

NTSB Aviation Accident Report NTSB/AAR-88/05

Section 3, Conclusions

3.1 Findings

1. Flight 255 did not encounter windshear either during the takeoff roll or after liftoff.
2. Flight 255 took off with its wing's trailing edge flaps and leading edge slats retracted.
3. The flightcrew did not extend the airplane's flaps and slats.
4. The flightcrew did not perform the airplane's checklists in accordance with the prescribed procedures contained in the Northwest Airplane Pilots Handbook. The flightcrew did not accomplish the TAXI checklist and therefore did not check the configuration of the airplane.
5. The airplane's climb performance was severely limited by the flightcrew's failure to properly configure the wing for takeoff.
6. The airplane would have cleared the light pole by 500 feet with only its wings slats extended.
7. The roll stability of the airplane was decreased as a result of flying it at or below the SSRS alarm and near the stall angle of attack. The resultant rolling of the airplane degraded its climb performance.
8. If the airplane had been flown at or below the stick shaker angle of attack, the roll stability would have been increased and the airplane would have cleared the light pole.
9. The CAWS unit's takeoff warning system was inoperative and, therefore, did not warn the flightcrew that the airplane was not configured properly for takeoff.
10. The failure of the takeoff warning system was caused by the loss of input 28V dc. electric power between the airplane's left dc. bus and the CAWS unit.
11. The interruption of the input power to the CAWS occurred at the P-40 circuit breaker. The mode of interruption could not be determined.
13. The light poles at the impact site did not exceed the limiting standards contained in 14 CFR Part 77. [editor's note: this finding number is taken directly from the NTSB report. The findings were listed on two successive pages, and no pages were missing. The NTSB may have either inadvertently skipped finding # 12, or incorrectly numbered this finding.]