



# Technical Standard Order

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**Subject: TSO-C23d, PERSONNEL PARACHUTE ASSEMBLIES**

a. Applicability.

(1) Minimum Performance Standards. This technical standard order (TSO) prescribes the minimum performance standard that personnel parachute assemblies must meet in order to be identified with the applicable TSO marking. New models of personnel parachute assemblies that are to be so identified and that are manufactured on or after the date of this TSO must meet the standards set forth in Society of Automotive Engineers, Inc. (SAE) Aerospace Standard (AS) Document No. AS 8015B, "Minimum Performance Standards for Parachute Assemblies and Components, Personnel," dated July 7, 1992.

b. Marking. Each personnel parachute assembly or separate sub-assembly must be marked in accordance with 14 CFR part 21, section 21.607(d) and paragraph 4.2 of SAE AS 8015B. This marking requirement applies to any previously approved major component/sub-assembly used in this TSO.

c. Data Requirements.

(1) In addition to the requirement in part 21, section 21.605, the manufacturer shall furnish the manager of the Aircraft Certification Office (ACO), FAA having geographical purview of the manufacturer's facilities, one copy each of the following technical data:

(i) A complete description of the personnel parachute assemblies, including detail drawings, material identification and specifications.

(ii) Operating instructions and limitations, to include donning, retention, adjustment, and deployment.

(iii) Installation instructions and limitations.

(iv) A report of the tests conducted in accordance with SAE AS 8015B for qualification and approval of personnel parachute assemblies.

(v) Detailed maintenance instructions, including specific guidance on the limits of wear and damage permissible to webbing material that would warrant replacement.

(vi) The quality control inspection and functional test specification to be used to ensure each production article complies with this TSO, as required by part 21, section 21.605(a)(3) and part 21, section 21.143(a)(3).

(2) The manufacturer must furnish to the user of the article one copy of the data and information specified in paragraphs c(l)(ii) and c(l)(v). This data and information is necessary for proper installation and use and for continued airworthiness of the product or article.

“The conditions and test required for TSO approval of this article are minimum performance standards. It is the responsibility of those desiring to install the article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards. The article may be installed only if further evaluation by the applicant (user/installer) documents an acceptable installation and is approved by the Administrator.”

d. Availability of Referenced Documents.

(1) Copies of SAE AS 8015B may be purchased from the Society of Automotive Engineers, Inc., Department 331, 400 Commonwealth Drive, Warrendale, PA 15096.

(2) Federal Aviation Regulations, part 21, subpart O, may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325.

(3) Advisory Circular 20- 110, “Index of Aviation Technical Standard Orders,” may be obtained from the U.S. Department of Transportation, General Services Section, M-443.2, Washington, DC 20590.

/S/ John K. McGrath  
Manager, Aircraft Engineering Division  
Aircraft Certification Service