Federal Aviation Administration, DOT

§ 133.43 Structures and design.

(a) External-load attaching means. Each external-load attaching means must have been approved under—

(1) Part 8 of the Civil Air Regulations on or before January 17, 1964;
(2) Part 133, before February 1, 1977;
(3) Part 27 or 29 of this chapter, as applicable, irrespective of the date of approval; or
(4) Section 21.25 of this chapter.

(b) Quick release devices. Each quick release device must have been approved under—

(1) Part 27 or 29 of this chapter, as applicable;
(2) Part 133, before February 1, 1977; or
(3) Section 21.25 of this chapter, except the device must comply with §§27.865(b) and 29.865(b), as applicable, of this chapter.

(c) Class B and D rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Pickup of the external load.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.

(d) Class C rotorcraft-load combinations: For Class C rotorcraft-load combinations used in wire-stringing, cable-laying, or similar operations, the operational flight check must consist of the maneuvers, as applicable, prescribed in paragraph (c) of this section.

§ 133.44 Flight characteristics requirements.

(a) The applicant must demonstrate to the Administrator, by performing the operational flight checks prescribed in paragraphs (b), (c), and (d) of this section, as applicable, that the rotorcraft-load combination has satisfactory flight characteristics, unless these operational flight checks have been demonstrated previously and the rotorcraft-load combination flight characteristics were satisfactory. For the purposes of this demonstration, the external-load weight (including the external-load attaching means) is the maximum weight for which authorization is requested.

(b) Class A rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Take off and landing.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.

(c) Class B and D rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Pickup of the external load.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.
(5) Demonstrating appropriate lifting device operation.

(d) Class C rotorcraft-load combinations: For Class C rotorcraft-load combinations used in wire-stringing, cable-laying, or similar operations, the operational flight check must consist of the maneuvers, as applicable, prescribed in paragraph (c) of this section.

§ 133.39 Inspection authority.

Each person conducting an operation under this part shall allow the Administrator to make any inspections or tests that he considers necessary to determine compliance with the Federal Aviation Regulations and the Rotorcraft External-Load Operator Certificate.

Subpart D—Airworthiness Requirements

§ 133.41 Flight characteristics requirements.

(a) The applicant must demonstrate to the Administrator, by performing the operational flight checks prescribed in paragraphs (b), (c), and (d) of this section, as applicable, that the rotorcraft-load combination has satisfactory flight characteristics, unless these operational flight checks have been demonstrated previously and the rotorcraft-load combination flight characteristics were satisfactory. For the purposes of this demonstration, the external-load weight (including the external-load attaching means) is the maximum weight for which authorization is requested.

(b) Class A rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Take off and landing.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.

(c) Class B and D rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Pickup of the external load.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.
(5) Demonstrating appropriate lifting device operation.

(6) Maneuvering of the external load into release position and its release, under probable flight operation conditions, by means of each of the quick-release controls installed on the rotorcraft.

(d) Class C rotorcraft-load combinations: For Class C rotorcraft-load combinations used in wire-stringing, cable-laying, or similar operations, the operational flight check must consist of the maneuvers, as applicable, prescribed in paragraph (c) of this section.

§ 133.42 Inspection authority.

Each person conducting an operation under this part shall allow the Administrator to make any inspections or tests that he considers necessary to determine compliance with the Federal Aviation Regulations and the Rotorcraft External-Load Operator Certificate.

Subpart D—Airworthiness Requirements

§ 133.43 Structures and design.

(a) External-load attaching means. Each external-load attaching means must have been approved under—

(1) Part 8 of the Civil Air Regulations on or before January 17, 1964;
(2) Part 133, before February 1, 1977;
(3) Part 27 or 29 of this chapter, as applicable, irrespective of the date of approval; or
(4) Section 21.25 of this chapter.

(b) Quick release devices. Each quick release device must have been approved under—

(1) Part 27 or 29 of this chapter, as applicable;
(2) Part 133, before February 1, 1977; or
(3) Section 21.25 of this chapter, except the device must comply with §§27.865(b) and 29.865(b), as applicable, of this chapter.

(c) Class B and D rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Pickup of the external load.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.

(d) Class C rotorcraft-load combinations: For Class C rotorcraft-load combinations used in wire-stringing, cable-laying, or similar operations, the operational flight check must consist of the maneuvers, as applicable, prescribed in paragraph (c) of this section.

§ 133.44 Flight characteristics requirements.

(a) The applicant must demonstrate to the Administrator, by performing the operational flight checks prescribed in paragraphs (b), (c), and (d) of this section, as applicable, that the rotorcraft-load combination has satisfactory flight characteristics, unless these operational flight checks have been demonstrated previously and the rotorcraft-load combination flight characteristics were satisfactory. For the purposes of this demonstration, the external-load weight (including the external-load attaching means) is the maximum weight for which authorization is requested.

(b) Class A rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Take off and landing.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.

(c) Class B and D rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Pickup of the external load.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.
(5) Demonstrating appropriate lifting device operation.

(6) Maneuvering of the external load into release position and its release, under probable flight operation conditions, by means of each of the quick-release controls installed on the rotorcraft.

(d) Class C rotorcraft-load combinations: For Class C rotorcraft-load combinations used in wire-stringing, cable-laying, or similar operations, the operational flight check must consist of the maneuvers, as applicable, prescribed in paragraph (c) of this section.

§ 133.45 Inspection authority.

Each person conducting an operation under this part shall allow the Administrator to make any inspections or tests that he considers necessary to determine compliance with the Federal Aviation Regulations and the Rotorcraft External-Load Operator Certificate.

Subpart D—Airworthiness Requirements

§ 133.46 Structures and design.

(a) External-load attaching means. Each external-load attaching means must have been approved under—

(1) Part 8 of the Civil Air Regulations on or before January 17, 1964;
(2) Part 133, before February 1, 1977;
(3) Part 27 or 29 of this chapter, as applicable, irrespective of the date of approval; or
(4) Section 21.25 of this chapter.

(b) Quick release devices. Each quick release device must have been approved under—

(1) Part 27 or 29 of this chapter, as applicable;
(2) Part 133, before February 1, 1977; or
(3) Section 21.25 of this chapter, except the device must comply with §§27.865(b) and 29.865(b), as applicable, of this chapter.

(c) Class B and D rotorcraft-load combinations: The operational flight check must consist of at least the following maneuvers:

(1) Pickup of the external load.
(2) Demonstration of adequate directional control while hovering.
(3) Acceleration from a hover.
(4) Horizontal flight at airspeeds up to the maximum airspeed for which authorization is requested.

(d) Class C rotorcraft-load combinations: For Class C rotorcraft-load combinations used in wire-stringing, cable-laying, or similar operations, the operational flight check must consist of the maneuvers, as applicable, prescribed in paragraph (c) of this section.

§ 133.47 Inspection authority.

Each person conducting an operation under this part shall allow the Administrator to make any inspections or tests that he considers necessary to determine compliance with the Federal Aviation Regulations and the Rotorcraft External-Load Operator Certificate.