



A Textron Company

ALERT SERVICE BULLETIN

505-21-20

PSL#541

20 February 2021

MODEL AFFECTED: 505

SUBJECT: PILOT COLLECTIVE STICK AND GRIP ASSEMBLY
M207-20M478-041/-043/-047, ONE-TIME DETAILED
INSPECTION OF.

HELICOPTERS AFFECTED: 65011 and subsequent.

COMPLIANCE: Prior to next flight, or not to exceed necessary ferry
flight(s) of helicopter to nearest approved maintenance
facility to comply with this Alert Service Bulletin.

DESCRIPTION:

Bell has received a report where a pilot collective stick assembly broke above the cabin floor at the junction with the collective jackshaft. This finding occurred during a pilot pre-flight check of flight controls for travel per BHT-505-FM Rotorcraft Flight Manual instructions.

This Alert Service Bulletin (ASB) provides instructions for a one-time inspection for cracks of the pilot collective stick and grip assembly. Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected helicopter.

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Product Support Engineering
Tel: 1-450-437-2862 / 1-800-363-8023 / productsupport@bellflight.com

MANPOWER:

Approximately 2 man-hours are required to complete this bulletin. This estimate is based on hands-on time and may vary with personnel and facilities available.

WARRANTY:

Warranty considerations for a replacement Pilot Collective Stick and Grip Assembly will be managed on a case by case basis following completion of step 5.a.1. in the accomplishment instructions of this ASB.

MATERIAL:

Required Material:

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty (Note)</u>
M207-20M478-047	Pilot Collective Stick and Grip Assembly	1 (1)

NOTE 1: Only required if the suspect assembly fails the inspection requirements of this Alert Service Bulletin.

Consumable Material:

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator’s consumable material stock levels. This material may be obtained through your Bell Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty (Note)</u>	<u>Reference *</u>
2110-07015-00	Dry-cleaning Solvent	1 GAL (1)	C-304
Commercial	Cleaning Cloth, Low-Lint	A/R	C-516

* C-XXX numbers refer to the consumables list in the BHT-ALL-SPM, Standard Practices Manual

NOTE 1: Quantity indicated is the format that the product is delivered in. Actual quantity required to accomplish the instructions in this bulletin may be less than what has been delivered.

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

505-MM, Maintenance Manual, Chapter 67
BHT-ALL-SPM, Standard Practice Manual, Chapter 6.

PUBLICATIONS AFFECTED:

Not affected.

ACCOMPLISHMENT INSTRUCTIONS:

1. If required, it is acceptable to perform a necessary ferry flight(s) to return the helicopter to the nearest approved maintenance facility where the suspect part shall be inspected. The following limitations are applicable for the duration of the ferry flight(s).
 - a. Minimum crew on board for the ferry flight(s).
 - b. Any approvals that may need to be obtained from local aviation authorities are the responsibility of the owner/operator.
2. Prepare the helicopter for maintenance.
3. Remove pilot collective stick and grip assembly (1, Figure 1) ([DMC-505-A-67-11-01-00A-520A-A](#)) from jackshaft assembly (2).
4. Clean pilot collective stick and grip assembly at areas identified (Figure 2) with a clean cloth (C-516) moistened with dry-cleaning solvent (C-304) or equivalent.
5. Using a 10X power magnifying glass and strong light source, inspect complete circumference of the pilot collective stick and grip assembly at the areas identified (Figure 2).
 - a. If a crack is found during the 10X magnifying glass inspection, or a crack is suspected, perform a fluorescent penetrant inspection in the area of the crack (BHT-ALL-SPM, Chapter 6).

1. If a crack is confirmed following the fluorescent penetrant inspection, the pilot collective stick and grip assembly is considered unserviceable as is. Report findings with pictures to Product Support Engineering at productsupport@bellflight.com, before proceeding. Make sure that the following is in the subject line of the e-mail:
 1. Service directive number: 505-21-20
 2. Helicopter serial number
 3. Operator name
 4. Total time in service
2. If there is no crack identified following the fluorescent penetrant inspection, go to step 6.
 - b. If no cracks are identified following the 10X magnifying glass inspection, go to step 6.
6. Install serviceable pilot collective stick and grip assembly ([DMC-505-A-67-11-01-00A-720A-A](#)) that meets the intent of the original release of this Alert Service Bulletin.
7. Make an entry in the helicopter logbook and historical service records indicating compliance with this Alert Service Bulletin.

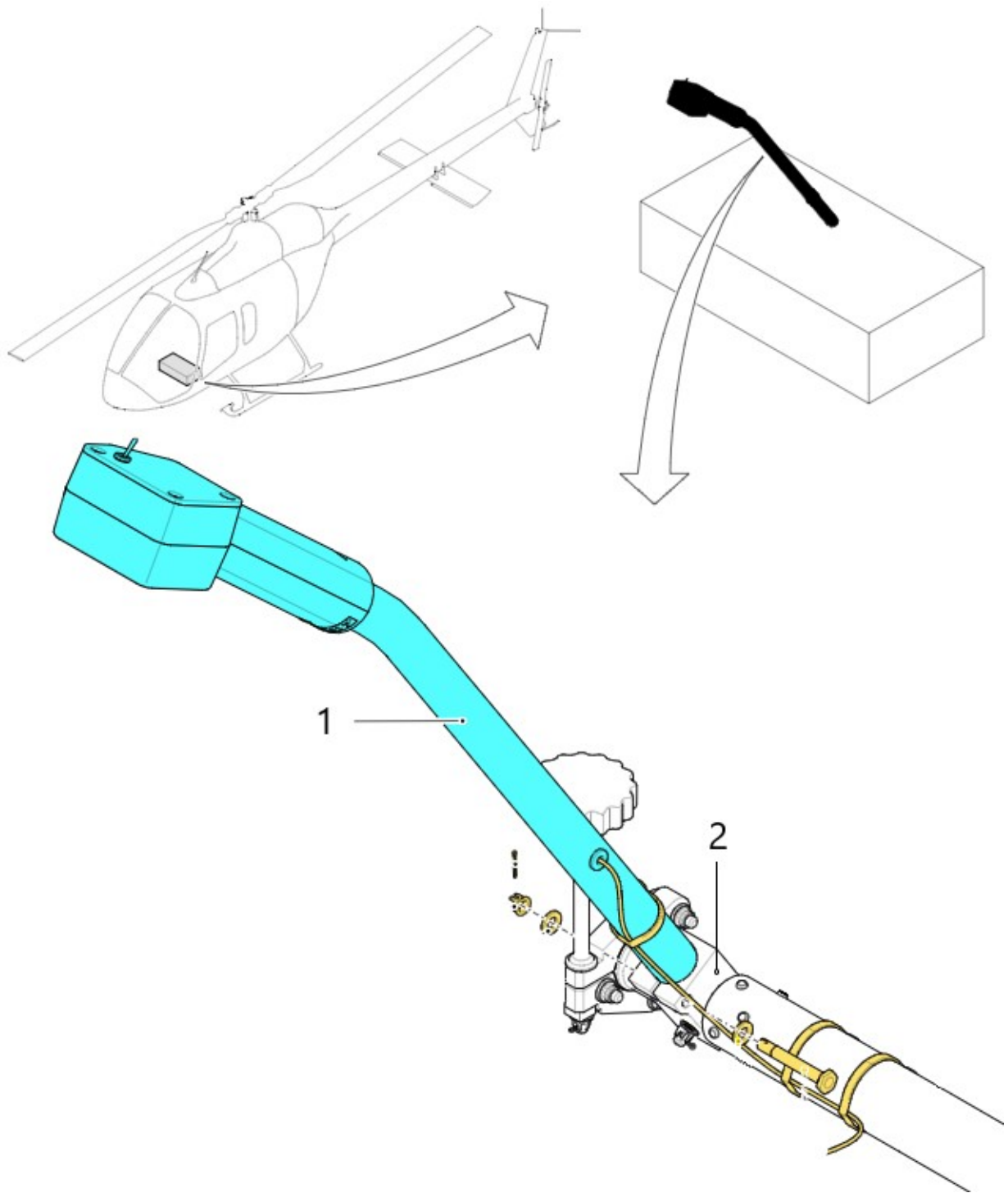


FIGURE 1 – Pilot Collective Stick and Jackshaft Assembly

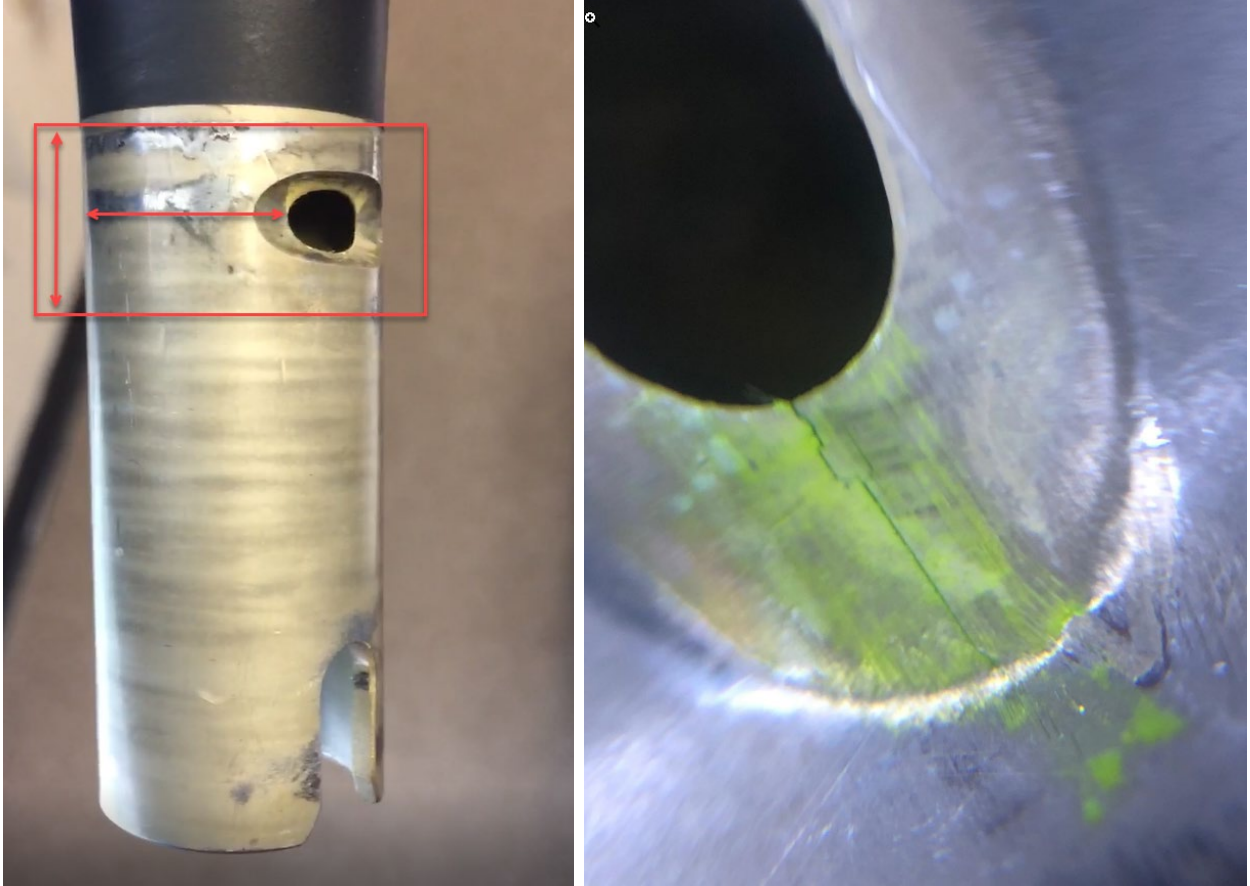


FIGURE 2 - Inspect Complete Circumference in Areas Identified