Airworthiness Concern Sheet

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Make, Model, Series, Serial No.:
Raytheon (Beech) Propeller Airplanes except for Model 17, Model 18, and Model 3000 (T-6A)

Reason for Airworthiness Concern:
Numerous accidents involving take-off or attempted take-off with the flight control gust lock engaged.

FAA Description of Airworthiness Concern (Who, What, Where, When, How? Attachments: RA and appropriate data) *and* **Request for Information** (Proposed Alternate Inspection/Repair Procedures, **Cost Impact**, Etc. Note: Any comments or replies to the FAA need to be as specific as possible. Please provide specific examples to illustrate your comments/concerns.)**:**

In May, 2000, a pilot took off in a 1970 Beech Baron without removing the flight control gust lock. The airplane became airborne and subsequently crashed, killing the pilot and five passengers. A subsequent search of FAA and NTSB records has revealed 14 occurrences of takeoffs/ attempted takeoffs with gust locks installed on various Raytheon (Beech) propeller airplanes. The resulting accidents have caused 26 fatalities and numerous injuries. An installed gust lock is also suspected in another accident, which resulted in 3 fatalities. Reportedly, a large number of these accidents, including the one described above, involved a make-shift gust lock that was not the one provided by the manufacturer and did not meet the requirements for control system 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 some cases, a common bolt or nail has been inserted through the holes provided in the control column for this purpose. The proper Beech control lock blocks the throttle and/or ignition, thus making it obvious that the control lock needs to be removed before starting the engine.

Raytheon Aircraft Company has notified the FAA that it is preparing a service bulletin to require that all affected airplanes be inspected to verify that the correct control lock is on board the airplane. The bulletin will also identify previously issued service bulletins that provide instructions to modify the control lock system to nose down and/or roll input locked control positions for certain models. 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 locked position.

Obviously, it is the pilot's responsibility to conduct adequate preflight checks to ensure freedom of movement of the control system. However, history shows that, particularly with improper gust locks installed, these gust lock related accidents do continue to occur. Therefore, in an effort to reduce the possibility of similar accidents in the future, the FAA is considering action (i.e., Airworthiness Directive (AD), Special Airworthiness Information Bulletin (SAIB), or General Aviation Alert) to address this safety concern. Items under consideration are 1) Encouraging or mandating implementation of service bulletins that modify the control lock systems in older airplanes to nose down and/or roll input locked control positions to prevent takeoff even if the control lock is left installed, and/or 2) Encouraging or mandating implementation of Raytheon's upcoming service bulletin that would require periodic verification that the correct control lock is on board the airplane.

This concern sheet was prompted by FAA Safety Recommendation 00.158.
The FAA endorses dissemination of this technical data and requests Association comment.

Attachments: *SDR(s) ☐ *A/IDS ☐ *SL(s) ☐ *SAIB ☐ *FAASR/NTSBSR ☐ *AD ☐ *AMOC ☐ *RA ☐
Notification: FAA ☒ *AOPA ☒ *EAA ☐ Type Club ☒ *TC Holder ☒ Other:

Response Requested 11/11/01: Emergency (10 days) ☐ Alert (30 days) ☐ Information (90 days) ☒