

RCAF INSPECTION OF AIRCRAFT TUBES

GENERAL

1 This EO defines the conditions under which aircraft tubes, manufactured to Specification MIL-T-5014B, can be accepted by the RCAF, when the tubes do not meet the complete requirements of the Specification. Tubes with defects which do not come within the scope of the conditions detailed below are to be held for disposition by the Materials Review Board. Should doubt or differences of opinion exist as to the applicability of the terms of this order to planned or completed repairs, the affected tubes are to be held for Materials Review Board action. The RCAF member shall rule on the interpretation of such terms as "localized" used in this Order.

TUBES ACCEPTABLE AT THE DISCRETION OF AN APPROVED CONTRACTOR'S AUTHORIZED INSPECTOR

2 Buffed tubes are acceptable without restriction regarding the size of the buffed area provided that:

(a) The wall thickness, after such buffing, is greater than or equal to the minimum thickness tabulated in the Specification.

(b) Branding specified in the Specification is complete.

3 Tubes, from which branding has been removed by buffing, are acceptable provided that the tube is rebranded by a hot plate method or by ink stamping.

4 Tubes with localized thin spots are acceptable, provided that the thickness is not less than:

(a) Crown area - 65% of the minimum thickness specified in MIL-T-5014.

(b) Base area - 80% of the minimum thickness specified in MIL-T-5014.

TUBES ACCEPTABLE FOR REWORK ON AUTHORITY OF APPROVED CONTRACTOR'S AUTHORIZED INSPECTOR

5 Tubes with deep surface blemishes or blisters are acceptable provided that:

(a) The blemishes are removed by buffing and the remaining wall thickness is equal to or greater than the minimum limits shown in para. 4, and the buffed area can be considered localized.

(b) The blemished area is repaired by the re-inforcing hot plate type repair. The area of the completed repair is not to be greater than 1 1/2" by 1/2". One such repair per tube is permissible except that where no individual repair is more than 1/2" in the longest dimension, three such repairs per tube may be permitted.

6 Tubes with cracked splices are acceptable provided they are:

(a) Buffed, and the remaining wall thickness is equal to or greater than the minimum thickness required by para. 4 above.

(b) Repaired by re-inforcing. The repair may extend completely around the tube section provided that the width of the finished repair does not exceed 1/2"

7 Tubes requiring valve repairs are acceptable provided that:

(a) Damaged or defective valves are replaced.

(b) Loose valve bases are repaired or replaced.

(c) Cracks around the valve base are:

(1) Removed by buffing, provided that the remaining wall thickness is equal to or greater than the minimum thickness required by para. 4 above.

(2) Repaired by reinforcing provided that the finished repair does not exceed 1/4" in width.

8 Tubes requiring repairs through the wall are acceptable provided that the finished repair is not larger than 1/2" x 1 1/2". Only one such repair is to be permitted per tube; however where no individual finished repair is more than 1/2" in the longest dimension, three such repairs may be made.

ACCEPTABLE COMBINATIONS OF REPAIRS

9 Any one of the following combinations of repairs is acceptable:

(a) Any valve repair in para. 7 AND a splice repair in para. 6.

(b) Any valve repair in para. 7 OR a splice repair in para. 6, AND one finished repair not larger than 1/2" x 1 1/2".

(c) Any valve repair in para. 7 OR a splice repair in para. 6 AND a maximum of three finished repairs, none of which is more than 1/2" in the longest dimension.

IDENTIFICATION OF REWORKED ITEMS

10 Tubes reworked in accordance with the conditions of this EO are to be identified by stamping adjacent to each repair. The stamp is to bear the identification "EO 120-110-4", enclosed in a border approximately 1/2" x 1 1/2". This stamp may be used by the contractor's authorized inspectors only.

NOTE

Stamps already in use bearing the identification "QCM 14/53" may be used until unserviceable, however the proper stamp is to be obtained as soon as practicable.

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF