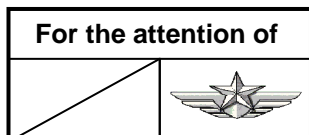


SAFETY PROMOTION NOTICE

SUBJECT: GENERAL

A helmet can save your life



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	C1, C2, C3, N, N1, N2, N3	F, Fs, Fi, K, K2
AS565		MA, MB, SA, SB, UB, MBe
SA366		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	
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), LS A-3	CBS-5 KLH, E-4
MBB-BK117	A-1, A-3, A-4, B-1, B-2, C-1, C-2, C-2e, D-2, D-2m, D-3, D-3m	D-2m, D-3m
EC135	T1, T2, T2+, T3, P1, P2, P2+, P3, EC635 T1, EC635 T2+, EC635 T3, EC635 P2+, EC635 P3, T3H, P3H, EC635 T3H, EC635 P3H	

No. 3587-P-00

This Safety Promotion Notice is a reminder on the recommendations from investigation bodies: wearing helmets significantly increases crew protection.

1. Publications from Accident investigation bodies

In 2010, the BEA (French Accident Investigation Board) has created a Safety Recommendation directed at EASA to make helmets compulsory for helicopter crews - at least for certain activities (FRAN-2010-001). In 2012, EASA responded with Opinion 02-2012, which stated that for Special Operations (aerial work for instance), the guidance material specifies that personal protection equipment should include helmets and other items.

In 2009, the Transportation Safety Bureau¹ (Canada) wrote a Safety Advisory to the Helicopter Association of Canada listing the occurrences where helmet wearing would have been beneficial. Following an accident in 2018, the TSB again highlighted the benefits of a helmet in certain accident scenarios such as rollover.

2. What are the benefits of wearing a helmet?

2.1 For individual protection

A study from the US army has shown that wearing a helmet could reduce the risk of fatal head injury in an accident by a factor of 6.² The study found that head injuries occur in a large majority of helicopter accidents, even though many of these accidents occur at relatively low speed. That means that these accidents could have been survivable if the crew members were correctly protected.

A 1998 Flight Safety Foundation (FSF) study on helmet-visor usage further suggests that, in 25 % of helicopter accidents where a helmet is worn with the visor down, the visor will significantly reduce facial and - of particular importance to pilots - eye injuries resulting from those facial strikes.

2.2 For passenger management

When an accident occurs, passengers look to their pilot for leadership in the conduct of the emergency egress procedures. If a pilot is unconscious or badly injured, he will not be able to manage the egress with certainly also injured passengers, neither will he be able to operate the survival equipment, the Emergency Locator Transmitter, nor manage the survivors while waiting for the rescue teams.



In this accident investigated by the TSB Canada, "The helmet provided sufficient protection to allow the pilot to remain conscious after the impact, to shut down the engine, and to provide help to the observer, who was seriously injured."

¹ https://www.h-a-c.ca/TSB_Safety_Advisory_Helmet_Use.pdf

² Crowley, J.S. (1991) Should Helicopter Frequent Flyers Wear Head Protection? A Study of Helmet Effectiveness. Journal of Occupational and Environmental Medicine, 33(7), 766-769

No. 3587-P-00

2.3 In case of bird strikes - for the continuation of a safe flight

Additionally, most of the lighter aircraft in the CS27 range are not equipped with bird strike resistant windshields. Some occurrences reported have shown cases of bird strike where the pilot was hit by a bird entering the cockpit. A key discriminant on the outcomes of those events was the presence of a helmet on the pilot's head. There were cases where pilots or copilots not wearing helmets received injuries up to short-term unconsciousness which is highly putting the continuation of a safe flight at risk.



Top & Bottom row:
Two instances of bird
strike.



3. For what missions / environments?

Each company has to perform a risk analysis to identify all Safety hazards related to their activities. Before each flight, it is recommended to perform a pre-flight risk analysis in which the helmet should be one of the mitigations considered.

This could include missions where the pilot would be alone in an emergency and in scenarios where he would be more exposed to risks or bear the responsibility for others. As a non-exhaustive list:

- Flights with simulated failures affecting the flight path and safety margins.
- Environments and seasons with high avian risks (check for published NOTAM).
- Low level flying and/or operations in proximity to obstacles (for instance mountain or aerial work).

Airbus Helicopters strongly encourages pilots and all crew members to wear flight helmets with visor down.