

RUSSIAN FEDERATION MINISTRY OF TRANSPORT OF THE RUSSIAN FEDERATION FEDERAL AIR TRANSPORT AGENCY

AIRWORTHINESS DIRECTIVE

19 of May, 2025

No. 2025-FATA-010144R-05

Applicability - ANSAT helicopters (ANSAT, ANSAT-GC models) and their modifications

Designer's State - RUSSIAN FEDERATION

Corrective actions stated in the present Airworthiness Directive are mandatory. None of the operators is allowed to operate the aircraft covered by present Airworthiness Directive otherwise than according to the requirements of present Directive.

Separation of the blade edge tippings 333.3950.1203-03(05) of the tail rotor blades 333.3950.1000 was detected during the operation of the tail rotors 333.3510.0000 on the ANSAT helicopters.

In order to ensure flight safety and maintain the airworthiness of the entire fleet of the ANSAT helicopters in the civil aviation of the Russian Federation, as well as based on the Technical decision of JSC "Kazan Helicopters" No. 1/144-2024-KB3 Issue 2 dated 20.01.2025

IT IS REQUIRED:

To use as guideline and to accept to follow the below stated technical maintenance procedure of the ANSAT helicopters (ANSAT, ANSAT-GC models) and their modifications with tail rotor blades 333.3950.1000 manufactured before 31.08.2023:

- 1. Each time the periodic technical maintenance is carried out within the scope of "50 flight hours / 12 calendar months" maintenance form, additionally perform a check of tail rotor blade 333.3950.1000 for non-glueing of strips 333.3950.1200, blade edge tippings 333.3950.1203-03(05) and 333.3950.1008, tips 333.3950.1600 according to the paragraph 1 of Technical Decision No. 1/144-2023-KB3 Issue 2 dated 20.01.2025. Make entries about the works performed in the helicopter logbook and tail rotor certificate.
- 2. In case of detection of non-glueing, the tail rotor shall be removed from the operation and sent to JSC "Kazan Helicopters" for repair.
 - 3. Airworthiness Directive comes into force on 30.05.2025 and is valid until its repeal.
- 4. Airworthiness Directive No. 2023-AHCAT, AHCAT-CK-03 dated 24.08.2023 is considered as invalid.

Appendix: Technical Decision No. 1/144-2024-KB3 Issue 2 dated 20.02.2025, on 8 sheets:

Deputy Head of FATA

A.A. Dobryakov

APPROVED
Deputy General Director –
Head of Design
JSC "Kazan Helicopters"
A.O. Garipov

TECHNICAL DECISION No. 1/144-2023-KB3

on continued airworthiness of the ANSAT helicopters (ANSAT, ANSAT-GC models)

Issue 2

The missing of the tail rotor blade edge tippings was detected during the post-flight technical maintenance of the ANSAT helicopter (ANSAT-GC model) No. 33150 RA-20084 on the 17.05.2023, at that there was no damage to the helicopter. In addition, during the flight on 20.05.2023 there was a noticeable vibration (imbalance) detected in the area of the tail rotor on the ANSAT helicopter (ANSAT-GC model) No. 33148 RA-20082, crew captain decided to land the helicopter, during the inspection the missing of two tail rotor blade edge tippings was detected, there was no damage to the helicopter.

In order to ensure the airworthiness of the ANSAT helicopters (ANSAT, ANSAT-GC models) being in operation, the following decision was made, taking into account the preliminary results of the investigation of the tail rotor blades received from the operators after the inspections.

DECISION:

On the ANSAT helicopters (ANSAT, ANSAT-GC models) with tail rotor blades 333.3950.1000 manufactured before 31.08.2023 since the issue of present Technical Decision:

- 1. When carrying out periodic technical maintenance within the scope of "50 flight hours // 12 calendar months" maintenance form, additionally perform a check according to the temporary task card No. 064.10.001 "Visual inspection of tail rotor blades, checking for absence of non-glueing" (Appendix 1).
- 2. Tail rotors, being under warranty and not, having the following defects detected during the checks:
- defects of the blades in the form of non-glueing of the rubber layer of strips (2), blade edge tippings (3), as well as tips (4) and blade edge tippings (5) (see fig. 202, Appendix 2), exceeding the permissible ones according to the temporary task card 064.10.00l,
- defects of the blades in the form of the strips rubber layer chipping-off, exceeding the permissible ones according to the temporary task card 064.10.00l,
- defects of the blades, exceeding the permissible ones according to the section 064.10.00 "Troubleshooting" of the helicopter Maintenance manual,

shall be removed from the operation and sent to JSC "Kazan Helicopters" for the purpose of investigation and repair.

Tail rotors together with the blades must be packed into containers and sent to JSC "Kazan Helicopters" with certificates and inspection reports attached according to the Appendix 3.

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- 3. After repair carried out at JSC "Kazan Helicopters", operation of the tail rotor blades could be resumed.
- 4. Repair of the tail rotors being under warranty is carried out at the expense of the JSC "Kazan Helicopters", except in cases where, according to the results of a study at JSC Kazan Helicopters, the defects of the blades have not been confirmed or classified as "operational'.
- 5. In connection with the issuance of the present Technical Decision No. 1/144-2023-KB3 Issue 2 the previously issued Technical Decision No. 1/144-2023-KB3 shall be considered as invalid.
- 6. Operators shall follow the requirements of the paragraphs of this Technical decision until the issuance of Service Bulletin A0599- \overline{b} 9- Γ by JSC "Kazan Helicopters" or issuance of another airworthiness directive.

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APPENDIX 1

			APPENDIX 1			
	Temporary task card 064.10.00l					
Procedure: Visual inspection of tail rotor blades, checking for absence of non-glueing						
		Operations and technical requirements	Corrective actions			
1	Works are a	allowed to be carried out without removing the tail rotor blades from the helicopter.				
C	AUTION.	WORKS SHOULD BE CARRIED OUT INDOORS AT A RELATIVE HUMIDITY OF NO MORE THAN 75%, AT TEMPERATURE OF NO LESS THAN 15°C. IF THE BLADES (HELICOPTER) WERE OUTDOORS AT HIGH HUMIDITY OR EXPOSED TO PRECIPITATION (SNOW, FOG, RAIN, DEW), THEY MUST BE KEPT INDOORS AT THE SPECIFIED TEMPERATURE AND HUMIDITY FOR AT LEAST 12 HOURS.				
2	Perform vis	ual inspection of tail rotor blades (see TC No. 064.10.00c).				
	Defects of t MM are not	Send the tail rotor to the JSC "Kazan Helicopters" for investigation and repair				
	If defects an					
3	Perform vis	ual inspection of the condition of rubber layer of blade strips (2) (see figure 202) for absence of damages.				
		er chipping-off with a total area of no more than 10 cm^2 , with a single layer with an area of no more than width of no more than 0.5 cm is allowed.	Send the tail rotor to the JSC "Kazan Helicopters"			
	In case of d make marks	for investigation and repair.				
4	for this pur hammer fro avoiding tra	bsence of non-glueing of the strips (4) and blade edge tippings (5) by tapping with a duralumin hammer, pose tap the entire area of the strips (4) and blade edge tippings (5) with a free fall of the duralumin m a height of no more than 10 15 mm or with soft blows from a distance of no more than 10 mm, aces of tapping. Violation of glueing is characterized by a change in tone. Check the presence and f the strips (4) and blade edge tippings (5) fastening screws.				

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The r	resence of nor	n-glueing of	f the strips (4)	and blade edge	tippings (5)	is not allowed.
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If any defects are detected, complete the inspection card* of tail rotor blade (see figure 201), make marks on the tail rotor blades with a soft pencil, and take pictures of the defects.

5 Check the absence of the rubber layer non-glueing of the strips (2) and blade edge tippings (3) by tapping with a duralumin hammer, for this purpose tap the entire area of the strips (2) and blade edge tippings (3) with a free fall of the duralumin hammer from a height of no more than 10 ... 15 mm or with soft blows from a distance of no more than 10 mm, avoiding traces of tapping. Violation of glueing is characterized by a change in tone.

The presence of the strips (2) rubber layer non-glueing is not allowed (except for areas A, B, C (see figure 201)).

Elimination of non-glueing in the areas A, B, C (see figure 201) shall be carried out in the course of operation according to the procedure described in section 020.10.00.

The presence of the blade edge tippings (3) non-glueing is not allowed.

If any defects are detected, complete the inspection card* of tail rotor blade (see figure 201), make marks on the tail rotor blades with a soft pencil, and take pictures of the defects.

6 Based on the results of works, draw up the inspection report according to the Appendix 3.

The report for each periodic inspection (with an inspection card and photographic materials) should be attached to the tail rotor certificate.

* **Note:** – Information about defects is completed in one inspection card of tail rotor blade.

Send the tail rotor to the JSC "Kazan Helicopters" for investigation and repair.

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Test equipment	Tools and appliances	Ex	pendable materials
	Duralumin hammer (333.9100.005)		

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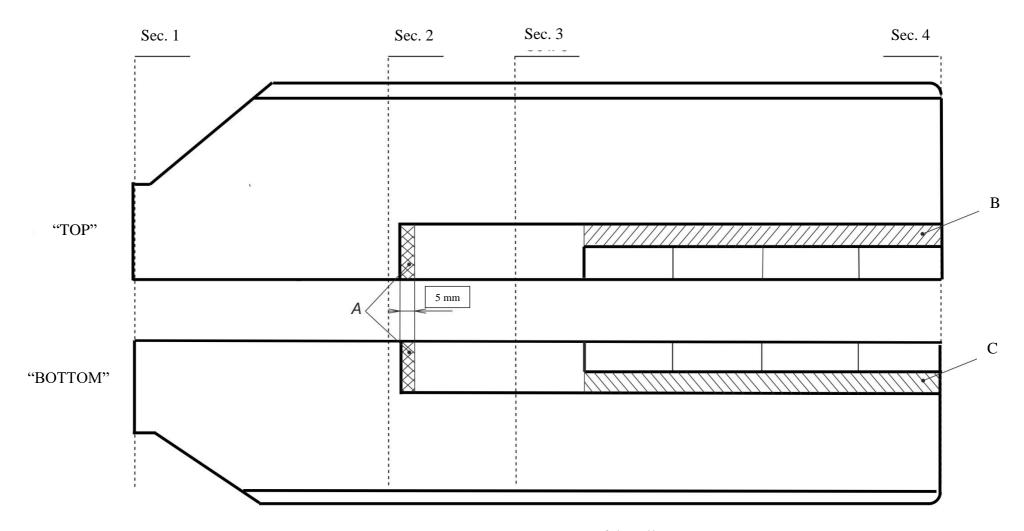


Figure 201 – Inspection card of the blade No. of the tail rotor No. (to be completed in case of detection of defects)

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APPENDIX 2

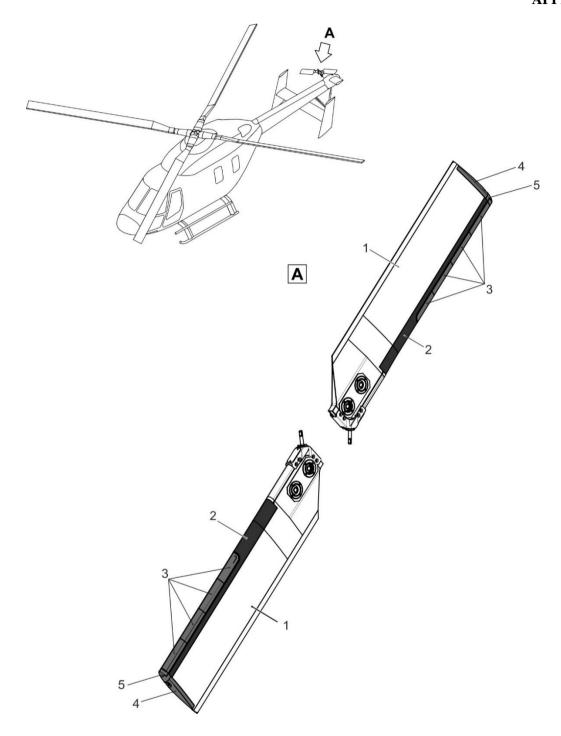


Figure 202 – Tail rotor blade

Table 1

Position	Quantity	Description	Designation
1	2	Tail rotor blade	333.3950.1000
2 2		Strip	333.3950.1200
3	8	Blade edge tipping	333.3950.1203-03(05)
4	2	Tip	333.3950.1600
5	2	Blade edge tipping	333.3950.1008

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APPENDIX 3

APPROVED				
(Head	of the operat	ing organization)		
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Report

of inspection of tail rotor blades and checking for non-glueing according to the temporary task card 064.10.001

In accordance with the Airworthiness Directive No. dated the blades of the tail rotor of the ANSAT helicopter No. have been inspected and checked for the absence of non-glueing in compliance with the temporary task card No. 064.10.00l.

The inspection results are attached.

Helicopter No.	Tail rotor No.	Blade No.	Inspection results*	Completion date
No	No	Blade No		
No	No	Blade No	•••	

Attachment:

- 1. Inspection card of blade No. ... of the tail rotor No. ... with photos.
- 2. Inspection card of blade No. ... of the tail rotor No. ... of the helicopter No. ... with photos.

AGREED

On behalf of (name of operating organization):

Note – If there are defects, attach an inspection card of the tail rotor blade, photographic materials of the identified defects.