

## Webinar — Final dissemination event for research project 'Integrity Improvement of Rotorcraft Main Gear Box (MGB)'

*Online event*

**Organised by:** EASA

**Date:**

**12 Mar 2024**

**12/03/2024, 15:00 - 17:00 CET (UTC +1)**

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### Event Materials

#### Documents

[Presentation — Final dissemination event for research project 'Integrity Improvement of Rotorcraft Main Gear Box \(MGB\)'](#)

[Recording — Final dissemination event for research project 'Integrity Improvement of Rotorcraft Main Gear Box \(MGB\)'](#)

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### Description

The main objective of the [Integrity Improvement of Rotorcraft Main Gear Box \(MGB\) research project](#) has been to determine ways of improving the integrity of rotorcraft gearboxes. There have been two primary work streams to be carried out as part of this research project:

**Stream 1:** The project should evaluate rotor and rotor drive system configurations and determine system architecture and design means to prevent single points of catastrophic failure, wherever possible. This can be accomplished by means of a review of typical rotorcraft gearbox configurations and development of proposals for improvements based on the knowledge and experience of the organisation conducting the research.

**Stream 2:** The project should identify the most significant design parameters that influence the reliability and tolerance to flaws of case-hardened materials subject to rolling contact fatigue. Based on the outcome of this activity, rolling contact fatigue tests and simulations should be conducted with the objective to:

- propose limitations for these design parameters that provide an acceptable level of reliability without crack initiation or without catastrophic cracking developing when the component is

subject to specific flaws;

- identify probable threats or flaws that cannot reliably be addressed by the proposed design parameters and that have the potential for crack initiation and subsequent propagation; and
- determine the factors that promote crack development back to the surface rather than into the core of a case-hardened component.

After a public tender procedure, EASA awarded the project implementation to Airbus Helicopters Technik (former ZF Luftfahrttechnik GmbH). The project team has now successfully accomplished all tasks and would like to invite you for the final dissemination webinar.

In this webinar, EASA and the project team of Airbus Helicopters Technik will:

- introduce the research scope and objectives,
- summarise the research activities and main results,
- inform about the expected benefits from the project, and
- give the possibility for questions and answers.

For submitting your questions and input even before the webinar, use [SLIDO](#) (event code: 1888564, passcode: pcw74q).

The webinar will be recorded and made available on this webinar page and the project page after the webinar.

Further information on the project including the public deliverables can be found on the project page: [Integrity Improvement of Rotorcraft Main Gear Box \(MGB\) | EASA \(europa.eu\)](#).

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## Agenda

[MGB final dissemination webinar agenda](#)

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## Registration

To register for this webinar, use the [registration link](#).

[Registration link](#)

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## Contact

For queries, please contact Willy Sigl at [willy.sigl \[at\] easa.europa.eu](mailto:willy.sigl@easa.europa.eu)  
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## Related Content

Research Project

Integrity Improvement of Rotorcraft Main Gear Box (MGB)

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