

# Beechcraft Safety Communique

March, 1987

TO ALL BEECHCRAFT WHOLESALERS, AVIATION CENTERS, AERO CENTERS, ALL INTERNATIONAL DISTRIBUTORS & DEALERS, AND OWNERS OF RECORD FOR ALL BEECHCRAFT AIRPLANE MODELS 33, 35, 36, 36TC, 55, 56TC, 58, 58TC and 95

MODELS: 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, F33, G33, E33A, F33A, E33C, F33C, 35, 35R, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35TC, V35A, V35A-TC, V35B, V35B-TC, 36, A36, A36TC, B36TC, 95, B95, B95A, D95A, E95, 95-55, 95-A55, 95-B55, 95-B55A, 95-B55B, 95-C55, 95-C55A, D55, D55A, E55, E55A, 56TC, A56TC, 58, 58A, 58TC, 58TCA

SUBJECT: Cabin Door Operation/Opening

There have been reports of recent accidents which followed a cabin door opening because the pilot did not make sure the door was properly latched prior to takeoff. In each accident the pilot failed to continue to fly the airplane and either lost control or allowed the airplane to stall at low altitude.

## THESE ACCIDENTS NEED NOT HAPPEN!!

Properly latching and checking the doors is the pilot's responsibility. All pilots must do the following with regard to cabin doors:

1. Follow the Before Takeoff Check List. Make certain that the door is properly latched before takeoff. To close the cabin door from the inside, observe that the door handle is in the unlocked position. In this position, the latch handle is free to move approximately one inch in either direction before engagement of the locking mechanism. Then grasp the door and firmly pull the door closed. Rotate the door handle fully counterclockwise into the locked position. When the door is properly locked, the door latch handle is free to move approximately one inch in either direction.

### NOTE

When checking the door latch handle, do not move it far enough to engage the door latch release mechanism.

Press firmly outward at the top rear corner of the door. If any movement of the door is detected, completely open the door and close again following the above instructions.

2. If a door is not properly latched it may come open during takeoff or in flight. **DO NOT ATTEMPT TO CLOSE THE DOOR.** Additional noise is to be expected when the door is open. Loose items may be drawn out of the cabin. The door will trail open approximately three inches which will increase drag. Do not permit yourself to be distracted by the open door. **ALWAYS MAINTAIN CONTROL OF THE AIRPLANE.**

3. Tests conducted with an open door in flight confirm that the airplane flight characteristics are not changed. However:
- Climb performance is decreased substantially due to the increased drag of the open door.
  - On the airplanes tested, the greatest reduction in climb performance was about a 160 fpm reduction from the handbook value.
  - Remember that climb performance decreases with density altitude. Consequently, at higher density altitudes the resulting percentage reduction in climb performance with the additional drag of an open door is more significant.
  - Service ceiling is reduced.
  - Airspeed and altimeter indications may be affected at slow airspeeds approaching stall speed.
  - The altered pressure field sensed by the static system due to the open door will cause the airspeed indicator to read higher than actual airspeed at stall. However, airspeed indication is accurate (within 1 knot) at normal approach speeds and above.
  - Maximum altitude lost in a stall may increase.
4. If a door comes open abort the takeoff if runway distance and other conditions permit. If the takeoff cannot be safely aborted or the door comes open in flight, **FLY THE AIRPLANE FIRST**. Continue to climb out, straight ahead if practicable, to pattern altitude, accelerate to and maintain normal pattern airspeed and make shallow turns not exceeding 30° of bank. Return to the field and land as conditions permit. **MAINTAIN AT LEAST THE APPROACH AND LANDING SPEEDS RECOMMENDED IN THE PILOT'S OPERATING HANDBOOK** to provide an adequate margin above stall speed. Remember that additional power will be required to compensate for the increased drag. After landing and coming to a complete stop, close the door. Check the door as noted in Step 1 above.

If a door opens in flight and you believe the door was properly latched, have the latches checked by your nearest Beechcraft facility.

This Safety Communique supersedes Safety Communique #68 which was dated October, 1985.