



RUSSIAN FEDERATION
MINISTRY OF TRANSPORT OF RUSSIAN FEDERATION
FEDERAL AIR TRANSPORT AGENCY
AIRWORTHINESS DIRECTIVE

16 of February, 2022

No. 2022-AHCAT-04

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.

In accordance with the conclusions of Conclusion No. 132/239-AHCAT/21 dated 22.12.2021 "Comparative analysis of the development of fatigue cracks of casings of the ANSAT helicopter tail rotor hubs occurred during bench tests" of the Scientific Center of Aircraft Continued Airworthiness of State Research Institute of Civil Aviation the signs of deviations in the treatment of surfaces and holes of the casings of the tail rotor hubs 333.3530.2000, 338.3510.200, 333.3530.2100 in terms of surface reinforcement were revealed. According to the results of periodic fatigue tests in 2020 and 2021 the service life of tail rotor hub of 2000 hours was confirmed.

Based on the Technical decision of JSC "Kazan Helicopters" No. 4/144-2022-KB3 dated 15.02.2022 in order to ensure flight safety and airworthiness of the ANSAT helicopters (ANSAT, ANSAT-GC models), and their modifications the following is

PROPOSED:

1. Establish the assigned service life of 2000 hours and assigned service time of 8 years for tail rotor hubs 333.3530.2000, 338.3510.200, 333.3530.2100, being in operation, in accordance with table 1 of Technical decision of JSC "Kazan Helicopters" No. 4/144-2022-KB3 dated 15.02.2022 and for tail rotor hubs produced by JSC "Kazan Helicopters" in 2022.

2. Make an entry in section "3. SERVICE AND STORAGE TIME LIMITS" of certificates of tail rotors 333.3510.0000, 333.3510.0000-03, being in operation:

“Assigned service life of tail rotor hub No. (Code) No. (Serial number) - 2000 hours within the limits of assigned service time of 8 years”.

3. Upon reaching the operating time of the tail rotor assembly 333.3510.0000, 333.3510.0000-03 of 2000 hours, send the tail rotor to JSC "Kazan Helicopters" to carry out the works on investigation and replacement of the tail rotor hubs 333.3530.2000, 338.3510.200, 333.3530.2100.

4. Operators of the ANSAT helicopters and their modifications shall inform JSC "Kazan Helicopters" about results of completion of works per p.2 of present Airworthiness directive.

5. Airworthiness directive comes into force from the date of its issue and becomes invalid after the issue of service bulletin No. A0481-БЭ-Г by JSC "Kazan Helicopters" or issue of another Airworthiness directive.


Appendix: Technical decision No. 4/144-2022-KB3 dated 15.02.2022, 2 sheets;

Deputy Director General

П. П.

A.A. Novgorodov

Верно по начальнику УТЛГ ВС
И.В. Пономарев



APPROVED BY
Deputy managing director –
Head of design
JSC “Kazan Helicopters”,
A.O. Garipov

TECHNICAL DECISION No.4/144-2022-KB3
on continued airworthiness of ANSAT helicopters and their modifications

In accordance with the conclusions of Conclusion No. 132/239-AHCAT/21 dated 22.12.2021 “Comparative analysis of the development of fatigue cracks of casings of the ANSAT helicopter tail rotor hub occurred during bench tests” of the Scientific Center of Aircraft Continued Airworthiness of State Research Institute of Civil Aviation the signs of deviations in the treatment of surfaces and holes of the casings of the tail rotor hubs in terms of surface reinforcement were revealed, while according to the results of periodic fatigue tests in 2020 and 2021, the service life of the tail rotor hub of 2000 hours was confirmed.

In order to ensure the airworthiness of the ANSAT helicopters and their modifications, which are in operation, the following decision was made.

DECISION:

On the ANSAT helicopters (ANSAT, ANSAT-GC models) and their modifications since the release of the Airworthiness directive:

1 Establish service life limitation of 2000 hours for tail rotor hubs 333.3530.2000, 338.3510.200, 333.3530.2100 with serial numbers according to table 1.

Table 1

No.	Serial number of tail rotor	Serial number of tail rotor hub
1	Г20.03.01	2002
2	Г20.03.02	2003
3	Г20.08.01	2011
4	Г20.08.03	2012
5	Г20.09.02	2014
6	Г20.10.01	2015
7	Г20.10.02	2016
8	Г20.11.02	2018
9	Г20.11.03	2019
10	Г20.12.01	2020
11	Г21.03.01	2102
12	Г21.03.02	2103
13	Г21.04.01	2104
14	Г21.04.03	2101
15	Г21.05.01	2106
16	Г21.06.01	2107
17	Г21.06.02	2102

TECHNICAL DECISION No. 4/144-2022 –KB3
on continued airworthiness of ANSAT helicopters and their modifications

No.	Serial number of tail rotor	Serial number of tail rotor hub
18	Г21.08.01	2109
19	Г21.08.02	2110
20	Г21.09.01	2111
21	Г21.10.01	2112
22	Г21.10.02	2113
23	Г21.11.01	2114
24	Г21.11.02	2115
25	Г21.11.03	2116
26	Г21.11.04	2117
27	Г21.11.05	2118
28	Г21.12.01	2119
29	Г21.12.02	2120
30	Г21.12.01	2101
31	Г21.12.03	2121
32	Г22.01.02	2202
33	Г21.04.02	2105
34	Г21.06.03	2108
35	Г22.01.01	2201

2 Tail rotors with serial numbers according to table 1:

2.1 Make an entry in section “3. SERVICE AND STORAGE TIME LIMITS” of tail rotor certificate: “Assigned service life of tail rotor hub No. (Code) No. (Serial number) - 2000 hours within the limits of assigned service time of 8 years”.

2.2 Upon reaching the operating time of the tail rotor 333.3510.0000, 333.3510.0000-03 of 2000 hours, send the tail rotor to JSC "Kazan Helicopters" to carry out the works on replacement of the tail rotor hub.

3 Inform JSC “Kazan Helicopters” and Federal Air Transport Agency about results of works carried out in accordance with paragraphs 1 and 2.1.

4 This technical decision also applies to the tail rotor hubs 333.3530.2000, 338.3510.200, 333.3530.2100 produced by JSC “Kazan Helicopters” in 2022.

5 Operators shall follow the requirements of the paragraphs of this technical decision until the issue of service bulletin A0481-БЭ-Г by JSC “Kazan Helicopters” or issue of another airworthiness directive.