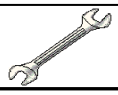
No. 3868-S-20

SAFETY INFORMATION NOTICE

SUBJECT: STANDARD PRACTICES

De-icing and anti-icing products

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	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, 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	
H160	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	

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Airbus Helicopters has participated in an investigation conducted by the Canadian Transport Safety Board (TSB), following an accident with an Ecureuil helicopter that occurred at the beginning of 2022 in Quebec.
The reported circumstances of this accident were that a helicopter collided with the frozen surface of a river (accident of the “Controlled Flight into Terrain” (CFIT) type).
The precise description and analysis of this accident, which did not result in injury, are given in Air transportation safety investigation report No. A22Q0029, which is available via the following link:

http://www.tsb.gc.ca/eng/enquetes-investigations/aviation/2022/A22Q0029/A22Q0029.html

You will find a summary of the circumstances of this accident and its analysis below:
- Before the flight during which the accident occurred, the helicopter was parked outside, at temperatures below zero. The external surface of the windshield was not protected and was covered in a layer of white frost.
- After starting the engine, the pilot applied a significant quantity of automobile windshield washer fluid to the entire windshield surface until all the frost was eliminated. He then removed the excess product by hand.
- A few moments after take-off, the outside surface of the windshield suddenly became covered with frost again.
- The pilot decided to perform a precautionary landing during which he was not able to judge the distance to the ground.
- The helicopter impacted the frozen and snow-covered surface of the river and then became immobilized on its left side.

The analysis performed by the TSB shows that the product used to de-ice the windshield was not the one recommended by Airbus Helicopters. The use of a methanol & water-based product, instead of an ethylene glycol & water-based product as recommended by Airbus Helicopters, led to the sudden icing (methanol being much more volatile than water, as opposed to ethylene glycol). When a methanol & water-based windshield washer fluid is used, the methanol will quickly evaporate and the remaining water will freeze as soon as the temperature drops below zero.

This event leads Airbus Helicopters to remind you that only the products recommended in the Work Cards of the Maintenance Manuals or Standard Practices Manual (MTC) must be used on our helicopters.

As regards de-icing or anti-icing protection, the applicable methods and products for our helicopters are described in Work Cards 20-07-02-205 and 20-07-03-409 (MTC).