

# SAFETY INFORMATION NOTICE

**SUBJECT: MAIN ROTOR DRIVE**

**Modifications to the measures to be taken in the event of incidents**

**For the attention of**



AIRCRAFT CONCERNED	Version(s)	
	Civil	Military
EC120	B	
AS350	B, BA, BB, B1, B2, B3, D	L1
AS550		A2, C2, C3, U2
AS355	E, F, F1, F2, N, NP	
AS555		AF, AN, SN, UF, UN, AP
EC130	B4, T2	
SA365 / AS365	C, C1, C2, C3, N, N1, N2, N3	F, Fs, Fi, K, K2
AS565		MA, MB, SA, SB, UB, MBe
SA366	G1	GA
EC155	B, B1	
SA330	J	Ba, L, Jm, S1, Sm
SA341	G	B, C, D, E, F, H
SA342	J	L, L1, M, M1, Ma
ALOUETTE II	313B, 3130, 318B, 318C, 3180, 3180B, 3180C	
ALOUETTE III	316B, 316C, 3160, 319B	
LAMA	315B	
EC225	LP	
EC725		AP
AS332	C, C1, L, L1, L2	B, B1, F1, M, M1
AS532		A2, U2, AC, AL, SC, UE, UL
EC175	B	
EC339		KUH/Surion
BO105	C (C23, CB, CB-4, CB-5), D (DB, DBS, DB-4, DBS-4, DBS-5), S (CS, CBS, CBS-4, CBS-5), E-4, LS A-3	CBS-5 KLH
MBB-BK117	A-1, A-3, A-4, B-1, B-2, C-1, C-2, C-2e, D-2, D-2m	D-2m
EC135	T1, T2, T2+, T3, P1, P2, P2+, P3, 635 T1, 635 T2+, 635 T3, 635 P2+, 635 P3	
EC135H	T3H, P3H, 635 T3H, 635 P3H	

Airbus Helicopters has recently reviewed the conditions in which repairs on dynamic assemblies are authorized, in particular if an incident has occurred in operation.

We remind you that, for cases of dynamic components involved in an accident or incident in operation or a transportation incident not covered by the "measures to be taken in the event of an incident" chapters of the documentation in force, it is mandatory to inform the Customer Service Technical Support Department. Pending instructions from this department, the assemblies are considered unfit for flight.

In particular we draw your attention to the fact that all incidents relating to the transportation or handling of assemblies/parts (falls, damage to containers or transportation packages), as well as significant impacts on assemblies/parts, whether they are installed on the aircraft or not (hangar door fall), are concerned by this requirement.

The Customer Service Technical Support Department shall decide whether the assemblies/parts are repairable or not. If applicable, they will provide instructions concerning any additional investigations to be carried out and instructions for the part to be repaired or scrapped. Finally, they will provide technical approval authorizing them to be re-used.

In addition, the conditions in which a dynamic component which was involved in an incident is considered as being repairable have been reviewed. This analysis has been used to define new directives for certain incidents.

The purpose of this Safety Information Notice is to inform you of these new directives, pending an update of the documentation. These directives replace those defined in the "measures to be taken in the event of an incident" chapters of the documentation in force, which will be updated. **These measures are now complied with by D-level Repair Centers when dynamic assemblies are returned following an incident as mentioned below.**

These directives do not affect the repairs already performed following an incident, as they have been performed and approved in accordance with the regulations and procedures which were in force at the time of the repair. The modification to the repair criteria increases the safety standards without changing the level of these standards prior to the criteria modification.

Generally speaking, repairs will no longer be authorized following an incident if one of the following criteria is met:

- the level of loads to which the assembly was subjected (acceleration or loads) cannot be estimated or is visibly very high,
- substantiation for the repair of damaged assembly, according to the airworthiness regulation in force, is not available or difficult,
- the detectability of all possible damage following the incident is not 100% guaranteed using conventional means available to repair centers or operators.

These directives apply to the following assemblies, if installed (according to versions):

- Main Rotor Assembly, including the rotor mast, hub, swashplate, pitch-change rod and scissors assemblies,
- Main Gearbox, including the MGB/Engine coupling,
- Accessory gearboxes of the Main Gearbox,
- Intermediate Gearbox,
- Tail Gearbox, including the tail rotor mast,
- Tail Rotor Assembly,
- Tail Rotor Drives,
- Main Rotor servo-controls,
- Tail rotor Servo-control,
- Main transmission mounting or suspension system.

For each assembly, depending on the type of incident, the table below specifies whether an inspection or repair is possible (YES) or not possible (NO) as per the documentation in force.

	Main Rotor Assembly (*)	MGB including MGB/GTM link	Intermediate GearBox	TGB including Mast	Tail Rotor Head	Tail Transmission	MGB Accessory Module	Main Servo Control	Tail Servo Control	Suspension (Strut Bars and Anti-Torque plate)
1	Aircraft roll over WITH rotating rotor	NO	NO	NO	NO	NO	YES	NO	YES (7)	NO
2	Aircraft roll over WITHOUT rotating rotor	NO	YES	YES	YES (1)	YES	YES	YES	YES (7)	YES
3	Hard Landing with only rear structure collapsed (tail boom or intermediate structure)	YES	YES	YES	YES	NO	YES	YES	YES	YES
4	Hard Landing with distorted MGB bar or main frame collapsed	NO	NO	NO	NO	NO	YES	NO	NO	NO
5	Immersion of the assembly	NO	NO	NO	NO	NO	NO	NO	NO	NO
6	Lightning	YES	YES (2)	YES	YES	YES	YES	YES	YES	YES
7	Main blade impact with rotating rotor, with significant damage on leading edge	NO	YES	YES	YES	YES	YES	YES	YES	YES
8	Tail blade impact with rotating rotor, with significant damage on leading edge	YES	YES	YES	NO	YES	YES	YES	YES	YES
9	Gear Box Overheating > 200°C	YES	NO (3)	NO (3)	YES (4)	YES	YES	YES	YES	YES
10	Overtorque without information (level/time) but on the main rotor (8)	NO (6)	NO	YES	YES	YES	YES	YES	YES	YES
11	Overtorque without information (level/time) but on the Tail rotor (8)	YES	YES (9)	NO	NO (6)	NO	YES	YES	YES	NO (6)
12	Rotor brake fire	YES	YES	YES	YES	YES (5)	YES	YES	YES	YES

**NOTE:** If several incidents have occurred, the most severe must be considered for each assembly.

**YES :** Comply with the documentation: the repair is authorized as per the documentation.

**NO :** Repair unauthorized. Pending the update of the documentation, contact Airbus Helicopters.

(\*) Including the rotor mast, hub, swashplate, pitch-change rod and scissors assemblies.

(1) Unless the tail rotor blades have hit the ground.

(2) The epicyclic module, if applicable, is not repairable if the MGB is affected by lightning.

(3) Only the modules affected by overheating are not repairable.

(4) The Fenestron or Tail Rotor Hub are not repairable if the TGB has overheated.

(5) The forward shaft section (MGB side) is not repairable.

(6) Except for the control system (swashplates, pitch-change rods and scissors).

(7) Except if tail rotor or tail servo control impacted on ground.

(8) If location is unknown, apply the most severe for each assembly/part between 10 and 11.

(9) Only parts of MGB rear output have to be scrapped.

If the repair of the assembly is no longer authorized (NO) as per the documentation, it is mandatory to inform the Customer Service Technical Support Department which will inform you of the measures to be taken.