

Federal Aviation Agency



ADVISORY CIRCULAR

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SUBJECT : EMERGENCY DESCENT PROCEDURES AND LIMITATIONS FOR TURBOJET AIRCRAFT DURING TRAINING, TYPE RATINGS, AND FLIGHT CHECKS

1. PURPOSE. This advisory circular is to republicize the recommended procedures and limitations concerning emergency descent maneuvers for operations of turbojet aircraft during training, type ratings, and proficiency checks.
 2. BACKGROUND.
 - a. While practicing emergency descents on a training flight, a turbojet aircraft was subjected to buffeting and excessive "g" forces resulting in structural damage. Although no noticeable control difficulty was experienced throughout this maneuver, it is believed that the aircraft damage was a result of prolonged high-speed descent and the "g" forces developed.
 - b. During several Federal Aviation Agency/Industry meetings concerning turbojet training and flight test maneuvers, the emergency descent came up for considerable discussion. This included the hazards of exceeding structural limitations, buffeting, and exposure to midair collisions during these prolonged VFR high-speed descents.
 3. RECOMMENDED ACTION.
 - a. The requirement for the emergency descent demonstration, except for initial training, may be satisfied if recovery is initiated soon after the airplane is established in the proper configuration at a preselected airspeed. Because of safety implications, sustained descents with large losses of altitude are not considered necessary.
 - b. Airspeed and MACH number limits selected for emergency descents should be a value of approximately five percent less than those specified in the Airplane Flight Manual. This would minimize the possibility of exceeding approved airplane speed limitations.
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- c. Check pilots and instructors are cautioned to monitor closely the entry and recovery, as well as the descents, taking all precautions to avoid buffeting, exceeding structural limitations, and exposures to midair collisions when executing these maneuvers.



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