

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: July 19, 1973

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the 27th day of June 1973

FORWARDED TO:)

Honorable Alexander P. Butterfield)
Administrator)
Federal Aviation Administration)
Washington, D. C. 20591)

SAFETY RECOMMENDATION A-73-50

The National Transportation Safety Board has investigated three accidents involving collapsed landing gears in Mooney MK20F type aircraft. These accidents occurred at Mobile, Alabama, August 12, 1970; Cincinnati, Ohio, April 12, 1971; and Phoenix, Arizona, June 27, 1972. All three aircraft had experienced an electrical system failure, and the pilots then had to extend the landing gears by using the manually operated emergency gear extension system. However, during the subsequent landing, the landing gears collapsed.

Investigation disclosed that the manual system had not been cranked far enough to extend fully and to lock the landing gears in the down position. All the pilots stated that they had operated the landing gears as set forth in the flight manual instructions and that from their viewing of the indicator on the floor, the gears were down. The flight manual and the panel placard indicate that approximately 50 turns of the crank should line up the indicator markings.


Investigation disclosed in each case that a few more turns of the crank would have locked the landing gears down. In addition, on-scene examination of the indicators on the floor showed that the indices were not aligned in the gear-down-and-locked position by approximately 1/64 inch. However, from the pilots' viewing position, the indices appeared to be aligned.

The Safety Board recommends that the Federal Aviation Administration:

Change the wording in the flight manual and on the cockpit placard in Mooney MK20F aircraft to make it clear that it is necessary to turn the crank until it stops or reaches the end of its travel.

Personnel from our Bureau of Aviation Safety are available if any further information or assistance is desired.

Reed, Chairman, McAdams, Thayer, Burgess, and Haley, Members, concurred in the above recommendation.


By John H. Reed
Chairman

THIS RECOMMENDATION WILL BE RELEASED TO THE PUBLIC ON THE ISSUE DATE SHOWN ABOVE. NO PUBLIC DISSEMINATION OF THE CONTENTS SHOULD BE MADE PRIOR TO THAT DATE.