

**Interstate Aviation Committee
Aviation Register**

AIRWORTHINESS DIRECTIVE

March 18, 2014 No. 2014-55-01

Applicability: Tu-204, Tu-214 aircraft and their modifications

State of Manufacturer – Russia

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

On the 1st of November, 2013, while performing maintenance of the Tu-204-100E, number No. 64042, operated by "Cubana de Aviation", damages of the stabilizer sections in the area of rib 0 and spar II junction were detected which could develop during further operation of the aircraft and lead to unsafe condition. A similar stabilizer damage was found on January 8, 2014, on Tu-204C No. 64021 operated by "Aviastar-Tu".

The aircraft design organization, manufacturer and operators promptly arranged an inspection of the Tu-204/Tu-214 flying fleet of various modifications that have the same stabilizer design, using the technology developed by "Tupolev".

As for March 18, 2014, the entire fleet of Tu-204/ Tu-214 aircraft flying in the Russian Federation has been inspected, as well as 11 Tu-204 aircraft operated by foreign operators.

No problems were found on Tu-214 aircraft manufactured by "Kazan Aviation Complex named after S.P. Gorbunov" (16 airplanes inspected). Out of 32 inspected Tu-204 aircraft manufactured by "Aviastar - SP" similar damages of the stabilizer sections were detected on 6 airplanes. Operation of those airplanes was suspended by the Aviation Authorities of the states of registration pending the repair and a Decision on resuming operation.

"Technical Conclusion on Structural Damage in the Area of Rib 0 and Spar II Junction on Tu-204 Family" approved by "Aviastar SP" and "Tupolev" on March 5, 2014, states that the detected damages were caused by deviation from "Tupolev" design and technological documentation in production that resulted in mounting stresses in the area of rib 0 and spar II junction.

On February 24, 2014, "Tupolev" approved "Substantiation of Possibility and Conditions for Further Operation of Tu-204 and its Modifications, Tu-214 and its Modifications, Relating to Stabilizer Defects Revealed in Operation". This document prescribes conditions for further operation of the aircraft for which no stabilizer damages have been revealed during inspections, and namely - periodic inspections of the stabilizer elements per Form F 1 with the first inspection to be performed upon achieving 1000 flights.

Based on this "Substantiation" of February 24, 2014, "Tupolev" prepared Technical Decision No. 3-42.05P on continued airworthiness of Tu-204/Tu-214 aircraft and their modifications approved by "Tupolev" on February 26, 2014, and concurred by GosNII GA on February 26, 2014, as well as Technical Decision No. 7-42.05P on continued airworthiness of Tu-204 aircraft operated by foreign operators approved by "Tupolev" on February 28, 2014.

"Tupolev" issued Service Bulletins for revising Maintenance Manuals and Maintenance Schedules:

- No. 766-БЭ Maintenance Manual and Maintenance Schedule for Tu-204-300A;
- No. 949-БЭ Maintenance Manuals and Maintenance Schedules for Tu-204-100, Tu-204C, Tu-204-300, Tu-204-100B, Tu-204-100C, Tu-204-300 (starting from No. 64057);
- No. 949-БЭ-АБ Maintenance Manuals and Maintenance Schedules for Tu-204-120, Tu-204-120C, Tu-204-120CE, Tu-204CE, Tu-204-100E, Tu-204-100B, Tu-204-300 (for aircraft operated by foreign operators);
- No. 214-516-БЭ Revision of Maintenance Manual and Maintenance Schedule for Tu-214.

Service Bulletins Nos. 766-БЭ, 949-БЭ, 214-516-БЭ are approved by "Tupolev" and concurred by GosNII GA.

Service Bulletin No. 949-БЭ-АБ is approved by "Tupolev".

In accordance with Aviation Regulations Part 39 (AP-39) item 39.13 the IAC Aviation Register

PROPOSE:

For in-service Tu-204, Tu-214 aircraft and their modifications:

1. For those aircraft for which no stabilizer damages have been revealed during inspections to be guided by Service Bulletins Nos. 766-БЭ, 949-БЭ, 949-БЭ-АБ, 214-516-БЭ for periodic inspections of the stabilizer elements per Form F 1 with the first inspection to be performed upon achieving 1000 flights.
2. For those aircraft for which stabilizer damages have been revealed during inspections and their operation has been suspended, the structural repair in order to resume operation to be performed on the basis of "Tupolev" technical documentation which must be developed for each individual aircraft. A decision on resuming operation of each individual aircraft after its repair shall be taken by the Aviation Authority of the state of registration.
3. In case of finding damages while inspecting the stabilizer in accordance with item 1 to suspend the aircraft operation and promptly inform "Tupolev" and the Aviation Authority of the state of registration on the revealed damages. The structural repair in order to resume operation to be performed on the basis of "Tupolev" technical documentation which must be developed for each individual aircraft. A decision on resuming operation of each individual aircraft after its repair shall be taken by the Aviation Authority of the state of registration.
4. Any questions relating to the technical content of this Airworthiness Directive shall be directed to the Department of after-sale support of "Tupolev" (tel. +7-499-263-70-80).

Attachments:

1. Technical Decision No. 3-42.05P on continued airworthiness of Tu-204/Tu-214 aircraft and their modifications approved by "Tupolev" on February 26, 2014, and concurred by GosNII GA on February 26, 2014;
 2. Technical Decision No. 7-42.05P on continued airworthiness of Tu-204 aircraft operated by foreign operators approved by "Tupolev" on February 28, 2014;
 3. Service Bulletin No. 766-БЭ Maintenance Manual and Maintenance Schedule for Tu-204-300A;
 4. Service Bulletin No. 949-БЭ Maintenance Manuals and Maintenance Schedules for Tu-204-100, Tu-204C, Tu-204-300, Tu-204-100B, Tu-204-100C, Tu-204-300 (starting from No. 64057);
 5. Service Bulletin No. 949-БЭ-АБ Maintenance Manuals and Maintenance Schedules for Tu-204-120, Tu-204-120C, Tu-204-120CE, Tu-204CE, Tu-204-100E, Tu-204-100B, Tu-204-300;
 6. Service Bulletin No. 214-516-БЭ Revision of Maintenance Manual and Maintenance Schedule for Tu-214.
-

Aviation Register
General Director

Alexander Donchenko