
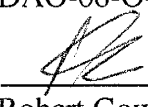


TECHNISONIC INDUSTRIES LIMITED	
A790 LOUD HAILER CONTROLLER	
INSTRUCTIONS for CONTINUED AIRWORTHINESS	
<u>ICA09101-1</u>	
<p>Mfg: Eurocopter</p> <p>Type: AS-350</p>	<p>Prepared by: Avionics Design Services</p> <p>Checked by:  Robert Gow, DE 101 DAO-06-O-01</p> <p>Released by:  Robert Gow, DE 101 DAO-06-O-01</p>

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N/C	Sept. 29, 2010	ALL	E. Muenz
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LOG OF PAGE REVISIONS

Chapter	Sub-Chapter	Page	Revision
Cover Page	-	-	A
Log of Page Revisions		i	A
Table of Contents		ii	A
1.0	1-00-00	1	A
		2	A
		3	A
4.0	4-00-00	1	A
5.0	5-20-00	1	A
	5-50-00	1	A
8.0	8-10-00	1	A
23.0	23-10-00	1	A
		2	A
		3	A
		4	A
APPENDIX A	-	APP-1	A

TABLE OF CONTENTS

CHAPTER 1.0 - INTRODUCTION	1
A. General	1
B. Reference Data	1
C. ICA Distribution	1
D. Definitions and Abbreviations	1
E. Supplement Identities:	2
CHAPTER 4.0 - AIRWORTHINESS LIMITATIONS	1
A. General	1
B. FAA Approval	1
CHAPTER 5.0 - TIME LIMITS/MAINTENANCE CHECKS	1
5-20-00: SCHEDULED CHECKS	1
A. General	1
B. Component Overhaul Schedule	1
5-50-00: UNSCHEDULED CHECKS	1
A. General	1
CHAPTER 8.0 - LEVELING - WEIGHING	1
8-10-00: WEIGHING and BALANCING	1
A. General	1
CHAPTER 23.0 - COMMUNICATIONS	1
23-10-00: A790 LOUD HAILER CONTROLLER	1
1.0 Description / Operation	1
101. Troubleshooting	1
201. Reserved	1
301. Servicing	2
401. Removal / Installation	2
501. Adjustment / Test	3
601. Inspection / Check	3
701. Cleaning / Painting	3
801. Approved Repairs	4
APPENDIX A	1

CHAPTER 1.0 - INTRODUCTION

A. General

The Technisonic Industries A790 Loud Hailer Controller installation is defined by Avionics Design Services Master Drawing List MDL09101. The following equipment is installed:

CHAPTER	MAKE	MODEL / UNIT	P/N	LOCATION
23-10-00	Technisonic	A790 Loud Hailer Controller	A790	Center Pedestal

B. Reference Data

- a) Access equipment in accordance with Eurocopter Description and Operation Manual AS 350, Chapter 06.
- b) Perform all maintenance procedures in accordance with Eurocopter Standard Practices Manual AS 350, Chapter 20.
- c) The following are reference documents required to supplement the information in this manual concerning the maintenance of the above components.

DOCUMENT	DOCUMENT NO.	TITLE
WIRING DIAGRAM	WD10046	TiL A790 INSTALLATION IN, AS 350
INSTALLATION INSTRUCTIONS	09RE410	A790 LOAD HAILER CONTROLLER

C. ICA Distribution

This document, and any revisions thereto, shall be distributed to authorized users of the applicable STC data. They will be distributed by courier, in electronic format or paper format.

D. Definitions and Abbreviations

ATA	Air Transport Association
FAA	Federal Aviation Administration
ICA	Instructions for Continued Airworthiness
PA	Public Address
STC	Supplemental Type Certificate

E. Supplement Identities: Chapter, Page, Paragraph Numbers

The supplement format follows the general requirements of Specification ATA-2200 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:

<u>Subject</u>	<u>Page Number</u>
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:

<u>Subject</u>	<u>Sub-Para. Number</u>
Description / Operation	1.0
Troubleshooting	101
(Reserved)	201
Servicing	301
Removal / Installation	401
Adjustment / Test	501
Inspection / Check	601
Cleaning / Painting	701
Approved Repairs	801

CHAPTER 4.0 - AIRWORTHINESS LIMITATIONS

A. General

No airworthiness limitations associated with this type design change.

B. FAA Approval

The following is for installations requiring FAA STC Approval:

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

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

A. General

Description	Inspection	Inspection Details
A790 Loud Hailer Controller	Type "T" - 500 hours OR Type "A" - 24 months Whichever occurs first.	Visually examine the surfaces for possible damage. Check for loose or damaged hardware. Make visual check of wiring and connectors for damage.

B. Component Overhaul Schedule

No component overhaul required for this type design change.

CHAPTER 5.0 - TIME LIMITS/MAINTENANCE CHECKS
5-50-00: UNSCHEDULED CHECKS

A. General

Hard Landing

Perform inspection, in accordance with Eurocopter AS 350 Maintenance Manual, Chapter 5-53-00 - Inspection Following An Incident, Card 05.53.00.605.

Aircraft Struck by Lightning

Perform inspection, in accordance with Eurocopter AS 350 Maintenance Manual, Chapter 5-53-00 - Inspection Following An Incident, Card 05.53.00.609.

CHAPTER 8.0 - LEVELING - WEIGHING
8-10-00: WEIGHING and BALANCING

A. General

The following table provides typical weight and balance information.

UNIT	WEIGHT	ARM	MOMENT
A790 Controller	0.84 Lbs (0.38 kg)	33.6 in. (0.85 m)	28.22 in.-lb. (0.323 kg-m)

CHAPTER 23.0 - COMMUNICATIONS

23-10-00: A790 LOUD HAILER CONTROLLER

1.0 Description / Operation

The A790 Controller is installed in the center pedestal.

The A790 controller works in conjunction with an existing loudhailer/PA system amplifier and external loudspeakers. The A790 provides control of the PA and interfaces to the flight crew audio system so that the pilots can make a PA announcement using their headset boom mikes, eliminating the need for a handheld microphone. Two configurations are offered. A standard installation allows any operator connected to the aircraft audio panel to use the PA system. The second configuration is used in situations where no spare positions are available on the aircraft audio panel. For this second configuration, only one operator can use the PA system.

An external audio device such as an MP3 or other audio player, can be connected to the A790 controller.

The A790 controller provides two siren sounds (siren and trill) and has the capacity to record and playback a user-recorded message.

101. Troubleshooting

Condition	Action
No power.	Ensure connectors are properly affixed. Pull and reset applicable fuse(s).
Not operating correctly.	A790 Controller; Inspect wiring / system configuration and continuity check harness in accordance with wiring diagram WD10046, and correct irregularities as required.
Not operating correctly after above action completed.	A790 Controller; Remove in accordance with Section 401. A of this chapter and return to Technisonic Industries Ltd. for evaluation and repair.

201. Reserved

Not Applicable

301. Servicing

There are no servicing procedures associated with the components of this chapter.

401. Removal / Installation

The A790 controller is protected by the following fuses:

FUSE LABEL	AMPS	LOCATION	BUS
A790 CTL	1A	ELECTRICAL MASTER BOX UNIT	PP12 28VDC BUS

A. A790 Controller

Removal

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

Installation

- a) Connect electrical connector to the rear of the controller.
- b) Slide controller into the panel cutout.
- c) Secure the two Dzus fasteners on the front of the controller.
- d) Perform the Function Test in accordance with Sections 501, A, of this chapter.

501. Adjustment / Test

A. Function Test

- a) Power up the Aircraft's avionics systems. Turn on the Loud Hailer/PA system and A790 controller (as applicable).
- b) Set the Mic control to the PA position.
- c) Generate a PA announcement.
- d) Verify that the PA announcement is heard, and is free of distortion.
- e) Momentarily press the SIREN button.
- f) Verify that the siren sounds over the PA, and is free of distortion.
- g) Vary the volume level using the VOL control and verify that a satisfactory volume level can be obtained.
- h) Momentarily press the TRILL button.
- i) Verify that the trill sounds over the PA, and is free of distortion.
- j) Vary the volume level using the VOL control and verify that a satisfactory volume level can be obtained.
- k) Momentarily press the PLAY button.
- l) Verify that the stored user message sounds over the PA, and is free of distortion.
- m) Vary the volume level using the VOL control and verify that a satisfactory volume level can be obtained.

601. Inspection / Check

Perform in accordance with Chapter 5-20-00, of these Instructions for Continued Airworthiness.

701. Cleaning / Painting

There is no cleaning or painting procedure associated with the components of this chapter.

801. Approved Repairs

There are no approved field repairs for the components of this chapter. If they are determined to be damaged or faulty, they must be removed and returned to the manufacturer:

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APPENDIX A		
ITEM	TITLE	REV
1	WIRING DIAGRAM WD10046 TiL A790 INSTALLATION IN, AS 350	NC*
2	INSTALLATION INSTRUCTIONS 09RE410	B*

* Or later Transport Canada approved revision.