

WPR22LA333

AIRWORTHINESS

Specialist's Factual Report - Attachment 3

N687AM Event No. 3 Inspection Checklist and Aircraft Logbook Entry dated May 10,
2022

Air Methods

Aircraft Record of Maintenance

DATE: <u>5-11-22</u>		ACFT MODEL: <u>BH407</u>		A/C N#: <u>687AM</u>		ACFT S/N#: <u>53497</u>		BASE: <u>VICCA</u>		LOG LEAF #: <u>1511071</u>	
ACFT TT		LANDINGS/FLIGHTS		ROTOR BRAKE CYC.		#1 ENGINE		ENG TT		Starts	
PREVIOUS		<u>6873+48</u>		<u>24319</u>				SERIAL #		<u>2746+17 6222</u>	
TODAY		<u>0</u>		<u>0</u>				<u>CAE -</u>		<u>0 0</u>	
TOTAL		<u>6873+48</u>		<u>24319</u>				<u>848351</u>		<u>2746+17 6222</u>	
TQ Event / COMP HOBBS		ROL / Prop #1		ARL / Prop #2		#2 ENGINE		ENG TT		Starts	
PREVIOUS						SERIAL #					
TODAY		<u>140</u>									
TOTAL		<u>140</u>									
ITEM		VOR CHECK		POWER CHECK							
NEXT DUE											
		#1									
		#2									
MEL/DEFERRAL						EXPIRES					
MEL/DEFERRAL						EXPIRES					
DISCREPANCY OR COMMENTS						CORRECTIVE ACTION					
# <u>1</u> PIREP MAREP RAMCO DESC # <u>LC-030025-22</u>						# <u>1</u> ATA: <u>0500</u> A/F Eng 1/2 DATE: <u>05/10/22</u> TIME: <u>0730</u> ACFT TT: <u>6873+48</u> ENG TT:					
AIR METHODS BELL 407 PREFLIGHT / AIRWORTHINESS CHECK DUE						PERFORMED PREFLIGHT IN ACCORDANCE WITH AIR METHODS / BH407 PREFLIGHT / AIRWORTHINESS CHECKLIST DATED 07/07/2021 NO DISCREPANCY OR DEFECTS NOTED. MAINTENANCE DUE REPORT REVIEWED AIRCRAFT DETERMINED TO BE AIRWORTHY CONDITION AT THIS TIME					
DATE: <u>05/10/22</u>		TIME OF DAY: <u>0730</u>		C/A: <u>[REDACTED]</u>		LABOR HOURS:					
ACFT TT: <u>6873+48</u>		LOCATION: <u>VICCA</u>		SIGNATURE: <u>[REDACTED]</u>		TASK CODE:		OPERATIONAL CHECK FLIGHT REQ YES/NO			
NAME: <u>Ed Henry</u>		EMPLOYEE #: <u>[REDACTED]</u>		EMPLOYEE #:		P/N OFF:		P/N ON:			
CERTIFICATE #: <u>[REDACTED]</u>		CERTIFICATE TYPE: <u>HP</u>		CERT #:		Type <u>HP</u>		S/N OFF:		S/N ON:	
# <u>5</u> PIREP MAREP RAMCO DESC #		#		ATA:		A/F Eng 1/2		DATE:		TIME:	
DATE:		TIME OF DAY:								LABOR HOURS:	
ACFT TT:		LOCATION:		SIGNATURE:		TASK CODE:		OPERATIONAL CHECK FLIGHT REQ YES/NO			
NAME:		EMPLOYEE #:		EMPLOYEE #:		P/N OFF:		P/N ON:			
CERTIFICATE #:		CERTIFICATE TYPE:		CERT #:		Type		S/N OFF:		S/N ON:	

Date _____ ACTT _____ Operational Check performed for discrepancy _____ listed above, Pass _____, Fail _____, Signature _____ Cert # & Type _____ (IAW 91.407 b)

White Copy - Forward to AMC Records Department (Weekly)

Yellow Copy - Remains in Aircraft Logbook

of 536's 1

Maintenance Worksheet

Acft Model: BH407	Acft Reg #: N687AM	Acft S/N: 53497	#1 Engine S/N: CAE-848351	#2 Engine S/N:
Log Page No.: 1511071	Log Card No.: LC 030025-22			
DISCREPANCY/COMMENT	CORRECTIVE ACTION			
#2	Inspected each driveshaft segment assembly in accordance with AD 2018-10-06 Amd 39-19281 par (e)(1) and AMC Engineering Order 13-6510-EO-1354, Rev.1 Part 2. No rotational or axial play between adapter and T/R driveshaft detected. Next inspection due at 7203+48			
Insp & Section #:				
Task Code: 13-6510-EO-1354Part 2				
Name: Ed Henry				
TAIL ROTOR DRIVESHAFT SEGMENT ASSEMBLY, INSPECTION OF	Signature: [Redacted]	Date: 05/10/2022	Time: 07:30	Acft TT: 6873+48
	Employee #:	P/N Off:	P/N On:	
	Cert. Type & #: A&	S/N Off:	S/N On:	
	CYA Initials:	RII Signature:	Cert. Type & #:	
#3	I certify that this aircraft has been inspected in accordance with Air Methods' Bell Helicopter Model 407 Series AAIP - A 0303 - Progressive inspection Event 3 and was determined to be in an airworthy condition.			
Insp & Section #:				
Task Code: 13A0500-05				
Name: Ed Henry				
A 0303 - Progressive Inspection Event 3	Signature: [Redacted]	Date: 05/10/2022	Time: 07:30	Acft TT: 6873+48
	Employee #:	P/N Off:	P/N On:	
	Cert. Type & #: A&	S/N Off:	S/N On:	
	CYA Initials:	RII Signature:	Cert. Type & #:	
#4	I certify that this aircraft has been inspected in accordance with Air Methods' Bell Helicopter Model 407 Series AAIP - D 1040 NT - 150 Hour Check HMU Manual Mode Operation Function and was determined to be in an airworthy condition.			
Insp & Section #:				
Task Code: 24E0500-23				
Name: Ed Henry				
D 1040 NT - 150 Hour Check HMU Manual Mode Operation Function	Signature: [Redacted]	Date: 05/10/2022	Time: 07:30	Acft TT: 6873+48
	Employee #:	P/N Off:	P/N On:	
	Cert. Type & #: A&	S/N Off:	S/N On:	
	CYA Initials:	RII Signature:	Cert. Type & #:	
#5	Applied Medesol in ref with AMC ES # ES-00-0500 ES 3239 ACFT decontamination. No further action required at this time. Next application due in 14 days.			
Insp & Section #:				
Task Code:				
Name: Ed Henry				
	Signature: [Redacted]	Date: 5-11-22	Time: 1200	Acft TT: 6873+48
	Employee #:	P/N Off:	P/N On:	
	Cert. Type & #: AIP	S/N Off:	S/N On:	
	CYA Initials:	RII Signature:	Cert. Type & #:	

Cleaning per Medesol Antiviral Solution Specification 00 0500 ES 3239.

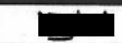
Bell Helicopter Model 407 Series AAIP

A 0303 - Progressive Inspection Event 3

SECTION: A 0303 - AIRFRAME INSPECTION
TYPE: PROGRESSIVE INSPECTION
NOTE: DUE 50 HOURS AFTER EVENT 2
MAN-HOURS: 3

Page: TR 3-11
Revision: TR-3
Date: 12/27/2021

Registration No.: N 687 Am Start _____ Aircraft Start Total Time: 6873+48
Aircraft S/N: 53497 Date: 5-10-22 Aircraft Start Total Cycles: 24319

MAINTENANCE ACTION		REFERENCE	MECHANIC INITIALS	INSPECTOR INITIALS
A 0303.1 GENERAL				
1.1	Review logbook for recorded discrepancies. Correct discrepancies on installed equipment. Note: Discrepancies discovered during this inspection will be addressed per Section 5 of the Preamble in this AAIP.			
1.2	Review Status Report to ensure that all applicable Airworthiness Directives (ADs), Service Bulletins selected by Air Methods & Special Inspections are complied with.			
1.3	Review Status Report to ensure components are within their published Service Life Limits (SLL) and Time Between Overhaul (TBO) limits.	BHT-407-MM		
1.4	Check electrical connectors and wire harnesses for security, chafing, and condition in all areas accessed.	AMC Cert Requirement		
1.5	Inspect the areas of the aircraft open for this inspection for signs of corrosion. If corrosion is evident, or if aircraft has been operating in a known corrosive environment, conduct a searching inspection for corrosion in accordance with BHT Corrosion Control Guide.	CSSD-PSE-87-001		
A 0303.2 PLACARDS AND MARKINGS - ZONE 4 - POWER PLANT				
2.1	Examine the placards, decals, and markings in Zone 4. Make sure you can read them, they are applied correctly and they are in agreement with the applicable configuration of your helicopter.	DMC-407-A-11-00-00-00A-028A-A		
A 0303.3 ENGINE - ZONE 4 - POWER PLANT (M250-C47B/C47E ENG ONLY)				
3.1	Examine the engine cowling for condition and security.	DMC-407-A-53-04-00-03A-280A-A		
3.2	Examine the engine cowling doors for condition and security.			
3.3	Examine the engine for condition, leaks, and security.	DMC-407-A-71-00-00-00A-284A-A		
3.4	Examine the components as follows:			
3.4.1	Fluid flexible and rigid lines.			
3.4.2	Electrical harness.	DMC-407-A-96-00-01-00A-280A-A		
3.4.3	Engine mounts, fittings and legs.	DMC-407-A-71-21-00-00A-280A-A		



Bell Helicopter Model 407 Series AAIP

SECTION: A 0303 - AIRFRAME INSPECTION
TYPE: PROGRESSIVE INSPECTION
NOTE: DUE 50 HOURS AFTER EVENT 2

Page: TR 3-12
Revision: TR-3
Date: 12/27/2021

MAINTENANCE ACTION		REFERENCE	MECHANIC INITIALS	INSPECTOR INITIALS
3.4.4	Exhaust stack.			
3.5	Examine the firewalls for condition and security.	DMC-407-A-53-05-00-00A-280A-A and DMC-407-A-53-05-00-02A-280A-A		
3.6	Examine the engine pan drains. Make sure that the engine pan drains are not clogged. Restore broken or missing sealant from engine pan.			
3.7	Examine the engine controls for condition, correct operation, and security.			
3.8	Examine the components as follows:			
3.8.1	Hydromechanical Unit (HMU) "MINIMUM" and "MAXIMUM" stops for contact during full travel of the throttle. Note: Refer to DMC-407-A-76-04-00-00A-276B-A, "Throttle/Fly detent rigging procedure" for acceptable limits.			
3.8.2	Linkage for any looseness.			
3.9	Examine the engine chip upper detector for metal particles.	DMC-407-A-96-11-22-00A-130C-A		
3.10	Examine the engine chip upper detector electrical circuit of the chip detectors for continuity.			
3.11	Examine the engine lower chip detector for metal particles.			
3.12	Examine the engine lower chip detector electrical circuit of the chip detectors for continuity.			
A 0303.4 ENGINE - ZONE 4 - POWER PLANT (HTS900-2-1D ENG ONLY)				
4.1	Examine the engine cowling for condition and security.	ICA-E407-789		NA
4.2	Examine the engine cowling doors for condition and security.			
4.3	Examine the engine for condition, leaks, and security.			
4.4	Examine the components as follows for condition, leaks, and security:			
4.4.1	Fluid flexible and rigid lines.			
4.4.2	Electrical harness.			
4.4.3	Engine mounts, fittings and legs.			
4.4.4	Exhaust stack.			
4.5	Examine the intake cowl plenum assembly.			
4.6	Examine the components as follows:			
4.6.1	Inspect the top cowl composite assembly for condition and Dzus' fastener holes for elongation.			
4.6.2	Inspect the Dzus' fasteners for condition.			
4.6.3	Inspect the base plate for condition and security.			
4.6.4	Inspect the access cover for condition and security.			
4.7	Examine the firewalls for condition and security.			NA

Bell Helicopter Model 407 Series AAIP

SECTION: A 0303 - AIRFRAME INSPECTION
TYPE: PROGRESSIVE INSPECTION
NOTE: DUE 50 HOURS AFTER EVENT 2

Page: TR 3-13
Revision: TR-3
Date: 12/27/2021

MAINTENANCE ACTION	REFERENCE	MECHANIC INITIALS	INSPECTOR INITIALS
4.8 Examine the engine pan drains. Make sure that the engine pan drains are not clogged. Restore broken or missing sealant from engine pan.			NA
4.9 Examine the engine chip detector for metal particles.			
4.10 Examine the engine chip detector electrical circuit for continuity.			
4.11 Examine the A/F fuel filter impending bypass indicator for correct operation.			
4.12 Examine the anti-ice system for condition, correct operation, and security.			NA
A 0303.5 ENGINE TO TRANSMISSION DRIVESHAFT - ZONE 4 - POWER PLANT			
5.1 Examine the engine to transmission driveshaft for condition and security.	DMC-407-A-63-12-00-00A-280A-A		
5.2 Examine the components as follows:			
5.2.1 Driveshaft for corrosion, surface damage and cracked spring.			
5.2.2 Flexframe and bolts for condition and signs of slippage.			
A 0303.6 TAIL ROTOR FORWARD SHORT SHAFT ASSEMBLY - ZONE 4 - POWER PLANT (M250-C47B/C47E ENG ONLY)			
6.1 Examine the short shaft for condition and security.	DMC-407-A-65-10-00-00A-280A-A		
6.2 Examine the disc pack couplings.			
6.3 Do a torque check of the disc pack coupling attachment hardware (150 to 180 inch pounds (17 to 20 Nm)).			
6.4 Examine the flywheel for condition and security (if installed).			NA
A 0303.7 TAIL ROTOR FORWARD SHORT SHAFT ASSEMBLY - ZONE 4 - POWER PLANT (HTS900-2-1D ENG ONLY)			
7.1 Examine the short shaft for condition and security.	ICA-E407-789		NA
7.2 Examine the disc pack couplings.			
7.3 Do a torque check of the disc pack coupling attachment hardware (150 to 180 inch-pounds (17 to 20 Nm)).			
7.4 Examine the spacer blocks for condition.			NA
A 0303.8 FREEWHEEL ASSEMBLY - ZONE 4 - POWER PLANT (M250-C47B/C47E ENG ONLY)			
8.1 Examine the freewheel assembly for condition, leaks and security.	DMC-407-A-63-13-00-00A-280A-A		
8.2 Examine the freewheel chip detector for metal particles.	DMC-407-A-63-23-15-02A-280A-A		
8.3 Examine the freewheel chip detector electrical circuit of the chip detectors for continuity.	DMC-407-A-96-11-22-00A-130C-A		

Bell Helicopter Model 407 Series AAIP

SECTION: A 0303 - AIRFRAME INSPECTION
TYPE: PROGRESSIVE INSPECTION
NOTE: DUE 50 HOURS AFTER EVENT 2

Page: TR 3-14
Revision: TR-3
Date: 12/27/2021

MAINTENANCE ACTION		REFERENCE	MECHANIC INITIALS	INSPECTOR INITIALS
A 0303.9 ROTOR BRAKE DISC – ZONE 4 – POWER PLANT				
9.1	Examine the rotor brake disc for condition and security.	DMC-407-A-63-22-03-00A-280A-A or ICA-E407-789, Chapter 63		
A 0303.10 AIRFRAME FUEL FILTER – ZONE 4 – POWER PLANT				
10.1	Replace Airframe Fuel Filter. Effectivity: A/C S/N 53000-54303 or 54305-54566 or 54568-54800.	DMC-407-A-12-00-00-00A-040A-A, Table 1		
A 0303.11 GROUND RUN				
11.1	Do a FADEC manual mode check. Effectivity: M250-C47B/C47E Engine only.	Rolls Royce EMM		
11.2	Complete a ground run at 100% NR to check for leaks and confirm system operation.	BHT-407-FM-X FMS-E407-789-1		
A 0303.12 POST INSPECTION				
12.1	Inspect for operation and leaks if required by manufacturer's manual or standard maintenance practices.	AMC Cert Requirement or Manufacturer's Instructions		
12.2	Check the anti-chafe tape for serviceability prior to installation of panels and/or cowlings in all areas accessed. Replace all unserviceable anti-chafe tape per QAN 01-11.	QAN 01-11		
12.3	Replace or close all applicable trim panels, covers, access and inspection doors/covers as necessary per manufacturer's manual or standard maintenance practices.			
12.4	Review Section 3 of AAIP Attachment D (Special/Conditional Inspections) for any post maintenance inspection requirements. Review manufacturer's procedures for any other post maintenance requirements.			
12.5	Make an entry in the appropriate logbook (refer to the following page for wording of approval for return to service).			

Bell Helicopter Model 407 Series AAIP

SECTION: A 0303 - AIRFRAME INSPECTION
TYPE: PROGRESSIVE INSPECTION
NOTE: DUE 50 HOURS AFTER EVENT 2

Page: TR 3-15
Revision: TR-3
Date: 12/27/2021

Upon satisfactory completion of each inspection item, the mechanic shall initial the pertinent space as provided. All mechanics shall sign and initial, in the space provided, at the end of the form.

At the completion of each inspection form, an A&P mechanic shall check the entire form for completion and then enter his/her signature, certificate type and number, and date in the space provided at the end of the form. The same individual is also responsible for making the logbook entry shown at the conclusion of this inspection.

I certify that I have inspected all the items initialed by me in accordance with Air Methods' Bell Helicopter Model 407 Series Approved Aircraft Inspection Program and found them to be in an airworthy condition except as may be noted in the Aircraft Logbook.

INITIALS	SIGNATURE	CERTIFICATE TYPE & NUMBER
[Redacted]	[Redacted]	AP [Redacted]

Tool Calibration			
Description	Part Number	Serial Number	Calibration Date
TQ Wr	ATECH1FR240B	0621106519	6-18-22

I have reviewed this inspection form to verify that all items have been completed and have made an entry in the Aircraft Logbook.

I certify that this aircraft has been inspected in accordance with Air Methods' Bell Helicopter Model 407 Series AAIP - A 0303 - Progressive Inspection Event 3 and was determined to be in an airworthy condition.

Registration No.: N687AW Ending Aircraft Ending Total Time: 6873+48
Aircraft S/N: 53497 Date: 5-10-22 Aircraft Ending Total Cycles: 24319
Signature: [Redacted] Certificate Type & No: AP [Redacted]