NTSB Identification: **DEN82IA154**

Scheduled 14 CFR Part 121: Air Carrier operation of FRONTIER AIRLINES, INC. Incident occurred Thursday, August 05, 1982 in DENVER, CO

Probable Cause Approval Date: 8/5/83 Aircraft: BOEING 737-291, registration: N7356F

Injuries: 102 Uninjured.

THE CAPTAIN SAID HE FELT A "THUMP" AND THE AIRCRAFT SLUMPED TO THE LEFT AS IT WAS ROTATED FOR TAKEOFF. AT THIS POINT, THE AIRCREW WERE COMMITTED TO CONTINUE THE TAKEOFF WHICH ACCOMPLISHED SUCCESSFULLY. A LOW PASS WAS MADE FOR TOWER PERSONNEL TO CHECK THE AIRCRAFT. THEY CONFIRMED THAT THE LEFT OUTBOARD TIRE WAS MISSING AND THE LEFT INBOARD TIRE APPEARED TO BE FLAT. THE PLANE WAS FLOWN FOR 2 HRS, 20 MIN TO CONSUME FUEL AND THEN IT WAS LANDED SUCCESSFULLY. AN INVESTIGATION REVEALED THAT THE WHEEL BEAD FLANGE (RIM) OF THE LEFT OUTBOARD WHEEL, PN 2601571-1, HAD FAILED FROM FATIGUE. THE CRACK ORIGINATED AT THE INSIDE DIAMETER OF THE RIM IN AN AREA OF LOCALIZED CORROSION PITTING. THE LEFT OUTBOARD TIRE HAD COME OFF, AND DURING LANDING, THE LEFT INBOARD WHEEL WAS BADLY DAMAGED. ALSO, THERE WAS MINOR DAMAGE AND SCUFF MARKS IN THE VICINITY OF THE LEFT MAIN GEAR.

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

LANDING GEAR, WHEEL.. FATIGUE