#### § 29.75

- (b) At the forward speed for best glide angle:
  - (c) At maximum weight; and
- (d) At the rotor speed or speeds selected by the applicant.

[Amdt. 29-12, 41 FR 55471, Dec. 20, 1976]

# § 29.75 Landing: General.

- (a) For each rotorcraft—
- (1) The corrected landing data must be determined for a smooth, dry, hard, and level surface:
- (2) The approach and landing must not require exceptional piloting skill or exceptionally favorable conditions; and
- (3) The landing must be made without excessive vertical acceleration or tendency to bounce, nose over, ground loop, porpoise, or water loop.
- (b) The landing data required by  $\S$  29.77, 29.79, 29.81, 29.83, and 29.85 must be determined—
- (1) At each weight, altitude, and temperature for which landing data are approved;
- (2) With each operating engine within approved operating limitations; and
- (3) With the most unfavorable center of gravity.

[Doc. No. 24802, 61 FR 21900, May 10, 1996]

#### § 29.77 Landing Decision Point (LDP): Category A.

- (a) The LDP is the last point in the approach and landing path from which a balked landing can be accomplished in accordance with §29.85.
- (b) Determination of the LDP must include the pilot recognition time interval following failure of the critical engine.

[Doc. No. 24802, 64 FR 45338, Aug. 19, 1999]

## §29.79 Landing: Category A.

- (a) For Category A rotorcraft—
- (1) The landing performance must be determined and scheduled so that if the critical engine fails at any point in the approach path, the rotorcraft can either land and stop safely or climb out and attain a rotorcraft configuration and speed allowing compliance with the climb requirement of §29.67(a)(2);
- (2) The approach and landing paths must be established with the critical engine inoperative so that the transi-

tion between each stage can be made smoothly and safely:

- (3) The approach and landing speeds must be selected by the applicant and must be appropriate to the type of rotorcraft; and
- (4) The approach and landing path must be established to avoid the critical areas of the height-velocity envelope determined in accordance with §29.87.
- (b) It must be possible to make a safe landing on a prepared landing surface after complete power failure occurring during normal cruise.

[Doc. No. 24802, 61 FR 21900, May 10, 1996]

## §29.81 Landing distance: Category A.

The horizontal distance required to land and come to a complete stop (or to a speed of approximately 3 knots for water landings) from a point 50 ft above the landing surface must be determined from the approach and landing paths established in accordance with §29.79.

[Doc. No. 24802, 64 FR 45338, Aug. 19, 1999]

## §29.83 Landing: Category B.

- (a) For each Category B rotorcraft, the horizontal distance required to land and come to a complete stop (or to a speed of approximately 3 knots for water landings) from a point 50 feet above the landing surface must be determined with—
- (1) Speeds appropriate to the type of rotorcraft and chosen by the applicant to avoid the critical areas of the height-velocity envelope established under § 29.87; and
- (2) The approach and landing made with power on and within approved limits.
- (b) Each multiengined Category B rotorcraft that meets the powerplant installation requirements for Category A must meet the requirements of—
  - (1) Sections 29.79 and 29.81; or
  - (2) Paragraph (a) of this section.
- (c) It must be possible to make a safe landing on a prepared landing surface if complete power failure occurs during normal cruise.

[Doc. No. 24802, 61 FR 21900, May 10, 1996; 61 FR 33963, July 1, 1996]