



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

**AIRWORTHINESS DIRECTIVE**

23 August 2019

No. 2019-FATA 36-32A-08

Applicability – Ka-32 helicopters

State of Manufacturer – Russian Federation

**The corrective actions prescribed by this Airworthiness Directive are mandatory. No persons may operate an aircraft to which this Airworthiness Directive applies, except in accordance with the requirements of this Airworthiness Directive.**

The International Aviation Committee (IAC) issued the Airworthiness Directives No. 2012-53-05 by 23 November 2012 and No. 2012-53-05 Change 1 by 11 November 2013 connected with the Ka-32 aviation events. They caused by failure of the TB3-117BMA and TB3-117BMA series 02 engines. The Directives propose the corrective actions for the designers of helicopter and engine concerning clarification of the operating and repair documentation. Further operation of the Ka-32 helicopters with mentioned engines demanded the issuing of additional changes for operating documentation during operation with the external sling load.

**IT IS PROPOSED:**

1. The item 2 of the Airworthiness Directive No. 2012-53-05 Change 1 by 11 November 2013 to change the following edition.

The Operators of Ka-32 helicopters operating with the external sling load should be guided by the Temporary change No. 1a to the Maintenance Manual of TB3-117BMA and TB3-117BMA series 02 engines (078.00.5800-04PЭ – the book 3) instead of the Temporary change No. 1 to the Maintenance Manual of TB3-117BMA and TB3-117BMA series 02 engines (078.00.5800-04PЭ).

Leave the rest of the item text without change.

2. The operation according to the item 1, subitems 1a, 1b, 1c of the Airworthiness Directive No. 2012-53-05 Change 1 by 11 November 2013 carry out during operation with the external sling load with the frequency of lifts more than 4 times per one hour.

3. Contact with the Joint-Stock Company “KAMOV” and “ODK-KLIMOV” concerning the technical content of this Airworthiness Directive.

Attachment: the Temporary change No. 1a on 5 pages.

**Deputy of Head of Federal Air Transport Agency**

**A. Novgorodov**

# Approval page

**AGREED**

Head of FATA Division for maintenance  
of the airworthiness of aircraft

**V. V. Kudinov**

« \_\_\_\_\_ » \_\_\_\_\_ 201\_\_

**APPROVED**

Director of the BK-2500, TB3-117 program-  
chief designer  
JSC “UEC-Klimov”

**E. S. Prodanov**

« \_\_\_\_\_ » \_\_\_\_\_ 201\_\_

**AGREED**

Head of representation office No. 192  
of MoD of the RF

**D.N. Poltoratskiy**

« \_\_\_\_\_ » \_\_\_\_\_ 201\_\_

**AGREED**

Chief designer for development  
JSC “Kamov”

**L. P. Shiriaev**

« \_\_\_\_\_ » \_\_\_\_\_ 201\_\_

**AGREED**

Head of representation office No. 708  
of MoD of the RF

**D. V. Bogdanov**

« \_\_\_\_\_ » \_\_\_\_\_ 201\_\_

## **TEMPORARY REVISION No. 1a**

of the Maintenance manual  
of the TB3-117BMA, TB3-117BMA series 02  
(078.00.5800 – 04PЭ – book 3)

**Approved by  
list of approval**

**TEMPORARY REVISION No. 1a**

to Maintenance manual of  
the ТВ3-117ВМА, ТВ3-117ВМА серия 02 engines  
(078.00.5800 – 04РЭ – book 3)

## **I Temporary revision description**

1. Temporary revision No. 1a is applied to the TB3-117BMA, TB3-117BMA series 02 engines installed in the Ka-32 type helicopters engaged in operations on pick up, carriage and release of loads with the aid of the external sling.
2. Temporary revision No. 1a has been developed for definition of the additional condition for the frequency of the external sling loads pickup – with the frequency of more than 4 times per 1 hour. A new requirement of the mandatory replacement of the compressor turbine with the NGV2, the fuel manifold by the new ones with no operating time since new has been introduced.

## **II Instruction on effect and procedure for drawing up of Temporary revision No. 1a**

The Temporary revision has been issued for the time period of 12 months from the date of approval and is printed on the colored paper.

The pages of the Temporary revision introduced into section 005.20.20, book 3 shall be placed before the revised pages of the maintenance manual without taking them out.

Temporary revision No. 1a shall be recorded in the pages of records of temporary revisions (section 005.00.00, book3) applied to Temporary revision No.1a.

**TB3-117  
MAINTENANCE MANUAL**

**005-1a**

**Introduce before page 1, book 3, 005.20.20**

**ENGINE – SCHEDULED WORKS  
(scheduled maintenance)**

A revision on the load lifting frequency per 1 hour has been introduced for works as per items 28, 29 performed during operation of the engines as part of helicopters engaged in external sling load operations.

The requirement of the mandatory replacement of the parts of the engine hot section with the new ones which have zero operating time since new has been introduced for works as per item 29.

28.	Engine technical condition evaluation NOTE. It is necessary to measure wear of the MHO-78 oil pump block shaft, the rotational speed transducer termination end and check the technical condition of the vertical flexible shaft beginning from 700 hours of operating time	100 (beginning from 300 hours of operating time)	Book 3 072.00.00 T.C. No. 609
29.	Replacement of the compressor turbine with NGV2, the fuel manifold and check of the hot section condition NOTE. 1. The compressor turbine with the NGV2, the fuel manifold are subject to the mandatory replacement by the new ones with no operating time. 2. The flame tube, the NGV I and III are replaced according to the technical condition	750	Light overhaul procedure 078.00.4300BC-T46 or Light overhaul manual 0780000000-80 PC

*Works as per items 28, 29 are performed during operation of the engines as part of helicopters engaged in external sling load operations with the frequency of more than 4 times per 1 hour.*

Approval page  
of Temporary Revision No.1a  
of Maintenance manual of  
the TB3-117BMA, TB3-117BMA series 02 (078.00.5800-04PЭ)

**On behalf of JSC “Kamov”**

Chief designer

Sh.A. Suleimanov

**On behalf of JSC “UEC-Klimov”**

Director of design bureau and CCI

A.V. Lipin

Deputy chief designer -  
Head of design bureau of author`s  
supervision

O.V. Chaikina

Head of customer support department

A.V. Moskalev

**On behalf of representation office No.  
708 of MoD of the RF**

Deputy service director

D. V. Menshikov

Chief specialist

D.P. Isotov

Leading designer

A.L. Semechko

1 category design engineer

A.N Zelenin

2 category design engineer

E.M. Popov