

COMPONENT NAME 90° Gearbox
 PART NUMBER 904-040-012-013
 SERIAL NUMBER 913-2421E
 PAGE 1 OF 2

Bell Helicopter **TEXTRON**
 A Subsidiary of Textron Inc.

POST OFFICE BOX 482 - FORT WORTH, TEXAS 76101

NOTICE: WHEN RETURNING ANY LIMITED LIFE COMPONENT TO BHTI FOR ANY REASON IT IS MANDATORY THAT A VALID HISTORICAL SERVICE RECORD ACCOMPANY THE COMPONENT.

HISTORICAL SERVICE RECORD

| INSTALLATION DATA | | | | | | A/C HOURS SCH. FOR <input type="checkbox"/> O/H <input type="checkbox"/> RETIRE HRS. / DATE | REMOVAL DATA | | | | |
|-------------------|----------------------|---------------|-----------------------|------------|-----------|---|--------------|---------------------|------------|------|--------------------|
| DATE | INSTALLED ON A/C NO. | BY (ACTIVITY) | INSTALLED AT A/C HRS. | COMP. HRS. | | | DATE | REMOVED AT A/C HRS. | COMP. HRS. | | REASON FOR REMOVAL |
| | | | | SINCE NEW | SINCE O/H | | | SINCE NEW | SINCE O/H | | |
| 4-1-06 | NESICH | CHI | 2577.3 | 3653.0 | 0 | | 6/1/09 | 4583.3 | 4659 | 1006 | CONTACT REQUIRED |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

TECHNICAL DIRECTIVES AND HISTORY OF OVERHAUL

| DIRECTIVE NUMBER IF APPLICABLE | TIME/DATE EFFECTIVITY | DESCRIPTION | COMPLIANCE | |
|--------------------------------|-----------------------|--|---------------|------|
| | | | BY (ACTIVITY) | DATE |
| | | OVERHAULED Tail DMWR 55-1560-127 For Detail See WO # 50383 | | 6 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

COMPONENT REMOVAL AND REPAIR/OVERHAUL RECORD

For use of this form, see DA PAM 738-751; the proponent agency is DCSLOG

REQUIREMENT CONTROL SYMBOL
CSGLD-1052(R3)

#449257(CORRECTED COPY)

SECTION I - IDENTIFICATION

| | | | | | | |
|---|--|--|---|--|--|--|
| CONTROL NUMBER 449257 455757 | | 1. NOUN NOMENCLATURE (Comp) GEARSHAFT, BEVEL | | 2. MODEL UH-1 | 3. NATIONAL STOCK NO. 3040-00-918-2677 | |
| 4. SERIAL NO. B13-2421E | 5. MANUFACTURER'S CODE 97499 | 6. PART NO. 204-040-012-13 | | 7. USAGE SINCE LAST INST (hrs) -1350 0 | 8. FAILURE CODE 799 -920- | |
| 9. FOR AIRCRAFT COMPONENTS ONLY | | a. PRIOR OVERHAULS (No.) 99 | b. USAGE SINCE NEW (hrs) 3653 | c. USAGE SINCE OVER-HAUL (hrs) 0 | 10. WUC 06G01 | |

SECTION IV - INSTALLATION

| | | | | | | | |
|-------------------------------------|----------------|--------------------------|--------------------------|-----------------|-------------------------|--|------------------|
| 30. INSTALLED ON (noun nomen) | | 31. MODEL | 32. NATIONAL STOCK NO. | 33a. SERIAL NO. | 33b. AIRCRAFT HOURS | | |
| 34. DATE INSTALLED (Julian) | | 35. ORGANIZATION | | 36. UIC | 37. MANHOURS TO INSTALL | | |
| 27. INSPECTION AND ACTION | | | 38. REASON FOR LOSS CODE | 39. SIGNATURE | | | |
| <input type="checkbox"/> | a. SERVICEABLE | <input type="checkbox"/> | | | | | d. REBUILT |
| <input type="checkbox"/> | b. REPAIRED | <input type="checkbox"/> | | | | | e. UNSERVICEABLE |
| <input checked="" type="checkbox"/> | c. OVERHAULED | <input type="checkbox"/> | | | | | f. |

USE NEXT LINE ONLY FOR LOSS TO INVENTORY BY TRANSFER

| | | | | |
|----------------|--|--------------|---------|------------------|
| 40. SHIPPED TO | | 41. LOCATION | 42. UIC | 43. DATE SHIPPED |
| REMARKS | | | | |

DA FORM 2410
MAY 81

INSTALLATION COPY 3

DETACH HERE

SECTION A - CORPUS CHRISTI ARMY DEPOT 204-040-012-13

| | | | |
|--------------------------|--|----------------------------|------------------------------|
| ITEM GEARSHAFT, BEVEL | MODEL UH-1 | SERIAL NUMBER B13-2421E | PART-NSN 3040-00-918-2677 |
| DATE ACCEPTED 92254 | TYPE WORK <input type="checkbox"/> RCM <input type="checkbox"/> REPAIR <input checked="" type="checkbox"/> OTHER-SPECIFY OVERHAULLED <input type="checkbox"/> MOD | | |

SECTION B - RECEIVING UNIT

| | | | |
|-----------------|--|-----------------------|------------------|
| UNIT ADDRESS | UNIT IDENTITY | DATE RECEIVED | DATE INSPECT |
| | CONDITION <input type="checkbox"/> ADEQ. <input type="checkbox"/> INADEQ. | DEFECT QTY | REPAIR M/H (EST) |
| DEFECT IDENTITY | PART-NSN | QDR-ROD REPORT NUMBER | |
| DATE | UNIT MAINTENANCE OFFICER | AV NUMBER | |

CCAD FORM 635, 15 JAN 92 (REV) PREVIOUS EDITION OF THIS FORM IS OBSOLETE

HELIPONENTS INC.

Bell Helicopter Authorized Customer Service Facility

| | | | | | |
|----------------|-------------------------|---------------|-------------------|----------------|-----------|
| Work Order No. | 107788 | Date Received | 12-Nov-12 | Date Completed | 19-Nov-12 |
| Customer | KARL RENZ [REDACTED] | Description | 90 Degree Gearbox | MFR/Model | Bell |
| | | Part Number | 204-040-012-013 | Serial Number | B13-2421F |
| | | Total Time | 5,069.3 | Time Since O/H | 410.3 |

| ITEM | LABOR INSTRUCTIONS/INSPECTIONS | MECH | INSP |
|------|--|------------|------------|
| 1 | Main Input Seal damage: Removed and replaced with seal P/N 212-340-100-103 IAW DMWR 55-1560-127 chap. 4, par. 4-1 thru 4-15, pages 4-1 thru 4-28.2, chap. 16, dated: 29 April 1994. TW # HPI49. Grease dated: April 2011. | [REDACTED] | [REDACTED] |
| 2 | Paint: Painted Gearbox P/N 204-040-012-013, S/N B13-2421F IAW BHT-ALL-SPM chap. 4, par. 4-7 thru 4-50, pages 7-30, rev. 4, dated: 17 Jun 2011. | [REDACTED] | [REDACTED] |

The item identified above was repaired and inspected in accordance with current F.A.A. regulations and is approved for return to service.

[Signature] ad Barta Date: 19-Nov-12

| | | | | | | | |
|--|-------------------|---|---|---|-------------------------|---|--|
| 1. Approving National Aviation Authority/Country FAA/UNITED STATES | | 2. AUTHORIZED RELEASE CERTIFICATE FAA Form 5130-3, AIRWORTHINESS APPROVAL TAG | | | | 3. Form Tracking Number: 107788 | |
| 4. Organization Name and Address: HELIPONENTS, Inc. | | | | Bell Helicopter Authorized Customer Service Facility FAA Repair Station XHCR759K 4930 E. Falcon Drive Mesa, Arizona 85215-2544 Tel: (480) 981-8300 Fax: (480) 981-8400 | | 5. Work Order/Contract/Invoice Number: 107788 | |
| 6. Item: | 7. Description | 8. Part Number | 9. Eligibility | 10. Quantity | 11. Serial Batch Number | 12. Status/Work: | |
| 1 | 90 Degree Gearbox | 204-040-012-013 | N/A | 1 | B13-2421F | REPAIRED | |
| 13. Remarks: Removed and replaced with seal P/N 212-340-100-103 IAW DMWR 55-1560-127 chap. 4, par. 4-1 thru 4-15, pages 4-1 thru 4-28.2, chap. 16, dated: 29 April 1994. REF: HPI WO #107788 for actual work performed. T.T 5069.3 T.S.O 410.3 | | | | | | | |
| 14. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation <input type="checkbox"/> Non-approved design data specified in Block 13 | | | 19. <input checked="" type="checkbox"/> 14 CFR 43.5 Return to Service <input type="checkbox"/> Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service. | | | | |
| 15. Authorized Signature: | | 16. Approval/Authorization No. | | 20. Authorized Signature | | 21. Approval/Certificate Number | |
| | | | | | | | |
| 17. Name (Typed or Printed) | | 18. Date (m/d/y) | | 22. Name (Typed or Printed) | | 23. Date (m/d/y): | |
| | | | | Chad Barta | | Nov 19, 2012 | |
| User/Installer Responsibilities | | | | | | | |
| <p>It is important to understand that the redaction of this document does not unilaterally constitute authority to repair the particular item assembly. When the user/installer performs work in accordance with the national regulations of an airworthiness authority or federal or state airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensure that the repair/overhaul, overhaul, parts, components, assemblies, from the airworthiness authority of the country specified in Block 1.</p> <p>Statements in Block 14 and 19 do not constitute approval or certification. In all cases, approval/authorization described and certified in regulation certificate issued in accordance with the national regulations by the user/installer remains the responsibility of the user.</p> | | | | | | | |

1. COMPLIED WITH PHASE INSPECTION # 2 IAW US ARMY MANUAL TM55-1520-210PM.
2. COMPLIED WITH DAILY PMD INSPECTION, 25 HOUR, 50 HOUR LUBE REQUIREMENTS IAW US ARMY MANUAL TM55-1520-210-23-1. ALL COMPONENTS LUBED WITH MOBILJET 28.
3. COMPLIED WITH 12M/600 HOUR TAIL ROTOR DRIVE SHAFT HANGER BEARINGS, T/R GEARBOX COUPLING, 42 DEGREE GEARBOX COUPLING AND TRANSMISSION OUTPUT COUPLING GREASE REPACK WITH BELL GREASE P/N 204-040-755-5 & INSPECTIONS.
4. COMPLIED WITH THE FOLLOWING AIRWORTHINESS DIRECTIVES
 - a. 83-03-03 100 HOUR INSPECTION, NEXT DUE AFTT 11,991.9.
 - b. 2013-13-06 25 HOUR, 1200 HOUR/24 MONTH GRIP INSPECTIONS, NO DEFECTS NOTED.
5. TAILBOOM INSPECTED IAW FAA SAIB SW-18-29. NO DEFECTS NOTED. NEXT DUE IN 100 HOURS AT 11,991.9. NO DEFECTS NOTED.
6. COMPLIED WITH 12M FIRE EXTINGUISHER WEIGHT CHECK. NO DEFECTS NOTED.
7. COMPLIED WITH 12 MONTH INSPECTION OF THE MAGNESIUM CLEVIS END OF THE DROOP COMPENSATOR JACKSHAFT ASSEMBLY. NO DEFECTS NOTED.
8. COMPLIED WITH US ARMY MM 300 HOUR SLOPPY LINK HYDRAULIC SERVO PLAY CHECK ON ALL 3 SERVOS. NO DEFECTS NOTED.
9. COMPLIED WITH US ARMY MM 50 HOUR LIFT LINK & ATTACH POINT INSPECTION. NO DEFECTS NOTED.
10. COMPLIED WITH US ARMY MM 100 HOUR/120 DAY VOLTAGE REGULATOR CHECK. NO DEFECTS NOTED.
11. COMPLIED WITH UH-1-12-AMAM-02 TAILBOOM LONGERON INSPECTION. NO DEFECTS NOTED. NEXT DUE IN 25 HOURS AT AFTT 11,916.9
12. COMPLIED WITH US ARMY MM 150 HOUR ODDS/CHIP DETECTOR SYSTEM INSPECTION. NO DEFECTS NOTED.
13. COMPLIED WITH US ARMY MM 1200 HR/24 MONTH 90 DEGREE GEARBOX CORROSION INSPECTION. NO DEFECTS NOTED.
14. REMOVED BHT 42 DEGREE TAIL ROTOR GEAR BOX, P/N 204-040-003-37, S/N B13-25-23 FOR AD 95-10-08 TERMINATING ACTION.
15. INSTALLED BHT 212 42 DEGREE GEARBOX P/N 212-040-003-007 S/N AHP-06064 T.S.N. UNK, TSO: 39.0. TERMINATING ACTION FOR A.D. 95-10-08 AND IS NOW N/A.
16. COMPLIED WITH US ARMY MM 12M FIRE WARNING/DETECTION SYSTEM INSPECTION/CHECK.
17. COMPLIED WITH US ARMY MM 12M OAT GAUGE CHECK IAW TM 11500204234.
18. INSPECTED GARMIN 430W IAW WITH GARMIN 400W SERIES ICA DOCUMENT NUMBER 190-00356-65 Rev. B. DATABASE UPDATED TO CURRENT CYCLE. NO DEFECTS NOTED.
19. COMPLIED WITH US ARMY MM 12M MAGNETIC COMPASS FOR DISCOLORATION OF LIQUID AND PROPER CALIBRATION IAW TM 11500204234.
20. COMPLIED WITH US ARMY MM 12M BLEED AIR HEARTER OPERATIONAL CHECK/INSPECTION.
21. COMPLIED WITH AVIATION DEVELOPMENT CORPORATION 200 HOUR EXTERNAL OIL FILTER INSPECTION IAW DOCUMENT ICA REPORT FMT021M. NO DEFECTS NOTED.
22. COMPLIED WITH PRECISE FLIGHT 12M PULSE LIGHT ICA INSPECTION IAW PRECISE FLIGHT ICA DOCUMENT 000PMAN0002, REV E, DATED JUNE 24th, 2008.
23. REMOVED CARGO HOOK PN# 528-020-04 S/N# 44 FOR OVERHAUL BY ONBOARD SYSTEMS. OVERHAUL PERFORMED UNDER W.O.# 44-WO64496-1. SEE 8130-3 DATED 1-29-2019 ONBOARD SYSTEMS. REINSTALLED CARGO HOOK.
24. ALL FUELS CELL CLEANED AND INSTALLED ALL NEW AIRFRAME FUELS LINES. NEW AIR FRAME FUEL FILTER ELEMENT INSTALLED. NEXT DUE IN 150 HOURS AT AFTT 12,041.9.
25. ENGINE OIL, TRANSMISSION, TAIL ROTOR & 42 GEARBOXES OIL DRAINED AND SERVICED. VOLTAGE REGULATOR Facet P/N 047546-02. GREASED

| | | |
|-------|-----|--------------|
| MODEL | S/N | REGISTRATION |
|-------|-----|--------------|

| JOURNEY | | CREW | RECORD OF TIME | | CYCLES | | | | | | SIGNATURE |
|----------|--|-----------|----------------|--------------------------------------|--------------------|--------------------|-------------|------------------|-----------------|------|--------------------------|
| (1) DATE | (2) POINT OF DEPARTURE AND DESTINATION | (3) NAMES | (4) AIR TIME | (5) TOTAL AIR TIME SINCE MANUFACTURE | (6) START ENGINE 1 | (7) START ENGINE 2 | (8) LANDING | (9) TORQUE EVENT | (10) HOIST OPEN | (11) | (12) PILOT & LICENSE NO. |

AFTT 11,891.9
LANDINGS 10,305
HOBBS 189.1

April 8th, 2019

26. REMOVED M/R HUB, STAB BAR ASSY, TRANSMISSION, MAST AND SWASHPLATE ASSY FOR CONVENIENCE. REINSTALLED SAME P/N's & S/N's. REMOVED M/R BLADES PN# 205-015-150-101 SN AFS-442 TSN 2617.5 SN AFS-490 TSN 3845.0. SENT TO HELIBLADE, INC. FOR REPAIR AND REPAINT WO's 3014, AND 3015, SEE 8130-3 DATED 2-20-19, RETNSTALLLED SAME M/R BLADES. THIS INSPECTION COMPLIES WITH THE REQUIRED US ARMY MM MRB 600 HOUR SECURE BALLAST WEIGHT INSPECTION. COMPLIED WITH TRACK & BALANCE INSTALLATION REQUIREMENTS

27. REMOVED TAIL ROTOR HUB P/N 204-011-801-17, S/N ABA-53333 FOR RETIREMENT. YOKE P/N 204-011-722-005, S/N A3-31078, TSN 1444.8 AND GRIPS P/N 204-011-711-10. REMOVED TAIL ROTOR BLADES P/N 204-011-702-15, S/N's ATR-73769 & S/N ATR-72357 FOR RETIREMENT AND TAIL ROTOR GRIPS P/N 205-011-711-101 S/N's IMPT-1591 AND IMPT-1785. INSTALLED T/R HUB P/N 204-011-801-17, S/N AHL5016, TAIL ROTOR YOKE P/N 204-011-722-005 S/N A3-30387 TSN 747.0, TAIL ROTOR BLADES P/N 204-011-702-15, S/N FS-15910 TSN 778.0, & S/N ATR-74218 TSN: 792.0. TAIL ROTOR GRIPS P/N 205-011-711-101 S/N's IMPT-4866, TSN 303.0 AND IMPT-5423, TSN 303.0. COMPLIED WITH TRACK & BALANCE INSTALLATION REQUIREMENTS

28. REMOVED LOANER ENGINE P/N T53L-703 SN# LE10901Z TSN 5230.8 TSO: 1783.6. GP CYC 8242.3, PT CYC 1352.9, COMP CYC 6918.7. INSTALLED REPAIRED T53-L703 S/N 12505Z. TSN:490.0 TSO:490.0 TSHSI 0.0. GP CYC, PT CYC, COMP CYC 3645.4 REPAIRED BY CAPPSCO, INTL CORP, FAA CRS 835R048D, WO R2345. SEE FAA 8130.3 DATED 11/14/18. ENGINE INSTALLED IAW MINUTEMAN AVIATION STC SR01196LA AND M.A. REPORT MA006, REV 1, DATED 6-4-03. COMPLIED WITH MINUTEMAN 150 HOUR INSPECTION AND ALL POST INSTALLATION CHECKS.

29. REMOVED OLD ELT AND INSTALLED NEW ACK ELT P/N ACK E-04 S/N 025769 IN SAME LOCATION. COMPLIED WITH FAR 91.207(d) 12M ELT INSPECTION. BATTERY REPLACEMENT DUE 10/24/2023

30. COMPLIED WITH ISOLAIR HIGH SKID CROSS TUBES 300 HOUR/6 MONTH INSPECTION IAW ISOLAIR ICA MANUAL No. 9002-UH1-ICA, REV E, DATED 4/29/14.

ALL WORK DONE IAW US ARMY TM55-1520-23-1 & PHASE MANUAL. MAIN ROTOR MAST NUT DUE RETORQUE IN 3 to 5 HOURS BY 11,901.9. MAINTENACE TEST FLIGHT & TRACK AND BALANCE REQUIRED THIS HELICOPTER IS APPROVED FOR RETURN TO SERVICE

Earnest Green A&P [REDACTED]

| |
|--------------------------|
| ENGINE F & C |
| TOTALS BRO |
| TOTALS FOR |
| ACCUMULATE |
| NEXT SCHED INSPECTION |
| TYPE INSP (50 HR., 100 F |
| ANNUAL INSP DUE DATE |

| |
|----------------------|
| (24) FLIGHT DISCREPA |
| 1 ACTION TAKEN |
| 2 ACTION TAKEN |
| 3 ACTION TAKEN |
| 4 ACTION TAKEN |



OIL ANALYSIS REPORT

| | |
|-----------------|-----------------|
| WEAR | ABNORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
BELL UH-1H N3276T - 90 DEGREES

Component
Gearbox

Fluid
NOT GIVEN (--- Oz)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|--------|-----------|--------------------|----------|----------|
| Sample Number | | | | GF04874620 | --- | --- |
| Sample Date | | | | 17 Dec 2019 | --- | --- |
| TSN | hrs | | | 0 | --- | --- |
| TSO | hrs | | | 0 | --- | --- |
| Oil Age | hrs | | | 0 | --- | --- |
| Filter Age | hrs | | | 0 | --- | --- |
| Oil Changed | | | | Not Changd | --- | --- |
| Filter Changed | | | | Not Changd | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

WEAR

The copper level is abnormal. The aluminum level is abnormal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185m | >30 | 19 | --- | --- |
| Chromium | ppm | ASTM D5185m | >4 | 1 | --- | --- |
| Nickel | ppm | ASTM D5185m | >5 | 1 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | >5 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >8 | ▲ 12 | --- | --- |
| Lead | ppm | ASTM D5185m | >10 | 6 | --- | --- |
| Copper | ppm | ASTM D5185m | >8 | ▲ 14 | --- | --- |
| Tin | ppm | ASTM D5185m | >4 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

There is no indication of any contamination in the oil.

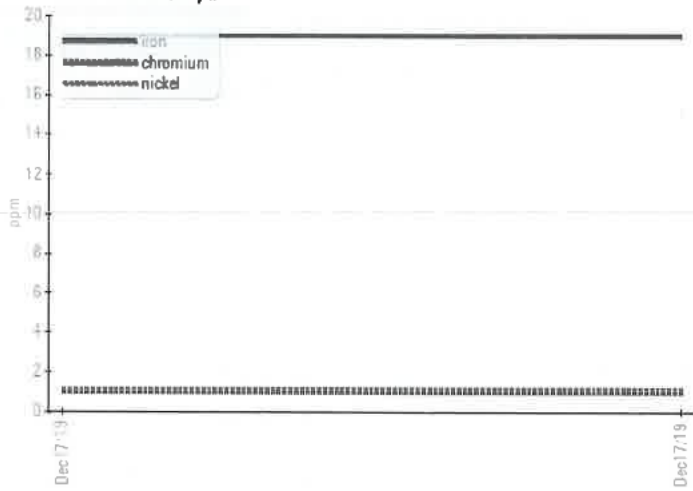
| | | | | | | |
|------------------|--------|-------------|-------|--------------|-----|-----|
| Silicon | ppm | ASTM D5185m | >10 | 5 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 8 | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | --- | --- |

FLUID CONDITION

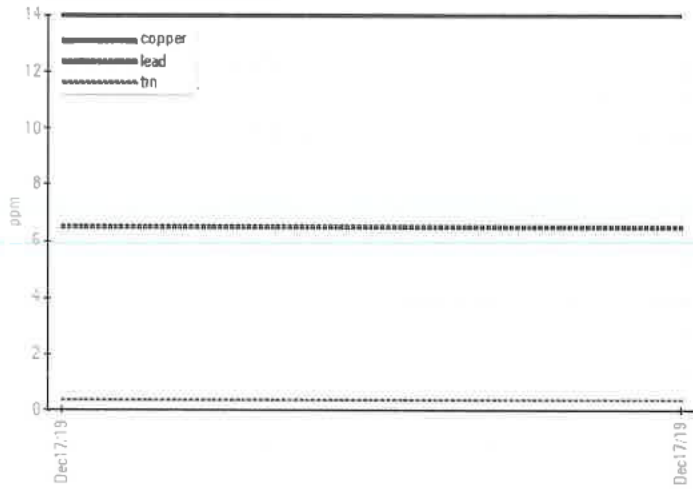
The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|--|--------------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 4 | --- | --- |
| Boron | ppm | ASTM D5185m | | 15 | --- | --- |
| Barium | ppm | ASTM D5185m | | <1 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | 0 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 6 | --- | --- |
| Magnesium | ppm | ASTM D5185m | | 25 | --- | --- |
| Calcium | ppm | ASTM D5185m | | <1 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | 2932 | --- | --- |
| Zinc | ppm | ASTM D5185m | | 10 | --- | --- |
| Sulfur | ppm | ASTM D5185m | | 67 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | | 24.6 | --- | --- |

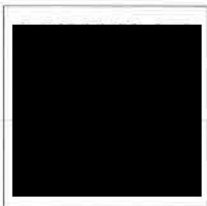
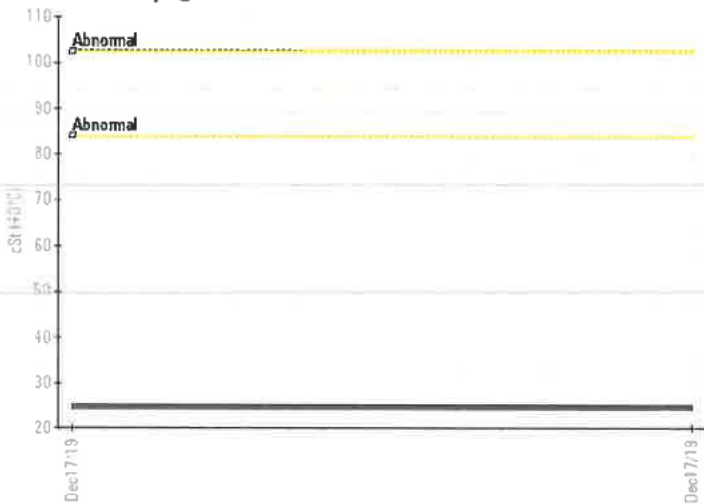
Ferrous Alloys



▲ Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GF04874620
Lab Number : 04874620
Unique Number : 8864658
Test Package : AVI 1

ROTORCRAFT SUPPORT INC


Received : 24 Dec 2019
Diagnosed : 26 Dec 2019
Diagnostician : Don Baldrige

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)



| | | | | |
|--|-------------------------|----------------------------|----------------------|----------------------------|
|  | N3276T | UH-1H S/N: 69-15911 | | |
| | DATE: 02/27/2020 | A/C TT: 11924.1 | ENG TT: 522.2 | LANDINGS: 10336 |
| | W/O: 20180 | PANEL HOBBS: 221.3 | STARTS: 401 | CONSOLE HOBBS: 79.1 |

1. DRAINED AND FLUSHED 90 DEGREE GEARBOX DUE TO DISCOLORED OIL. GEARBOX RE-SERVICED WITH NEW MOBIL JET II OIL.
2. REMOVED 90 DEGREE GEARBOX SIGHT GLASS AND INDICATOR. INSTALLED NEW SIGHT GLASS P/N 204-040-514-001, INDICATOR P/N 204-040-508-009 AND O-RING P/N M83248/1-218.
3. ROTATING BEACON REPORTED INOPERATIVE. DISASSEMBLED AND CLEANED INTERIOR OF BEACON. REPLACED LIGHT BULB. SATISFACTORY OPERATIONAL CHECK PERFORMED.
4. RIGHT HAND FUEL BOOST PUMP LIGHT ILLUMINATED. REMOVED RIGHT HAND FLOOR, OPENED FUEL CELL, CLEANED EJECTOR PUMP, CLOSED FUEL CELL AND INSTALLED FLOOR. SATISFACTORY OPERATIONAL CHECK PERFORMED.
5. OIL SAMPLES TAKEN FROM THE FOLLOWING AND SENT FOR ANALYSIS: 90 DEGREE GEARBOX, 42 DEGREE GEARBOX, TRANSMISSION, HYDRAULIC SYSTEM, AND ENGINE.
6. REMOVED MAIN ROTOR HUB & BLADE ASSEMBLY AND DISASSEMBLED TO FACILITATE MAINTENANCE. REASSEMBLED MAIN ROTOR HUB AND BLADES. ALIGNED AND STATIC BALANCED MAIN ROTOR HUB AND BLADE ASSEMBLY. REINSTALLED MAIN ROTOR HUB AND BLADES.
7. MAIN ROTOR GRIPS P/N 204-011-121-113 S/N'S AFS 3838 (RED) AND AFS 3360 (WHITE), WERE INSPECTED PER AD 2013-13-06, PARA (e) (3) INSPECTION OF GRIP BUFFER PAD ON THE INNER SURFACE OF EACH GRIP TANG FOR DELAMINATION & CORROSION - EACH GRIP WAS FOUND SERVICEABLE. AD 2013-13-06 PARA (e) (3) - BUFFER PAD INSPECTION, NEXT DUE AT ACTT: 13,124.1 OR FEB-2022.
8. MAIN ROTOR BLADE P/N 205-015-150-101, S/N A-FS442 (RED) WAS REMOVED, INSPECTED AND REPAIRED BY HELIBLADE INC. UNDER WORK ORDER NUMBER 3276 AND REINSTALLED. (TSN: 2649.7)
9. MAIN ROTOR BLADE P/N 205-015-150-101, S/N A-FA490 (WHITE) WAS REMOVED; INSPECTED AND REPAIRED BY HELIBLADE INC. UNDER WORK ORDER NUMBER 3275; AND REINSTALLED. (TSN: 416.7)
10. REPLACED ROD END BEARINGS P/N 204-011-119-001 ON BOTH MAIN ROTOR PITCH CHANGE LINKS DUE TO WEAR.
11. RETENTION HARDWARE, AN503-8-12 SCREWS, MS21042L08 NUTS, & NAS1149FN832P WASHERS ON BOTH MAIN ROTOR BLADE BOLT NUTS WERE REPLACED DUE TO WEAR.
12. SAFETY WIRE BETWEEN TRANSMISSION DRAIN PLUG AND CHIP DETECTOR HOUSING REINSTALLED IN CORRECT DIRECTION.
13. REMOVED ACK AVIONICS TECHNOLOGIES INC., E-04, EMERGENCY LOCATOR TRANSMITTER (ELT) S/N 025769 WITH MOUNTING BRACKET; ELT ANTENNA E-04.8 AND REMOTE CONTROL SWITCH E-04.5 WITH AUDIO ALERT UNIT E-04-7-1. INSTALLED AN ARTEX PRODUCTS ME406HM ELT, S/N 242-07933, (HEX I.D. ADCC407BF4003C9), MOUNTING BRACKET, AND AUDIBLE ALERT BUZZER; ELT ANTENNA, P/N 110-338, S/N 610518. REFER TO FIELD APPROVED RSI FAA FORM 337 DATED 02-27-2020 FOR DETAILS. ELT BATTERY REPLACEMENT DATE JAN 2027.
14. PERFORMED ELT TEST PER FAR 91.207d PER 12 MONTH REQUIREMENTS.
15. INSTALLED A 9 PIN, "MS" BULKHEAD CONNECTOR. REFER TO FIELD APPROVED RSI FAA FORM 337 DATED 02-27-2020 FOR DETAILS.
16. BUCKET SWITCH REPORTED TO BE INOP - VERIFIED CORRECT OPERATION OF BUCKET RELEASE SYSTEM AFTER 9 PIN CONNECTOR INSTALLATION.
17. REMOVED THE EXISTING FUEL CAP ASSEMBLY, P/N 415-50. INSTALLED A NEW AERONAUTICAL ACCESSORIES, LOCKING FUEL CAP KIT P/N 212-280-002, WHICH CONTAINS FUEL CAP ASSEMBLY P/N 206-701-201, S/N 2125. REFER TO FIELD APPROVED RSI FAA FORM 337 DATED 02-27-2020 FOR DETAILS.
18. REPLACED WORKING RIVETS ON AFT TAILBOOM BULKHEAD REFERENCING BELL STRUCTURAL REPAIR MANUAL, BHT-ALL-SRM, REVISION 1, CHAPTER 3, TYPICAL PROCESSES AND REPAIR PROCEDURES.
19. INSTALLED A NEW FORWARD MOST NUTPLATE AT THE AFT RIGHT HAND CROSSTUBE RETENTION CAP DUE TO WEAR.
20. TRACKED AND BALANCED MAIN ROTOR BLADES TO ACCEPTABLE LIMITS PER TM 55-1520-210-23, CHANGE 47, CHAPTER 5, SECTION IX WITH CHADWICK EQUIPMENT.
21. REPLACED BOTH LUBRICATION FITTINGS WITH NEW P/N NAS516-1A AT MAIN ROTOR TRUNNION DUE TO RESTRICTION WHILE GREASING.
22. INSTALLED NEW SHIMS P/N 120-008C58E29, BETWEEN MAIN ROTOR BLADES AND DRAG BRACE CLEVIS.
23. LUBRICATED, CLEANED AND ADJUSTED RIGHT HAND CREW DOOR DUE TO DIFFICULT TO OPEN.
24. PERFORMED A 25 HOUR & 50 HOUR LUBRICATION.
25. CARGO ASSEMBLY REMOVED AND REINSTALLED. VERIFIED CORRECT OPERATION OF MANUAL AND ELECTRICAL CARGO RELEASE FUNCTION.
26. REVISED WEIGHT AND BALANCE CHART C.
27. SATISFACTORY GROUND RUN AND LEAK CHECK PERFORMED.
28. OPERATIONAL CHECK FLIGHT REQUIRED.

PHILLIP B. [REDACTED]
 ROTORCRAFT SUPPORT, INC.
 FAA CRS YT2R331L