

[Tangelo Reg. 25]

PART 905—ORANGES, GRAPEFRUIT, TANGERINES, AND TANGELOS GROWN IN FLORIDA

Limitation of Shipments

§ 905.446 Tangelo Regulation 25.

(a) *Findings.* (1) Pursuant to the marketing agreement, as amended, and Order No. 905, as amended (7 CFR Part 905), regulating the handling of oranges, grapefruit, tangerines, and tangelos grown in Florida, effective under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), and upon the basis of the recommendations of the committees established under the aforesaid amended marketing agreement and order, and upon other available information, it is hereby found that the limitation of shipments of tangelos, as hereinafter provided, will tend to effectuate the declared policy of the act.

(2) It is hereby further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rule-making procedure, and postpone the effective date of this section until 30 days after publication thereof in the *FEDERAL REGISTER* (5 U.S.C. 1001-1011) because the time intervening between the date when information upon which this section is based became available and the time when this section must become effective in order to effectuate the declared policy of the act is insufficient; a reasonable time is permitted, under the circumstances, for preparation for such effective time; and good cause exists for making the provisions hereof effective as hereinafter set forth. Shipments of tangelos, grown in the production area, are presently subject to regulation by grades and sizes, pursuant to the amended marketing agreement and order; the recommendation and supporting information for regulation during the period specified herein were promptly submitted to the Department after an open meeting of the Growers Administrative Committee on January 5, 1965, such meeting was held to consider recommendations for regulation, after giving due notice of such meeting, and interested persons were afforded an opportunity to submit their views at this meeting; the provisions of this section, including the effective time hereof, are identical with the aforesaid recommendation of the committee, and information concerning such provisions and effective time has been disseminated among handlers of such tangelos; it is necessary, in order to effectuate the declared policy of the act, to make this section effective during the period hereinafter set forth so as to provide for the continued regulation of the handling of tangelos, and compliance with this section will not require any special preparation on the part of the persons subject thereto which cannot be completed by the effective time hereof.

(b) *Order.* (1) Terms used in the amended marketing agreement and order shall, when used herein, have the

same meaning as is given to the respective term in said amended marketing agreement and order; and terms relating to grade, diameter, standard pack, and standard box, as used herein, shall have the same meaning as is given to the respective term in the United States Standards for Florida Oranges and Tangelos (§§ 51.1140-51.1178 of this title).

(2) During the period beginning at 12:01 a.m., e.s.t., January 11, 1965, and ending at 12:01 a.m., e.s.t., January 25, 1965, no handler shall ship between the production area and any point outside thereof in the continental United States, Canada, or Mexico:

(i) Any tangelos, grown in the production area, which do not grade at least U.S. No. 1 Russet; or

(ii) Any tangelos, grown in the production area, which are of a size smaller than $2\frac{1}{16}$ inches in diameter, except that a tolerance of 10 percent, by count, of tangelos smaller than such minimum diameter shall be permitted, which tolerance shall be applied in accordance with the provisions for the application of tolerances specified in said United States Standards for Florida Oranges and Tangelos.

(Secs. 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601-674)

Dated: January 7, 1965.

PAUL A. NICHOLSON,
Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[F.R. Doc. 65-296; Filed, Jan. 8, 1965; 8:50 a.m.]

[Tangerine Reg. 25]

PART 905—ORANGES, GRAPEFRUIT, TANGERINES, AND TANGELOS GROWN IN FLORIDA

Limitation of Shipments

§ 905.447 Tangerine Regulation 25.

(a) *Findings.* (1) Pursuant to the marketing agreement, as amended, and Order No. 905, as amended (7 CFR Part 905), regulating the handling of oranges, grapefruit, tangerines, and tangelos grown in Florida, effective under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), and upon the basis of the recommendations of the committees established under the aforesaid amended marketing agreement and order, and upon other available information, it is hereby found that the limitation of shipments of tangerines, as hereinafter provided, will tend to effectuate the declared policy of the act.

(2) It is hereby further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rule-making procedure, and postpone the effective date of this section until 30 days after publication thereof in the *FEDERAL REGISTER* (5 U.S.C. 1001-1011) because the time intervening between the date when information upon which this section is based became available and the time when this section must become effective in order to effectuate

the declared policy of the act is insufficient; a reasonable time to permitted, under the circumstances, for preparation for such effective time; and good cause exists for making the provisions hereof effective as hereinafter set forth. Shipments of tangerines, grown in the production area, are presently subject to regulation by grades and sizes, pursuant to the amended marketing agreement and order; the recommendation and supporting information for regulation during the period specified herein were promptly submitted to the Department after an open meeting of the Growers Administrative Committee on January 5, 1965, such meeting was held to consider recommendations for regulation, after giving due notice of such meeting, and interested persons were afforded an opportunity to submit their views at this meeting; the provisions of this section, including the effective time hereof, are identical with the aforesaid recommendation of the committee, and information concerning such provisions and effective time has been disseminated among handlers of such tangerines; it is necessary, in order to effectuate the declared policy of the act, to make this section effective during the period hereinafter set forth so as to provide for the continued regulation of the handling of tangerines, and compliance with this section will not require any special preparation on the part of the persons subject thereto which cannot be completed by the effective time hereof.

(b) *Order.* (1) Terms used in the amended marketing agreement and order shall, when used herein, have the same meaning as is given to the respective term in said amended marketing agreement and order; and terms relating to grade, diameter, and standard pack, as used herein, shall have the same meaning as is given to the respective term in the United States Standards for Florida Tangerines (§§ 51.1810-51.1834 of this title).

(2) During the period beginning at 12:01 a.m., e.s.t., January 11, 1965, and ending at 12:01 a.m., e.s.t., January 25, 1965, no handler shall ship between the production area and any point outside thereof in the continental United States, Canada, or Mexico:

(i) Any tangerines, grown in the production area, which do not grade at least U.S. No. 1 Russet; or

(ii) Any tangerines, grown in the production area, which are of a size smaller than $2\frac{1}{16}$ inches in diameter, except that a tolerance of 10 percent, by count, of tangerines smaller than such minimum diameter shall be permitted, which tolerance shall be applied in accordance with the provisions for the application of tolerances specified in said United States Standards for Florida Tangerines.

(Secs. 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601-674)

Dated: January 7, 1965.

PAUL A. NICHOLSON,
Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[F.R. Doc. 65-297; Filed, Jan. 8, 1965; 8:50 a.m.]

[Navel Orange Reg. 68]

PART 907—NAVEL ORANGES GROWN IN ARIZONA AND DESIGNATED PART OF CALIFORNIA

Limitation of Handling

§ 907.368 Navel Orange Regulation 68.

(a) Findings. (1) Pursuant to the marketing agreement, as amended, and Order No. 907, as amended (7 CFR Part 907), regulating the handling of navel oranges grown in Arizona and designated part of California, effective under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), and upon the basis of the recommendations and information submitted by the Navel Orange Administrative Committee, established under the said amended marketing agreement and order, and upon other available information, it is hereby found that the limitation of handling of such navel oranges, as hereinafter provided, will tend to effectuate the declared policy of the act.

(2) It is hereby further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rule-making procedure, and postpone the effective date of this section until 30 days after publication hereof in the FEDERAL REGISTER (5 U.S.C. 1001-1011) because the time intervening between the date when information upon which this section is based became available and the time when this section must become effective in order to effectuate the declared policy of the act is insufficient, and a reasonable time is permitted, under the circumstances, for preparation for such effective time; and good cause exists for making the provisions hereof effective as hereinafter set forth. The committee held an open meeting during the current week, after giving due notice thereof, to consider supply and market conditions for Navel oranges and the need for regulation; interested persons were afforded an opportunity to submit information and views at this meeting; the recommendation and supporting information for regulation during the period specified herein were promptly submitted to the Department after such meeting was held; the provisions of this section, including its effective time, are identical with the aforesaid recommendation of the committee, and information concerning such provisions and effective time has been disseminated among handlers of such Navel oranges; it is necessary, in order to effectuate the declared policy of the act, to make this section effective during the period herein specified; and compliance with this section will not require any special preparation on the part of persons subject hereto which cannot be completed on or before the effective date hereof. Such committee meeting was held on January 7, 1965.

(b) Order. (1) The respective quantities of Navel oranges grown in Arizona and designated part of California which may be handled during the period beginning at 12:01 a.m., P.s.t., January 10, 1965, and ending at 12:01 a.m., P.s.t.,

January 17, 1965, are hereby fixed as follows:

- (i) District 1: 500,000 cartons;
 - (ii) District 2: 150,000 cartons;
 - (iii) District 3: Unlimited movement;
 - (iv) District 4: Unlimited movement.
- (2) As used in this section, "handled," "District 1," "District 2," "District 3," "District 4," and "carton" have the same meaning as when used in said amended marketing agreement and order.

(Secs. 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601-674)

Dated: January 8, 1965.

*Director, Fruit and Vegetable
Division, Agricultural Mar-
keting Service.*

[F.R. Doc. 65-357; Filed, Jan. 8, 1965;
11:20 a.m.]

[Grapefruit Reg. 7, Amdt. 2]

PART 944—FRUITS; IMPORT REGULATIONS

Grapefruit

Pursuant to the provisions of section 8e of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), the provisions of paragraph (a) of Grapefruit Regulation 7 (§ 944.103; 29 F.R. 12762, 13603) are hereby amended to read as follows:

§ 944.103 Grapefruit Regulation No. 7.

(a) On and after 12:01 a.m., e.s.t., January 15, 1965, the importation of any grapefruit is prohibited unless such grapefruit are inspected and meet the following applicable requirements:

(1) Seeded grapefruit shall grade at least U.S. No. 1 and be of a size not smaller than $3\frac{1}{16}$ inches in diameter, except that a tolerance of 10 percent, by count, of seeded grapefruit smaller than such minimum size shall be permitted, which tolerance shall be applied in accordance with the provisions for the application of tolerances, specified in the United States Standards for Florida Grapefruit; or

(2) Seedless grapefruit shall grade at least U.S. No. 1 Russet and be of a size not smaller than $3\frac{1}{16}$ inches in diameter, except that seedless grapefruit which grade U.S. No. 2 or U.S. No. 2 Bright may be imported if such grapefruit (i) meet the requirements as to form (shape) and color specified in the U.S. No. 1 grade and (ii) are not smaller than $4\frac{1}{16}$ inches in diameter: *Provided*, That a tolerance of 10 percent, by count of grapefruit which is smaller than the aforesaid minimum sizes shall be permitted, which tolerance shall be applied in accordance with the provisions for the application of tolerances, specified in the United States Standards for Florida Grapefruit.

It is hereby found that it is impracticable, unnecessary, and contrary to the public interest to give preliminary notice, engage in public rule-making procedure, and postpone the effective time of this amendment beyond that hereinafter specified (5 U.S.C. 1001-1011) in that (a) the requirements of this amended

import regulation are imposed pursuant to section 8e of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), which makes such regulation mandatory; (b) such regulation imposes the same restrictions on imports of all grapefruit as the grade and size restrictions being made applicable to the shipment of all grapefruit grown in Florida under Grapefruit Regulation 46 (§ 905.445); (c) compliance with this amended import regulation will not require any special preparation which cannot be completed by the effective time hereof; (d) notice hereof in excess of three days, the minimum that is prescribed by said section 8e, is given with respect to this import regulation; and (e) such notice is hereby determined, under the circumstances, to be reasonable.

(Secs. 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601-674)

Dated, January 7, 1965, to become effective at 12:01 a.m., e.s.t., January 15, 1965.

*PAUL A. NICHOLSON,
Deputy Director, Fruit and Veg-
etable Division, Agricultural
Marketing Service.*

[F.R. Doc. 65-300; Filed, Jan. 8, 1965;
8:50 a.m.]

[970.305, Amdt. 1]

PART 970—CARROTS GROWN IN SOUTH TEXAS

Limitation of Shipments

Findings. (a) Pursuant to Marketing Agreement No. 142 and Order No. 970, both as amended (7 CFR Part 970), regulating the handling of carrots grown in designated counties in South Texas, effective under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (Secs. 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601 et seq.), and upon the basis of the recommendation and information submitted by the South Texas Carrot Committee, established pursuant to said marketing agreement and order, and upon other available information, it is hereby found that the amendment to the limitation of shipments hereinafter set forth will maintain orderly marketing conditions tending to increase returns to carrot growers in the production area.

(b) It is hereby found that it is impracticable and contrary to the public interest to give preliminary notice, or engage in public rule making procedure, and that good cause exists for not postponing the effective date of this amendment until 30 days after publication in the FEDERAL REGISTER (5 U.S.C. 1003) in that (1) the 1964-65 marketing season for South Texas carrots is currently in progress and a heavy volume of shipments is now being made, (2) to maximize benefits to growers, this amendment should apply to as many shipments of carrots as possible during the remainder of the 1964-65 season, (3) compliance with this amendment will not require any special preparation on the part of handlers, and (4) information regarding the committee's recommenda-

tion has been disseminated to producers and handlers in the production area.

Order, as amended. In § 970.305 (29 F.R. 15018, 15019), amend the introductory paragraph and paragraphs (a) and (b) to read as follows:

§ 970.305 Limitation of shipments.

During the period from January 12, 1965, through June 30, 1965, no handler shall (1) package or load carrots on Sundays, or (2) handle any lots of carrots grown in the production area unless such carrots meet the grade requirements of paragraph (a) of this section, and one of the size designations of paragraph (b) of this section, and meet the container and pack requirements of paragraphs (c) and (d) of this section, or unless such carrots are handled in accordance with provisions of paragraphs (e), (f), (g), and (h) of this section.

(a) *Minimum grade requirements.* U.S. No. 1, or better, and which are "clean", averaging at least 50 percent well formed, with no individual sample under 35 percent well formed.

(b) *Sizing requirements.*—(1) *Medium-to-large.* $\frac{7}{8}$ inch minimum diameter to $1\frac{1}{2}$ inches maximum diameter, 6 inches minimum length, with an average of 30 percent by count 1 inch minimum diameter or larger and no sample with less than 15 percent by count 1 inch or larger in diameter.

(2) *Jumbos.* $1\frac{1}{4}$ inches minimum diameter to 3 inches maximum diameter and 6 inches minimum length.

(Secs. 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601 et seq.)

Dated January 6, 1965, to become effective January 12, 1965.

PAUL A. NICHOLSON,
Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[F.R. Doc. 65-295; Filed, Jan. 8, 1965; 8:50 a.m.]

Chapter XVI—Agricultural Marketing Service (Food Stamp Program), Department of Agriculture

PART 1601—PARTICIPATION OF STATE AGENCIES AND ELIGIBLE HOUSEHOLDS

Effective Date

The regulations governing the Food Stamp Program as issued in 29 F.R. 16784, are amended as follows:

The last paragraph following § 1601.9 is amended to read as follows:

The provisions of this part shall become effective as provided in § 1600.5(d) of this chapter.

S. R. SMITH,
Administrator.

Approved: January 6, 1965.

ORVILLE L. FREEMAN,
Secretary.

[F.R. Doc. 65-277; Filed, Jan. 8, 1965; 8:49 a.m.]

Title 9—ANIMALS AND ANIMAL PRODUCTS

Chapter I—Agricultural Research Service, Department of Agriculture

PART 40—SPECIAL SERVICES RELATING TO MEAT AND OTHER PRODUCT

Miscellaneous Amendments

Under the authority contained in sections 203 and 205 of the Agricultural Marketing Act of 1946, as amended (7 U.S.C. 1622 and 1624), §§ 40.2 and 40.3 of Part 40, Subchapter A, Chapter I, Title 9, Code of Federal Regulations, as amended, are hereby further amended in the following respects:

1. Section 40.2 is changed by adding a new paragraph (j) to read:

§ 40.2 Definitions.

(j) *Reindeer.* Domesticated reindeer. 2. Section 40.3 is changed by adding a new paragraph (d) to read:

§ 40.3 Types and availability of service.

(d) *Reindeer inspection service.* An inspection and certification service for wholesomeness relating to the slaughter of reindeer. All applicable provisions of this subchapter shall apply to the slaughter of reindeer, and the preparation, labeling, and certification of the reindeer meat and reindeer products prepared under this reindeer inspection service.

(Secs. 203, 205, 60 Stat. 1087 and 1090, as amended; 7 U.S.C. 1622 and 1624; 29 F.R. 16210)

Effective date. The foregoing amendments shall become effective upon publication in the FEDERAL REGISTER.

The foregoing amendments provide for reindeer inspection service upon the request of interested persons and on a reimbursable basis. Inasmuch as the amendments provide for an inspection service not heretofore available, they should become effective as soon as possible in order to be of maximum benefit to persons desiring to use such service. Accordingly, it is found upon good cause under Section 4 of the Administrative Procedure Act (5 U.S.C. 1003) that notice and other public procedure with respect to the amendments are impracticable and contrary to the public interest; and good cause is found for making the amendments effective less than 30 days after publication in the FEDERAL REGISTER.

Done at Washington, D.C., this 6th day of January 1965.

GEORGE W. IRVING, JR.,
Acting Administrator,
Agricultural Research Service.

[F.R. Doc. 65-279; Filed, Jan. 8, 1965; 8:49 a.m.]

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Agency
[Reg. Docket No. 4080]

PART 23—AIRWORTHINESS STANDARDS: NORMAL, UTILITY, AND ACROBATIC CATEGORY AIRPLANES

Correction

In F.R. Doc. 64-12987, appearing at page 17955, of the issue for Friday, December 18, 1964, the following changes are made:

1. In the last line of § 23.365(d), the factor "1.3" is changed to read "1.33".
2. In § 23.427, the word "local" in the second line of the formula is changed to read "load".

PART 121—CERTIFICATION AND OPERATIONS: DOMESTIC, FLAG, AND SUPPLEMENTAL AIR CARRIERS AND COMMERCIAL OPERATORS OF LARGE AIRCRAFT

Appendixes A, B, and C to Part 121 of Title 14, Chapter I, published in the FEDERAL REGISTER dated December 31, 1964 (F.R. Doc. 64-13424, 29 F.R. 19186), read as follows:

Appendix A—First-Aid Kits

Approved first-aid kits required by § 121.309 must meet the following specifications and requirements.

(1) Each first-aid kit must be dust and moisture proof, and contain only materials that meet Federal Specifications GG-K-391a, as revised.

(2) The type of first-aid kit and the contents thereof based upon the capacity of the airplane is as follows:

(a) No. 1 kit for airplanes of 1 to 5 persons capacity.

Contents	No.
Adhesive bandage compresses, 1-inch (16 per unit).....	1
Antiseptic swabs, 10mm. (10 per unit).....	1
Ammonia inhalants, 6mm. (10 per unit).....	1
2-inch bandage compresses (4 per unit).....	1
4-inch bandage compresses (1 per unit).....	1
Triangular bandage compressed, 40-inch (1 per unit).....	2
Burn compound, $\frac{1}{4}$ oz. (6 per unit) or equivalent amount of other burn remedy.....	1
Ophthalmic ointment, $\frac{1}{4}$ oz. (6 per unit).....	1

(b) No. 2 kit for airplanes of 6 to 25 persons capacity.¹

Contents	No.
Adhesive bandage compresses, 1-inch (16 per unit).....	2
Antiseptic swabs, 10mm. (10 per unit).....	2
Ammonia inhalants, 6mm. (10 per unit).....	1
2-inch bandage compresses (4 per unit).....	3
4-inch bandage compresses (1 per unit).....	2
Triangular bandage compressed, 40-inch (1 per unit).....	3
Burn compound, $\frac{1}{4}$ oz. (6 per unit) or equivalent amount of other burn remedy.....	2
Ophthalmic ointment, $\frac{1}{4}$ oz. (6 per unit).....	1

¹ Kit No. 2 in canvas may also be used on lifts.

(e) No. 3 kit for airplanes of over 25 persons capacity.

Contents	No.
Adhesive bandage compresses, 1-inch (16 per unit).....	4
Antiseptic swabs, 10mm. (10 per unit).....	4
Ammonia inhalants, 6mm. (10 per unit).....	2
2-inch bandage compresses (4 per unit).....	3
4-inch bandage compresses (1 per unit).....	3
Triangular bandage compressed, 40-inch (1 per unit).....	5
Burn compound, 1/2 oz. (6 per unit) or an equivalent amount of other burn remedy.....	2
Ophthalmic ointment, 1/2 oz. (6 per unit).....	1

Appendix B—Minimum Standards for the Approval of Airplane Simulators

1. *Application for approval.* An application for approval of an airplane simulator is submitted, in triplicate, to the Administrator. The application must include the following:

(a) Enough information to show that the simulator adequately simulates the type of airplane with respect to the items and systems listed in section 3 of this appendix.

(b) Comparative data sheets showing that the performance and flight characteristics of the airplane simulator have been flight checked and found to be within the limits prescribed for the items listed in section 4 of this appendix. The airplane data used for comparison purposes must be applicable to the currently certificated airplanes. This data may be obtained:

(1) From the approved Airplane Flight Manual, Type Inspection Reports, or other flight test data provided by the airplane manufacturer. Other sources of airplane data may be used if approved by the Administrator. Such data must be submitted so as to allow sufficient time for investigation of their adequacy.

(2) By flight tests conducted in the certificate holder's own airplane. If this procedure is used, performance and flight characteristics data for the center of gravity limits and weights used during training will be satisfactory. Before starting these flights, an outline of the tests to be conducted in the airplane must be prepared and coordinated by the certificate holder with the Administrator. This outline must contain procedures to be followed and data to be obtained during each phase of the flight testing program. Administrator may observe and participate in the flight test program to the extent he considers necessary and appropriate. Any data so obtained will be acceptable for use by other certificate holders using the same type of airplane if appropriate arrangements are made with the certificate holder originating the data.

2. General requirements.

(a) The effect of changes on the basic forces and moments must be introduced for all combinations of drag and thrust normally encountered in flight. The effect of changes in airplane attitude, power, drag, altitude, temperature, gross weight, center of gravity location, and configuration must be included.

(b) In response to control movement by a flight crew member, all instrument indications involved in the simulation of the applicable airplane must be entirely automatic in character unless otherwise specified.

(c) The rate of change of simulator instrument readings and of control forces must, unless specific tolerances are otherwise specified in this Appendix, reasonably correspond to the rate of change which would occur on the applicable airplane under actual flight conditions, for any given change in the applied load on the controls, in the applied power or in aircraft configuration.

(d) Control forces and degree of actuating control travel must, unless specific toler-

ances are otherwise specified in this Appendix, reasonably correspond to that which would occur in the airplane under actual flight conditions.

(e) Through the medium of instrument indication, it must be possible to use the simulator for the training and checking of a pilot in the operational use of controls and instruments on the applicable airplane model during the simulated execution of ground operation, takeoff, landing, normal flight, unusual attitudes, navigation problems, and instrument approach procedures. In addition, the simulator must be designed so that malfunction of aircraft engines, propellers, and primary systems may be presented and corrective action taken by the crew to cope with such emergencies.

(f) Suitable course and altitude recorders must be provided.

(g) Communication and navigation aids of the applicable airplane must be simulated for on-the-ground and in-flight operations.

3. *Minimum standards for simulation of airplane systems.* The simulator must simulate at least the following items and systems which are appropriate to the airplane being simulated:

(a) All normal cockpit noise related to engine or aerodynamic noise (adjustable volume is permissible);

(b) All flight controls;

(c) Gust locks;

(d) Trim tabs;

(e) Landing gear operation;

(f) Wheel brakes;

(g) Steering mechanisms used on the ground;

(h) Wing flaps and spoilers;

(i) Powerplant operations;

(j) Propeller controls and circuitry;

(k) Antidetonation injection systems;

(l) Fuel and oil systems;

(m) Cockpit—the simulator must represent a full scale mockup, including normal flight crew stations and accommodations for the instructor or check airman, and shall be representative of a typical fleet airplane;

(n) Circuit breaker stations manageable by the flight crew in the flight compartment (those not related to essential flight equipment or systems need not be operative);

(o) Hydraulic systems;

(p) Fire detection and extinguishing systems;

(q) Pneumatic systems (including emergency airbrakes);

(r) Electrical systems;

(s) Interior cockpit lights;

(t) Exterior light controls;

(u) Pressurization and air-conditioning systems (instrument indication and warning signals);

(v) Deicing and anti-icing systems; and

(w) Supplemental breathing systems (the systems may be charged with or vented to air).

4. *Minimum standards of tolerance for performance and flight characteristics.* The simulator must simulate the performance and flight characteristics of the particular type of airplane being simulated within the tolerance limits specified in paragraphs (a) and (b) of this section. If alternate tolerance limits are given, whichever is the greater shall apply.

(a) *Performance characteristics.* (Airplane weight and center of gravity optional.)

(1) Propeller feathering time, ± 3 seconds.

(2) Landing gear operating time, ± 3 seconds.

(3) Wing flap operating time, ± 3 seconds.

(4) Takeoff acceleration time, ± 10 percent.

(5) Calibration of gyrocompass and turn-and-bank indicator in standard rate turns and 30-degree banked turns, through a range of 180 degrees. Average rate of turn shall be within ± 10 percent.

(6) Minimum control speed (in flight), ± 5 knots.

(7) Stall speeds and stall warning speeds (wings level), as follows:

(i) Stall warning speed (initial buffet) in the takeoff, approach, and landing configuration, ± 3 knots.

(ii) Stall speeds in the takeoff, approach, and landing configuration, ± 5 knots.

(iii) The difference between stall warning (initial buffet) and stall speed shall be within ± 5 knots of that for the appropriate airplane, but in no case should the stall occur before the stall warning.

(8) Engine power (thrust) calibration at takeoff and maximum continuous ratings over an altitude range, as follows:

(i) Reciprocating engines: MP, for a given BMEP and RPM, ± 1 inch.

(ii) Turbine engines: N_1 and N_2 , for a given EPR, ± 2 percent.

(iii) Critical altitude, piston engine simulators only, ± 800 feet or ± 10 percent.

(9) Speed versus power in level flight at cruise altitude, ± 5 knots, or 3 percent, or .03 Mach.

(10) Rates of climb versus altitude in the following configurations (propeller airplane simulators, ± 50 feet or 10 percent; jet airplane simulators, ± 100 feet or 10 percent):

(i) Takeoff gear down (one engine inoperative).

(ii) Takeoff gear up (one engine inoperative).

(iii) Final takeoff (one engine inoperative).

(iv) All engines en route.

(v) One-engine-inoperative en route climb.

(vi) Two-engine-inoperative en route climb (for airplanes with four or more engines).

(vii) Approach (one engine inoperative), and

(viii) Landing.

Note: At least two airplane weights must be included in at least one configuration, and at least two outside air temperatures must be included in at least one other configuration.

(11) Rates of climb versus airspeed for one takeoff, and one en route configuration (propeller airplane simulators ± 50 feet or ± 10 percent; jet airplane simulators ± 100 feet or ± 10 percent).

(12) In determining compliance with subparagraphs (9), (10), and (11) of this paragraph, MP/BMEP/RPM relationships must conform to airplane data within the tolerance specified in subparagraph (8)(i), and EPR/Compressor RPM relationships must conform to airplane data within the tolerance specified in subparagraph (8)(ii) of this paragraph.

(b) *Flight characteristics.* (Airplane weight and center of gravity optional.)

(1) *Static longitudinal control stability:* In the landing, approach, cruise (high and low altitude), and climb configurations, return to trim, when the simulator speed is caused to depart 15 percent from trim speed, must be within ± 5 knots of approved airplane data. The slope of the stick force curve must be positive. One of these configurations must cover a center of gravity range.

(2) *Control forces:* Simulator control forces in the following areas must be within ± 8 pounds or ± 25 percent of the forces encountered in the airplane as indicated by the required data; except that, in regard to rudder forces, the tolerances must be ± 10 pounds or ± 20 percent:

(i) Longitudinal control forces during flap retraction (power off and power on), flap extension, power or thrust application, go-around following a balked landing.

(ii) Minimum control speed (in flight), rudder and aileron forces.

(iii) Stick force per "g."

(3) The roll rate of the simulator must be within ± 2 seconds or ± 25 percent, whichever is greater, of that of the airplane.

NOTE: If data for items in subparagraphs (2)(ii), (2)(iii) and (3) of this paragraph are not contained in the Type Inspection Report, the Administrator may adjudge the adequacy of simulation.

(4) In the following areas, specified tolerance limitations are not set forth in these standards. In these areas of flight characteristics, when appropriate to the type of airplane being simulated, the adequacy of simulation must be subject to the approval of the Administrator:

- (i) Compressibility trim change.
- (ii) Approaches to stall in the takeoff, approach, and landing configuration (wings level), from initial buffet to stall; except that at least one approach to a stall must be done in a 20-degree bank turn.
- (iii) Buffet at high Mach numbers up to design Mach limits.
- (iv) Dutch roll.
- (v) Emergency descents.

5. **Minimum standards of tolerance for simulator navigational accuracy.** At any altitude, on any heading, and at any airspeed, the navigational accuracy of the simulator must be as follows:

(a) The distance traveled with zero wind in a particular time interval must be equivalent to ± 5 percent of the horizontal component of the true airspeed multiplied by the time interval.

(b) The track of the simulator with no wind must agree with the true heading of the simulator within ± 3 degrees which must include allowances for instrument error. (This applies when the simulator is turning as well as flying a straight course.)

(c) During simulated ILS approaches with zero wind, the descent path of the simulator, as indicated by airspeed, altitude, and rate of descent, must agree with the descent path as indicated by the flight instrument indicating glide path deviation, within ± 20 feet from 0 to 200 feet, ± 10 percent of the height above the runway, from 200 to 1,000 feet, and ± 100 feet from 1,000 to 5,000 feet above the airport elevation.

Appendix C—C-46 Nontransport Category Airplanes

Cargo Operations

1. **Required engines.** (a) Except as provided in paragraph (b) of this section, the engines specified in subparagraphs (1) or (2) of this section must be installed in C-46 nontransport category airplanes operated at gross weights exceeding 45,000 pounds:

(1) Pratt and Whitney R2800-51-M1 or R2800-75-M1 engines (engines converted from basic model R2800-31 or R2800-75 engines in accordance with FAA approved data) that—

- (i) Conform to Engine Specification 5E-8;
- (ii) Conform to the applicable portions of the operator's manual;
- (iii) Comply with all the applicable airworthiness directives; and

(iv) Are equipped with high capacity oil pump drive gears in accordance with FAA approved data.

(2) Other engines found acceptable by the FAA Regional Flight Standards Division having type certification responsibility for the C-46 airplane.

(b) Upon application by an operator conducting cargo operations with nontransport category C-46 airplanes between points within the State of Alaska, the appropriate FAA Air Carrier District Office, Alaskan Region, may authorize the operation of such airplanes, between points within the State of Alaska; without compliance with paragraph (a) of this section if the operator shows that, in its area of operation, installation of the modified engines is not necessary to provide

adequate cooling for single-engine operations. Such authorization and any conditions or limitations therefor is made a part of the Operations Specifications of the operator.

2. **Minimum acceptable means of complying with the special airworthiness requirements.** Unless otherwise authorized under § 121.213, the data set forth in §§ 3 through 34 of this Appendix, as correlated to the C-46 nontransport category airplane, is the minimum means of compliance with the special airworthiness requirements of §§ 121.215 through 121.281.

3. **Susceptibility of material to fire.** [Deleted as unnecessary]

4. **Cabin interiors.** C-46 crew compartments must meet all the requirements of § 121.215, and, as required in § 121.221, the door between the crew compartment and main cabin (cargo) compartment must be flame resistant.

5. **Internal doors.** Internal doors, including the crew to main cabin door, must meet all the requirements of § 121.217.

6. **Ventilation.** Standard C-46 crew compartments meet the ventilation requirements of § 121.219 if a means of ventilation for controlling the flow of air is available between the crew compartment and main cabin. The ventilation requirement may be met by use of a door between the crew compartment and main cabin. The door need not have louvers installed; however, if louvers are installed, they must be controllable.

7. **Fire precautions.** Compliance is required with all the provisions of § 121.221.

(a) In establishing compliance with this section, the C-46 main cabin is considered as a Class A compartment if—

(1) The operator utilizes a standard system of cargo loading and tie-down that allows easy access in flight to all cargo in such compartment, and, such system is included in the appropriate portion of the operator's manual; and

(2) A cargo barrier is installed in the forward end of the main cabin cargo compartment. The barrier must—

(i) Establish the most forward location beyond which cargo cannot be carried;

(ii) Protect the components and systems of the airplane that are essential to its safe operation from cargo damage; and

(iii) Permit easy access, in flight, to cargo in the main cabin cargo compartment.

The barrier may be a cargo net or a network of steel cables or other means acceptable to the Administrator which would provide equivalent protection to that of a cargo net. The barrier need not meet crash load requirements of FAR § 25.561; however, it must be attached to the cargo retention fittings and provide the degree of cargo retention that is required by the operators' standard system of cargo loading and tie-down.

(b) C-46 forward and aft baggage compartments must meet, as a minimum, Class B requirements of this section or be placarded in a manner to preclude their use as cargo or baggage compartments.

8. **Proof of compliance.** The demonstration of compliance required by § 121.223 is not required for C-46 airplanes in which—

(1) The main cabin conforms to Class A cargo compartment requirements of § 121.219; and

(2) Forward and aft baggage compartments conform to Class B requirements of § 121.221, or are placarded to preclude their use as cargo or baggage compartments.

9. **Propeller deicing fluid.** No change from the requirements of § 121.225. Isopropyl alcohol is a combustible fluid within the meaning of this section.

10. **Pressure cross-feed arrangements, location of fuel tanks, and fuel system lines and fittings.** C-46 fuel systems which conform to all applicable Curtiss design specifications and which comply with the FAA

type certification requirements are in compliance with the provisions of § 121.227 through 121.231.

11. **Fuel lines and fittings in designated fire zones.** No change from the requirements of § 121.233.

12. **Fuel valves.** Compliance is required with all the provisions of § 121.235. Compliance can be established by showing that the fuel system conforms to all the applicable Curtiss design specifications, the FAA type certification requirements, and, in addition, has explosion-proof fuel booster pump electrical selector switches installed in lieu of the open contact type used originally.

13. **Oil lines and fittings in designated fire zones.** No change from the requirements of § 121.237.

14. **Oil valves.** C-46 oil shutoff valves must conform to the requirements of § 121.239. In addition, C-46 airplanes using Hamilton Standard propellers must provide, by use of stand pipes in the engine oil tanks or other approved means, a positive source of oil for feathering each propeller.

15. **Oil system drains.** The standard C-46 "Y" drains installed in the main oil inlet line for each engine meet the requirements of § 121.241.

16. **Engine breather line.** The standard C-46 engine breather line installation meets the requirements of § 121.243 if the lower breather lines actually extend to the trailing edge of the oil cooler air exit duct.

17. **Firewalls and firewall construction.** Compliance is required with all the provisions of §§ 121.245 and 121.247. The following requirements must be met in showing compliance with these sections:

(a) **Engine compartment.** The engine firewalls of the C-46 airplane must—

(1) Conform to type design, and all applicable airworthiness directives;

(2) Be constructed of stainless steel or approved equivalent; and

(3) Have fireproof shields over the fairleads used for the engine control cables that pass through each firewall.

(b) **Combustion heater compartment.** C-46 airplanes must have a combustion heater fire extinguishing system which complies with AD-49-18-1 or an FAA approved equivalent.

18. **Cowling.** Standard C-46 engine cowling (cowling of aluminum construction employing stainless steel exhaust shrouds) which conforms to the type design and cowling configurations which conform to the C-46 transport category requirements meet the requirements of § 121.249.

19. **Engine accessory section diaphragm.** C-46 engine nacelles which conform to the C-46 transport category requirements meet the requirements of § 121.251. As provided for in that section, a means of equivalent protection which does not require provision of a diaphragm to isolate the engine power section and exhaust system from the engine accessory compartment is the designation of the entire engine compartment forward of and including the firewall as a designated fire zone, and the installation of adequate fire detection and fire extinguishing systems which meet the requirements of § 121.253 and § 121.273, respectively, in such zone.

20. **Powerplant fire protection.** C-46 engine compartments and combustion heater compartments are considered as designated fire zones within the meaning of § 121.253.

21. **Flammable fluids—**

(a) **Engine compartment.** C-46 engine compartments which conform to the type design and which comply with all applicable airworthiness directives meet the requirements of § 121.255.

(b) **Combustion heater compartment.** C-46 combustion heater compartments which conform to type design and which meet all the requirements of AD-49-18-1 or an FAA approved equivalent meet the requirements of § 121.255.

22. Shutoff means—

(a) **Engine compartment.** C-46 engine compartments which comply with AD-62-10-2 or FAA approved equivalent meet the requirements of § 121.257 applicable to engine compartments, if, in addition, a means satisfactory to the Administrator is provided to shut off the flow of hydraulic fluid to the cowl flap cylinder in each engine nacelle. The shutoff means must be located aft of the engine firewall. The operator's manual must include, in the emergency portion, adequate instructions for proper operation of the additional shutoff means to assure correct sequential positioning of engine cowl flaps under emergency conditions. In accordance with § 121.315, this positioning must also be incorporated in the emergency section of the pilot's checklist.

(b) **Combustion heater compartment.** C-46 heater compartments which comply with paragraph (5) of AD-49-18-1 or FAA approved equivalent meet the requirements of § 121.257 applicable to heater compartments if, in addition, a shutoff valve located above the main cabin floor level is installed in the alcohol supply line or lines between the alcohol supply tank and those alcohol pumps located under the main cabin floor. If all of the alcohol pumps are located above the main cabin floor, the alcohol shutoff valve need not be installed. In complying with paragraph (5) of AD-49-18-1, a fail-safe electric fuel shutoff valve may be used in lieu of the manually operated valve.

23. Lines and fittings.—(a) Engine compartment. C-46 engine compartments which comply with all applicable airworthiness directives, including AD-62-10-2, by using FAA approved fire-resistant lines, hoses, and end fittings, and engine compartments which meet the C-46 transport category requirements, meet the requirements of § 121.259.

(b) **Combustion heater compartments.** All lines, hoses, and end fittings, and couplings which carry fuel to the heaters and heater controls, must be of FAA approved fire-resistant construction.

24. Vent and drain lines.—(a) Engine compartment. C-46 engine compartments meet the requirements of § 121.261 if—

(1) The compartments conform to type design and comply with all applicable airworthiness directives or FAA approved equivalent; and

(2) Drain lines from supercharger case, engine-driven fuel pump, and engine-driven hydraulic pump reach into the scupper drain located in the lower cowl segment.

(b) **Combustion heater compartment.** C-46 heater compartments meet the requirements of § 121.261 if they conform to AD-49-18-1 or FAA approved equivalent.

25. Fire-extinguishing system. (a) To meet the requirements of § 121.263, C-46 airplanes must have installed fire extinguishing systems to serve all designated fire zones. The fire-extinguishing systems, the quantity of extinguishing agent, and the rate of discharge shall be such as to provide a minimum of one adequate discharge for each designated fire zone. Compliance with this provision requires the installation of a separate fire extinguisher for each engine compartment. Insofar as the engine compartment is concerned, the system shall be capable of protecting the entire compartment against the various types of fires likely to occur in the compartment.

(b) Fire-extinguishing systems which conform to the C-46 transport category requirements meet the requirements set forth in paragraph (a). Furthermore, fire-extinguishing systems for combustion heater compartments which conform to the requirements of AD-49-18-1 or an FAA ap-

proved equivalent also meet the requirements in paragraph (a).

In addition, a fire-extinguishing system for C-46 airplanes meets the adequacy requirement of paragraph (a) if it provides the same or equivalent protection to that demonstrated by the CAA in tests conducted in 1941 and 1942, using a CW-20 type engine nacelle (without diaphragm). These tests were conducted at the Bureau of Standards facilities in Washington, D.C., and copies of the test reports are available through the FAA Regional Engineering Offices. In this connection, the flow rates and distribution of extinguishing agent substantiated in American Airmotive Report No. 128-52-d, FAA approved February 9, 1953, provides protection equivalent to that demonstrated by the CAA in the CW-20 tests. In evaluating any C-46 fire-extinguishing system with respect to the aforementioned CW-20 tests, the Agency would require data in a narrative form, utilizing drawings or photographs to show at least the following:

Installation of containers; installation and routing of plumbing; type, number, and location of outlets or nozzles; type, total volume, and distribution of extinguishing agent; length of time required for discharging; means for thermal relief, including type and location of discharge indicators; means of discharging, e.g., mechanical cutterheads, electric cartridge, or other method; and whether a one- or two-shot system is used; and if the latter is used, means of cross-feeding or otherwise selecting distribution of extinguishing agent; and types of materials used in makeup of plumbing.

High rate discharge (HRD) systems using agents such as bromotrifluoromethane, dibromodifluoromethane and chlorobromomethane (CB), may also meet the requirements of paragraph (a).

26. Fire-extinguishing agents. Extinguishing agent container pressure relief, Extinguishing agent container compartment temperatures, and Fire-extinguishing system materials. No change from the requirements of §§ 121.265 through 121.271.

27. Fire-detector system. Compliance with the requirements of § 121.273 requires that C-46 fire detector systems conform to:

(a) AD-62-10-2 or FAA approved equivalent for engine compartments; and

(b) AD-49-18-1 or FAA approved equivalent for combustion heater compartments.

28. Fire detectors. No change from the requirements of § 121.275.

29. Protection of other airplane components against fire. To meet the requirements of § 121.277, C-46 airplanes must—

(a) Conform to the type design and all applicable airworthiness directives; and

(b) Be modified or have operational procedures established to provide additional fire protection for the wheel well door aft of each engine compartment. Modifications may consist of improvements in sealing of the main landing gear wheel well doors. An operational procedure which is acceptable to the Agency is one requiring the landing gear control to be placed in the up position in case of in-flight engine fire. In accordance with § 121.315, such procedure must be set forth in the emergency portion of the operator's emergency checklist pertaining to in-flight engine fire.

30. Control of engine rotation. C-46 propeller feathering systems which conform to the type design and all applicable airworthiness directives meet the requirements of § 121.279.

31. Fuel system independence. C-46 fuel systems which conform to the type design and all applicable airworthiness directives meet the requirements of § 121.281.

32. Induction system ice prevention. The C-46 carburetor anti-icing system which conforms to the type design and all applicable airworthiness directives meets the requirements of § 121.283.

33. Carriage of cargo in passenger compartments. Section 121.285 is not applicable to nontransport category C-46 cargo airplanes.

34. Carriage of cargo in cargo compartments. A standard cargo loading and tie-down arrangement set forth in the operator's manual and found acceptable to the Administrator must be used in complying with § 121.287.

35. Performance data. Performance data on Curtiss model C-46 airplane certificated for maximum weight of 45,000 and 48,000 pounds for cargo-only operations.

1. The following performance limitation data, applicable to the Curtiss model C-46 airplane for cargo-only operation, must be used in determining compliance with §§ 121.199 through 121.205. These data are presented in the tables and figures of this Appendix.

TABLE 1—TAKEOFF LIMITATIONS

(a) Curtiss C-46 certificated for maximum weight of 45,000 pounds.

(1) "Effective length" of runway required when effective length is determined in accordance with § 121.171 (distance to accelerate to 93 knots TIAS and stop, with zero wind and zero gradient). (Factor=1.00)

Standard altitude in feet	Airplane weight in pounds		
	39,000	42,000	45,000
Distance in feet			
8,100	4,110	4,390	4,570
1,000	4,250	4,440	4,720
2,000	4,400	4,600	4,880
3,000	4,550	4,880	5,190
4,000	4,910	5,170	5,500
5,000	5,160	5,450	5,810
6,000	5,420	5,730	6,120
7,000	5,680	6,000	6,440
8,000	5,940	6,280	(¹)

¹ Ref. Fig. 1(a)(1) for weight and distance for altitudes above 7,000'.

(2) Actual length of runway required when "effective length," considering obstacles, is not determined (distance to accelerate to 93 knots TIAS and stop, divided by the factor 0.85).

Standard altitude in feet	Airplane weight in pounds		
	39,000	42,000	45,000
Distance in feet			
8,100	4,830	5,090	5,370
1,000	5,000	5,290	5,530
2,000	5,170	5,410	5,740
3,000	5,470	5,740	6,100
4,000	5,770	6,080	6,470
5,000	6,070	6,410	6,830
6,000	6,380	6,740	7,200
7,000	6,680	7,070	7,570
8,000	6,990	7,410	(¹)

¹ Ref. Fig. 1(a)(2) for weight and distance for altitudes above 7,000'.

(b) Curtiss C-46 certificated for maximum weight 48,000 pounds.

(1) "Effective length" of runway required when effective length is determined in accordance with § 121.171 (distance to accelerate to 93 knots TIAS and stop, with zero wind and zero gradient). (Factor=1.00)

TABLE 3—LANDING LIMITATIONS

(a) Intended Destination.

"Effective length" of runway required for intended destination when effective length is determined in accordance with § 121.171 with zero wind and zero gradient.

(1) Curtiss model C-46 certificated for maximum weight of 45,000 pounds. (0.60 factor.)

Standard altitude in feet	Airplane weight in pounds			
	39,000	42,000	45,000	48,000
Distance in feet				
S.L.	4,110	4,290	4,570	4,950
1,000	4,250	4,440	4,720	5,130
2,000	4,400	4,600	4,880	5,300
3,000	4,550	4,880	5,190	5,670
4,000	4,710	5,170	5,500	6,050
5,000	5,160	5,450	5,810	6,420
6,000	5,420	5,730	6,120	6,800
7,000	5,680	6,000	6,440	(1)
8,000	5,940	6,280	6,750	(1)

¹ Ref. Fig. 1(b)(1) for weight and distance for altitudes above 6,000'.

(2) Actual length of runway required when "effective length," considering obstacles, is not determined (distance to accelerate to 93 knots TIAS and stop, divided by the factor 0.85).

Standard altitude in feet	Airplane weight in pounds			
	39,000	42,000	45,000	48,000
Distance in feet				
S.L.	4,830	5,050	5,370	5,830
1,000	5,000	5,230	5,550	6,030
2,000	5,170	5,410	5,740	6,280
3,000	5,470	5,740	6,100	6,670
4,000	5,770	6,080	6,470	7,120
5,000	6,070	6,410	6,830	7,560
6,000	6,380	6,740	7,200	8,010
7,000	6,680	7,070	7,570	(1)
8,000	6,990	7,410	7,940	(1)

¹ Ref. Fig. 1(b)(2) for weight and distance for altitudes above 6,000'.

TABLE 2—EN ROUTE LIMITATIONS

(a) Curtiss model C-46 certificated for maximum weight of 45,000 pounds (based on a climb speed of 113 knots (TIAS)).

Weight (pounds)	Terrain clearance (feet) ¹	Blower setting
45,000	6,450	Low.
44,000	7,000	Do.
43,000	7,500	Do.
42,000	8,000	High.
41,000	9,000	Do.
40,000	11,000	Do.
39,000	12,300	Do.

¹ Highest altitude of terrain over which airplanes may be operated in compliance with § 121.201.

Ref. Fig. 2(a).

(b) Curtiss model C-46 certificated for maximum weight of 48,000 pounds or with engine installation approved for 2,550 revolutions per minute (1,700 brake horsepower). Maximum continuous power in low blower (based on a climb speed of 113 knots (TIAS)).

Weight (pounds)	Terrain clearance (feet) ¹	Blower setting
48,000	5,850	Low.
47,000	6,300	Do.
46,000	6,700	Do.
45,000	7,200	Do.
44,500	7,450	Do.
44,250	8,000	High.
44,000	8,550	Do.
43,000	10,800	Do.
42,000	12,500	Do.
41,000	13,000	Do.

¹ Highest altitude of terrain over which airplanes may be operated in compliance with § 121.201.

Ref. Fig. 2(b).

Standard altitude in feet	Airplane weight in pounds and approach speeds ¹ in knots							
	40,000	V _{AS}	42,000	V _{AS}	44,000	V _{AS}	45,000	V _{AS}
	Distance in feet							
S.L.	4,320	86	4,500	88	4,700	90	4,800	91
1,000	4,440	86	4,620	88	4,830	90	4,930	91
2,000	4,550	86	4,750	88	4,960	90	5,060	91
3,000	4,670	86	4,880	88	5,090	90	5,190	91
4,000	4,800	86	5,000	88	5,220	90	5,320	91
5,000	4,920	86	5,140	88	5,350	90	5,450	91
6,000	5,040	86	5,270	88	5,500	90	5,600	91
7,000	5,170	86	5,410	88	5,650	90	5,750	91
8,000	5,310	86	5,550	88	5,800	90	5,900	91

¹ Steady approach speed through 50-foot height TIAS denoted by symbol V_{AS}.

Ref. Fig. 3(a)(1).

(2) Curtiss model C-46 certificated for maximum weight of 48,000 pounds.¹ (0.60 factor.)

Standard altitude in feet	Airplane weight in pounds and approach speeds ¹ in knots							
	42,000	V _{AS}	44,000	V _{AS}	46,000	V _{AS}	48,000	V _{AS}
	Distance in feet							
S.L.	3,370	80	3,400	82	3,620	84	3,740	86
1,000	3,460	80	3,580	82	3,710	84	3,830	86
2,000	3,540	80	3,670	82	3,800	84	3,920	86
3,000	3,630	80	3,760	82	3,890	84	4,020	86
4,000	3,720	80	3,850	82	3,980	84	4,110	86
5,000	3,800	80	3,940	82	4,080	84	4,220	86
6,000	3,890	80	4,040	82	4,180	84	4,320	86
7,000	3,980	80	4,140	82	4,280	84	4,440	86
8,000	4,080	80	4,240	82	4,390	84	4,550	86

¹ Steady approach speed through 50 height knots TIAS denoted by symbol V_{AS}.

Ref. Fig. 3(a)(2).

(b) Alternate Airports.

"Effective length" of runway required when effective length is determined in accordance with § 121.171 with zero wind and zero gradient.

(1) Curtiss model C-46 certificated for maximum weight of 45,000 pounds. (0.70 factor.)

Standard altitude in feet	Airplane weight in pounds and approach speeds ¹ in knots							
	40,000	V _{AS}	42,000	V _{AS}	44,000	V _{AS}	45,000	V _{AS}
	Distance in feet							
S.L.	3,700	86	3,860	88	4,030	90	4,110	91
1,000	3,800	86	3,960	88	4,140	90	4,220	91
2,000	3,900	86	4,070	88	4,250	90	4,340	91
3,000	4,000	86	4,180	88	4,360	90	4,450	91
4,000	4,110	86	4,290	88	4,470	90	4,560	91
5,000	4,210	86	4,400	88	4,590	90	4,680	91
6,000	4,330	86	4,510	88	4,710	90	4,800	91
7,000	4,430	86	4,630	88	4,840	90	4,930	91
8,000	4,550	86	4,750	88	4,970	90	5,060	91

¹ Steady approach speed through 50 foot-height-knots TIAS denoted by symbol V_{AS}.

Ref. Fig. 3(b)(1).

(2) Curtiss model C-46 certificated for maximum weight of 48,000 pounds.¹ (0.70 factor.)

Standard altitude in feet	Airplane weight in pounds and approach speeds ¹ in knots							
	42,000	V _{AS}	44,000	V _{AS}	46,000	V _{AS}	48,000	V _{AS}
	Distance in feet							
S.L.	2,890	80	3,000	82	3,110	84	3,220	86
1,000	2,960	80	3,070	82	3,180	84	3,290	86
2,000	3,040	80	3,150	82	3,260	84	3,360	86
3,000	3,110	80	3,220	82	3,340	84	3,440	86
4,000	3,180	80	3,300	82	3,410	84	3,520	86
5,000	3,260	80	3,380	82	3,500	84	3,610	86
6,000	3,330	80	3,460	82	3,580	84	3,700	86
7,000	3,420	80	3,540	82	3,670	84	3,800	86
8,000	3,500	80	3,630	82	3,760	84	3,900	86

¹ Steady approach speed through 50 foot-height-knots TIAS denoted by symbol V_{AS}.

Ref. Fig. 3(b)(2).

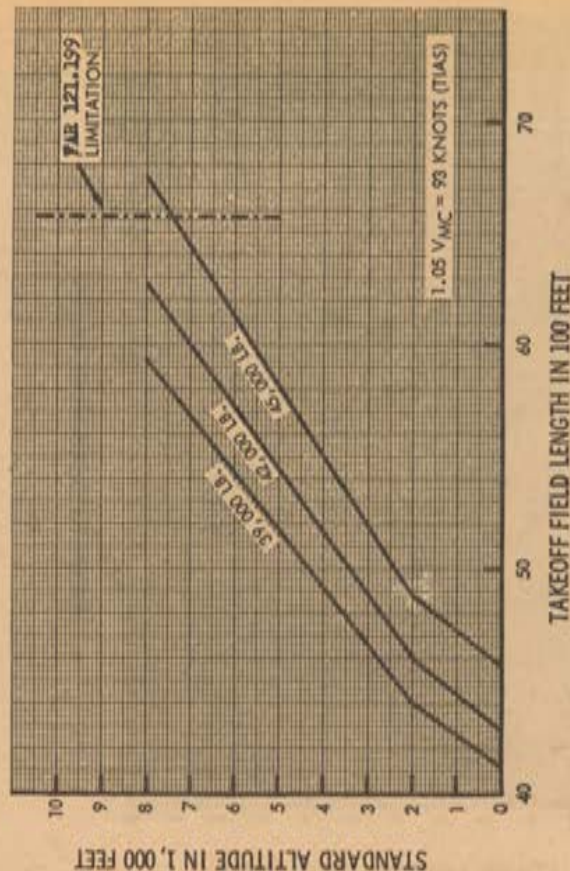
¹ For use with Curtiss model C-46 airplanes when approved for this weight.

CURTIS C-46 MODELS
CERTIFICATED FOR MAX. WEIGHT OF 45,000 LBS.

TAKEOFF LIMITATION,
ZERO WIND AND ZERO GRADIENT.

BASED ON EFFECTIVE TAKEOFF
LENGTH, (1.00 FACTOR)

FAR 121.159



REFERENCE TABLE 1 (a) (1)

FIG. 1 (a)(1)

(c) Actual length of runway required when effective length, considering obstacles, is not determined in accordance with § 121.171.

(1) Curtiss model C-46 certificated for maximum weight of 45,000 pounds. (0.55 factor.)

Standard altitude in feet	Airplane weight in pounds and approach speeds ¹ in knots				
	40,000	V _{AS}	42,000	V _{AS}	V _{AS}
Distance in feet					
S.L.	4,710	86	4,910	88	5,120
1,000	4,840	86	5,050	88	5,270
2,000	4,960	86	5,180	88	5,410
3,000	5,080	86	5,320	88	5,550
4,000	5,200	86	5,460	88	5,700
5,000	5,330	86	5,600	88	5,850
6,000	5,460	86	5,740	88	5,990
7,000	5,590	86	5,880	88	6,130
8,000	5,720	86	6,020	88	6,270

¹ Steady approach speed through 50 foot-height-knots TIAS denoted by symbol V_{AS}.

Ref. Fig. 3(c)(1).

(2) Curtiss C-46 certificated for maximum weight of 48,000 pounds.² (0.55 factor.)

Standard altitude in feet	Airplane weight in pounds and approach speeds ¹ in knots				
	42,000	V _{AS}	44,000	V _{AS}	V _{AS}
Distance in feet					
S.L.	3,680	80	3,820	82	3,960
1,000	3,770	80	3,910	82	4,050
2,000	3,860	80	4,000	82	4,140
3,000	3,950	80	4,090	82	4,240
4,000	4,050	80	4,190	82	4,340
5,000	4,150	80	4,290	82	4,450
6,000	4,240	80	4,380	82	4,550
7,000	4,340	80	4,480	82	4,650
8,000	4,450	80	4,580	82	4,750

¹ Steady approach speed through 50 foot-height-knots TIAS denoted by symbol V_{AS}.

Ref. Fig. 3(c)(2).

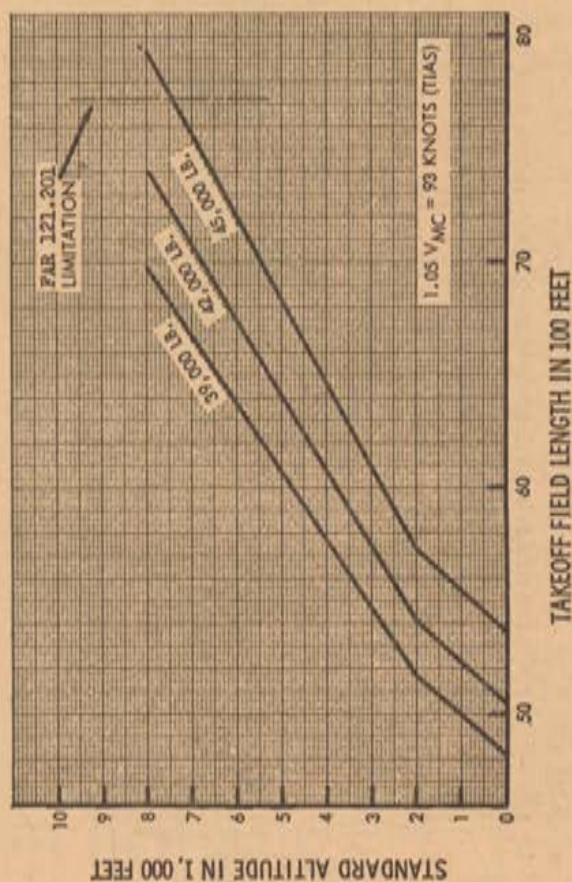
² For use with Curtiss model C-46 airplanes when approved for this weight.

CURTISS C-46 MODELS

CERTIFICATED FOR MAX. WEIGHT OF 45,000 LBS.

TAKEOFF LIMITATION
ZERO WIND AND ZERO GRADIENTBASED ON ACTUAL TAKEOFF LENGTH
WHEN EFFECTIVE LENGTH IS NOT
DETERMINED. (0.85 FACTOR)

FAR 121.159



REFERENCE TABLE 1 (a) (2)

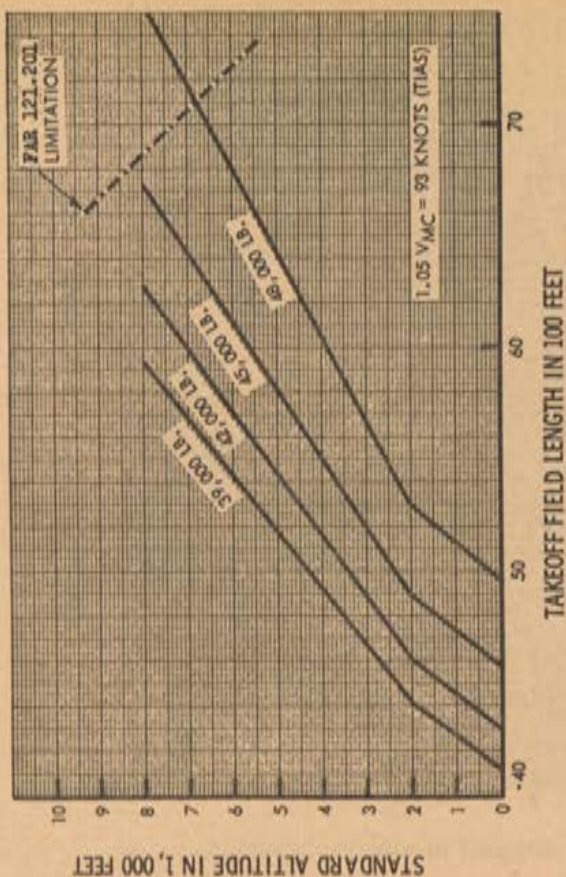
FIG. 1(a) (2)

CURTISS C-46 MODELS

CERTIFICATED FOR MAX. WEIGHT OF 48,000 LBS.

TAKEOFF LIMITATION
ZERO WIND AND ZERO GRADIENTBASED ON EFFECTIVE TAKEOFF
LENGTH. (1.00 FACTOR)

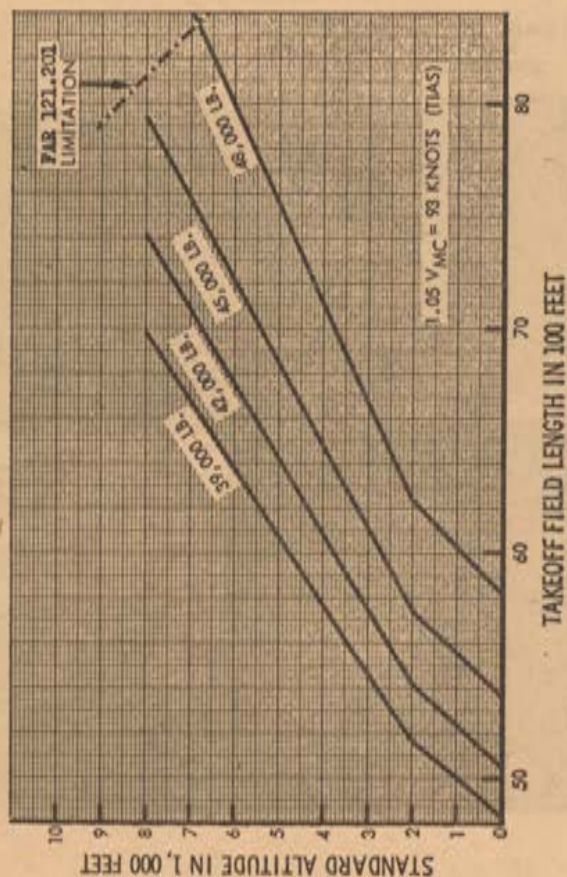
FAR 121.159



REFERENCE TABLE 1(b) (1)

FIG. 1(b) (1)

CURTISS C-46 MODELS
CERTIFICATED FOR MAX. WEIGHT OF 48,000 LBS.
TAKEOFF LIMITATION
ZERO WIND AND ZERO GRADIENT
BASED ON ACTUAL TAKEOFF LENGTH
WHEN EFFECTIVE LENGTH IS NOT
DETERMINED. (0.85 FACTOR)



REFERENCE TABLE 1(b) (2)

FIG. 1(b) (2) 1-27-64

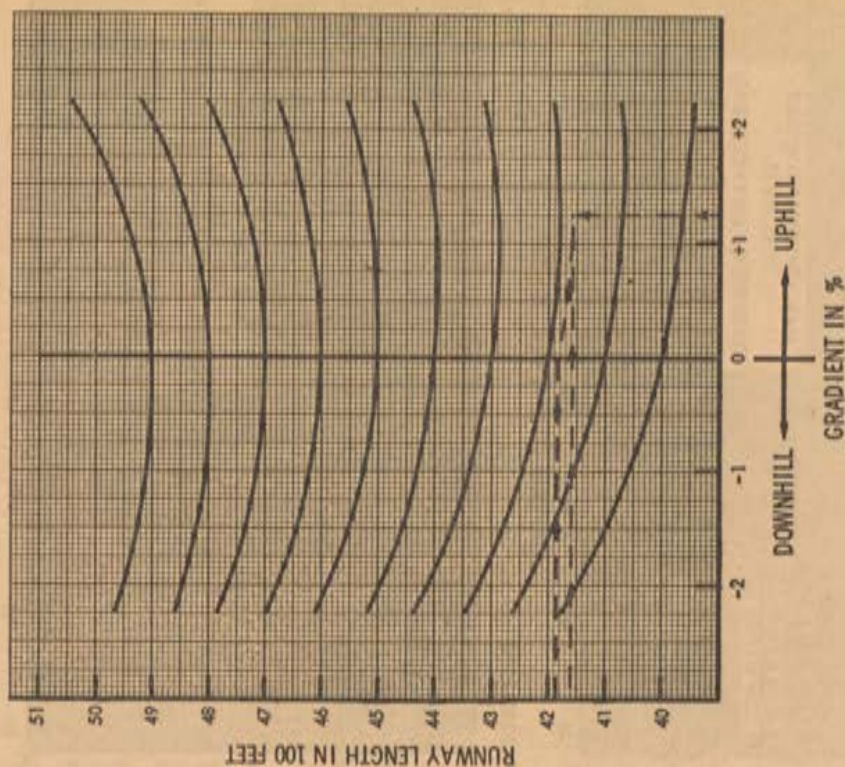


FIG. 1(e)

CURTIS C-46 MODELS ENROUTE LIMITATIONS - ONE ENGINE INOPERATIVE

FAR 121.201

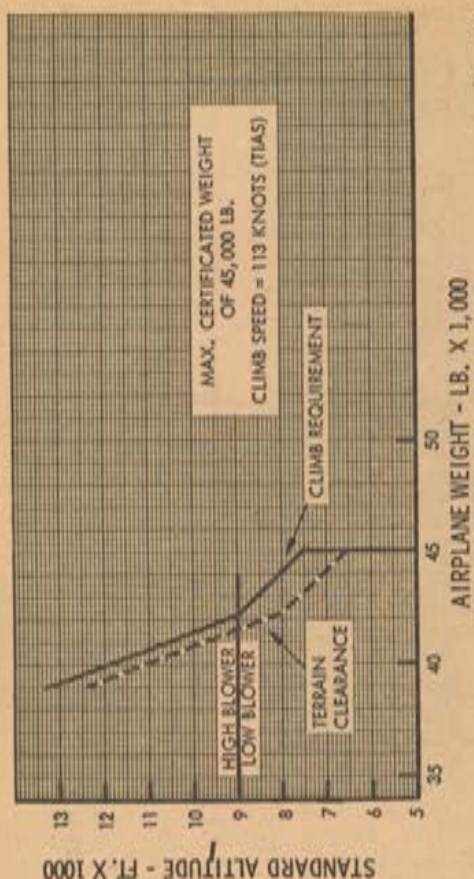


FIG. 2(a)

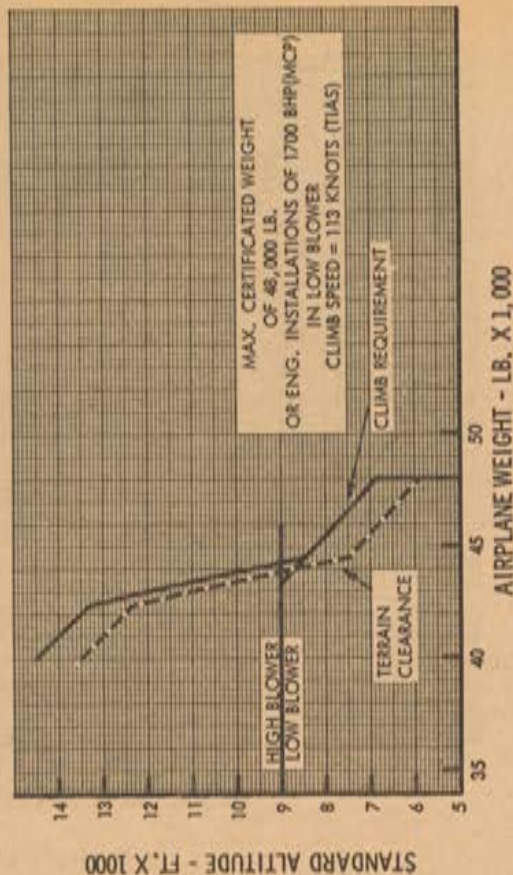


FIG. 2(b)

C-46 MAX. CERTIFICATED WEIGHT 48,000 LBS.
DRIFT-DOWN CHART FAR 121.201
SINGLE ENGINE ENROUTE OPERATION

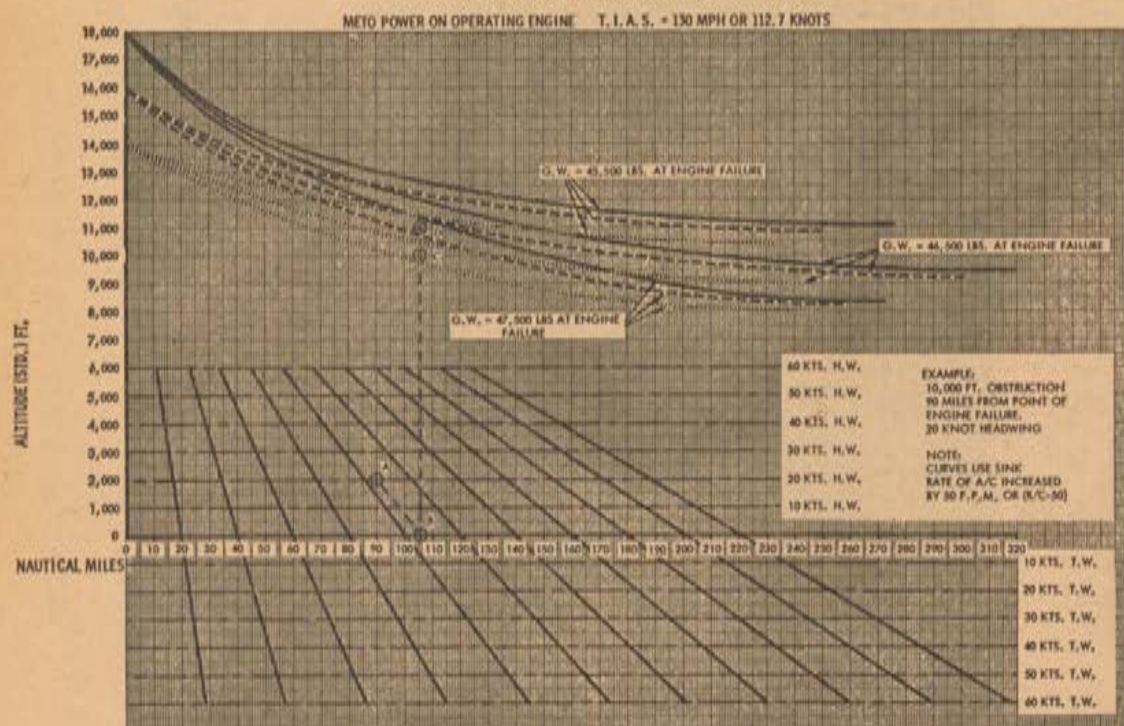


FIG. 2(c)

C-46 MAX. CERTIFICATED WEIGHT 48,000 LBS.
ENROUTE CLIMB SUMMARY

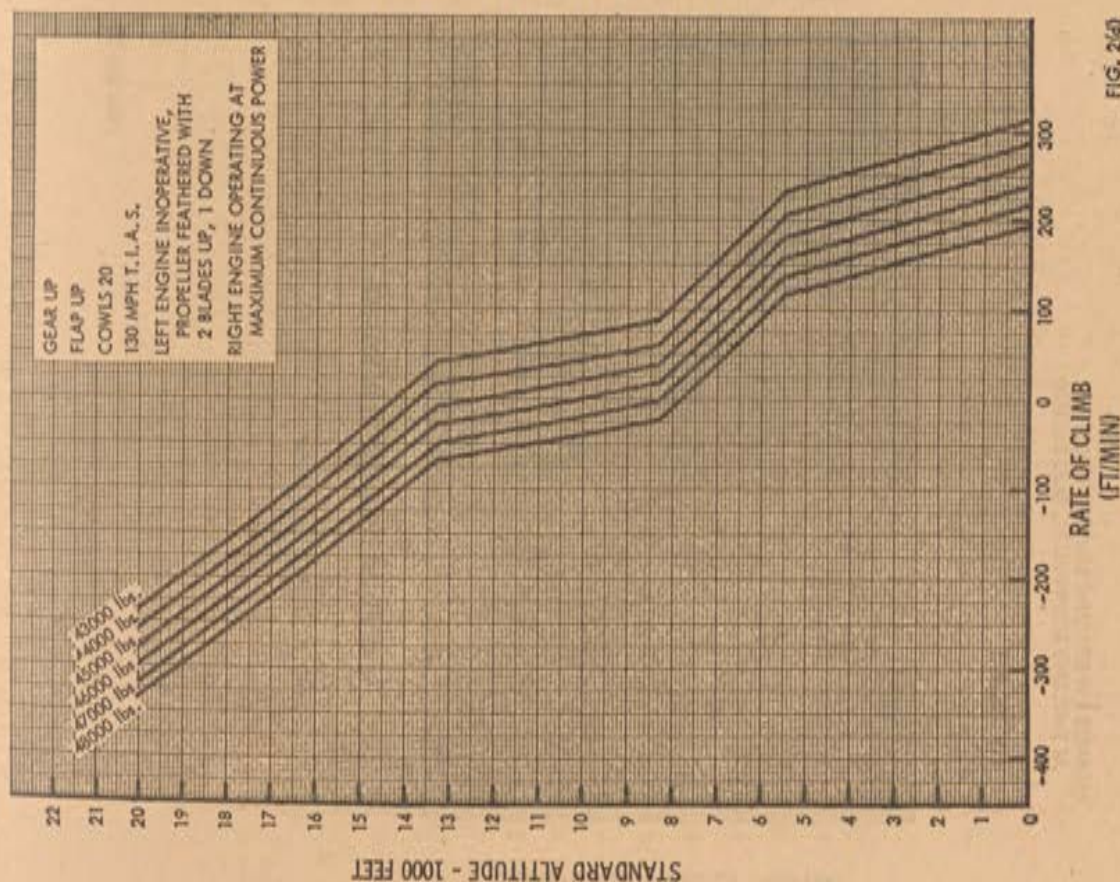


FIG. 2(d)

CURTISS C-46 MODELS
CERTIFICATED FOR MAX. WEIGHT OF 45,000 LBS.

LANDING LIMITATIONS.
ZERO WIND AND ZERO GRADIENT
BASED ON EFFECTIVE LANDING LENGTH
AT INTENDED DESTINATION, (0.60 FACTOR)

FIG. 3(a) 203

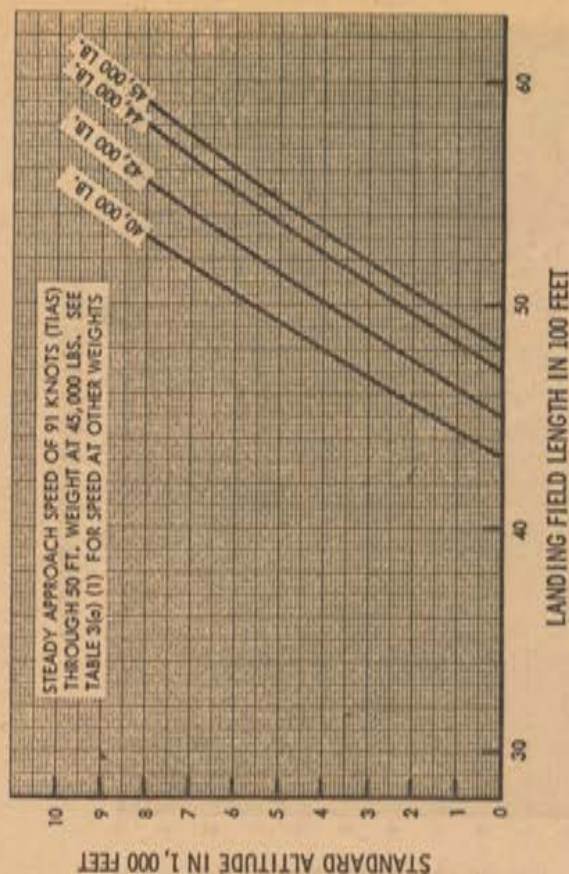


FIG. 3(a) (1)

CURTISS C-46 MODELS

CERTIFICATED FOR MAX. WEIGHT OF 48,000 LBS.

LANDING LIMITATIONS.
ZERO WIND AND ZERO GRADIENTBASED ON EFFECTIVE LANDING LENGTH
AT INTENDED DESTINATION. (0.60 FACTOR)

FAR 121.203

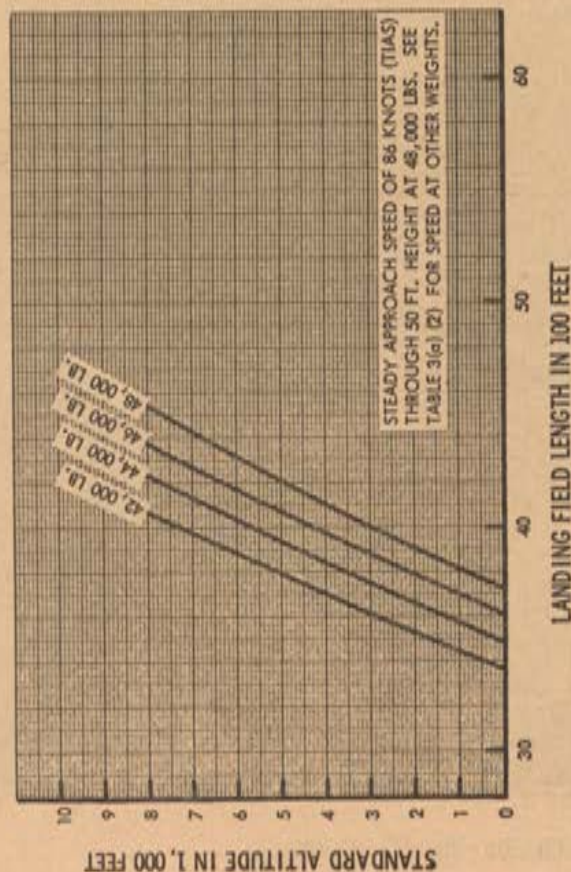


FIG. 3(a) (2)

CURTISS C-46 MODELS

CERTIFICATED FOR MAX. WEIGHT OF 45,000 LBS.

LANDING LIMITATIONS.
ZERO WIND AND ZERO GRADIENTBASED ON EFFECTIVE LANDING LENGTH
AT ALTERNATE AIRPORTS. (0.70 FACTOR)

FAR 121.205

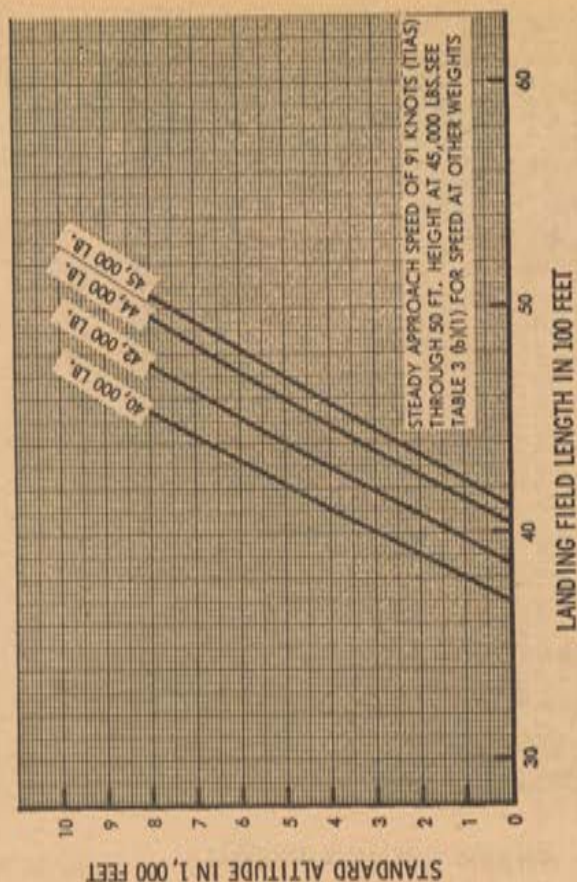


FIG. 3(b) (1)

CURTISS C-46 MODELS
CERTIFICATED FOR MAX. WEIGHT OF 48,000 LBS.

LANDING LIMITATIONS.
ZERO WIND AND ZERO GRADIENT

BASED ON EFFECTIVE LANDING LENGTH
AT ALTERNATE AIRPORTS. (0.70 FACTOR).

FAR 121.205

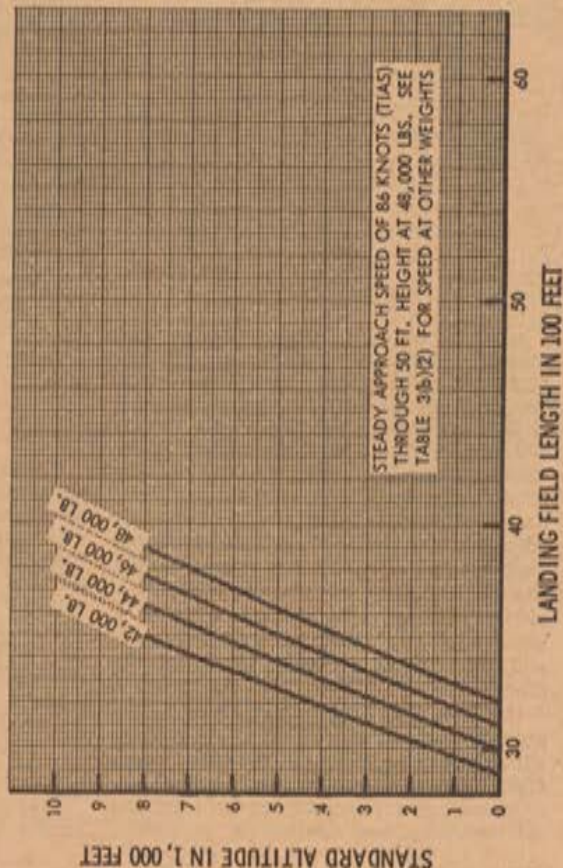


FIG. 3(b) (2)

CURTISS C-46 MODELS
CERTIFICATED FOR MAX. WEIGHT OF 45,000 LBS.

LANDING LIMITATIONS.
ZERO WIND AND ZERO GRADIENT

BASED ON ACTUAL LANDING LENGTH
WHEN EFFECTIVE LENGTH IS NOT
DETERMINED. (0.55 FACTOR)

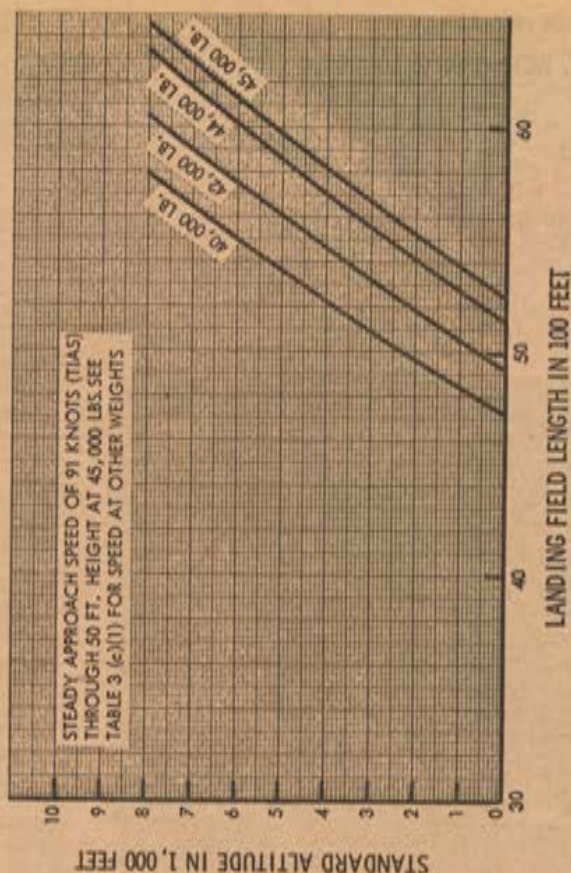


FIG. 3(c) (1)

CURTISS C-46 MODELS
CERTIFICATED FOR MAX. WEIGHT OF 48,000 LBS.

LANDING LIMITATIONS,
 ZERO WIND AND ZERO GRADIENT

BASED ON ACTUAL LANDING LENGTH
 WHEN EFFECTIVE LENGTH IS NOT
 DETERMINED. (0.55 FACTOR)

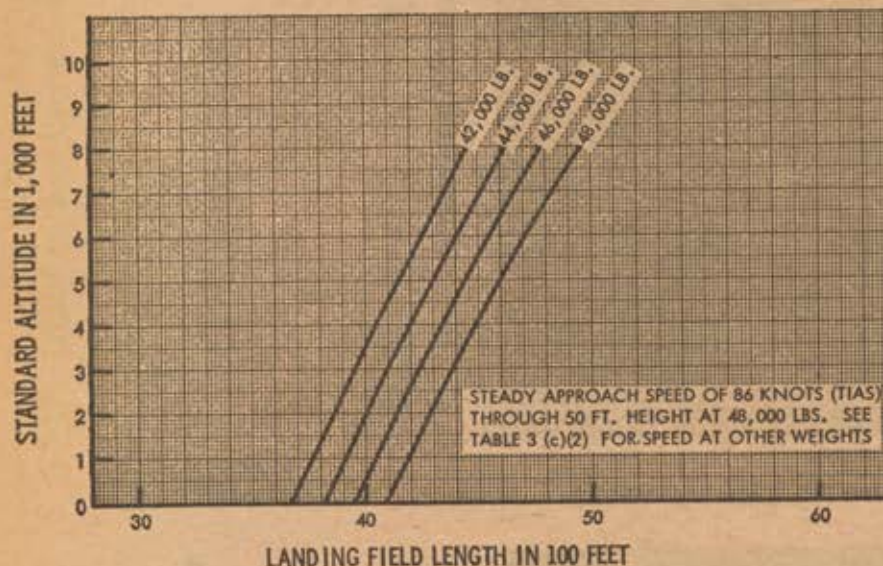


FIG. 3(c) (2)

Title 20—EMPLOYEES' BENEFITS

Chapter II—Railroad Retirement Board

PART 237—INSURANCE ANNUITIES AND LUMP SUMS FOR SURVIVORS

Application Deemed To Be Filed

Pursuant to the general authority contained in section 10 of the act of June 24, 1937 (50 Stat. 314, 45 U.S.C. 228j), § 237.808 of Part 237 (20 CFR 237.808) of the Regulations under such act is amended by Board Order 64-153, dated December 28, 1964, to read as follows:

§ 237.808 Application deemed to have been filed.

An acceptable application shall be deemed to have been filed in accordance with sections 237.802, 237.803, and 237.805 by:

(a) The widow or widower of an employee for an annuity under § 237.406, § 237.407, or § 237.408, as the case may be, and on behalf of the employee's child(ren) for an annuity under § 237.409, in the month in which the employee died: *Provided, however*, That the widow or widower shall have been in receipt of an annuity under Part 232 of this chapter (disregarding the application of § 232.402 thereof) in the month next preceding the month in which the employee died: *Provided, further*, That in the case of a child, such child shall have been in such widow's care at the time the employee died.

(b) The widow of an employee for an annuity under § 237.406 in the month in which she attains age 60: *Provided, however*, That such widow shall have been in receipt of an annuity under § 237.408 (disregarding the application of § 237.-

702) in the month next preceding the month in which she attains age 60.

(Sec. 10, 50 Stat. 314, 45 U.S.C. 228j)

Dated: January 5, 1965.

By authority of the Board.

LAWRENCE GARLAND,
 Secretary of the Board.

[F.R. Doc. 65-262; Filed, Jan. 8, 1965; 8:46 a.m.]

Title 21—FOOD AND DRUGS

Chapter I—Food and Drug Administration, Department of Health, Education, and Welfare

SUBCHAPTER C—DRUGS

PART 147—ANTIBIOTICS INTENDED FOR USE IN THE LABORATORY DIAGNOSIS OF DISEASE

Antibiotic Sensitivity Discs; Assay Procedure for Erythromycin- and Neomycin-Containing Discs

In the matter of amending the regulations for antibiotics intended for use in the laboratory diagnosis of disease (21 CFR 147.1; 29 F.R. 7091, 9958) by changing the assay procedures for erythromycin- and neomycin-containing sensitivity discs to effect more precise assay results:

No comments were received in response to the notice published in the FEDERAL REGISTER of November 13, 1964 (29 F.R. 15264), setting forth a proposal of the Commissioner of Food and Drugs in the above-identified matter. Therefore, pursuant to the provisions of the Federal Food, Drug, and Cosmetic Act (sec. 507, 59 Stat. 463 as amended, 21 U.S.C. 357), and under the authority delegated to the Commissioner by the Secretary of Health, Education, and Welfare (21 CFR 2.90; 29 F.R. 471), the proposed amendments, with minor editorial changes, are adopted as hereinafter set forth.

Effective date. This order shall become effective on the date of its publication in the FEDERAL REGISTER.

Dated: January 4, 1965.

JOHN L. HARVEY,
 Deputy Commissioner
 of Food and Drugs.

Section 147.1 is amended by adding to paragraph (b) a new subparagraph (11); by changing in the table in paragraph (c) (3) the items "Erythromycin" and "Neomycin * * *"; by changing in the table in paragraph (d) the item "Neomycin * * *"; and by changing the fourth sentence of paragraph (e) (1). As amended, the affected portions read as follows:

§ 147.1 Antibiotic sensitivity discs; tests and methods of assay; potency.

(b) * * *

(11) Suspension 11. *Streptococcus fecalis* (A.T.C.C. 14506) is maintained