sub-paragraph (*a*) an obstacle shall be deemed to be in the path of the aeroplane if the distance from the obstacle to the nearest point on the ground below the intended line of flight of the aeroplane does not exceed :—

(i) a distance of 200 feet plus half the wing span of the aeroplane plus $\frac{1}{8}$ of the distance from such point to the end of the take-off distance available measured along the intended line of flight of the aeroplane ; or

(ii) 5,000 feet,

whichever is the less.

(*c*) In assessing the ability of the aeroplane to satisfy this condition, insofar as it relates to flight path, it shall not be assumed to make a change of direction of a radius less than the radius of steady turn corresponding to an angle of bank of 15°.

(2) (i) (*a*) Subject to sub-paragraph (*b*), the weight of the aeroplane at any point on the route or planned diversion therefrom, having regard to the fuel and oil expected to be consumed up to that point, shall be such that the aeroplane, with one power unit inoperative and the other power unit or units operating within the maximum continuous power conditions specified in the said flight manual, will be capable of a rate of climb of at least $K(Vso/100)^2$ feet per minute at an altitude not less than the minimum altitude for safe flight stated in or calculated from the information contained in the operations manual, where Vso is in knots and K has the value of 797–1060/N, N being the number of power units installed.

(*b*) As an alternative to (*a*), the aeroplane may be flown at an altitude from which, in the event of failure of one power unit, it is capable of reaching an aerodrome where a landing can be made in accordance with condition (3) (ii) of this Regulation relating to an alternate aerodrome. In that case, the weight of the aeroplane shall be such that, with the remaining power unit or units operating within the maximum continuous power conditions specified in the said flight manual, it is capable of maintaining a minimum altitude on the route to such aerodrome of 2,000 feet above all obstacles within five nautical miles on either side of the intended track and

(*aa*) the rate of climb, determined from the flight manual for the appropriate weight and altitude, used in calculating the flight path shall be reduced by an amount equal to $K(Vso/100)^2$ feet per minute ;

(*bb*) the aeroplane shall comply with the climb requirements of condition 2 (i) (*a*) at 1,000 feet above the chosen aerodrome ;

(*cc*) account shall be taken of the effect of wind and temperature on the flight path ; and

(*dd*) the weight of the aeroplane may be assumed to be progressively reduced by normal consumption of fuel and oil.

(ii) An aeroplane having four power units shall, if any two power units become inoperative at any point along the route or any planned diversion therefrom, being a point more than 90 minutes flying time (assuming all power units to be operating) from the nearest aerodrome at which a landing can be made in compliance with condition (3) (ii) of this Regulation relating to an alternate aerodrome, be capable of continuing the flight at an altitude of not less than 1,000 feet above ground level to a point above that aerodrome. In assessing the ability of the aeroplane to satisfy this condition, it shall be assumed that the remaining power units will operate within the maximum continuous power conditions specified in the said flight manual, and account shall be taken of the temperature and wind conditions expected for the flight.

(3) (i) The weight of the aeroplane at the intended time of landing (hereinafter in this Regulation called " the landing weight ") calculated by deducting the estimated weight of fuel and oil expected to be used on the flight from its weight at the commencement of the take-off run will not exceed any of the maximum landing weights specified in the said flight manual as being appropriate to the heights above mean sea level of the aerodrome of intended landing and any alternate aerodrome.

(ii) The landing runway lengths respectively specified in the said flight manual as being appropriate to aerodromes of intended destination and to alternate aerodromes, and to—

(*a*) the landing weight ;

(*b*) the height above mean sea level of the aerodrome ;

(*c*) still air conditions ; and

(*d*) not more than 50 per cent of the forecast wind component opposite to the direction of landing or not less than 150 per cent of the forecast wind component in the direction of landing,

do not exceed the landing distance available at the aerodrome at which it is intended to land or at any alternate aerodrome, as the case may be, on the most suitable runway for a landing in still air and on the runway that may be required for landing because of the expected wind conditions.

37B. With reference to Article 17 (6) of the Order, a public transport aeroplane classified in the certificate of airworthiness relating to the aeroplane issued or rendered valid by the Minister as an aeroplane of performance group X shall not fly or attempt to fly over water so as to be more than 60 minutes flying time from the nearest shore unless it has more than two power units. For the purposes of this Regulation, flying time shall be calculated at normal cruising speed with one power unit inoperative."

7.—(1) In Regulation 38 of the Regulations the words and figures " Regulations 36, 37, 37A and 37B ", shall be substituted for the words and figures " Regulation 36 or 37 ".

(2) The following shall be added to Regulation 38 of the Regulations as paragraph (2) thereof :—

"(2) In assessing the ability of an aeroplane to comply with Regulations 36 (4) and (5) and 37A (2) (i) (*b*) and 37A (2) (ii) account may be taken of any reduction of the weight of the aeroplane which may be achieved after the failure of a power unit by such jettisoning of fuel as is feasible and prudent in the circumstances of the flight and in accordance with the said flight manual."

(3) The existing provisions of Regulation 38 of the Regulations shall be numbered (1).

8.—(1) In the first line of Regulation 39 of the Regulations the words and figures " Regulations 33, 34, 36, 37, 37A and 37B " shall be substituted for the words and figures " Regulations 33, 34, 36 and 37."

(2) In paragraph (*b*) of Regulation 39, the expression " one and one half times " shall be substituted for the word " twice ".

(3) The following shall be substituted for paragraph (*d*) of Regulation 39 of the Regulations:—

"(*d*) the landing distance available means the distance from the point on the surface of the aerodrome above which the aeroplane can commence its landing, having regard to the obstructions in its approach path, to the nearest point in the direction of landing at which the surface of the aerodrome is incapable of bearing the weight of the aeroplane under normal operating conditions or at which there is an obstacle capable of affecting the safety of the aeroplane."

9. Regulation 45 of the Regulations shall be deleted and the following shall be substituted therefor:—

" 45. With reference to Article 18 (4) of the Order:—

(1) The operator of a public transport aircraft registered in the United Kingdom shall not permit any person to fly as the pilot in charge of that aircraft during any flight unless that person has had training, practice and periodical tests as provided in this Regulation in respect of the duties which he is to perform and the operator is satisfied that such person is competent to perform his duties.

(2) *Scheduled journeys*

(*a*) In the case of a flight constituting the whole or part of a scheduled journey, the pilot in charge of the aircraft for the flight shall within the relevant period have been tested by or on behalf of the operator—

(i) as to his knowledge of the route to be taken, the aerodromes of take-off and landing, and any alternate aerodromes, including in particular his knowledge of

the terrain,

the seasonal meteorological conditions,

the meteorological, communications, and air traffic facilities, services and procedures,

the search and rescue procedures,

and the navigational facilities

relevant to the route ;

(ii) as to his proficiency in using instrument approach-to-land systems of the type in use at the aerodrome of intended

landing and any alternate aerodromes, such test being carried out either in flight or by means of apparatus of approved type in which flight conditions are simulated on the ground, and in IFR conditions which may in the case of tests carried out in flight be simulated.

(*b*) In determining whether a person's knowledge of the matters referred to in sub-paragraph (*a*) (i) is sufficient to render him competent to perform the duties of pilot in charge of the aircraft on the flight, the operator shall take into account the person's flying experience of the route in conjunction with the following factors—

(i) the influence of terrain and obstructions on departure and approach procedures at the aerodromes of take-off and intended landing and at alternate aerodromes ;

(ii) the similarity of the instrument approach procedures and let-down aids to those with which the person is familiar ;

(iii) the dimensions of runways which may be used in the course of the flight in relation to the performance limits of aircraft of the type to be used on the flight ;

(iv) the reliability of meteorological forecasts and the probability of difficult meteorological conditions in the areas to be traversed ;

(v) the adequacy of the information available regarding the aerodrome of intended landing and any alternate aerodromes ;

(vi) the extent of the assistance obtainable en route from navigational aids and air to ground communication facilities ;

(vii) the extent to which it is possible for the person to become familiar with unusual aerodrome procedures and features of the route by means of ground instruction and training devices.

(3) *Non-Scheduled journeys*

In the case of a flight which does not constitute the whole or any part of a scheduled journey, the pilot in charge of the aircraft for the flight shall within the relevant period have been tested by or on behalf of the operator—

(i) as to his knowledge of—

the terrain,

the seasonal meteorological conditions,

the meteorological, communications, and air traffic facilities, services and procedures,

the search and rescue procedures,

and the navigational facilities

relevant to the route ;

(ii) as to his proficiency in using instrument approach-to-land systems of the type in use at the aerodrome of intended landing and any alternate aerodromes, such test being carried out either in flight or by means of apparatus of approved type in which flight conditions are simulated on the ground, and in IFR conditions which may in the case of tests carried out in flight be simulated.

(4) For the purposes of this Regulation:—

the expression "scheduled journey" means one of a series of journeys which are undertaken between the same two places and which together amount to a systematic service;

the expression "relevant period" in relation to a flight means a period which immediately precedes the commencement of that flight, being a period—

(*a*) in the case of sub-paragraphs (2) (*a*) (ii) and (3) (ii), of six months;

(*b*) in the case of sub-paragraphs (2) (*a*) (i) and (3) (i), of twelve months:

Provided that—

(i) a person to whom the provisions of sub-paragraphs (2) (*a*) (ii) or (3) (ii) apply shall for the purposes of the flight be deemed to have complied with the requirements thereof within the relevant period if he has qualified to perform his duties in accordance therewith on two occasions within the period of twelve months immediately preceding the flight, such occasions being separated by an interval of not less than four months;

(ii) the requirements of sub-paragraph (2) (*a*) shall be deemed to have been complied with within the relevant period by a pilot in charge of the aircraft for the flight if, having become qualified so to act on flights between the same terminals over the same route more than twelve months before the commencement of the flight he has within the period of twelve months immediately preceding the commencement of the flight flown as pilot of an aircraft on a flight between those terminals over that route.

(5) Any test specified in sub-paragraph (2) (*a*) may be dispensed with by the operator in the case of a person who would, but for the provisions of this paragraph, be required to undergo that test, if either—

(i) the flying experience of that person during the relevant period specified in relation to that test has been wholly or mainly in the service of the operator and is such as to satisfy the operator, after taking into account all the requirements of that test, that that person is competent to perform the duties of pilot in charge of the aircraft on the flight; or

(ii) that person satisfies the operator, by the production of written evidence either as to his flying experience during the relevant period specified in relation to that test or as to his having undergone within that period a test of the same description to the satisfaction of some other operator of public transport aircraft and subsequently performed in flight the duties to which it relates, that after taking into account all the requirements of that test that person is competent to perform the duties of pilot in charge of the aircraft on the flight.

(6) (*a*) The records required to be maintained by an operator under Article 18 (4) of the Order shall be accurate and up to date records so kept as to show, in relation to each person who has flown as

pilot in charge of any public transport aircraft operated by that operator—

(i) the date and particulars of each test specified in this Regulation undergone by that person, including the name and qualifications of the examiner;

(ii) the operator's conclusions based on each such test as to that person's competence to perform his duties;

(iii) the date and particulars of any decision taken by the operator during the said period under paragraph (5) of this Regulation to dispense in relation to that person with any test or tests, including particulars of the evidence upon which that decision was based.

The operator shall retain such records for a period of at least two years after the date of the test, or decision to dispense with a test, to which they relate.

(*b*) The operator shall whenever called upon to do so by any person authorised in that behalf by the Minister produce for the inspection of any person so authorised all records referred to in the preceding sub-paragraph and furnish to any person so authorised all such information as he may require in connection with any such records and produce for his inspection all log books, certificates, papers and other documents whatsoever which he may reasonably require to see for the purpose of determining whether such records are complete or of verifying the accuracy of their contents.

(*c*) The operator shall at the request of any person in respect of whom he is required to keep records as aforesaid furnish to that person, or to any operator of public transport aircraft by whom that person may subsequently be employed, particulars of any qualifications in accordance with this Regulation obtained by such person whilst in his service."

10. In sub-paragraph (*a*) of paragraph (4) of Regulation 221 of the Regulations, the figure "150" shall be substituted for the figure "100".

Given under the Official Seal of the Minister of Transport and Civil Aviation this seventeenth day of April, 1959.

(L.S.)

G. J. Hole,
An Under Secretary of the
Ministry of Transport and Civil Aviation.

EXPLANATORY NOTE

(This Note is not part of the Regulations, but is intended to indicate their general purport.)

These Regulations amend the Air Navigation (General) Regulations, 1954, as amended, in respect of—

(1) weight and performance regulations with which aeroplanes must comply before they are allowed to take off;

(2) the requirements imposed upon operators of public transport aircraft to satisfy themselves that pilots in charge of such aircraft are competent to perform their duties on the routes they are required to fly;

(3) the qualifications necessary in the case of an applicant for an Assistant Instructor's rating (Flying Machines).