



Technical Standard Order

**Subject: TSO-C55, FUEL AND OIL QUANTITY INSTRUMENTS
(RECIPROCATING ENGINE AIRCRAFT)**

Technical Standard Orders for Aircraft Materials,
Parts, Processes, and Appliances

Part 514 contains minimum performance standards and specifications of materials, parts, processes, and appliances used in aircraft and implements the provisions of sections 3.18, 4a.31, 4b.18, 6.18 and 7.18 of the Civil Air Regulations. The regulation uses the Technical Standard Order system which, in brief, provides for FAA-industry cooperation in the development of performance standards and specifications, which are adopted by the Administrator as Technical Standard Orders, and a form of self-regulation by industry in demonstrating compliance with these orders.

Part 514 consists of two subparts. Subpart A contains the general requirements applicable to all Technical Standard Orders. These provisions are summarized below for the convenient reference of the public. Subpart B contains the technical standards and specifications to which a particular product must conform, and each Technical Standard Order is set forth in the appropriate section of Subpart B. The subject Technical Standard Order is printed below. ANY TECHNICAL STANDARD ORDER MAY BE OBTAINED BY SENDING A REQUEST TO FAA, WASHINGTON 25, D.C.

SUBPART A--GENERAL

This subpart provides, in part, that a manufacturer of an aircraft material, part, process, or appliance for which standards are established in Subpart B, prior to its distribution for use on a civil aircraft of the United States, shall furnish a written statement of conformance certifying that the material, part, process, or appliance meets the applicable performance standards established in this part. The statement of conformance must be signed by a person duly authorized by the manufacturer, and furnished to the Chief, Engineering and

Manufacturing Division, Bureau of Flight Standards, Federal Aviation Agency, Washington 25, D. C.

Subpart A also requires appropriate marking of materials, parts, processes, and appliances as follows:

- (a) Name and address of the manufacturer responsible for compliance,
- (b) Equipment name, or type or model designation,
- (c) Weight to the nearest pound and fraction thereof,

(d) Serial number and/or date of manufacture, and

(e) Applicable Technical Standard Order (TSO) number.

In addition, Subpart A provides that no deviation will be granted from the

performance standards established in Subpart B, and that the Administrator may take appropriate action in the event of noncompliance with Part 514.

SUBPART B

§ 514.54 Fuel and oil quantity instruments (for reciprocating engine aircraft) - TSO-C55 -- (a) Applicability -- (1) Minimum performance standards. Minimum performance standards are hereby established for fuel and oil quantity instruments (for reciprocating engine aircraft) which specifically are required to be approved for use on civil aircraft of the United States. New models of fuel and oil quantity instruments (for reciprocating engine aircraft) manufactured for installation on civil aircraft on or after April 1, 1959, shall meet the standards as set forth in SAE Aeronautical Standard AS-405B, "Fuel and Oil Quantity Instruments," dated July 15, 1958,^{1/} with the exceptions listed in subparagraph (2) of this paragraph. Fuel and oil quantity instruments (for reciprocating engine aircraft) approved by the Administrator prior to April 1, 1959, may continue to be manufactured under the provisions of their original approval.

(2) Exceptions. (i) Conformance with the following sections is not required: 3.1; 3.1.1; 3.1.2; 3.2; 4.2.1.

(ii) Substitute the following for section 7.: "Performance tests: The following tests, in addition to any others deemed necessary by the manufacturer, shall be the basis for determining compliance with the performance requirements of this standard."

(b) Marking. In lieu of the weight specified in paragraph (c) of §514.3, the following shall be shown:

- (1) Instrument type (I or II),
- (2) Range,
- (3) Rating if applicable, i. e., electrical, vacuum, etc.

(c) Data requirements. One copy each of the manufacturer's operating instructions, schematic diagrams, and installation procedures shall be furnished the Chief, Engineering and Manufacturing Division, Federal Aviation Agency, Washington 25, D. C., with the statement of conformance.

(d) Effective date. April 1, 1959.

^{1/} Copies may be obtained from the Society of Automotive Engineers, Inc., 485 Lexington Ave., New York 17, New York.