# TECHNISONIC INDUSTRIES LIMITED

TDFM-600/6000 Series VHF/UHF Low/UHF High/800 MHZ Multi-band Transceiver System

# INSTRUCTIONS for CONTINUED AIRWORTHINESS

# MMS02090-1

Mfg: See Aircraft Applicability

Chapter 1.0, Section C.

Type: See Aircraft Applicability

Chapter 1.0, Section C.

Serial No.:

Registration:

Prepared by: Avionics Design Services

Approved by:

Robert Gow

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DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH

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#### **CHAPTER 1.0 - INTRODUCTION**

# A. General

The Technisonic Industries Limited TDFM-600/6000 Series VHF/UHF Low/UHF High/800 MHZ Multi-band Transceiver installation is defined by Department of Transport Supplemental Type Certificate SH97-10 and FAA Supplemental Type Certificate SR00811NY. The following equipment is installed:

- # TDFM-600/6000 Series VHF/UHF Low/UHF High/800 MHZ Multi-band Transceiver;
- # RC-6000 Remote Control Head (optional); installed in the instrument panel;
- # AMS-6000 Audio Mode Selector (optional); installed in the instrument panel;
- # VHF / UHF HI / UHF LO / 800 Antennas (as required);

The inspection and maintenance practices described herein relate to the TDFM-600/6000 Series Multi-band Transceiver system as described above.

# B. ICA Distribution

This document, and any revisions thereto, shall be distributed to authorized users of the applicable STC data.

# C. Aircraft Applicability

The TDFM-600/6000 Series Multi-band Transceiver system installation is applicable to the following rotorcraft:

MAKE	MODELS
Agusta	A109A, A109A II
Bell Helicopter Textron	204B, 205A-1
Bell Helicopter Textron	214, 214B-1
Bell Helicopter Textron	212, 412
Bell Helicopter Textron	222, 222B/U, 230, 430
Bell Helicopter Textron	206A, A-1, B, L, L-1, L-3, L-4, 407
Boeing Defense & Space Group	234
Enstrom	480
Eurocopter	EC 120 B
Eurocopter Canada	BO105 LS A-3
Eurocopter Deutschland	BO105 C, BO105 S
Eurocopter Deutschland	BK117 A1 (D), A-3 (D), A-4 (D), BK117 B-1 (D), B-2 (D)
Eurocopter France	SA341 G
Eurocopter France	SA315 B, SA316 B/C, SA319 B, SE3160
Eurocopter France	SA3180, SA318 B/C, SE3130, SE313 B
Eurocopter France	AS332 C/L, SA330 F/G/J

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MAKE	MODELS
Eurocopter France	SA360 C
Eurocopter France	AS350 B, B1, B2, B3, BA, C, D, D1
Eurocopter France	SA365 C, C1, N
Eurocopter France	AS355 E, F, F1, F2
Kaman Aerospace	K1200
McDonnell Douglas Helicopter	500N, 600N, 369, 369A, 369H, 369HM, 369HS, 369HE, 369D, 369E, 369F, 369FF
Robinson	R44
Sikorsky	S-61L, N
Sikorsky	S-76A, C

# D. Supplement Identities: Chapter, Page, Paragraph Numbers

The supplement format follows the general requirements of Specification ATA-100 with respect to Chapter and Title. However, since the extent of the supplemental information is relatively small in scope, the page numbering for each chapter is consecutive. Reference can be made to the following Chapter/Subject Listing:

Subject	Page Number
Title page	0
Table of Contents, Index, Page Listing	i, ii, iii, etc.
Content page(s)	1, 2, 3, etc.

Paragraph or component titles are listed via A. B. C. D. etc.

Sub-paragraphs are listed according to:

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1-00-00 Page 2 Technisonic Industries Ltd. 240 Traders Blvd. E Mississauga, ON L4Z 1W7 SUPPLEMENT No. MMS02090-1 Revision A

# **CHAPTER 4.0 - AIRWORTHINESS LIMITATIONS**

# A. General

No airworthiness limitations associated with this type design change.

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## SUPPLEMENT No. MMS02090-1 Revision A

# CHAPTER 5.0 - TIME LIMITS/MAINTENANCE CHECKS 5-20-00: SCHEDULED CHECKS

# A. General

There are no required scheduled maintenance checks for the components of the TDFM-600/6000 Series Multi-band Transceiver system installation. Their primary maintenance process is CONDITION-MONITORING.

# B. Component Overhaul Schedule

No component overhaul required for this type design change.

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# CHAPTER 23.0 - COMMUNICATIONS 23-10-00: TDFM-600/6000 TRANSCEIVERS

## 1.0 <u>Description</u>

The TDFM-600/6000 series of transceivers are airborne multiband radios capable of conventional FM, P25, SmartNet and SMART ZONE trunking systems. The TDFM-600/6000 integrates two or three Motorola portable radio modules in a single unit. RF modules are available in VHF, UHFLO, UHFHI and 800 MHZ bands. The bands are numbered 1, 4, 5, and 8 respectively. An antenna is required for each of the bands.

The optional RC-6000 remote control head is a secondary control point for the TDFM-600/6000 series of transceivers.

The optional AMS-6000 is an audio mode selector box designed to work in conjunction with the TDFM-600/6000 series of transceivers. The AMS-6000 combines the audio and key lines from up to three separate RF Bands in a TDFM-6000 to operate as a single transceiver from one position on an audio controller.

#### 401. Removal / Installation

#### A. TDFM-600/6000 Transceivers

#### Removal

- a) Remove four Dzus fasteners from front of transceiver.
- b) Slide transceiver forward of the panel cutout.
- c) Disconnect electrical connector and antenna connector(s) from the rear of the transceiver.
- d) Remove transceiver from the panel cutout.

## **Installation**

- e) Connect electrical connector and antenna connector(s) to the rear of the transceiver.
- f) Slide transceiver into the panel cutout.
- g) Secure four Dzus fasteners on the front of transceiver.

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# B. Antenna(s)

## Removal

- a) Remove sealant around periphery of antenna.
- b) Remove fastening screws used to attach antenna to fuselage.
- c) Disconnect coaxial cable from antenna coax connector.

## **Installation**

- d) Connect coaxial cable to antenna coax connector.
- e) Secure fastening screws used to attach antenna to fuselage.
- f) Seal around periphery of antenna.

# C. RC-6000 Remote Control Head (optional)

#### Removal

- a) Unlock four Dzus fasteners from front of RC-6000.
- b) Slide RC-6000 forward of the panel cutout.
- c) Disconnect electrical connector from the rear of the RC-6000.
- d) Remove RC-6000 from the panel cutout.

## **Installation**

- e) Connect electrical connector to the rear of the RC-6000.
- f) Slide RC-6000 into the panel cutout.
- g) Secure four Dzus fasteners on the front of RC-6000.

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# D. AMS-6000 Audio Mode Selector (optional)

#### Removal

- a) Unlock two Dzus fasteners from front of AMS-6000.
- b) Slide AMS-6000 forward of the panel cutout.
- c) Disconnect electrical connector from the rear of the AMS-6000.
- d) Remove AMS-6000 from the panel cutout.

# **Installation**

- e) Connect electrical connector to the rear of the AMS-6000.
- f) Slide AMS-6000 into the panel cutout.
- g) Secure two Dzus fasteners on the front of AMS-6000.

#### 501. Adjustment / Test

#### A. TDFM-600/6000 Transceivers

Tests of the TDFM-600/6000 Transceivers are to be performed in accordance with the Technisonic Industries Limited Multiband P25 Airborne Transceiver Model TDFM-600/6000 Installation and Operating Instructions; TIL Document No. 01RE293, Rev. C, dated August 2002, or later approved revision, Section 3.17.

#### B. RC-6000 Remote Control Head (optional)

Tests of the RC-6000 are to be performed in accordance with the Technisonic Industries Limited Multiband P25 Airborne Transceiver Remote Control Model RC-6000 Installation and Operating Instructions; TIL Document No. 02RE299, Rev. A, dated November 2002, or later approved revision, Section 3.7.

# C. AMS-6000 Audio Mode Selector (optional)

Tests of the AMS-6000 are to be performed in accordance with the Technisonic Industries Limited Multiband P25 Airborne Transceiver Model TDFM-600/6000 Installation and Operating Instructions; TIL Document No. 01RE293, Rev. C, dated August 2002, or later approved revision, Section 3.17. Check each transmit and receive button for proper function. Confirm operation of the transmit and receive indicators. Test the REPEAT function to ensure there is no interference from or to other equipment in the aircraft.

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