are not normally applicable tariff rate(s) or charge(s), the word "Special" will be added in parentheses.

(4) Tariff identification or other reference for rate(s) and charge(s).

(b) Purchase orders may be issued in lieu of Government bills of lading for obtaining drayage or other types of local service.

(c) When storage in transit is desired, the bill of lading will be annotated accordingly. If the _____ officer desires such storage at origin or destination, the annotation will be "storage in transit not to exceed _____ days is authorized and will be at origin" or "storage in transit not to exceed _____ days is authorized and will be at destination," as appropriate. The name of the storage warehouse will not be specified by the _____ officer.

§ 38.7 *Execution and distribution of service tender.* The _____ officer, upon request of a freight forwarder, will provide the forwarder two copies of DD Form 872,[1] Freight Forwarder Service Tender (Uncrated Household Goods), for execution, and one copy each of DD Forms 619[1] and 873.[1] The original Freight Forwarder Service Tender (Uncrated Household Goods), after execution by the freight forwarder, will be assigned an identifying serial number and retained in the files of the _____ officer. The duplicate copy of the Freight Forwarder Service Tender (Uncrated Household Goods) will be retained by the freight forwarder. Regulated freight forwarders will file Service Tenders with each of the installations from which they seek traffic. Freight forwarders which are exempt under section 402b of the Interstate Commerce Act will submit Service Tenders to the headquarters of the military department concerned for approval prior to filing them with local installations.

§ 38.8 *Execution of accessorial services certificate.* A certificate (DD Form 619)[1] verifying the accessorial services rendered by a freight forwarder in connection with the transportation must be executed in triplicate by the freight forwarder and the property owner, when applicable. Sufficient copies of this form will be provided the carrier by the _____ officer.

§ 38.9 *Processing of Government bills of lading and supporting papers.* (a) As soon as possible after pick-up of the household goods, the freight forwarder will furnish the ordering activity:

(1) Two memorandum copies, numbers 6 and 8, of the applicable bill of lading showing gross, tare and net weights, signature of the freight forwarder's agent, dates of pick-up and dispatch of shipment by the freight forwarder, the transportation rate, and total charges accrued.

(2) One copy of the inventory list.

(3) One copy of the completed Accessorial Services Certificate, DD Form 619,[1] with the words "at origin" added after the name of the shipping activity or installation. (This is required only when charges are assessed for accessorial services performed and are noted on the Government bill of lading.)

(b) The freight forwarder will furnish the property owner or his agent at time of pick-up:

(1) Memorandum Copy No. 9 of the Government bill of lading.

(2) A copy of the inventory list.

(c) The freight forwarder will submit to the origin _____ officer for the purpose of receiving payment:

(1) Original and memorandum copy No. 5 of the accomplished bill of lading.

(2) Original and copy of Public Voucher (Standard Forms 1113 and 1113A).

(3) Original or certified copies of certificates showing gross and tare weights furnished by a certified weighmaster or obtained from a certified scale.

(4) Original of Accessorial Services Certificate (DD Form 619).[1] (This is required only when charges are assessed for accessorial services performed and are noted on the Government bill of lading.)

(5) Two copies of the freight forwarder's bill of lading, freight bill, or combination form.

(d) Freight forwarders will not be required to furnish a greater number of copies of a Government bill of lading and/or supporting papers than is established in this part. In the event any copies of these documents (except the original Government bill of lading) are lost or destroyed, legible photostatic copies of the same size as the document reproduced are acceptable. If the original Government bill of lading should become lost or destroyed it will be replaced by a Certificate in Lieu of Lost U. S. Government Bill of Lading (Standard Form 1108).

(e) To facilitate timely payment to the freight forwarder, the origin _____ officer will:

(1) Promptly assemble and review the voucher and supporting papers required by the disbursing procedures of the military department concerned; and

(2) Promptly dispatch such papers to the appropriate disbursing office.

T. P. PIKE,
Assistant Secretary of Defense (Supply and Logistics).

[F. R. Doc. 55-8970; Filed, Nov. 7, 1955; 8:45 a. m.]

[1] Filed as part of original document.

Chapter V—Department of the Army

Subchapter F—Personnel

PART 573—APPOINTMENT OF COMMISSIONED OFFICERS AND WARRANT OFFICERS

GENERAL ELIGIBILITY REQUIREMENTS

Paragraph (h) of § 573.10 is revised to read as follows:

§ 573.10 *General eligibility requirements.* * * *

(h) *Age.* Applicants must have reached their 21st birthday but not their 27th birthday on date of appointment. This maximum age may be increased by the number of years, months, and days of active Federal commissioned service performed in the Army of the United States after attaining the age of 21 years and subsequent to December 31, 1947, but not to exceed a total of 5 years; the maximum, therefore, precludes appointment after attainment of the 32d birthday. Applications will not be accepted from male applicants who will become ineligible by virtue of excess age within 9 months subsequent to the date the completed application file would be received in the Department of the Army (or from the end of the application period). Applications from Women's Army Corps applicants will not be forwarded if applicant will be ineligible by virtue of excess age within 3 months after the date the completed file will be received in the Department of the Army.

[C2, AR 601-100, October 12, 1955] (R. S. 161; 5 U. S. C. 22. Interprets or applies sec. 205, 61 Stat. 501, as amended; 10 U. S. C. 506c)

[SEAL] JOHN A. KLEIN,
Major General, U. S. Army, The Adjutant General.

[F. R. Doc. 55-8972; Filed, Nov. 7, 1955; 8:46 a. m.]

TITLE 14—CIVIL AVIATION

Chapter II—Civil Aeronautics Administration, Department of Commerce

[Amdt. 63]

PART 600—DESIGNATION OF CIVIL AIRWAYS

ALTERATIONS

Correction

In F. R. Document 55-8477, appearing in the issue for Thursday, October 20, 1955, at page 7899, paragraph 8 should read as set forth below:

8. Section 600.6012 *VOR civil airway No. 12 (Santa Barbara, Calif., to Philadelphia, Pa.)* is amended by changing all between the Winslow, Ariz., omnirange station and the Albuquerque, N. Mex., omnirange station to read: "Winslow, Ariz., omnirange station; Zuni, N. Mex., omnirange station, including a north alternate via the intersection of the Winslow omnirange 076° True and the Zuni omnirange 287° True radials; Grants, N. Mex., omnirange station; Albuquerque, N. Mex., omnirange station;" by changing all between the Emporia, Kans., omnirange station and the Columbia, Mo., omnirange station to read: "Emporia, Kans., omnirange station, including a north alternate via the intersection of the Wichita omnirange 046° True and the Emporia omnirange 259° True radials; Kansas City, Mo., omnirange station; Columbia, Mo., omnirange station, including a north alternate via the intersection of the Kansas City omnirange 077° True and the Columbia omnirange 292° True radials;".

TITLE 38—PENSIONS, BONUSES, AND VETERANS' RELIEF

Chapter I—Veterans Administration

PART 1—GENERAL PROVISIONS

ELIGIBILITY FOR AND DISPOSITION OF U. S. FLAG FOR BURIAL PURPOSES

In § 1.10, paragraphs (a) (1) (iv) and (b) (1) and (3) are amended to read as follows:

§ 1.10 *Eligibility for and disposition of the United States Flag for burial purposes*—(a) *Eligibility for burial flags*—(1) *Persons eligible.*

(iv) Any person who has served in the active service of the Armed Forces of the United States on or after June 27, 1950, and prior to February 1, 1955 (Presidential Proclamation 3080), and who was discharged or released from active duty under conditions other than dishonorable.

* * * * *

(b) *Disposition of burial flags.* (1) When a flag is actually used to drape the casket of a deceased veteran, it must be delivered to the next of kin following interment. Where the flag is not claimed by next of kin it may be given upon request to a close friend or associate of the deceased veteran. Such action will constitute final and conclusive determination of rights under this section.

* * * * *

(3) The phrase "close friend or associate" for the purpose of disposing of the burial flag means any person who because of his relationship with the deceased veteran arranged for the burial or assisted in the burial arrangements. In the absence of a person falling in either of these categories, any person who establishes by evidence that he was a close friend or associate of the veteran may be furnished the burial flag. Where more than one request for the burial flag is received and each is accompanied by satisfactory evidence of relationship or association, the Manager of the Veterans Administration station having jurisdiction of the burial flag quota will determine which applicant is the one most equitably entitled to the burial flag.

(Sec. 5, 43 Stat. 608, as amended, secs. 1, 2, 46 Stat. 1016, sec. 7, 48 Stat. 9; 38 U. S. C. 426, 11a, 707. Interprets or applies sec. 2, 57 Stat. 591, 65 Stat. 40, 69 Stat. 440; 36 U. S. C. 184, 38 U. S. C. 745, 38 U. S. C. ch. 12A)

This regulation is effective November 8, 1955.

[SEAL] J. C. PALMER,
Assistant Deputy Administrator.

[F. R. Doc. 55-8986; Filed, Nov. 7, 1955; 8:49 a m.]

PART 4—DEPENDENTS AND BENEFICIARIES CLAIMS

BASIC REQUIREMENTS OF SERVICE AND DEATH

In § 4.300, paragraph (b) (2) is amended to read as follows:

§ 4.300 *Basic requirements of service and death.* * * *

(b) * * *

(2) (i) Persons (volunteers) who have been or are provisionally accepted on or after June 27, 1950, and directed to report to a place for final acceptance or for entry upon active duty in the military or naval service, and who died or shall die as the result of disability incurred while en route to such place and within 120 days after the incurrence of such disability. Coverage is limited to those who died or shall die as a result of disability incurred while en route from the place of assembly to the induction station and does not extend to travel to the place of assembly or to the period after rejection including the return trip.

(ii) Reservists of the Army, Air Force, Navy, Marine Corps, or Coast Guard who on or after June 27, 1950, have been or are called to active duty (including active duty for training) for a period of 30 days or less and who die or shall die as the result of disability incurred while in authorized travel status and within 120 days after the incurrence of such disability. Coverage under the term "Authorized Travel Status" includes injuries received while en route to or returning from a designated destination, in compliance with competent orders, during the period specified in the orders as constituting active duty status.

* * * * *

(Sec. 5, 43 Stat. 608, as amended, sec. 2, 46 Stat. 1016, sec. 7, 48 Stat. 9; 38 U. S. C. 11a, 426, 707)

This regulation is effective November 8, 1955.

[SEAL] J. C. PALMER,
Assistant Deputy Administrator.

[F. R. Doc. 55-8988; Filed, Nov. 7, 1955; 8:49 a. m.]

PART 13—DEPARTMENT OF VETERANS BENEFITS, CHIEF ATTORNEYS

MISCELLANEOUS AMENDMENTS

1. In § 13.321, that portion of paragraph (b) (5) preceding subdivision (i) is amended to read as follows:

§ 13.321 *Investments; inspection of assets.* * * *

(b) * * *

(5) Where investments are made in bonds, the fiduciary will be required to furnish information as to serial numbers, kind of bonds, rate of interest, the date of maturity and security, if any. In the case of United States Government bonds, it is highly desirable that such investments be in the form of registered bonds and the bonds should be registered, unless for good cause shown such registration would be undesirable or unnecessary. The Chief Attorney will advise each fiduciary to keep such bonds in a safe depository under the control of the fiduciary, in order to avoid loss through theft or otherwise. At the time the annual accounting is furnished the Veterans Administration or filed with the court, the Chief Attorney will require that the fiduciary furnish definite evidence to the Veterans Administration or the court that the bonds or other securities in which the funds have been invested are so deposited under the control of the fiduciary. VA Form 2-4709, Certificate as to Securities, may be used for this purpose. In the event of the failure of the fiduciary to furnish such evidence, the Chief Attorney will make appropriate investigations and take such formal court action as may be required to protect the interests of the beneficiary. This provision contemplates that an annual inspection of the securities in each estate under guardianship will be made by the Chief Attorney's office: *Provided*, That the requirements of this provision as to inspection of the assets shall be considered to have been met:

* * * * *

2. In § 13.363, paragraph (a) is amended to read as follows:

§ 13.363 *Grounds for removal.* * * *

(a) *Authority of Chief Attorney to suspend payments.* The Chief Attorney is empowered to authorize suspension of payments in such cases, pending adjustment. The Chief Attorney will submit separate requests for suspension of compensation or pension and for suspension of insurance.

(Sec. 5, 43 Stat. 608, as amended, sec. 2, 46 Stat. 1016, sec. 7, 48 Stat. 9; 38 U. S. C. 11a, 426, 707. Interpret or apply 43 Stat. 613, as amended; 38 U. S. C. 450)

This regulation is effective November 8, 1955.

[SEAL] J. C. PALMER,
Assistant Deputy Administrator.

[F. R. Doc. 55-8987; Filed, Nov. 7, 1955; 8:49 a. m.]

PROPOSED RULE MAKING

CIVIL AERONAUTICS BOARD

[14 CFR Parts 3, 4b]

1955 ANNUAL REVIEW AND AMENDMENTS OF AIRWORTHINESS REGULATIONS

NOTICE OF PROPOSED RULE MAKING

Pursuant to authority delegated by the Civil Aeronautics Board to the Bureau of Safety Regulation, notice is hereby given that the Bureau will propose to the Board amendments to the airworthiness provisions of the Civil Air Regulations in substance as hereinafter set forth.

Interested persons may participate in the making of the proposed rules by submitting such written data, views, or arguments as they may desire. Communications should be submitted in duplicate to the Civil Aeronautics Board, attention Bureau of Safety Regulation, Washington 25, D. C. In order to insure their consideration by the Board before taking further action on the proposed rules, communications must be received by December 9, 1955. Copies of such communications will be available after December 14, 1955, for examination by interested persons at the Docket Section of the Board, Room 5412, Department of Commerce Building, Washington, D. C.

The proposed amendments to the airworthiness regulations attached hereto stem from the studies conducted during the Board's 1955 Annual Airworthiness

Review and particularly from the discussions which took place at the meetings held in Washington September 12 through September 15. Those issues which are sufficiently resolved are being published herein in the form of proposed amendments to the regulations.

The amendments being proposed herein pertain to Parts 3 and 4b of the Civil Air Regulations. The explanatory statements accompanying the proposed amendments present the basis for the amendments and also the reasons why certain other proposals are not considered sufficiently resolved to justify specific recommendations for amendment of the regulations at the present time.

These amendments are proposed under the authority of Title VI of the Civil Aeronautics Act of 1938, as amended. The proposals may be changed in the light of comments received in response to this notice of proposed rule making.

(Sec. 205, 52 Stat. 984; 49 U. S. C. 425. Interpret or apply secs. 601–610, 52 Stat. 1007–1012, as amended; 49 U. S. C. 551–560)

Dated at Washington, D. C., October 21, 1955.

By the Bureau of Safety Regulation.

[SEAL] JOHN M. CHAMBERLAIN,
Director.

Part 3: There are contained herein proposed rules with respect to various miscellaneous issues which were possible of resolution within the framework of this year's Annual Airworthiness Review.

Structural failures experienced in the past with small airplanes in the high speed range strongly indicate the inappropriateness of relating a reduction in maneuvering load factor with any feature of an airplane intended to improve safety only in the low speed range. Therefore, it is proposed to delete the provision of § 3.186, which permits a reduction of the maximum maneuvering load factor limitation of 3.8 to 3.5 for airplanes incapable of spinning.

The presently effective provisions of § 3.242 permit the design landing weight to be less than the maximum certificated weight only for multiengine airplanes, which meet the one-engine-inoperative climb, provided that such airplanes comply with the fuel jettisoning and certain ground loads and landing gear requirements of Part 4b. All other airplanes are required to comply with all of the ground load requirements at the maximum weight, and experience has shown that these requirements were critical in most instances in respect to the establishment of the maximum weight. It is believed that this requirement has restricted unduly the utility of small airplanes. Accordingly, there is included a proposal which, under certain conditions, would permit the design landing weight to be as low as 95 percent of the maximum weight.

There is being proposed in § 3.330 a new requirement with respect to the structural design of supporting structure and the attachment of concentrated mass balance weights incorporated on control surfaces.

The presently effective requirements of § 3.390 in respect to restraining occupants of berths by safety belts are considered unrealistic. A change to these provisions is proposed which would exclude safety belts in berths from compliance with the forward accelerations prescribed for an emergency landing, and would require restraint of occupants in berths by means of a padded end board, a canvas diaphragm, or other equivalent method.

With respect to § 3.344, there is proposed a change which would require incorporation of design features or marking of control system elements to minimize the possibility of incorrect assembly. For this same purpose, a proposed change is included with respect to the fuel valve provisions of § 3.551.

There is proposed a change to § 3.431 which would require independence of the fuel system for each engine on all multiengine airplanes and would relax the existing standards for independence of fuel systems by permitting the use of one tank for supplying more than one engine if certain design criteria are met.

The presently effective provisions of § 3.624 (a) permit use of fire resistant rather than fireproof materials for sealing fire wall openings on unsupercharged engines. On the basis of present engine design, it is believed that the degree of fire hazard is more closely related to the total engine displacement rather than on whether or not the engine is supercharged. In view of this, there is proposed a change which would permit use of fire-resistant sealing of fire walls in installations equipped with engines having a maximum displacement up to 1,000 cubic inches.

It is proposed to change § 3.702 so that the intensity requirements for the forward red and green position lights, and the rear white position light would be consistent with the requirements prescribed for these lights in Part 4b.

Section 3.771 is proposed to be changed to require placarding of the maneuvering air speed.

There are also included a few minor changes, which are editorial or clarifying in nature.

There were certain issues discussed at the recent Annual Airworthiness Meeting, which indicated a need for further study. These included the matter of the 6,000 pound limitation, also proposals with respect to the fuel tank sump drain and the carburetor air temperature indicator.

It is proposed to amend Part 3 as follows:

1. By amending § 3.186 (a) by deleting the following sentence: "For airplanes certificated as characteristically incapable of spinning, need not exceed 3.5."

2. By deleting Figure 3–2.

3. By amending § 3.242 to read as follows:

§ 3.242 *Design weight.* The design landing weight shall not be less than the maximum weight for which the airplane is to be certificated, except as provided in paragraphs (a) and (b) of this section.

(a) A design landing weight equal to not less than 95 percent of the maximum weight shall be acceptable if it is demonstrated that the structural limit load values at the maximum weight are not exceeded when the airplane is operated over terrain having the degree of roughness to be expected in service at all speeds up to the takeoff speed. In addition, the following shall apply:

(1) The minimum fuel capacity shall not be less than the total of the capacity prescribed in § 3.74 (a) (1) and of the capacity equivalent to the weight of fuel equal in amount to that by which the maximum weight exceeds the design landing weight.

(2) The operating limitations shall limit the takeoff weight in such a manner as to assure that landings in normal operation would not exceed the design landing weight.

(b) A design landing weight equal to less than 95 percent of the maximum weight shall be acceptable for multiengine airplanes, meeting the one-engine-inoperative climb requirement of § 3.85 (b) if compliance is shown with the following sections of Part 4b of this subchapter in lieu of the corresponding requirement of this part: The ground load requirements of § 4b.230, the landing gear requirements of §§ 4b.331 through 4b.336 of this subchapter, and the fuel jettisoning system requirements of § 4b.437 of this subchapter.

4. By amending Figure 3–12 (a) by deleting the term "n" from all columns in the two lines titled "Main wheel loads (both wheels) {V_r" and "Tail (nose) wheel loads {V_f" and inserting in lieu thereof in each instance the term "$(n-L)$".

5. By amending Figure 3–12 (a) by deleting the term "KV_r" from the first and fourth columns of the line titled "Main wheel loads (both wheels) {D_r" and inserting in lieu thereof in each instance the term "KnW".

6. By amending Figure 3–12 (a) by deleting the term "KV_r" from the third column of the line titled "Main wheel loads (both wheels) {D_r" and inserting in lieu thereof the term "$KnW\ a'/d'$".

7. By amending Figure 3–12 (a) by deleting the term "KV_f" from the third column of the line titled "Tail (nose) wheel loads {D_f" and inserting in lieu thereof the term "$KnW\ b'/d'$".

8. By amending Figure 3–12 (a) by adding a new note to read as follows:

NOTE (4): L is defined in § 3.353.

9. By adding a new § 3.330 to read as follows:

§ 3.330 *Mass balance weights.* The supporting structure and the attachment of concentrated mass balance weights incorporated on control surfaces shall be designed for limit accelerations in the following conditions: 24g normal to the plane of the control surface; 12g fore and aft; and 12g parallel to the hinge line.

10. By amending § 3.344 by adding a new sentence at the end thereof to read as follows: "The elements of the flight control system shall incorporate design features or shall be distinctively and permanently marked so as to minimize the possibility of incorrect assembly, which could result in malfunctioning of the control system."

11. By amending § 3.390 to read as follows:

§ 3.390 *Seats and berths.* All seats and berths shall be of an approved type. They and their supporting structures shall be designed for an occupant weighing at least 170 pounds (190 pounds with parachute for seats intended for the acrobatic and utility categories) and for the maximum load factors corresponding with all specified flight and ground load conditions including the emergency landing conditions prescribed in § 3.386. The provisions of paragraphs (a) through (d) of this section shall also apply:

(a) Pilot seats shall be designed for the reactions resulting from the application of pilot forces to the primary flight controls as prescribed in § 3.231.

(b) All seats in the U and A categories shall be designed to accommodate passengers wearing parachutes, unless placarded in accordance with § 3.74 (b).

(c) Berths shall be so designed that the forward portion is provided with a padded end board, a canvas diaphragm, or some equivalent means, capable of restraining the occupant within the berth when subjected to the forward accelerations prescribed in § 3.386. Berths shall be provided with an approved safety belt and shall be free from corners or protuberances likely to cause serious injury to a person occupying the berth during emergency conditions. Berth safety belt attachments shall withstand the critical loads resulting from all relevant flight and ground load conditions and from the emergency landing conditions of § 3.386 with the exception of the forward load.

(d) In determining the strength of the attachment of the seat and berth to the structure, the accelerations prescribed in § 3.386 shall be multiplied by a factor of 1.33.

12. By deleting § 3.391.

13. By amending § 3.431 by deleting from the first sentence the following clause: "* * * which are required to comply with the provisions of § 3.85 (b) or § 3.85a (b)".

14. By amending § 3.431 by deleting the last sentence and inserting in lieu thereof the following: "An arrangement employing one fuel tank to supply more than one engine shall be acceptable if the individual systems from the tank outlets to the engines incorporate features to assure continued supply of fuel to the other engines in the event of failure of any one component of an individual system."

15. By amending § 3.551 by adding a new paragraph (d) to read as follows:

§ 3.551 *Fuel valves.* * * *

(d) Fuel valve handles and their connections to the valve mechanism shall incorporate design features so as to minimize the possibility of incorrect installation.

16. By amending § 3.624 (a) to read as follows:

§ 3.624 *Fire wall construction.* (a) Fire walls and shrouds shall be constructed in such a manner that no hazardous quantity of liquids, gases, or flame could pass from the engine compartment to other portions of the airplane. All openings in the fire wall or shroud shall be sealed tight with fireproof grommets, bushings, or fire-wall fittings, except that, such seals of fire-resistant materials shall be acceptable for use on single-engine airplanes and multiengine airplanes not required to comply with § 3.85 (b) or § 3.85a (b), if such airplanes are equipped with engine(s) having a volumetric displacement of 1,000 cubic inches or less; and if the openings in the fire walls or shrouds are such that, without seals, the passage of a hazardous quantity of flame could not result.

17. By amending § 3.702 so that the intensity distribution requirements for the forward red and green position lights and the rear white position light conform with the presently effective requirements prescribed for these lights in Part 4b of this subchapter.

18. By amending § 3.715 by adding a new sentence at the end thereof to read as follows: "In the case of safety belts for berths, the forward load factor need not be applied."

19. By amending § 3.771 by adding a new paragraph (c) to read as follows:

§ 3.771 *Airspeed placards.* * * *

(c) Rough air or maneuvering speed determined in accordance with §3.741.

Part 4b: There are contained herein proposed rules with respect to various miscellaneous issues which were possible of resolution within the framework of this year's Annual Airworthiness Review.

With respect to the flight provisions, there is proposed a change to § 4b.112, which would permit the use of the minimum speed attained during the stall demonstration in determining the required climb, and a change to § 4b.160, which would permit determination of the demonstration stall speed in terms of the stall warning speed.

The presently effective gust load requirements are based on wing loading. Research in past years indicates that gust loads are more closely a function of mass parameter than of wing loading. For this reason, there is included a proposal incorporating the more up-to-date concept of "mass parameter" in the gust load requirements.

In § 4b.270, there is proposed a new rule which establishes more specific criteria for fatigue evaluation of flight structure, including pressurized cabins. Among other proposed changes relative to the structural provisions there is a change to § 4b.210 (c), which establishes more realistic criteria for evaluating the strength of the airplane at weights in the vicinity of the zero fuel weight. These new criteria are predicated on the simultaneous application of the new gust load and fatigue evaluation criteria. There are proposed changes which would require accounting for compressibility effects at all speeds; establish detail conditions for the evaluation of gyroscopic loads imposed on engine mounts; and would require consideration of thermal effects on the structure.

There is also proposed a change to § 4b.230 (b), which would permit in showing compliance with the ground load requirements the use of wing lift equal to the weight of the airplane instead of only two-thirds of the weight as prescribed by the currently effective regulations. To compensate for the relaxatory effect of this proposal, other complementary changes are also proposed.

Three proposals are included with respect to control surfaces and their control systems. Two of these would entail changes to § 4b.320, which would require incorporation of design features, or marking of control system elements to minimize the possibility of incorrect assembly, and which would require tab control system designs to be such that a failure of any element would not jeopardize the flight. The third change is to § 4b.324, which would require application of the fail safe philosophy to flap actuating systems incorporating a mechanical interconnection to assure against hazardous unsymmetrical flap extension.

There is proposed a change to § 4b.336, which would establish a more up-to-date criteria for the selection of landing gear tires.

The presently effective requirements of § 4b.358, in respect to restraining occupants of berths by safety belts are considered unrealistic. A change to these provisions is proposed, which would exclude safety belts in berths from compliance with the forward inertia loads prescribed for emergency landings and instead would require restraint of berth occupants by means of a padded end board, a canvas diaphragm, or other equivalent method.

In addition, there are included other changes which are either relatively minor, clarifying, or of an editorial nature.

There were several proposals discussed at this year's Annual Airworthiness meeting, which could not be resolved because they require further study. These include proposals with respect to combustion heater design, decelerating devices, floatable passenger seat design, fuel storage, fire extinguisher systems, flight instrument panel arrangement, and propeller reverse thrust indication. Issues pertaining to the carriage of flares and to the operational icing requirements in the operating parts were also discussed at the meeting; however, no proposals on these issues are being included herein. Instead, these two issues will be considered in conjunction with other issues relevant to the operating parts of the Civil Air Regulations.

It is proposed to amend Part 4b as follows:

1. By amending § 4b.104 (a) by deleting the words "total quantity of engine coolant".

2. By amending § 4b.104 (b) by deleting the words "fuel, oil, and coolant tanks" and inserting in lieu thereof the words "fuel and oil tanks".

3. By amending § 4b.112 (c) to read as follows:

§ 4b.112 *Stalling speeds.* * * *

(c) The stall speeds defined in this section shall be the minimum speeds ob-

tained in flight tests conducted in accordance with the procedure of subparagraphs (1) and (2) of this paragraph.

(1) With the airplane trimmed for straight flight at a speed of 1.4 V_{s_1} and from a speed sufficiently above the stalling speed to assure steady conditions, the elevator control shall be applied at a rate such that the airplane speed reduction does not exceed one mile per hour per second.

(2) During the test prescribed in subparagraph (1) of this paragraph, the flight characteristics provisions of § 4b.160 shall be complied with.

4. By amending the introductory paragraph of § 4b.160 (c) (2) and by inserting an additional note to read as follows:

§ 4b.160 *Stalling; symmetrical power.* * * *

(c) * * *

(2) The airplane shall be considered stalled when, at an angle of attack measurably greater than that of maximum lift, the inherent flight characteristics give a clear indication to the pilot that the airplane is stalled, except that for airplanes demonstrating unmistakable inherent aerodynamic warning associated with the stall in all required configurations, the speed need not be reduced below a value which provides an adequate stall warning margin as defined in § 4b.162.

NOTE: Types of inherent aerodynamic warning considered acceptable include characteristics such as buffeting, small amplitude pitch or roll oscillations, distinctive shaking of the pilot's controls, etc.

5. By amending § 4b.202 by adding a new paragraph (d) to read as follows:

§ 4b.202 *Proof of structure.* * * *

(d) Proof of compliance of the structure with the fatigue evaluation requirements of § 4b. 270 shall be made.

6. By amending Figure 4b–1 by deleting the speed "1.3 V_{s_1}" from the abscissa scale and the straight line it identifies, and by deleting the term "0.8 V_d" associated with the $Vc_{\min}$ curve and inserting in lieu thereof the following: "Mach Number Selected by Applicant."

7. By amending § 4b.210 by deleting the last sentence in the introductory paragraph and inserting in lieu thereof the following: "Compressibility effects shall be taken into account at all speeds."

8. By amending § 4b.210 (b) (3) to read as follows:

§ 4b.210 *General.* * * *

(b) *Design air speeds.* * * *

(3) *Design speed for maximum gust intensity, V_B.* V_B shall be either the speed determined by the intersection of the line representing the maximum positive lift $C_{N_{max}}$ and the line representing the rough air gust velocity on the gust V–n diagram or ($\sqrt{n_g}$) V_{s_1}, whichever is the lesser; where n_g is the positive airplane gust load factor due to gust at speed V_C in accordance with § 4b.211 (b) (2) at the particular weight under consideration and V_{s_1} is the stalling speed with flaps retracted at the particular weight under consideration. V_B need not be greater than V_C.

9. By amending § 4b.210 by adding a new paragraph (c) to read as follows:

§ 4b.210 *General.* * * *

(c) *Design fuel loads.* The disposable load combinations shall include all fuel loads in the range from zero fuel to the maximum fuel load selected by the applicant. It shall be permissible for the applicant to select a structural reserve fuel condition not exceeding 45 minutes of fuel as defined in § 4b.437 (c). If a structural reserve fuel condition is selected, it shall be used as the minimum fuel weight condition for showing of compliance with the flight load requirements as prescribed in this subpart, in which case, the provisions of subparagraphs (1) through (3) of this paragraph shall also apply.

(1) The structure shall be designed for a condition of zero fuel at limit loads corresponding with:

(i) A maneuver load factor of +2.25.

(ii) Gust intensities equal to 85 percent of the values prescribed in § 4b.211 (b).

(2) Fatigue evaluation of the structure shall take into account any increase in operating stresses resulting from the design condition of subparagraph (1) of this paragraph (see § 4b.270).

(3) The flutter, deformation, and vibration requirements shall also be met with zero fuel (see § 4b.308).

10. By amending Figure 4b–3 by deleting the references "+40K FPS Gust", "+30K", "+15K", "−15K", "−30K", and "−40K", and inserting in lieu thereof, respectively, the following: "Gust Line For V_B", "Gust Line For V_C Speed", "Gust Line for V_D Speed", "Gust Line For V_D Speed", "Gust Line For V_C Speed", and "Gust Line For V_B Speed".

11. By amending § 4b.211 (b) to read as follows:

§ 4b.211 *Flight envelopes.* * * *

(b) *Gust load factors.* The airplane shall be assumed to be subjected to symmetrical vertical gusts while in level flight. The resulting limit load factors shall correspond with the conditions prescribed in subparagraphs (1) through (5) of this paragraph. The shape of the guest shall be assumed to be:

$$U=\frac{U_{de}}{2}\left(1-\cos\frac{2\pi s}{25\bar{C}}\right)$$

where:

s = distance penetrated into gust, ft.
$\bar{C}$ = mean geometric chord of wing, ft.
U_{de} = derived gust velocity referred to in subparagraphs (1), (2), and (3) of this paragraph, (fps).

(1) Positive (up) and negative (down) rough air gusts of 66 fps at the speed V_B shall be considered at altitudes between sea level and 20,000 feet. At altitudes above 20,000 feet, it shall be acceptable to reduce the gust velocity linearly from 66 fps at 20,000 feet to 38 fps at 50,000 feet.

(2) Positive and negative gusts of 50 fps at the speed V_C shall be considered at altitudes between sea level and 20,000 feet. At altitudes above 20,000 feet, it shall be acceptable to reduce the gust velocity linearly from 50 fps at 20,000 feet to 25 fps at 50,000 feet.

(3) Positive and negative gusts of 25 fps at the speed V_D shall be considered at altitudes between sea level and 20,000 feet. At altitudes above 20,000 feet, it shall be acceptable to reduce the gust velocity linearly from 25 fps at 20,000 feet to 12.5 fps at 50,000 feet.

(4) Gust load factors shall be assumed to vary linearly between the specified conditions B′ through G′, as shown on the gust envelope of Figure 4b–3.

(5) In the absence of a more rational analysis, the gust load factors shall be computed in accordance with the following formula:

$$n=1+\frac{K_g U_{de} V a}{499(W/S)}$$

where:

$K_g=\frac{0.88\mu_g}{5.3+\mu_g}$ = gust alleviation factor;

$\mu_g=\frac{2(W/S)}{\rho \bar{C} a g}$ = airplane mass ratio;

U_{de} = derived gust velocities referred to in subparagraphs (1), (2), and (3) of this paragraph, (fps);

ρ = density of air (slugs/cu. ft.);

W/S = wing loading (psf);

$\bar{C}$ = mean geometric chord (ft.);

g = acceleration due to gravity (ft./sec.²);

V = airplane equivalent speed (knots);

a = slope of the airplane normal force coefficient curve C_{N_A} per radian, if the gust loads are applied to the wings and horizontal tail surfaces simultaneously by a rational method. It shall be acceptable to use the wing lift curve slope C_L per radian when the gust load is applied to the wings only and the horizontal tail gust loads are treated as a separate condition.

12. By amending § 4b.212 (a) (2) by deleting "15 fps nominal intensity" and inserting in lieu thereof the following: "25 fps derived".

13. By amending § 4b.212 (b) (2) to read as follows:

§ 4b.212 *Effect of high lift devices.* * * *

(b) * * *

(2) Positive and negative derived gusts as prescribed in § 4b.211 (b) acting normal to the flight path in level flight.

14. By amending § 4b.212 (c) by deleting the last sentence and inserting in lieu thereof the following: "For other than tractor type airplanes, a head-on gust equivalent to the intensity prescribed in § 4b.211 (b) (3) with no alleviations acting along the flight path shall be considered.

15. By amending § 4b.213 (d) (3) by deleting the term "K" and inserting in lieu thereof "K_g".

16. By amending § 4b.215 (b) to read as follows:

§ 4b.215 *Yawing conditions.* * * *

(b) *Lateral gusts.* The airplane shall be assumed to encounter derived gusts normal to the plane of symmetry while in unaccelerated flight. The derived gusts and airplane speeds corresponding with points B′ through J′ on Figure 4b–3 as determined by §§ 4b.211 (b) and 4b.212 (a) (2) or (b) (2) shall be investigated. The shape of the gust shall be as specified in § 4b.211 (b). In the absence of a rational investigation of the airplane's response to a gust, it shall be acceptable to compute the gust loading on the vertical tail surfaces by the following formula:

$$L_t = \frac{K_{gt} U_{de} V a_t S_t}{499}$$

where:

L_t = vertical tail load, (lbs.);

$K_{gt} = \frac{0.88 \mu_{gt}}{5.3 + \mu_{gt}}$ = gust alleviation factor;

$\mu_{gt} = \frac{2W}{\rho \bar{C}_t g a_t S_t \left(\frac{K}{l_t}\right)^2}$ = lateral mass ratio;

U_{de} = derived gust velocity (fps);

ρ = air density (slugs/cu. ft.);

W = airplane weight (lbs.);

S_t = area of vertical tail ($ft.^2$);

$\bar{C}_t$ = mean geometric chord of vertical surface (ft.);

a_t = lift curve slope of vertical tail, per radian;

K = radius of gyration in yaw (ft.);

l_t = distance from airplane C. G. to lift center of vertical surface (ft.);

g = acceleration due to gravity (ft./sec.^{2});

V = airplane equivalent speed (knots).

17. By amending § 4b.216 (c) (1) by adding a new sentence at the end thereof to read as follows: "Stress concentration and fatigue effects shall be accounted for in the design of pressure cabins (see § 4b.270)."

18. By amending § 4b.216 (c) (3) by deleting from the first sentence the following words: "to provide for such effects as fatigue and stress concentrations."

19. By amending § 4b.216 by adding a new paragraph (e) to read as follows:

§ 4b.216 *Supplementary flight conditions.* * * *

(e) *Gyroscopic loads.* The structure supporting the engines shall be designed for gyroscopic loads associated with the conditions specified in §§ 4b.213 through 4b.215 with the engines operating at maximum continuous rpm.

20. By amending § 4b.230 (b) (1) by deleting the words "when landing the airplane" and inserting in lieu thereof the words "in the attitude and subject to the drag loads associated with the particular landing condition, and".

21. By amending § 4b.230 (b) (1) by adding a new subdivision (iii) to read as follows:

§ 4b.230 *General.* * * *

(b) *Load factors, descent velocities, and design weights for landing conditions.*

(1) * * *

(iii) 10 fps at the design minimum weight.

22. By amending § 4b.230 (b) (2) by deleting the words "two-thirds of".

23. By amending § 4b.231 (a) by deleting the first sentence and inserting in lieu thereof the following: "In the level attitude the airplane shall be assumed to contact the ground at forward velocity components parallel to the ground ranging from V_{L_1} to 1.25 V_{L_2} and shall be assumed to be subjected to the load factors prescribed in § 4b.230 (b) (1) where V_{L_1} is equal to V_{s_0} (TAS) at the appropriate landing weight and in standard sea level conditions and where V_{L_2} is equal to V_{s_0} (TAS) at the appropriate landing weight and altitudes in a hot day temperature of 41° F. above standard.

24. By amending § 4b.231 (a) by deleting from the second sentence the clause "or landings at elevations higher than 5,000 feet".

25. By amending § 4b.231 (a) by deleting the last sentence from subparagraphs (1) and (3) and inserting in lieu thereof in each instance the following: "It shall be acceptable to apply this condition only to the landing gear, directly affected attaching structure, and large mass items (i. e. external fuel tanks, nacelles, etc.)".

26. By amending the introductory paragraph of § 4b.232 to read as follows:

§ 4b.232 *Tail-down landing conditions.* In the conditions of paragraphs (a) and (b) of this section the airplane shall be assumed to contact the ground at forward velocity components parallel to the ground, ranging from V_{L_1} to V_{L_2}, where V_{L_1} and V_{L_2} are as indicated in § 4b.231 (a). The load factors prescribed in § 4b.230 (b) (1) shall apply. The combination of vertical and drag components specified in § 4b.231 (a) (1) and (3) shall be considered acting at the main wheel axle centerline.

27. By amending § 4b.235 (a) to read as follows:

§ 4b.235 *Ground handling conditions.* * * *

(a) *Taxiing and take-off run.* The airplane shall be assumed to be in the attitude of all wheels contacting the ground. The limit vertical load factor shall be 2.0 unless a lower value is substantiated by tests. Drag and side loads shall be assumed equal to zero.

28. By amending § 4b.235 by adding new paragraphs (g) and (h) to read as follows:

§ 4b.235 *Ground handling conditions.* * * *

(g) *Reversed braking.* The airplane shall be in a three point static ground attitude. Horizontal reactions parallel to the ground and directed forward shall be applied at the ground contact point of each wheel equipped with brakes. The limit loads shall be equal either to 0.55 times the vertical load at each wheel or to the load developed by 1.2 times the nominal maximum static brake torque, whichever is the lesser. For nosewheel types, the pitching moment shall be balanced by rotational inertia. For tailwheel types, the resultant of the ground reactions shall pass through the center of gravity of the airplane.

(h) *Towing loads.* Towing loads shall be those specified in Figure 4b–26, considering each condition separately. These loads shall be applied at the towing fittings and shall act parallel to the ground. A vertical load factor equal to 1.0 shall be considered acting at the center of gravity. The shock struts and tires shall be in their static positions. The towing load, F_{TOW}, shall be defined as equal to $0.3W_T$ for W_T less than 30,000 pounds, equal to $\frac{6W_T + 450{,}000}{70}$ for W_T between 30,000 and 100,000 pounds and equal to $0.15W_T$ for W_T over 100,000 pounds, where W_T is the design maximum take-off weight. For towing points not on the landing gear but located near the plane of symmetry of the airplane, the drag and side tow load components specified for the auxiliary gear shall apply. For tow points located outboard of the main gear the drag and side tow load component specified for the main gear shall apply. In cases where the specified angle of swivel cannot be obtained, the maximum obtainable angle shall be used.

29. By adding a new Figure 4b–26.

30. By adding a new heading and a new § 4b.270 to read as follows:

FATIGUE EVALUATION

§ 4b.270 *General.* The strength, detail design, and fabrication of those portions of the airplane's flight structure in which fatigue may be critical shall be evaluated in accordance with the provisions of either paragraph (a) or (b) of this section.

(a) *Fatigue strength.* The structure shall be shown by analysis and/or tests to be capable of withstanding the repeated loads of variable magnitude expected in service. The provisions of subparagraphs (1) through (3) of this paragraph shall apply.

(1) Evaluation of fatigue shall involve the following:

(i) Typical loading spectrum expected in service;

(ii) Identification of principal structural elements and detail design points, the fatigue failure of which could cause catastrophic failure of the aircraft; and

(iii) An analysis and/or repeated load tests of principal structural elements and detail design points, identified in subdivision (ii) of this subparagraph.

Tow point	Position	Load		
		Magnitude	No.	Direction
Main gear		0.75 F_{TOW} per main gear unit.	1	Forward, parallel to drag axis.
			2	Forward, at 30° to drag axis.
			3	Aft, parallel to drag axis.
			4	Aft, at 30° to drag axis.
Auxiliary gear	Swiveled forward	1.0 F_{TOW}	5	Forward.
			6	Aft.
	Swiveled aft	do	7	Forward.
			8	Aft.
	Swiveled 45° from forward	0.5 F_{TOW}	9	Forward, in plane of wheel.
			10	Aft, in plane of wheel.
	Swiveled 45° from aft	do	11	Forward, in plane of wheel.
			12	Aft, in plane of wheel.

BALANCING FORCES

The side component of the towing load at the main gear is reacted by a side force at the static ground line at the wheel to which load is applied.

The towing loads at the auxiliary gear and the drag components of the towing loads at the main gear are reacted in each of the following ways:

a. Reaction applied at the axle of the wheel to which load is applied, this reaction having a maximum value equal to the vertical reaction. Airplane inertia is applied as required for equilibrium.

b. The loads reacted by airplane inertia.

FIGURE 4b–26—Towing loads.

NOTE: Usually tests of principal structural elements include major fittings, samples of joints, spar cap strips, skin units, and other representative sections of the flight structure.

(2) It shall be acceptable to utilize the service history of airplanes of similar structural design, taking due account of differences in operating conditions and procedures.

(3) When circumstances require substantiation of the pressure cabin by fatigue tests, the cabin or representative portions of it shall be cycle-pressure tested, utilizing the normal-operating pressure together with the effects of external aerodynamic pressure combined with the flight loads. It shall be acceptable to represent the effects of flight loads by an increased cabin pressure, or to omit the flight loads if they are shown to have no significant effect upon fatigue.

(b) *Fail safe strength.* It shall be shown by analysis and/or tests that catastrophic failure or excessive structural deformation, which could adversely affect the flight characteristics of the airplane, are not probable after fatigue failure or obvious partial failure of a single principal structural element. After such failure, the remaining structure shall be capable of withstanding static loads corresponding with the flight loading condition specified in subparagraphs (1) and (2) of this paragraph. These loads shall be multiplied by a factor of 1.15 unless the dynamic effects of failure under static load are otherwise taken into consideration. In the case of a pressure cabin, the normal operating pressures combined with the expected external aerodynamic pressures shall be applied simultaneously with the flight loading conditions specified in this paragraph.

(1) An ultimate load factor of 2.0 at V_C.

(2) Gust loads as specified in § 4b.211 (b), except that these gust loads shall be considered to be ultimate and the gust velocities shall be as follows:

(i) At speed V_B, 49 fps from sea level to 20,000 feet altitude, thereafter decreasing linearly to 28 fps at 50,000 feet altitude.

(ii) At speed V_C, 33 fps from sea level to 20,000 feet altitude, thereafter decreasing linearly to 16.5 fps at 50,000 feet altitude.

(iii) At speed V_D, 15 fps from sea level to 20,000 feet altitude, thereafter decreasing linearly to 6 fps at 50,000 feet altitude.

31. By amending § 4b.306 (b) by adding a new sentence at the end thereof to read as follows: "The effects of temperature on allowable stresses used for design in an essential component or structure shall be considered where thermal effects are significant under normal operating conditions."

32. By amending § 4b.306 (d) by adding to the end of the sentence the reference "(also see § 4b.270)".

33. By amending § 4b.320 to read as follows:

§ 4b.320 *General.* All controls and control systems shall operate with ease, smoothness, and positiveness appropriate to their function. The elements of the flight control system shall incorporate design features or shall be distinctively and permanently marked so as to minimize the possibility of incorrect assembly which could result in malfunctioning of the control system. Tab control systems shall be such that disconnection or failure of any element at speeds up to V_C cannot jeopardize the safety of flight (also see §§ 4b.308, 4b.350, and 4b.353).

34. By amending § 4b.324 (a) by adding a new sentence at the end thereof to read as follows: "When a mechanical interconnection is employed, means shall be provided to insure against hazardous unsymmetrical operation of the wing flaps after any reasonably possible single failure of the flap actuating system."

35. By amending § 4b.332 (b) (2) by deleting from the definition of "L" the numerals "0.667" and inserting in lieu thereof the numeral "1.0".

36. By amending § 4b.333 by adding a new paragraph (c) to read as follows:

§ 4b.333 *Limit load factor determination.* * * *

(c) *Landing gear rebound condition.* The landing gear and its supporting structure shall be designed for the loads occurring during rebound of the airplane from the landing surface. With the landing gear fully extended and not in contact with the ground, a load factor of 20.0 shall act on the unsprung weights of the landing gear. This load factor shall act in the direction of motion of the unsprung weights as they reach their limiting positions in extending with relation to the sprung portions of the landing gear."

37. By amending § 4b.336 to read as follows:

§ 4b.336 *Tires.* Landing gear tires shall be of a proper fit on the rim of the wheel, and of load ratings which are not exceeded under the following conditions:

(a) Main wheel tires: Equal static loads on all main wheel tires corresponding with the most critical combination of maximum take-off weight and center of gravity position.

(b) Nose wheel tires: Equal static loads on all nose wheel tires corresponding with the following conditions:

(1) The static ground reaction per tire corresponding with the most critical combination of takeoff weight and center of gravity position. This load shall correspond with the static rating of the tire.

(2) The dynamic ground reaction per tire at maximum landing weight, assuming the mass of the airplane concentrated at the most critical location of the center of gravity for this weight and exerting a force of 1.0g downward and 0.31g forward, the reactions being distributed to the nose and main wheels by the principles of statistics with a 0.31g drag reaction at the ground applied at those wheels which have brakes. This load shall correspond with the dynamic rating of the tire.

(3) The dynamic ground reaction per tire at design takeoff weight, assuming the mass of the airplane concentrated at the most critical location of the center of gravity for this weight, and exerting a force of 1.0g downward and 0.20g forward, the reactions being distributed to the nose and main wheels by the principles of statistics with a 0.20g drag reaction at the ground applied at those wheels which have brakes. This load shall correspond with the dynamic rating of the tire.

38. By amending § 4b.337 (a) (2) by deleting the word "connection" and inserting in lieu thereof the word "connecting".

39. By amending § 4b.358 (b) by adding a new subparagraph (4) to read as follows:

§ 4b.358 *Seats, berths, and safety belts.* * * *

(b) *Arrangement.* * * *

(4) Berths shall be so designed that the forward portion is provided with a padded end board, a canvas diaphragm, or equivalent means capable of restraining the occupant within the berth when subjected to the forward inertia force specified in § 4b.260. Berths shall be free from corners and protuberances likely to cause serious injury to a person occupying the berth during emergency conditions.

40. By amending § 4b.358 (c) by adding a new sentence between the first and second sentences to read as follows: In the case of berths, a forward inertia force shall be considered in accordance with paragraph (b) (4) of this section in lieu of the forward reaction between the occupant and the safety belt.

41. By amending § 4b.386 (g) by deleting subparagraphs (1) and (2)* and inserting in lieu thereof a new subparagraph (1) to read as follows:

§ 4b.386. *Combustion heater fire protection.* * * *

(g) *Heater exhaust.* * * *

(1) Provisions shall be made in the design of the heater exhaust system so that the products of combustion will be safely conveyed overboard to prevent the occurrence of the following:

(i) Fuel leakage from the exhaust to surrounding compartments;

(ii) Exhaust gas impingement on surrounding equipment or structure;

(iii) Ignition of flammable fluids by the exhaust, when the exhaust is located in a compartment containing flammable fluid lines.

(iv) Restriction by the exhaust of the prompt relief of backfires which can cause heater failure due to pressure generated within the heater.

42. By amending § 4b.413 (b) by adding a new subparagraph (4) to read as follows:

§ 4b.413 *Fuel flow rate.* * * *

(b) * * *

(4) In systems where § 4b.435 (d) requires a fuel filter bypass arrangement, the fuel flow rate corresponding with 100 percent of the engines' maximum fuel demand at standard atmospheric conditions shall be demonstrated with the fuel filter blocked.

43. By amending § 4b.414 (a) by beginning the sentence with the words: "For reciprocating engines * * *".

44. By amending § 4b.414 by deleting from the first sentence of paragraph (b) the words "paragraph (a) of", by redesignating paragraph (b) as paragraph (c), and by adding a new paragraph (b) to read as follows:

§ 4b.414 *Pump systems.* * * *

(b) For turbine engines, the fuel flow rate for pump systems shall be 125 percent of the fuel flow required to develop the standard sea level atmospheric condition takeoff power, selected by the applicant and included as an operating limitation in the airplane Flight Manual.

45. By amending § 4b.420 by deleting paragraph (c) and by redesignating paragraphs (d), (e), and (f) as (c), (d), and (e), respectively.

46. By amending §4b.421 (a) to read as follows:

§ 4b.421 *Fuel tank tests.* (a) Fuel tanks shall be demonstrated capable of withstanding the most critical of the following pressures without failure or leakage as mounted in the airplane.

(1) Internal pressure of 3.5 p. s. i.;

(2) 125 percent of the maximum air pressure developed in the tank from ram effect;

(3) The fluid pressures developed during maximum limit accelerations of the airplane with a full tank. If any of these pressures exceed the greater of the pressures prescribed in subparagraphs (1) and (2) of this paragraph, the test shall be conducted so as to simulate the pressure distribution insofar as practicable. The minimum pressure at any point in the tank shall not be less than the greater of the pressures prescribed in subaparagraphs (1) and (2) of this paragraph.

47. By amending the introductory statement of § 4b.421 (b) to read as follows:

§ 4b.421 *Fuel tank tests.* * * *

(b) Tanks with large unsupported or unstiffened flat surfaces, the failure or deformation of which could cause fuel leakage, shall be capable of withstanding a vibration test in accordance with the conditions of subparagraphs (1) through (4) of this paragraph, or other equivalent test, without leakage, or excessive deformation of the tank walls.

48. By amending § 4b.421 (b) (2) to read as follows:

§ 4b.421 *Fuel tank tests.* * * *

(b) * * *

(2) The tank assembly shall be vibrated for 25 hours while filled two-thirds full of water or any suitable test fluid. The amplitude of vibration shall not be less than one thirty-second of an inch, unless otherwise substantiated.

49. By amending § 4b.421 (b) (4) to read as follows:

§ 4b.421 *Fuel tank tests.* * * *

(b) * * *

(4) During the test, the tank assembly shall be rocked at the rate of 16 to 20 complete cycles per minute through an angle of 15° on either side of the horizontal (30° total) about the most critical axis for 25 hours. If motion about more than one axis is likely to be critical, the tank shall be rocked about each axis for 12½ hours.

50. By amending § 4b.421 (b) by deleting subparagraph (5).

51. By amending § 4b.421 (a) by deleting the numerals "0.25" and inserting in lieu thereof the numerals "0.10".

52. By amending § 4b.430 (a) (3) by beginning the second sentence with the words: "Reciprocating engine * * *" in lieu of the word "Engine * * *".

53. By amending § 4b.430 (b) (1) by inserting the words "Reciprocating engine" between the words "of" and "installations".

54. By amending § 4b.431 (a) by adding a new sentence at the end thereof to read as follows: "In turbine engine fuel systems, provisions shall be made to maintain the fuel pressure at the inlet to the engine fuel system within the limits established for engine operation."

55. By amending § 4b.435 by adding a new paragraph (d) to read as follows:

§ 4b.435 *Fuel strainer.* * * *

(d) When filter or strainers susceptible to icing are incorporated in the fuel system, a means shall be provided to maintain automatically the fuel flow in the event ice particles accumulate and restrict flow by clogging the filter or screen.

56. By amending § 4b.437 (c) by adding a new sentence at the end thereof to read as follows: "For turbine-powered airplanes, the design of the jettisoning system shall be such that it would not be possible to jettison fuel in the tanks used for take-off and landing below the level providing climb from sea level to 10,000 feet and thereafter providing 45 minutes cruise at a speed for maximum range.

57. By amending § 4b.604 by deleting paragraph (b).

58. By amending § 4b.637 by adding a new sentence at the end thereof to read as follows: "If an additional anti-collision light is installed on the bottom of the fuselage, the prescribed limits of effective flash frequency in the overlap region of the two light beams need not be met."

59. By amending § 4b.643 by adding a new sentence at the end thereof to read as follows: "In the case of safety belts for berths, the forward load factor need not be applied."

60. By amending § 4b.711 (b) by adding a note at the end thereof to read as follows:

NOTE: Where speeds are limited by compressibility effects, this section is intended to provide an adequate margin between M_{NE} and the lowest of the following Mach values: M_D, M_{DF}, or the Mach number where adverse flight characteristics, such as the following, occur: Undue reduction in ability to recover; rapid or large changes in stability during level flight or recovery which would cause the airplane to exceed structural limits; buffeting so severe as to endanger the structural integrity of the airplane. The speed margin required usually depends upon the effectiveness of the warning provided to the pilots whenever M_{NE} is reached or exceeded, and upon the recovery or speed control characteristics of the airplane. In any case the margin should be sufficient: to enable recovery from mild upsets due to gusts or inadvertent control movements or trim changes; to allow for inadvertent increases in Mach number due to horizontal gusts or temperature inversions; and, for instrument inaccuracies or airplane production differences. The probability of the simultaneous occurrence of the aforementioned speed margin conditions are usually considered, but the effects of all such conditions are not necessarily additive.

61. By amending §§ 4b.718 (a) (4), (5) and (b) (3) by deleting in each instance the words "or coolant outlet".

62. By amending § 4b.738 (b) by deleting the title and inserting in lieu thereof the following "Fuel and oil filler openings."

63. By amending § 4b.738 (b) by deleting subparagraph (3).

64. By amending § 4b.738 by deleting paragraph (d) and by redesignating paragraph (e) as paragraph (d).

[F. R. Doc. 55-8929; Filed, Nov. 7, 1955; 8:45 a. m.]

NOTICES

DEPARTMENT OF STATE

[Public Notice 144]

[Delegation Authority 78-B]

DEPUTY UNDER SECRETARY OF STATE FOR ADMINISTRATION ET AL.

FUNCTIONS AND AUTHORITIES

Pursuant to the authority vested in the Secretary of State by sections 3 and 4 of Public Law 73, 81st Congress, approved May 26, 1949 (63 Stat. 111), and in accordance with the requirements of section 3 (a) (1) of Public Law 404, 79th Congress, approved June 11, 1946 (60 Stat. 238), functions and authorities are hereby prescribed for the positions enumerated below. All prior delegations of authority and public notices which are inconsistent or in conflict with the functions and authorities herein prescribed are, to the extent of such inconsistencies or conflicts, hereby superseded. Nothing contained herein shall authorize the exercise of authority which by law is required to be exercised solely by the Secretary of State.

The Deputy Under Secretary of State for Administration. a. Exercises the authority vested in the Secretary of State by section 3 of Public Law 73, 81st Congress, to "administer, coordinate, and direct the Foreign Service of the United States and the personnel of the State Department."

b. Exercises the authority now or hereafter vested in the Secretary of State or the Department of State with

respect to the administration of the Department of State and the Foreign Service.

c. Provides general direction and control of the organizational structure and assignment of functions in the Department of State and the Foreign Service.

d. Provides general direction for the use of appropriated funds, for the establishment of program priorities for budgetary purposes, and the administrative implementation of approved substantive policies and programs.

e. Directs the administration of the Department's inspection programs.

f. Directs the activities of the Foreign Service Institute.

g. Directs and supervises the activities of the Assistant Secretary-Controller, the Administrator of the Bureau of Security and Consular Affairs, and the Director General of the Foreign Service.

h. Prescribes and promulgates such rules and regulations, and makes such delegations of authority as may be necessary to carry out his assigned responsibilities.

Assistant Secretary-Controller. a. Develops, establishes, revises and promulgates the organizational structure and assignment of functions in the Department and the Foreign Service.

b. Directs the administration of the personnel program of the Department and the Foreign Service.

c. Directs preparation of budget estimates and the allocation of funds made available to the Secretary or the Department.

d. Establishes relative program priorities for budgetary purposes and supervises the use of appropriated funds in accordance with congressional limitations, program objectives, and policies of the President and the Secretary.

e. Directs the development and operation of administrative management controls including fiscal controls, reporting systems, manuals of regulations and procedures, etc., designed to promote efficient, economical and effective operation in all areas of the Department and the Foreign Service, and to enforce compliance with established policies and instructions.

f. Directs and provides for the acquisition, maintenance and operation of buildings, grounds, and other facilities required for use in connection with the Department's operations abroad.

g. Directs and provides procurement, communication, transportation, fiscal and other administrative services.

h. Prescribes and promulgates such rules and regulations, and makes such delegations of authority as may be necessary to carry out his assigned responsibilities.

i. Acts for the Deputy Under Secretary for Administration in his absence.

Administrator, Bureau of Security and Consular Affairs. a. Provides technical direction for the consular program of the Foreign Service and directs related work of the Department, including such activities as passport services, protection and welfare of American citizens and interests, issuance of visas, representation of interests of foreign governments, control of international traffic in arms, and policies concerning disclosure of classified military information.

b. Directs the security program of the Department and the Foreign Service.

c. Directs the administration of the Refugee Relief Program established by the Refugee Relief Act of 1953, Public Law 203, 83d Congress (67 Stat. 400).

d. Prescribes and promulgates such rules and regulations as may be necessary to carry out his assigned responsibilities.

Dated: October 29, 1955.

[SEAL] HERBERT HOOVER, Jr.,
Acting Secretary of State.

[F. R. Doc. 55-8975; Filed, Nov. 7, 1955; 8:46 a. m.]

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[Wisc. 1858603]

WISCONSIN

NOTICE OF FILING OF PLAT OF SURVEY AND ORDER PROVIDING FOR OPENING OF PUBLIC LANDS

1. A plat of dependent survey and extension survey to include certain lands which were erroneously omitted from the original survey will be officially filed in the Eastern States Land Office, Washington, D. C., effective at 10:00 a. m. on December 6, 1955, as described below.

FOURTH PRINCIPAL MERIDIAN, WISCONSIN

T. 40 N., R. 14 E.,
Sec. 22, Lots 9, 10, 11, 12, 13;
Sec. 23, Lots 6, 7;
Sec. 26, Lots 9, 10, 11, 12, 13;
Sec. 35, Lot 4.

The area described aggregates 313.27 acres.

2. According to the field notes and as shown by the plat, lot 11 sec. 22 and lots 9, 10, 11, 12 and 13 sec. 26 are principally swamp in character and appear to be swamp and overflowed within the meaning of the Act of September 28, 1950 (9 Stat. 519). Should the lands be finally determined to be swamp and overflowed in character, it must be held that the lands inured to the State and any application adverse to the State's conflict with swamp land claim will be governed by sec. 271.2 of Title 43 of the Code of Federal Regulations.

3. The lands first described above are within the exterior boundaries of the Nicolet National Forest by proclamation No. 2219 of December 31, 1936.

4. Available information as to the remaining lands indicates that the soil is sandy and gravel loam with some stone and of gently rolling to rolling upland; that the timber consists of hemlock, norway and white pine, birch, maple, etc., with an undergrowth of young timber, hazel and high-bush cranberry.

5. Anyone having a valid existing right to any of the remaining lands, initiated prior to the date of the forest withdrawal of the lands, should assert the same within one year from the date hereof of filing an application under the Act of February 27, 1925 (43 Stat. 1013, 43 U. S. C. 994), and the Act of August 24, 1954 (68 Stat. 789).

6. Claimants under the 1925 act, supra, have a preferred right of application for a period of 90 days from December 6, 1955. Applications under the 1954 act, supra, must be filed within one year from December 6, 1955. No patent will be issued for the lands not swamp in character prior to December 7, 1956.

7. Inquiries concerning the lands shall be addressed to the Acting Manager, Eastern States Land Office, Bureau of Land Management, Department of the Interior, Washingon 25, D. C.

WILLIAM E. THOMAS,
Acting Manager.

[F. R. Doc. 55-8974; Filed, Nov. 7, 1955; 8:46 a. m.]

FEDERAL POWER COMMISSION

[Docket No. G-9298]

DELTA GULF DRILLING CO.

NOTICE OF APPLICATION AND DATE OF HEARING

NOVEMBER 1, 1955.

Take notice that Delta Gulf Drilling Company (Applicant), a Delaware corporation, with principal office in Tyler, Texas, filed on September 2, 1955, an application for a certificate of public convenience and necessity pursuant to section 7 of the Natural Gas Act, authorizing Applicant to render service as hereinafter described, subject to the jurisdiction of the Commission, all as more fully represented in the application which is on file with the Commission and open for public inspection.

Applicant proposes to sell natural gas to Trunkline Gas Company which it will produce from acreage controlled by Applicant from the Charles G. Hooks Lease, located in Batson Dome Field, Hardin County, Texas, at the average daily delivery rate of 1000 Mcf for the term of the life of the wells on said acreage, at the price of 8.6102 cents per Mcf.

This matter is one that should be disposed of as promptly as possible under the applicable rules and regulations and to that end:

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Power Commission by sections 7 and 15 of the Natural Gas Act, and the Commission's rules of practice and procedure, a hearing will be held on December 12, 1955, at 9:30 a. m., e. s. t., in a Hearing Room of the Federal Power Commission, 441 G Street NW., Washington, D. C., concerning the matters involved in and the issues presented by such application: *Provided, however,* That the Commission may, after a noncontested hearing, dispose of the proceedings pursuant to the provisions of section 1.30 (c) (1) or (c) (2) of the Commission's rules of practice and procedure. Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for the Applicant to appear or be represented at the hearing.

Protests or petitions to intervene may be filed with the Federal Power Commis-