

Brief of Accident (Continued)

DCA03MA022
File No. 15962

01/08/2003

Charlotte, NC

Aircraft Reg No. N233YV

Time (Local): 08:49 EST

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF

Findings

1. (C) FLT CONTROL SYST,ELEVATOR CONTROL - MOVEMENT RESTRICTED
2. (C) MAINTENANCE,ADJUSTMENT - IMPROPER - OTHER MAINTENANCE PERSONNEL
3. (C) IMPROPER USE OF PROCEDURE - COMPANY MAINTENANCE PERSONNEL
4. (F) INADEQUATE SURVEILLANCE OF OPERATION - COMPANY/OPERATOR MGMT
5. (C) AIRCRAFT PERFORMANCE,TAKEOFF CAPABILITY - DETERIORATED
6. MAINTENANCE,ADJUSTMENT
7. (F) INADEQUATE SURVEILLANCE OF OPERATION - FAA(ORGANIZATION)
8. (C) AIRCRAFT WEIGHT AND BALANCE
9. (C) MATERIAL INADEQUATE - COMPANY/OPERATOR MANAGEMENT
10. (F) INADEQUATE SURVEILLANCE OF OPERATION - FAA(ORGANIZATION)
11. AIRCRAFT WEIGHT AND BALANCE
12. (F) INADEQUATE SURVEILLANCE,INADEQUATE PROCEDURE - FAA(ORGANIZATION)
13. AIRCRAFT WEIGHT AND BALANCE
14. (F) INADEQUATE SURVEILLANCE,INADEQUATE PROCEDURE - COMPANY/OPERATOR MGMT

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF

Findings

15. TERRAIN CONDITION - GROUND

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.

the airplane's loss of pitch control during take-off. The loss of pitch control resulted from the incorrect rigging of the elevator system compounded by the airplane's aft center of gravity, which was substantially aft of the certified aft limit.

Contributing to the cause of the accident were (1) Air Midwest's lack of oversight of the work being performed at the Huntington, West Virginia, maintenance station; (2) Air Midwest's maintenance procedures and documentation; (3) Air Midwest's weight and balance program at the time of the accident; (4) the Raytheon Aerospace quality assurance inspector's failure to detect the incorrect rigging of the elevator control system; (5) the Federal Aviation Administration's (FAA) average weight assumptions in its weight and balance program guidance at the time of the accident; and (6) the FAA's lack of oversight of Air Midwest's maintenance program and its weight and balance program.