



A Textron Company

ALERT SERVICE BULLETIN

505-21-23
17 June 2021

MODEL AFFECTED: 505

SUBJECT: OIL SYSTEM - DEDICATED CRITERIA IN THE FRAME OF BELL ASB 505-21-22

HELICOPTERS AFFECTED: Serial numbers 65011 through 65275, 65278 through 65291, 65294 through 65302, 65307, 65312, 65314 through 65332, 65334 through 65339, 65342, 65345 and 65346.

[Serial number 65276, 65277, 65292, 65293, 65303 through 65306, 65308 through 65311, 65313, 65333, 65340, 65341, 65343, 65344, 65347 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

COMPLIANCE: See attached Safran Service Bulletin SB 319 79 4847
Version: A Dated 11 June 2021 First Issue

DESCRIPTION:

The purpose of this bulletin is to achieve complete distribution of the attached supplier bulletin to the owners/operators currently registered on the Bell technical publications distribution list.

Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected helicopter.

APPROVAL: See attached Safran Service Bulletin SB 319 79 4847
Version: A Dated 11 June 2021 First Issue

SERVICE BULLETIN No. 319 79 4847

Version: A
Date: 11 June 2021
First issue

Modification

Recurring action

One-off action
Applicable from:
“JUNE 2021”
Subject:
Oil system - Dedicated criteria in the frame of BELL ASB 505-21-22.

APPLICABLE ENGINE / VARIANT(S)	EFFECTIVITY CODE	MAINTENANCE LEVEL	CONDITION OF APPLICATION	OPERATIONAL EFFECT
ARRIUS 2 R	4	1, 2	Application upon customer request in the frame of BELL ASB 505-21-22	
		3, 4	Not applicable	

This SB must be done in full compliance with manufacturer instructions. Refer to the Effectivity Code found in the table above.

SERVICE BULLETIN No. 319 79 4847

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

1. GENERAL**1.1. Background****1.1.1. Context**

Bell and Safran Helicopter Engines have become aware of a situation on the field regarding particles (Refer to Figure 1) found during a routine engine oil change and filter inspection.

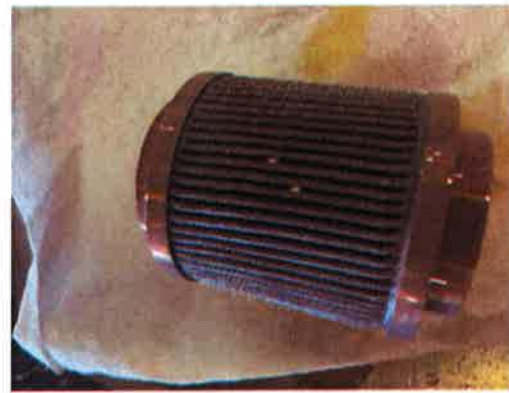


Figure 1 - Machining chips from BELL oil tank

1.1.2. Analysis

The results of the joint investigation performed by Safran Helicopter Engines and Bell have revealed that most nonmagnetic particles were introduced into the engine oil system via left over manufacturing fragments trapped inside Bell engine oil tanks.

1.1.3. Solution

Bell Alert Service Bulletin (ASB 505-21-22) introduces a one-time visual inspection of the engine oil filter to address this possible condition.

This Safran Helicopter Engines Service Bulletin (SB) describes the dedicated criteria to be applied if concerned particles are identified in the engine oil filter.

1.2. Approval

The technical content of this document is approved under the authority of the DOA (Design Organisation Approval) ref. EASA.21J.070.

1.3. Summary of updates

Not applicable.

**End of Section §1
“General”**

SERVICE BULLETIN No. 319 79 4847

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

2. PROCEDURE DONE AT THE OPERATOR'S SITE OR AT A MAINTENANCE CENTER APPROVED FOR LEVEL 1, 2**2.1. Manpower**

Not applicable.

2.2. Tooling and/or materials

Refer to ARRIUS 2 R Maintenance Manual.

2.3. Material information

Refer to ARRIUS 2 R Maintenance Manual.

2.4. Necessary procedures

Refer to paragraph 2.6.

2.5. Block diagram for this SB

Not applicable.

2.6. Instructions on how to do the procedure**2.6.1. Implementation**

Engine on the aircraft.

2.6.2. Operating instructions

- 2.6.2.1. If particles are detected in the oil filter: Apply the procedure given on Figure 204 "Particle sampling" in ARRIUS 2 R Maintenance Manual, task 71-02-07-280-803 ("Particles in the oil system - Decision table - Special procedure").

SERVICE BULLETIN No. 319 79 4847

§1.GENERAL

§2.LEVEL 1, 2

§3.LEVEL 3

§4.LEVEL 4

§5.CERTIFICATES

2.6.2.2. If the particles found in the oil filter are similar to Figure 1, Refer to the special decision table below:

Type of particles		Maintenance level		
Wires	Q < 5	Level A Refer to Figure 205	Q ≥ 5	Level B + Particle analysis Refer to Figure 206, Figure 208
Machining chips	Q < 5 30	Level A Refer to Figure 205	Q ≥ 5 30	Level B + Particle analysis Refer to Figure 206, Figure 208
Coked oil	Q < 5	Level A Refer to Figure 205	Q ≥ 5	Level B + Particle analysis Refer to Figure 206, Figure 208
Flakes, Splinters	Q < 2	Level B + Particle analysis Refer to Figure 206, Figure 208	Q ≥ 2	Level C + Particle analysis Refer to Figure 207, Figure 208
Dust (visible to the naked eye)	Q < reference image (1)	Level A Refer to Figure 205	Q ≥ reference image (1)	Level B + Particle analysis Refer to Figure 206, Figure 208
Fragments of the bearing separating cage	Level C Refer to Figure 207 The particles analysis is not necessary			
Non-magnetic particles	Rubber, paint, organic deposit	Level A Refer to Figure 205		
	Silver particles	Level B + Particle analysis Refer to Figure 206, Figure 208		

Figure 2 - Modified decision table from Maintenance Manual task 71-02-07-280-803

2.6.3. Reconditioning and checks

Refer to ARRIUS 2 R Maintenance Manual, task 05-50-00-200-801.

2.6.4. Identification

Refer to the following Guides for instructions on how to record this SB in the engine log book:

- Guide U441 or U015 if the paper engine log book is the official record for equipment that is subject to this SB.
- Guide U797 if the electronic engine log book is the official record for equipment that is subject to this SB.

For the paper engine log book:

Record the application of this SB in section "A" and in section "E" of the "unique" engine log book.

For the electronic engine log book:

Refer to Guide U797.

2.7. Weight and balance

Not applicable.

End of Section §2

“Procedure done at the operator’s site or at a Maintenance Center approved for Level 1, 2”

SERVICE BULLETIN No. 319 79 4847

§1. GENERAL

§2. LEVEL 1, 2

§3. LEVEL 3

§4. LEVEL 4

§5. CERTIFICATES

3. PROCEDURE DONE AT A MAINTENANCE CENTER APPROVED FOR LEVEL 3 OR AT THE OPERATOR'S SITE BY A MAINTENANCE CENTER APPROVED FOR LEVEL 3

Not applicable.

End of section §3**“Procedure done AT a Maintenance Center approved for Level 3 OR AT THE OPERATOR'S SITE BY a Maintenance Center approved for Level 3”**

SERVICE BULLETIN No. 319 79 4847

§1.GENERAL

§2. LEVEL 1, 2

§3. LEVEL 3

§4. LEVEL 4

§5.CERTIFICATES

4. PROCEDURE DONE AT A REPAIR CENTER APPROVED FOR LEVEL 4

Not applicable.

End of Section §4**“Procedure done at a Repair Center approved for Level 4”**

SERVICE BULLETIN No. 319 79 4847

§1. GENERAL

§2. LEVEL 1, 2

§3. LEVEL 3

§4. LEVEL 4

§5. CERTIFICATES

Not applicable

