EMERGENCY AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post Emergency ADs on the internet at "www.faa.gov"

DATE: March 4, 2005
AD #: 2005-05-53

Send to owners and operators of the following The Cessna Aircraft Company (Cessna) airplanes:

Model	Serial Numbers
172R	81234, 81235, and 81236.
172S	89774, 89775, 89776, 89778 through 89781, 89783, 89784, 89786, 89788 through 89791, and 89793.
182T	81522 through 81525 and 81537.
T182T	80353 through 80365, 80367, 80368, 80369, 80371, and 80372.

Discussion

What events caused this AD action? The FAA has been notified that inadequate or incorrect flight controls rigging may exist on recently produced Cessna Models 172R, 172S, 182T, and T182T airplanes. The following issues were identified through Cessna's inspection of airplanes still at their production facility:

- Two airplanes with ailerons not engaging the upper stops and one with a flap push/pull rod missing the nut on the bolt.
- Elevator cables chafing fuel lines near the fuel selector, which caused damage to the fuel lines.
- Elevator trim cables routed outside the cotter pins in the horizontal stabilizer.
- Elevator trim cables crossed twice (trim functioned correctly in flight).
- Control cables rubbing structures such as bulkheads and center consoles.
- Aileron bell crank adjustment screw interference with stringer.
- Barrels on control cables not safety pinned or incorrectly pinned.
- Control cables routed outside of pulleys.
- A bent flap bell crank.

The FAA's Determination

After careful review of all available information related to the subject presented above, FAA has determined that:

- Operation of the affected Models 172R, 172S, 182T, and T182T airplanes should be prohibited until all the flight control systems are inspected and any discrepancies corrected; and
- AD action should be taken to prevent loss of airplane control due to incorrect or inadequate rigging of critical flight systems.

Presentation of the Actual AD

This rule is issued under 49 U.S.C. Section 44701 (formerly section 601 of the Federal Aviation Act of 1958), pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this action.

2005-05-53 THE CESSNA AIRCRAFT COMPANY: Directorate Identifier 2005-CE-10-AD.

When Does This AD Become Effective?

(a) This emergency AD becomes effective upon receipt.

Are Any Other ADs Affected By This Action?

(b) This action does not affect any other airworthiness directive.

What Airplanes Are Affected by This AD?

(c) This AD affects the following airplanes that are certificated in any category:

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What is the Unsafe Condition Presented in This AD?

(d) This AD is the result of flight control system problems found on airplanes within Cessna's control that could also exist on airplanes produced and delivered within a certain time period. We are issuing this AD to prevent loss of airplane control due to incorrect or inadequate rigging of critical flight systems. Airplanes affected by this AD may have additional flight control issues beyond those listed in "What events caused this AD action?"

What Must I do to Address This Problem?

(e) The following specifies action you must do per this AD and other pertinent information to address this problem:

Actions	Compliance	Procedures
(1) Do a one-time detailed inspection of the flight control system, correct installations that do not conform to type design, and repair any damage.	Prior to further flight after the receipt of this emergency AD.	Follow Chapter 5 TIME LIMITS/ MAINTENANCE CHECKS of whichever of the following applies: • Model 172 Maintenance Manual using the List of Effective Pages, dated June 7, 2004. • Model 182/T182 Maintenance Manual using the List of Effective Pages, dated March 1, 2004.
(2) Special flight permits or positioning flights are not permitted for this AD.	Not applicable.	14 CFR 39.19 allows special flight permits for all ADs, unless specifically prohibited in a specific AD. This emergency AD prohibits such flight permits. If an aircraft is in a location where necessary services are not available to perform the inspections identified above, contact Cessna Product Support at (316) 517-5800.

May I Request an Alternative Method of Compliance?

(f) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.19. You may submit your request through your Flight Standards District Office (FSDO) Principal Inspector, who may add comments and then send your request to the Manager, Wichita Aircraft Certification Office (ACO), FAA. For information on any already approved alternative methods of compliance or for further information about this AD, contact Chris B. Morgan, Aerospace Engineer, FAA, Wichita ACO, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4154; facsimile: (316) 946-4107; e-mail: chris.b.morgan@faa.gov.

Issued in Kansas City, Missouri, on March 4, 2005.

David R. Showers,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.