

# ALERT SERVICE BULLETIN

**Bell Helicopter** **TEXTRON**

A Subsidiary of Textron Inc.

NO. 430-03-28

DATE March 3, 2003

PAGE 1 of 5

DATE

REV

**MODEL AFFECTED:** 430

**SUBJECT:** AIRSPEED LIMITS, REVISION OF

**HELICOPTERS AFFECTED:** Model 430 helicopters serial number 49001 through 49098.

Model 430 helicopters serial numbers 49099 and subsequent will have the intent of this bulletin accomplished prior to delivery.

**COMPLIANCE:** At customer's convenience but no later than July 30, 2003.

**DESCRIPTION:**

Alert Service Bulletin 430-01-22 dated 04-30-01 introduced new Vne decals restoring the operation of the aircraft to -40 degrees C (-40 degrees F). Since then, additional testing has been completed and the tests proved that the Vne limits could be further expanded.

This bulletin provides a procedure to replace the existing airspeed limits decal with new decals P/N 430-075-208-119 and -121 that will represent increased Vne airspeed.

In addition, note that decals P/N 430-075-070-101/-103 added to the instrument panel with Alert Service Bulletin 430-01-22, to remind the pilot and co-pilot to respect airspeed limitations displayed on the VNE decal, are still required.

**APPROVAL:**

The engineering design aspects of this bulletin are Transport Canada approved.

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**MANPOWER:**

Approximately 1 man-hour is required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

**MATERIAL:**

**Required Material:**

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
430-075-208-119	Decal <b>(Note 1)</b>	1
430-075-208-121	Decal <b>(Note 2)</b>	1

**Note 1:** Only for aircraft equipped with standard or high skid landing gear. Refer to figure 1.

**Note 2:** Only for aircraft equipped with retractable landing gear. Refer to figure 1.

**Consumable Material:**

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Reference</u>
TT-N-95,TYII 1GAL	Aliphatic Naphtha	A/R	C-305
3950 SCOTHCAL	Decal Sealer	A/R	C-349

**SPECIAL TOOLS:**

None required

**WEIGHT AND BALANCE:**

Not affected

**ELECTRICAL LOAD DATA:**

Not affected

**REFERENCES:**

BHT-430-Maintenance Manual  
BHT-430- Illustrated Parts Catalog  
BHT-430-MMS-12  
BHT-430-FM-1, Revision 14 dated 29 January 2003  
BHT-430-FMS-1 Revision 4 dated 21 January 2003

**PUBLICATIONS AFFECTED:**

BHT-430- Illustrated Parts Catalog  
BHT-430-FM-1  
BHT-430-FMS-1

**ACCOMPLISHMENT INSTRUCTIONS:**

**A) For aircraft equipped with retractable landing gear:**

1. Remove existing airspeed limitation decal P/N 430-075-208-117 from the overhead console. Use a sharp pointed knife to lift one corner of the decal and then remove the decal.
2. Remove the decal adhesive that remains with aliphatic naphtha (C-305).
3. Install decal P/N 430-075-208-121 in the location of the decal previously removed. Refer to figure 1. Seal edge of decal with sealer. (C-349)

**B) For aircraft equipped with standard or high skid landing gear:**

1. Remove existing airspeed limitation decal P/N 430-075-208-115 from the overhead console. Use a sharp pointed knife to lift one corner of the decal and then remove the decal.
2. Remove the decal adhesive that remains with aliphatic naphtha (C-305).
3. Install decal P/N 430-075-208-119 in the location of the decal previously removed. Refer to figure 1. Seal edge of decal with sealer. (C-349)

**C) For aircraft equipped with 430-706 004 overspeed warning system kit (Category A operations):**

1. Ensure decals P/N 430-075-070-103 are installed just below the pilot and co-pilot airspeed indicators. Refer to Alert Service Bulletin 430-01-22.

**D) For aircraft equipped with 430-705-009 or 430-705-011 kit (AFCS with Flight director):**

1. Ensure decal (s) P/N 430-075-070-101 are installed just above the pilot and co-pilot electronic attitude direction indicator (EADI). Refer to Alert Service Bulletin 430-01-22.

**E) For all aircraft:**

1. Insert BHT-430-FM1 Revision 14 Dated 29 January 2003
2. Insert BHT-430-FMS-1 Revision 4 Dated 21 January 2003
3. Annotate the helicopter records to reflect compliance with this bulletin.

	OAT °C	PRESSURE ALTITUDE FT x 1000											
		0	2	4	6	8	10	12	14	16	18	20	
VNE AIRSPEED LIMITS - BASIC HELICOPTER (INDICATED AIRSPEED IN KTS)	52	148											AUTOROTATION VNE 80 KIAS
	40	150	144	137	130								
	30	150	147	140	133	126	119						
	20	150	150	143	136	129	122	114	107	100			
	10	150	150	147	140	133	125	118	111	104	96	89	
	0	150	150	150	143	136	128	121	114	107	99	92	GEAR EXTENSION & RETRACTION VLO 120 KIAS
	-10	150	150	150	145	133	131	123	116	109	101	94	
	-15	144	144	144	141	129	127	123	118	110	103	96	
	-20	133	133	133	133	125	117	117	114	111	105	97	
	-25	120	120	120	120	118	112	109	106	103	100	98	
	-30	110	110	110	110	110	102	99	96	93	91	88	
	-35	100	100	100	100	100	90	88	85	82	79	76	
	-40	95	95	95	95	95	82	75	72	68	65		

**VNE IS 130 KIAS FOR CERTAIN TAKEOFF LOADING CONDITIONS  
FROM FUSELAGE STATION 249 TO FUSELAGE STATION 255**

Decal P/N 430-075-208-119

	OAT °C	PRESSURE ALTITUDE FT x 1000											
		0	2	4	6	8	10	12	14	16	18	20	
VNE AIRSPEED LIMITS - BASIC HELICOPTER (INDICATED AIRSPEED IN KTS)	52	148											AUTOROTATION VNE 80 KIAS
	40	150	144	137	130								
	30	150	147	140	133	126	119						
	20	150	150	143	136	129	122	114	107	100			
	10	150	150	147	140	133	125	118	111	104	96	89	
	0	150	150	150	143	136	128	121	114	107	99	92	GEAR EXTENSION & RETRACTION VLO 120 KIAS
	-10	150	150	150	145	133	131	123	116	109	101	94	
	-15	144	144	144	141	129	127	123	118	110	103	96	
	-20	133	133	133	133	125	117	117	114	111	105	97	
	-25	120	120	120	120	118	112	109	106	103	100	98	
	-30	110	110	110	110	110	102	99	96	93	91	88	
	-35	100	100	100	100	100	90	88	85	82	79	76	
	-40	95	95	95	95	95	82	75	72	68	65		

**VNE IS 130 KIAS FOR CERTAIN TAKEOFF LOADING CONDITIONS  
FROM FUSELAGE STATION 249 TO FUSELAGE STATION 255**

Decal P/N 430-075-208-121

Figure 1