# Instructions for Continued Airworthiness 3M<sup>™</sup> Corrosion Prevention Sealing Tape 9143FR

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## **1.0 INTRODUCTION**

#### 1.1 PURPOSE

The purpose of these Instructions for Continued Airworthiness (ICA) is to provide the owner/operators with the information necessary to ensure proper installation and maintenance of 3M's 9143FR, Corrosion Prevention Sealing Tape. These instructions serve as the principal manual for installation and maintenance of 9143FR but must be used in conjunction with 3M document number Record-06-953478, *3M Corrosion and Prevention Sealing Tape 9143FR, Installation, Maintenance and Removal Instructions* (Section 1.9.2).

These Instructions for Continued Airworthiness have been authored in compliance with FAA Regulations and Orders for their preparation (Section 1.9.1).

#### NOTE

These Instructions for Continued Airworthiness must be placed in the aircraft operator's maintenance manual and incorporated into the operator's scheduled maintenance program.

#### 1.2 INSTALLATION DESCRIPTION

Aircraft passenger and cargo compartment floor panel metallic support structures, crease beams and door thresholds [hereinafter collectively referred to as structure(s)] are susceptible to corrosion with repeated exposure to various fluids, particularly around doors, galleys, lavatories, and in cargo compartments. Severe corrosion can result in these structures requiring replacement during heavy check maintenance operations. 3M<sup>™</sup> Corrosion Prevention Sealing Tape 9143FR is used to seal the structure surfaces, protecting the integrity of their corrosion inhibiting coatings. 9143FR is applied and adheres directly to the upper surfaces of the floor panel support structures, crease beams and door thresholds. The floor panels are installed on top of the 9143FR; their attachment fasteners puncture through the 9143FR tape for reinstallation [see Figure 1.2.1].

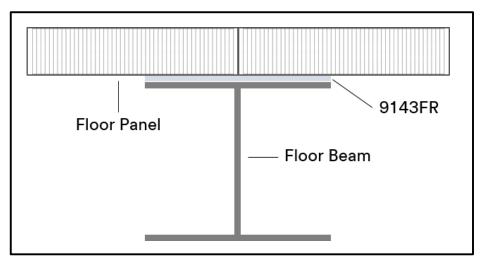


Figure 1.2.1 3M™ Corrosion Prevention Sealing Tape 9143FR and Typical Aircraft Floor Panel Support Structure

### 1.3 PROGRAM FOR THE DISTRIBUTION OF CHANGES TO THESE INSTRUCTIONS

Significant changes to these ICA are envisioned only in the event of a change to the components that comprise the sealing tape which results in modification of any of the guidance in this document. In the case of significant changes, the latest version of these instructions will be distributed directly to the aircraft owner/operator in hard copy and/or electronic format upon completion of the changes. For minor typographical or grammatical changes where no functional or operational characteristics are affected, no notice of change will be made. If the change is of a more severe nature and is considered critical to flight safety or system operation, the FAA will be notified in accordance with 14 CFR 21.3, *Reporting of Failures, Malfunctions and Defects*. Upon determination by the FAA, an Airworthiness Directive may be issued describing the nature of the change, including instructions regarding document updates and any additional service requirements.

#### 1.4 APPLICABILITY

These Instructions for Continued Airworthiness are applicable to those aircraft makes and models listed on the FAA Approved PMA Supplement(s) for 9143FR.

#### 1.5 DEFINITIONS

Airworthiness Directive – Airworthiness Directives are legally enforceable rules issued by the FAA in accordance with 14 CFR 39 to correct an unsafe condition in a product. 14 CFR 39 defines a product as an aircraft, aircraft engine, propeller, or appliance.

Parts Manufacturer Approval (PMA) – A Parts Manufacturer Approval is a combined design and production approval for modification and replacement articles. It allows a manufacturer to produce and sell these articles for installation on type certificated products.

#### 1.6 ABBREVIATIONS

CFR – United States Code of Federal Regulations

FAA – United States Federal Aviation Administration

ICA - Instructions for Continued Airworthiness

PLM – Product Lifecycle Management

PMA – Parts Manufacturer Approval

#### 1.7 WARNINGS, CAUTIONS AND NOTES

Warnings, cautions, and notes may be used throughout this manual to emphasize important and critical instructions as follows:

WARNING

#### AN OPERATING PROCEDURE, PRACTICE, ETC., WHICH, IF NOT CORRECTLY FOLLOWED, COULD RESULT IN PERSONAL INJURY OR LOSS OF LIFE

CAUTION

AN OPERATING, PROCEDURE, PRACTICE, ETC. WHICH, IF NOT STRICTLY OBSERVED, COULD RESULT IN DAMAGE TO, OR DESTRUCTION OF EQUIPMENT

NOTE

An operating procedure, condition, etc., which is essential to highlight

#### 1.8 UNITS OF MEASUREMENT

United States customary units of measurements are utilized in this and referenced documents. Equivalent metric units of length are in enclosed in parentheses where important.

#### 1.9 REFERENCES

#### 1.9.1 Federal Aviation Administration

14 CFR 21.3	Reporting of Failures, Malfunctions and Defects
14 CFR 21.41	Type Certificates
14 CFR 21.50	Instructions for Continued Airworthiness and Manufacturer's Maintenance Manuals Having Airworthiness Limitations Sections
14 CFR 23.1529	Instructions for Continued Airworthiness
14 CFR 25.1529	Instructions for Continued Airworthiness
14 CFR 23 Appendix A	Instructions for Continued Airworthiness
14 CFR 25 Appendix H	Instructions for Continued Airworthiness
14 CFR 39	Airworthiness Directives
Order 8110.54	Instructions for Continued Airworthiness Responsibilities, Requirements and Contents

#### 1.9.2 3M Company

Record-06-953478 3M<sup>™</sup> Corrosion Prevention Sealing Tape 9143FR, Installation, Maintenance, and Removal Instructions

#### 1.10 CONTROL AND OPERATION INFORMATION

**NOT APPLICABLE** – This section is not applicable as 9143FR in no way directly, or indirectly, contributes to the control or operation of the aircraft models upon which it is installed.

#### 1.11 SERVICING INFORMATION

**NOT APPLICABLE** – This section is not applicable as 9143FR installed upon the aircraft does not require servicing to maintain its continued airworthiness.

#### 2.0 MAINTENANCE INSTRUCTIONS

#### 2.1 SCHEDULING INFORMATION

9143FR does not require periodic inspection, cleaning, adjustment, test, etc. to maintain its continued airworthiness. Replacement may occur as determined necessary during ordinary aircraft maintenance activities.

#### 2.2 RECOMMENDED OVERHAUL PERIODS

As with any product, environmental factors, age and use affect the materials and performance of 9143FR. Typically, the manufacturer recommends replacing 9143FR at approximately 6 (six) year intervals. Use in harsh environments may necessitate more frequent replacement.

This replacement interval, however, is optional, at the owner/operator's discretion, and is in no way mandatory to achieve the continued operational safety of the aircraft.

#### 2.3 INSPECTION PROGRAM

NOT APPLICABLE – This section is not applicable as 9143FR does not require a periodic inspection to maintain its continued airworthiness.

#### 2.4 TROUBLESHOOTING

Damaged part criteria for 9143FR are presented in 3M document number Record-06-953478, Section 5.0.

#### 2.5 ORDER AND METHOD FOR REMOVAL AND REPLACEMENT

Part removal and part replacement is accomplished in accordance with 3M document Record-06-953478, Sections 7.0 and 8.0, respectively.

#### 2.6 SYSTEMS TESTING

No systems testing is required to ensure the continued airworthiness of 9143FR.

#### 2.7 WEIGHING AND DETERMING CENTER OF GRAVITY

Installation of 9143FR does not measurably affect the weight nor center of gravity of the aircraft within which it is installed.

#### 2.8 PARTS AND CONFIGURATION CONTROL

All owner/operators who purchase 9143FR for installation aboard an aircraft receive an electronic copy, or hard copy if desired, of the Installation, Maintenance and Removal Instructions, (Section 1.9.2). This document is utilized by owner/operators to identify the proper location(s) of 9143FR within an aircraft, to correctly identify damage types and actions, to order additional materials from 3M, etc. 3M manages these documents using its Product Lifecycle Management (PLM) configuration management system. Significant changes to this document will be distributed to all owner/operators in accordance with Section 1.3.

### 3.0 ACCESS

9143FR is installed on aircraft floor panel metallic support structures, crease beams and door thresholds (Figure 1.2.1). It can be accessed by removal of the floor panel(s).

### 4.0 SPECIAL INSPECTION TECHNIQUES

NOT APPLICABLE – 9143FR does not require any special inspection techniques to determine suitability for continued use or replacement.

### 5.0 PROTECTIVE TREATMENTS

NOT APPLICABLE – 9143FR does not require any protective treatments to be applied within an aircraft for its installation, maintenance, removal, or replacement.

### 6.0 FASTENERS

NOT APPLICABLE – 9143FR does not require the use of fasteners to retain the tape.

# 7.0 SPECIAL TOOLS

A "3M Aerospace Yellow Squeegee" is recommended to facilitate installation of 9143FR as described in 3M document Record-06-953478, Section 14.0.

## **8.0 SYSTEMS WIRING DIAGRAMS**

NOT APPLICABLE - system schematics and wiring diagrams are not applicable for the installation of 9143FR within an aircraft.

# 9.0 AIRWORTHINESS LIMITATIONS

# "The Airworthiness Limitations section is FAA-approved and specifies maintenance required under Sec. 43.16 and 91.403 of the Federal Aviation Regulations, unless an alternative program has been FAA approved."

No airworthiness limitations are imposed on an aircraft because of the installation of 9143FR.

Further, the repair or alteration of any aircraft using 9143FR and the procedures described in this, and associated documents, does not constitute an Airworthiness Authority installation approval which is the responsibility of the aircraft owner/operator to obtain prior to an aircraft's return to service.

FAA Approved:



Date: 2024.06.18 09:39:17 -05'00' For Paul Nguyen

Manager – Central Certification Branch (AIR-760) Compliance and Airworthiness Division Federal Aviation Administration

#### MANUFACTURER CONTACT INFORMATION 10.0

Aircraft owner/operators may contact the manufacturer at:



**3M Company 3M Corporate Headquarters 3M** Center St. Paul, MN 55144-1000

**3M Aerospace Customer Service** 1-800-235-2376 Call Monday - Friday 8AM to 5PM Central Time

Website: www.3M.com/Aerospace

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# 11.0 REVISION HISTORY

Page No.	Version	Description of Revision
All	1	Initial Issue