

**INSTRUCTIONS for CONTINUED AIRWORTHINESS**

**For**

**Airwolf Aerospace, LLC PMA Main Rotor Blade  
Tension-Torsion Strap Assemblies**

**on**

**Bell Helicopter Textron 204, 205, 210 & 212  
Model Series Rotorcraft**

**and**

**US Military-Surplus, Type Certificated UH-1 Model Series  
Rotorcraft**

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**Log of Revisions**

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IR.....	Initial Release.....	Joe McGarvey, DER.....	16 Nov. 2014
A.....	Cover: Added Model 210,..... & STC SR03408CH Chap. 1, Para.6: Added 210 Para. 8: Added Ref. 6) Chap. 4: Added P/Ns & 36-mos. For -101C & -103C Chap. 5 & 6: Added 210 Manual	Joe McGarvey, DER.....	10 Mar. 2016
B.....	Chap. 5 &6: For 204B, 205A-1, ... 205B, 210 & 212 Models Added, "...or most current Relevant Bell Helicopter Maintenance Manual. For UH-1 Model Series Added, "...or most current U.S. Military Technical Manual.	Joe McGarvey, DER.....	21 Jan. 2017

List of Effective Pages

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## CHAPTER 1 INTRODUCTION

### 1 Type Design Change:

This type design change consists of the installation of Airwolf Aerospace, LLC Tension-Torsion Strap Assemblies as a direct replacement for the Type Design Bell Helicopter Textron Tension-Torsion Strap Assemblies. The Airwolf Aerospace, LLC Strap Assy is the same weight as the Type Design Assy.. Therefore, there is no affect on rotorcraft weight & balance.

### 2 Scope:

The scope of this Instruction for Continued Airworthiness(ICA) focuses exclusively on Maintenance, Inspection & Airworthiness Limitations associated with this FAA-approved type design change.

### 3 Purpose:

The purposes of this ICA are to apprise Owner/Operators who have modified their rotorcraft pursuant to this type design change : (1) When, where & how to inspect; and (2) When and under what conditions to replace the T-T Strap Assemblies to assure continued operational safety.

### 4 Arrangement:

This ICA is a single document comprised of four (4) Chapters:  
Chapter 1 Introduction  
Chapter 4 Airworthiness Limitations  
Chapter 5 Inspection Requirements & Overhaul Schedule  
Chapter 6 Installation & Removal

### 5 Superseded Documents:

This ICA does not supersede any Bell Helicopter Textron Maintenance document. This ICA reiterates that Owner/Operators who have modified their rotorcraft with Airwolf Aerospace, LLC T-T Strap Assemblies must life-manage their rotorcraft in accordance with the inspection requirements and Airworthiness Limitations cited in this ICA.

**6 Applicability:**

This ICA is applicable to the following Bell Helicopter Textron Model Rotorcraft: 204B, 205A-1, 205B, 210, 212;, and to Type Certificated, Military-surplus UH-1B, UH-1C, UH-1D, UH-1E, UH-1F, UH-1H, UH-1K, UH-1M and UH-1V models.

**7 Precautions:**

There are no precautionary notes associated with this type design change other than those stated in Chapters 4 & 5 of this ICA.

**8 Referenced Publications:**

- 1) 204B Maintenance & Overhaul Instructions, BHT-204B-M&O-1, Rev. 10, 24 June 2011 Section II, "Main Rotor Hub & Blade Assembly"
- 2) 205A-1 Component Repair & Overhaul Manual. BHT-205A-1-CR&O-1 , Rev.6, 10 January 2011, Chapter 65, "Main Rotor"
- 3) 205B Maintenance Manual, BHT-205B-MM-1, Rev. 2, 18 Dec. 2007, Chapter 4, Airworthiness Limitations
- 4) 212 Component Repair & Overhaul Manual, Vol. 3, "Main Rotor/Main Rotor Drive System" Rev. 9, 10 January 2011
- 5) US Army Manual DMWR 55-1560-196, Change 28, 1 December 1965
- 6) 210 Component Repair & Overhaul Manual, BHT-210-CR&O, Rev.0, September 30, 2005

**9 Distribution:**

Airwolf Aerospace, LLC will maintain a list of all Bell Helicopter Owner/Operators that have purchased its T-T Strap Assemblies and should the need arise to modify this ICA, the revision will be sent to all Owner/Operators. For Owner/Operators having internet access, the latest revision to this ICA will be available for downloading from the Airwolf Aerospace, LLC.: <http://www.AirwolfAerospace.com>.

**10 List of Abbreviations:**

<b>Abbreviation</b>	<b>Definition</b>
DER.....	Designated Engineering Representative
DMWR.....	Depot Maintenance Work Requirement
ICA.....	Instructions for Continued Airworthiness
LLC.....	Limited Liability Corporation
Rev,.....	Revision
RPM.....	Revolutions per Minute
T-T.....	Tension – Torsion

## CHAPTER 4 AIRWORTHINESS LIMITATIONS

### Airworthiness Limitations:

#### P/N AA-204-310-101 & AA-204-310-103

- 1) 1200 flight-hours from date of installation;  
OR
- 2) 24 months from date of installation;  
Whichever occurs first.

#### P/N AA-204-310-101C & AA-202-310-103C

- 1) 1200 flight-hours from date of installation  
OR
- 2) 36 months from date of installation  
Whichever occurs first.

The Airworthiness Limitations Section is FAA approved and specifies maintenance required under 14CFR 43.16 and 14CFR 91.403 of the Federal Aviation Regulations unless an alternate program has been FAA approved.

FAA Approved

*for* Joseph H. McHarvey  
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Manager, Airframe & Administrative Branch  
Chicago Aircraft Certification Office

Date: Mar. 21, 2016

## CHAPTER 5 INSPECTION REQUIREMENTS & OVERHAUL SCHEDULE

### 1) Inspection Requirements:

**For 204B Models:** Tension-Torsion Strap Assemblies are subject to a normal inspection during Hub Overhaul. This inspection is to be performed in accordance with BHT-204B-M&O-1, Rev. 10, dated 24 June 2011, Section II, Para. 2-28, Steps c 1. thru c10., inclusive; or most current relevant Bell Helicopter Maintenance Manual.

Main Rotor Hubs are also subject to a conditional inspection following usage outside the flight envelope. If the conditional inspection necessitates the replacement of any part, the Tension-Torsion Strap Assemblies shall be replaced.

**For 205A-1 Models:** Tension -Torsion Strap Assemblies are subject to a normal inspection during Hub overhaul. This inspection is to be performed in accordance with BHT-205A-1-CR&O-1, Rev.6, dated 10 January 2011, Chapter 65, Para. 65-19, Steps 19a. thru 19i., inclusive; or most current relevant Bell Helicopter Maintenance Manual

Main Rotor Hubs are also subject to a conditional inspection following an accident or usage outside the realm of normal usage. Events requiring conditional inspections include Hard Landings, Sudden Stoppage/Acceleration, Main Rotor Overspeed (Over 110% RPM), and Overtorque. These conditional inspections are to be performed in accordance with BHT-205A-1-CR&O-1, Chapter 65, Para. 65-16, Step 2, and Para. 65-19, Steps 19a. thru 19j., inclusive; or most current relevant Bell Helicopter Maintenance Manual. If the conditional inspections necessitates the replacement of any part, the Tension-Torsion Strap Assemblies shall be replaced.

**For 205B and 212 Models:** Tension-Torsion Strap Assemblies are subject to a normal inspection during Hub Overhaul. This inspection is to be performed in accordance with BHT-212-CR&O-3, Rev. 10, dated 10 January 2011, Chapter 62, Para. 62-21, Steps 18a. thru 18j. inclusive; or the most current relevant Bell Helicopter Maintenance Manual.

Main Rotor Hubs are also subject to a conditional inspection following an accident or usage outside the realm of normal usage. Events requiring conditional inspections include Hard Landings, Sudden Stoppage/Acceleration, Main Rotor Overspeed (104 – 112% RPM), and Overtorque. These conditional inspections are to be performed in accordance with BHT-212-CR&O-3, Rev. 10, dated 10 January 2011, Chapter 62, Steps 18a. thru 18j., inclusive; or the most current relevant Bell Helicopter Maintenance Manual. If the conditional inspection necessitates the replacement of any part, the Tension-Torsion Strap Assemblies shall be replaced.

**For 210 Models:** Tension -Torsion Strap Assemblies are subject to normal inspection during Hub Overhaul. This inspection is to be performed in accordance with BHT-210-CR&O, Rev.0, dated 30 September 2005, Chapter 62, Para. 62-22, Steps 19a. thru 19j, inclusive or the most current relevant Bell Helicopter Maintenance Manual.

## CHAPTER 5 INSPECTION REQUIREMENTS & OVERHAUL SCHEDULE, Cont'd.

### 1) Inspection Requirements, Cont'd.

Main Rotor Hubs are also subject to a conditional inspection following an accident or usage outside the realm of normal usage. In such events, perform a conditional inspection in accordance with BHT-210-CR&O, Rev.0, dated 30 September 2005 , Chapter 62, Para. 62-21, Step 2. & Para. 62-22, Steps 19a thru 19j, inclusive; or the most current relevant Bell Helicopter Maintenance Manual.

**For UH-1 Model Series: Tension – Torsion Strap Assemblies** are subject to a normal inspection during Hub Overhaul. This inspection is to be performed in accordance with US Army Manual DMWR 55-1560-196, Change 28, dated 1 December 1965, Para. 4-12, Steps a. thru l, inclusive; or most current relevant U.S. Military Technical Manual..

Main Rotor Hubs are also subject to a conditional inspection following an accident or usage outside the realm of normal usage. Events requiring conditional inspections include Hard Landings, Sudden Stoppage/Acceleration, Main Rotor Overspeed, and Overtorque. These conditional inspections are to be performed in accordance with US Army Manual DMWR 55-1560-196, Change 28, dated 1 December 1965, Para. 4-12, Steps a. thru l., inclusive; or most current relevant U.S. Military Technical Manual. If the conditional inspection necessitates the replacement of any part, the Tension- Torsion Strap Assembly shall be replaced.

### 2) Overhaul Schedule

The Tension –Torsion Strap Assemblies are not to be overhauled.



## CHAPTER 6 INSTALLATION & REMOVAL

**For 204B Models:** Disassemble and remove T-T Strap Assemblies in accordance with BHT-204B-M&O-1, Rev. 10, dated 24 June 2011, Section II, Para. 2-24, Step o; or most current relevant Bell Helicopter Maintenance Manual.

Install T-T Strap Assemblies in accordance with BHT-204B-M&O-1, Rev. 10, dated 24 June 2011, Section II, Para. 2-41, Steps l.1., l.2. & l.3.; or most current relevant Bell Helicopter Maintenance Manual.

**For 205A-1 Models:** Disassemble and remove T-T Strap Assemblies in accordance with BHT-205A-1-CR&O-1, Rev. 6, dated 10 January 2011, Chapter 65, Para. 65-14, Step 7a.; or most current relevant Bell Helicopter Maintenance Manual.

Install T-T Straps in accordance with BHT-205A-1-CR&O-1, Rev.6, dated 10 January 2011, Chapter 65, Para. 65-19, Steps 1h. thru 1j., inclusive; or most current relevant Bell Helicopter Maintenance Manual.

**For 205B and 212 Models:** Disassemble and remove T-T Strap Assemblies in accordance with BHT-212-CR&O-3, Rev. 9, dated 10 January 2011, Chapter 62, Para. 62-19, Step 7a. ; or most current relevant Bell Helicopter Maintenance Manual.

**For 210 Models:** Disassemble and remove T-T Strap Assemblies in accordance with BHT-210-CR&O, Rev. 0, dated 30 September 2005 Chapter 62, Section 62-20, para. 4.0; or most current relevant Bell Helicopter Maintenance Manual.

Install T-T Strap Assemblies in accordance with BHT-210-CR&O, Rev. 0, dated 30 September 2005, Chapter 62, Section 62-24, para. 1h.; or most current relevant Bell Helicopter Maintenance Manual.

**For UH-1 Model Series:** Disassemble and remove T-T Strap Assemblies in accordance with US Army Manual DMWR 55-1560-196, Change 28, dated 1 December 1965, Section III, Para. 4-6, Step ab.; or most current relevant U.S. Military Technical Manual.

Install T-T Strap Assemblies in accordance with US Army Manual DMWR 55-1560-196, Change 28, Section VIII, Para. 4-30, Step c.; or most current relevant U.S. Military Technical Manual.