

## Title 14—AERONAUTICS AND SPACE

### Chapter I—Federal Aviation Administration, Department of Transportation

[Docket No. 10036; Amdt. 37-24]

#### PART 37—TECHNICAL STANDARD ORDER AUTHORIZATIONS

##### Cargo Pallets, Nets, and Containers

The purpose of this amendment is to establish minimum performance standards that cargo pallets, nets, and containers must meet in order for a manufacturer to identify them with the applicable Technical Standard Order (TSO) designation. This action was published as a notice of proposed rule making (35 F.R. 15, Jan. 1, 1970), and circulated as Notice 69-56.

Under the present Federal Aviation Regulations cargo pallets, nets, and containers must be approved under the aircraft type certificate or by a supplemental type certificate. In Notice 69-56 the FAA noted the rapid growth in the air-cargo industry and the corresponding increase in the development of cargo loading devices, and proposed to establish minimum performance standards for the manufacture of cargo pallets, nets, and containers under the Technical Standard Order system. The notice proposed to incorporate by reference in the TSO the performance standards set forth in National Aerospace Standard, NAS 3610, approved October 1969, except Sheets 59 through 93.

A number of comments were received in response to the notice. These generally favored the proposed action, although a number of changes were recommended. The comments, together with the changes to the proposal resulting therefrom, are discussed below.

Several comments noted that sheets 59 through 93, inclusive, of NAS 3610 were not incorporated by reference in the proposed TSO and stated that these sheets are needed to define the restraint systems for which the unit load device must be designed and structurally tested or analyzed. The FAA agrees and the rule as adopted contains a reference to those sheets.

One comment misinterpreted NAS 3610 in its statement that overthrow straps were identified by the symbol "N" and that they should be identified by the symbol "S" to distinguish them from the nets indicated in the configuration drawings. Separate identification of overthrow straps was intentionally omit-

ted from NAS 3610. They are used in combination with a Type II net or container for use in a Class I system and are not considered separately under the single NAS 3610 classification identifier.

With reference to the loads specified for Class II devices in Table XIV, one comment recommended increasing the loads to a level equal to the highest load level to be encountered in any of the emerging aircraft in order to improve pallet interchangeability. The FAA does not agree with this recommendation. The increased loads were considered during the development of NAS 3610 and were rejected because they would result in the derating of existing devices used in present aircraft.

Two commentators recommended that the number of net receptacles on pallet configurations 1A3 and 1B3, Sheets 24 and 33, of NAS 3610 be doubled. The recommended change has not been made since doubling the number of net receptacles for these pallet configurations could result in improper installation of nets and overthrow straps and the misalignment and misengagement of the stirrup fittings with the restraint system locks.

Several comments noted a few dimensional errors in the configuration drawings in NAS 3610 and also questioned the correctness of the directional arrows on several of the drawings. NAS 3610 has been revised to correct these errors and the directional arrows have been removed to avoid any misunderstanding. Accordingly, the proposal has been changed to reference NAS 3610, Revision 1, approved April 30, 1970. In this connection, one commentator recommended that NAS 3610 be incorporated into the TSO without limiting it to a particular issue in order that any changes in the NAS standard would automatically become the TSO standard. The FAA does not agree. The FAA has adopted the performance standards set forth in NAS 3610, Revision 1 for incorporation by reference into the proposed TSO. If the FAA determines that the TSO standards should be amended because of a subsequent revision to NAS 3610, the rule-making procedures set forth in Part 11 of the Federal Aviation Regulations should be followed in making the amendment.

The recommendations of several commentators that the proposed TSO include additional cargo loading devices and the recommendation of one commentator that an additional loading system be added in Table XIV are beyond the scope of the notice. However, the comments will be considered in connec-

tion with future rulemaking action.

The proposed TSO standards require the article to comply with the fire protection requirements of § 25.853. It has subsequently been determined that aircraft loading masters may need to know the burning rate of the article in order to determine compatibility with the aircraft, and a marking requirement has been added to paragraph (b) to require that the burning rate be specified.

Finally, the data requirement in proposed paragraph (c)(3) has been changed to specify "An assembly drawing" in order to more clearly indicate the type of drawing that must be submitted.

Interested persons have been afforded the opportunity to participate in the making of this amendment and all relevant material submitted has been fully considered.

In consideration of the foregoing, Part 37 of the Federal Aviation Regulations is amended effective October 18, 1970, by adding a new § 37.199 to read as follows:

§ 37.199 Cargo pallets, nets, and containers, TSO-C90.

(a) *Applicability*—(1) *Minimum performance standards*. This Technical Standard Order prescribes the minimum performance standards that aircraft cargo pallets, nets, and containers must meet in order to be identified with the applicable TSO marking. New models of such equipment which are so identified that are manufactured on or after October 18, 1970, must meet the minimum performance standards for cargo pallets, nets, and containers as set forth in National Aerospace Standard, NAS 3610, Revision 1, approved April 30, 1970. National Aerospace Standard, NAS 3610, Revision 1, approved April 30, 1970, entitled "Cargo Unit Load Devices—Specification for" 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, National Aerospace Standard, NAS 3610 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 National Standards Association, Inc., 1321 14th Street NW., Washington, D.C. 20005 at a cost of eight (8) dollars.

(2) *Exceptions*. Paragraph 3.5 of NAS 3610 is not essential to compliance with this section since paragraph (b) of this TSO provides the necessary marking requirements.

(b) *Markings*. In lieu of the marking requirements of § 37.7(d), cargo pallets,

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nets, and containers must be legibly and permanently marked in an area clearly visible after the article is loaded with cargo, with the following information:

(1) Name and address of the manufacturer.

(2) The weight of the article to the nearest pound.

(3) The serial number or date of manufacture or both.

(4) The identification of the article in the code system set out in paragraph 1.2.1 of NAS 3610, Revision 1, approved April 30, 1970.

(5) Any limitations or restrictions.

(6) If the article is not omnidirectional, the words "Forward", "Aft", and "Side" must be conspicuously and appropriately placed.

(7) The burning rate determined for the article under paragraph 3.7 of NAS 3610, Revision 1, approved April 30, 1970.

(8) The applicable TSO number.

(c) *Data requirements.* In addition to the data specified in § 37.5, the manufacturer must furnish to the Chief, Engineering and Manufacturing Branch, Flight Standards Division, Federal Aviation Administration, in the region in which the manufacturer is located (or in the case of the Western Region, the Chief, Aircraft Engineering Division),

the following technical data:

(1) One copy of the manufacturer's analysis and/or test results showing compliance with the requirements of this TSO.

(2) One copy of the manufacturer's instructions for installation, operation, servicing, maintenance, and repair of the article.

(3) An assembly drawing of the article showing and describing the actual language of all markings, their location, and size of print.

(d) *Previously approved equipment.* Cargo pallets, nets, and containers approved prior to October 18, 1970, may continue to be manufactured under the provisions of their original approval.

(Secs. 313(a), 601, Federal Aviation Act of 1958, 49 U.S.C. 1354(a), 1421; sec. 6(c), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Washington, D.C., on September 11, 1970.

R. S. SLIFF,  
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NOTE: The incorporation by reference in this document was approved by the Director of the Federal Register on April 16, 1969.