U.S. Department
of Transportation

Federal Aviation Administration

TECHNICAL STANDARD ORDER

TSO-C22f, SAFETY BELTS

Safety Belts—TSO–C22f.

(a) *Applicability*—(1) *Minimum performance standards.* This technical standard order prescribes the minimum performance standards that safety belts must meet in order to be identified with the applicable TSO marking. New models of safety belts that are to be so identified and that are manufactured on or after May 1, 1972, must meet the standards set forth in National Aircraft Standards (NAS) Specification 802 revised May 15, 1950, with the exceptions covered in subparagraph (2) of this paragraph. NAS 801 is incorporated by reference herein in accordance with 5 U.S.C. 552(a)(1) and § 37.23 and is available as indicated in § 37.23. Additionally, NAS 802 may be examined at any FAA regional office of the Chief, Engineering and Manufacturing Branch, (or in the case of the Western Region, the Chief, Aircraft Engineering Division) and may be obtained from the National Standards Association, 1321 14th Street, N.W., Washington, D.C. 20005, at a cost of three (3) dollars. Belts approved under prior issuances of this section may continue to be manufactured under the earlier provisions.

(2) *Exceptions.* (i) For the purpose of this section the strengths specified in section 4.1.1 of NAS 802 shall be 1,500 pounds and 3,000 pounds instead of 3,000 pounds and 6,000 pounds.

(ii) In complying with section 4.3.2.2 of NAS 802, the curved portion of the test form may be padded with no more than one inch of medium density sponge rubber, or equivalent, and covered with suitable fabric to simulate a person's body and clothing.

(iii) Synthetic material webbing which is not subject to loss of strength due to the influence of humidity, temperature variations, etc., need not be subjected to the first six-month retesting period specified in section 3.1.2 of NAS 802. Retesting at succeeding six-month periods will be necessary if the belt manufacturer is unable to ascertain by means of textile data available to him that the webbing is unaffected by ambient storage conditions for the period of time involved.

(iv) In complying with section 4.1.3 of NAS 802, the two-inch webbing width shall be considered a nominal width. Thus, after considering all manufacturing processes as are necessary such as weaving, dyeing, mildew proofing, flame resistance and abrasion treatments, a webbing width of $1\frac{15}{16}$ inches $\pm\frac{1}{16}$ inch shall be acceptable.

(v) The slots or openings in the hardware for attachment of the safety belt webbing shall not be less than two inches.

(vi) In lieu of compliance with paragraphs 1.1.1, 3.1.4, and 4.3.1.1 of NAS 802, the webbing and all other materials used in the belt assembly must comply with the fire protection provisions of § 25.853(b–2) of this chapter.

(b) *Marking.*—(1) Each half of each safety belt shall be marked in accordance with § 37.7 except that the weight required by paragraph (d)(3) of § 37.7 need not be shown and the rated strength of the safety belt assembly shall be shown, and

(2) In lieu of the marking requirement in paragraph (d)(4) of § 37.7 the date of manufacture is required. The serial number may also be marked on the belt but not in lieu of the date of manufacture.

(c) *Data requirements.* (1) The manufacturer shall maintain a current file on complete design data.

(2) The manufacturer shall maintain a current file of complete data describing the inspection and test procedures applicable to his product. (See paragraph (d) of this section.)

(3) One copy of the following shall be furnished to the Chief, Engineering and Manufacturing Branch, Flight Standards Division, Federal Aviation Administration, in the region in which the manufacturer is located: A drawing of the complete belt assembly showing the manufacturer's part numbers together with a notation indicating the minimum webbing strength specified by the belt manufacturer. If the test belts were tested to destruction, the average strength of the belt assembly should also be indicated.

(d) *Quality control.* Each safety belt shall be produced under a quality control system, established by the manufacturer, which will assure that each belt is in conformity with the requirements of this standard. This system shall be described in the data required under paragraph (c)(2) of this section. The Administrator shall be permitted to make such inspections and tests at the manufacturer's facility as may be necessary to determine compliance with the requirements of this standard.