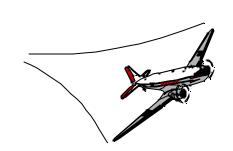
SPECIAL AIRWORTHINESS INFORMATION BULLETIN





U.S. Department of Transportation

Federal Aviation Administration

No. CE-02-19 March 11, 2002

Aircraft Certification Service Washington, DC

We post SAIBs on the internet at "av-info.faa.gov"

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) provides you, owners and operators of various Raytheon (Beech) propeller airplanes, safety information regarding usage of flight control gust locks. This SAIB applies to all series of the following models: 19, 23, 24, 33, 35, 35-33, 36, 50, 55, 95-55, 56, 58, 60, 65, 70, 76, 77, 65-80, 65-88, 65-90, 90, 95, 99, 100, 200, 300, 1900, and 2000.

Background

The FAA is aware of numerous incidents and fatal accidents that have resulted from the failure of a pilot to remove the flight control gust lock prior to attempted takeoff. A review of the records from these accidents, dating back to 1975, has revealed that many of the accidents involved use of a make-shift gust lock that was not the one provided by Raytheon (Beech). In some cases, a common bolt or nail has been inserted through the holes provided in the control column for this purpose. Such a device does not meet the requirements for flight control locks as defined in 14 CFR 23.679, which states in part: "If there is a device to lock the control system on the ground or water, (a) There must be means to- (1) Give unmistakable warning to the pilot when the lock is engaged..."

In an effort to reduce the consequences of takeoffs with the gust locks engaged, Raytheon Aircraft Company has, in the past, issued service bulletins to modify the flight control columns such that the gust lock could only be engaged in the nose down and/or roll input position. Beech airplanes manufactured prior to 1971 had control locks that would lock the controls in the neutral position, thus allowing take-off with the locks engaged. Starting in 1971, most models were equipped with gust locks that locked the controls in the nose down and/or roll input position.

Regardless of the configuration of the gust lock, proper adherence to the required preflight inspection and preflight checks specified in the AFM would have prevented all of these accidents.

Recommendation

The FAA strongly recommends that all pilots review preflight inspection procedures and "Before Takeoff" procedures specified in the pertinent airplane flight manual, pilot operating handbook, checklists, markings and placards. It should be noted that compliance with the operating limitations specified in the approved Airplane Flight Manual, markings and placards **is required** by 14 CFR 91.9.

Furthermore, the FAA strongly recommends that only the proper gust lock be used. The locks provided by the manufacturer are compliant with federal requirements to provide an unmistakable warning to the pilot when the lock is engaged. A listing of these locks and the applicable Model and serial numbers is as follows:

Model (Series)	Control lock part number	Applicable serials
19	169-590016	MB-1 THRU MB-480
19	169-590016-9	MB-481 THRU MB-523, MB-526, MB-534, MB-535
19	169-590016-15	MB-524, MB-525, MB-527 THRU MB-533, MB-536 THRU MB-905, SPARES FOR ALL.

23		M O M A THDU M 554			
23	NO CONTROL LOCK	M-2, M-4 THRU M-554			
	INSTALLED AT				
	TIME OF				
	DELIVERY				
23	169-590016	M-3, M-555 THRU M-1284			
23	169-590016-9	M-1285 THRU M-1378, M-1383, M-1386.			
23	169-590016-15	M-1379 THRU M-1382, M-1384, M-1385, M-1387 THRU M-2392,			
		SPARES FOR ALL			
24	169-590016	MA-1 THRU MA-363			
24	169-590016-9	MA-364 THRU MA-368, MC-2 THRU MC-106, MC-108, MC-109, MC-			
		110, MC-112			
24	169-590016-15	MC-107, MC-111, MC-113 THRU MC-795 SPARES FOR ALL			
33	35-590127-1	CD-1 THRU CD-387			
33	35-590128-1	CD-388 THRU CD-1304, CE-1 THRU CE-544, CE-547, CJ-1 THRU CJ-			
		85.			
33	36-590013-1	CE-545, CE-546, CE-548 THRU CE-1791, CJ-86 THRU CJ-179.			
35	35-524190-3	D-1 THRU D-4865			
35	35-590127-1	D-4866 THRU D-6841			
35	35-590128-1	D-6842 THRU D-9704			
35	36-590013-1	D-9705 THRU D-10403			
36	35-590128-1	E-1 THRU E-618			
36	36-590013-1	E-619 THRU E-1945, E-1947 THRU E-2103, E-2105 THRU E-2110.			
36	106-590013-19	E-1946, E-2104, E-2111 THRU E-2695			
36	106-590013-51	E-2696 AND AFTER AND SPARES FOR THE 106-590013-19.			
A/B36TC	36-590013-1	EA-1 THRU EA-319, EA -321 THRU EA-388			
A/B36TC	106-590013-19	EA-320, EA-389 THRU EA-530			
A/B36TC	106-590013-51	EA-531 AND AFTER AND SPARES FOR THE 106-590013-19.			
50	50-524257	H-1 THRU H-11, CH-12 THRU CH-360, DH-1 THRU DH-130, DH-132 THRU DH-143			
50	50-524257-17	DH-131, DH-144 THRU DH-347, EH-1 THRU E-70, FH-71 THRU FH-93,			
		FH-95, FH-96, GH-94, GH-97 THRU GH-119, HH-120 THRU HH-149,			
		JH-150 THRU JH-176.			
55	95-590011	TC-1 THRU TC-224			
55	95-590031	TC-225 THRU TC-1436, TE-1 THRU TE-859, TF-1 THRU TF-70			
55	58-590016-1	TC-1437 THRU TC-2343, TE-860 THRU TE-1185			
55	58-590016-13	TC-2344 THRU TC-2430, TE-1186 THRU TE-1197			
55	58-590016-19	TC-2431 THRU TC-2456, TE-1198 THRU TE-1201, TF-1 THRU TF-70			
ECTO	05 500021	AND SPARES FOR ALL			
56TC	95-590031	TG-2 THRU TG-94.			
56TC 58	58-590016-19 95-590031	SPARES FOR ALL TH-1 THRU TH-222			
58	58-590016-1	TH-223 THRU TH-1155, TJ-3 THRU TJ-288, TK-1 THRU TK-126			
58	58-590016-13	TH-1156 THRU TH-1315, TJ-289 THRU TJ-288, TK-1 THRU TK-126 TH-1156 THRU TH-1315, TJ-289 THRU TJ-381, TK-127 THRU TK-146.			
58	58-590016-19	TH-1316 THRU TH-1313, TJ-289 THRU TJ-381, TK-127 THRU TK-140.			
58	38-390010-19	435, TJ-437 THRU TJ-443, TK-148 THRU TK-150, SPARES ON PRIOR			
		AIRCRAFT			
58	106-590013-19	TH-1389, TH-1396 THRU TH-1652, TJ-436, TJ-444 THRU TJ-497, TK-			
		147, TK-151			
58	106-590013-51	TH-1653 AND AFTER			
60	60-590012	P-4 THRU P-246			
60	60-590012-23	P-247 THRU P-596, SPARES FOR 60-590012			
76	169-590016-15	ME-1 THRU ME-388			
76	169-590016-17	ME-339 THRU ME-437, SPARES FOR ALL			
77	108-590010-1	WA-1 THRU WA-312			

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65,70,80,88	50-590122-1	L-1, L-2, L-6, LC-1 THRU LC-317, LD-1 THRU LD-432, LB-1 THRU LB-
		25, LP-1 THRU LP-26, LP-28, LP-30 THRU LP-47
65,70,80,88	50-590122-31	LC-318 THRU LC-335, LD-433 THRU LD-511, LB-26 THRU LB-35
90	50-590122-1	LJ-1 THRU LJ-113
90	50-590122-21	LJ-114 THRU LJ-501
90	50-590122-33	LJ-502 THRU LJ-702, LW-1 THRU LW-202
90	50-590122-35	LJ-703 THRU LJ-1146, LJ-1148 THRU LJ-1151, LJ-1153 THRU LJ-1157,
		LW-203 AND AFTER
90	50-590122-39	LJ-1147, LJ-1152, LJ-1158 AND AFTER
90	101-590016-5	LA-2 AND AFTER
95	95-590011	TD-2 THRU TD-545
95	95-590031	TD-546 THRU TD-721
95	58-590016-19	SPARES FOR ALL
99.	50-590122-21	U-1 THROUGH U-164 EXCEPT U-50
99A,A99,		
A99A, B99		
C99	50-590122-37	U-50, U-165 AND AFTER
100	50-590122-33	B-1 AND AFTER, BE-1 AND AFTER
200	101-590016-5	BB-2 THRU BB-1265, BL-1 THRU BL-112, BT-1 THRU BT-31, BN-1
		THRU BN-4
200	101-590016-7	BB-1266 THRU BB-1324, BT-32, BT-33, BL-113 THRU BL-117, BL-127
		THRU BL-132
200	101-590016-9	BB-1325 AND AFTER, BT-34 AND AFTER, BL-133 AND AFTER, BN-5
		AND AFTER
MILITARY	101-590016- 5, -7	BJ-, BC-, BD-, BP-, CF-, GR-, FE-, BL-, BV-, BU-, BW-, FG- SERIALS
KING AIRS	OR -9	
300/300LW	101-590016-5	FA-1 THRU FA-114
300/300LW	101-590016-7	FA-115 AND AFTER, FF-1 THRU FF-19
B300	101 590016-9	FL-1 AND AFTER, FM-1 AND AFTER, FN-1 AND AFTER
1900	101-590016-5	UC-1 THRU UC-174, UB-1 THRU UB-74, UA-1 THRU UA-3
1900	101-590016-7	UE-1 THRU UE-17
1900	101-590016-13	UE-18 AND AFTER
2000	122-590011-21	NC-4 AND AFTER

The FAA also recommends that airplanes with a gust lock design that locks the controls in the neutral position be modified to a configuration that locks the column only in the nose-down position, provided a gust lock modification service bulletin is available. This modification will, at a minimum, prevent the airplane from taking off with the gust lock engaged. A listing of the available kits is as follows:

- 1. Models 55, 56, 58, 95-55 and 95 series Service Bulletin No. SB 27-3205
- 2. Models 33, 35 and 36 series Service Bulletin No. 2527
- 3. Model 76 Service Bulletin No. 1136
- 4. Models 65, 70, 80, 88, 90, 99 and 100 series Service Bulletin No. 0887-155
- 5. Models 55, 56, 58, 95-55, and 95 series Service Bulletin No. 0659-155, Rev. 1
- 6. Models 33, 35, and 36 series Service Bulletin No. 0660-155
- 7. Models 65, 70, and 65-B80 Service Bulletin No. 0331-017

Notes:

1. Item 1, above, is an updated version of Item 5 and is not needed if Item 5 has been accomplished.

2. Item 6, above, provides improved gust locks but does not rework the control column to pin the controls in the nose-down position.

For Further Information Contact

FAA, Wichita Aircraft Certification Office, Attention: Mr. Paul DeVore, 1801 Airport Rd, Room 100, Wichita, Kansas, 67209, telephone (316) 946-4142; email: paul.devore@faa.gov

U.S. Department of Transportation

Federal Aviation Administration

Aircraft Certification Service Delegation & Airworthiness Programs Branch PO Box 26460, AIR-140 Oklahoma City, OK 73125-0460

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URGENT FORWARD TO AIRCRAFT OPERATOR

CHANGE OF ADDRESS NOTICE

Airworthiness Directives (AD) for a particular make and model of aircraft are mailed to the aircraft owners using the permanent mailing address on file with the FAA Registry. If you need to change your address, YOU MUST SIGN THIS FORM AND MAIL TO FAA Aircraft Registration. A revised Certificate of Aircraft Registration will be mailed to you without charge. SIGNATURE REQUIREMENTS MAIL TO:

Individual Owner must sign

Partnership, a general partner must sign

Co-owner, each co-owner must sign continuing as necessary on an attached sheet

____ Government, any authorized person may sign

MAL 10: FAA Aircraft Registry, AFS-750 Mike Monroney Aeronautical Center PO Box 25504 Oklahoma City, OK 73125-0504

AIRCRAFT REGISTRATION #:				SERIAL #			
MAKE:				MODEL:			
ADDRESS CHANGE REQUESTED				CANCELLATION OF REGISTRATION REQUESTED			
NAME OF CERTIFICATE HOLDER			(Check applicable block, sign, and date) 1. Aircraft Sold To: (Purchaser's name and Address)				
STREET			-				
				2. Aircraft Destroyed/Sci			
CITY S	TATE	ZIP	 3. Aircraft Exported To: 4. Other, Specify: I (we) request cancellation of registration for the above reason. 				
COUNTRY							
SIGNATURE (IN INK)	TITLE	DATE	SIGNATU	RE (IN INK)	TITLE	DATE	