

FPS. Feet per second.

Free bag. A type 5 reserve deployment device used with ram-air canopies. Not attached to the canopy, it is designed to allow deployment of the canopy in the event of a horseshoe-type malfunction.

Free fall. A parachute jump in which the parachute is activated manually at the discretion of the parachutist.

French fell seam (LSC-2). A plain overlap where material is folded over on itself and stitched to prevent raveling.

Friction burns. The result of two textile surfaces rubbing together rapidly and generating frictional heat, which reduces the tensile strength of the textile and causes deterioration of the individual threads; it occurs primarily during parachute deployment and initial inflation.

G

G force. The measure or value of the gravitational pull of the earth as modified by the earth's rotation, equal to acceleration of a freely moving body at the rate of 32.16 feet per second. Example: If a 100-pound load places a 300-pound stress on the parachute during opening, the shock is 3 Gs.

Gauge. The space between needles on a sewing machine.

Glide. The horizontal movement of the canopy.

Gore. The portion of the canopy contained between two adjacent suspension lines and the area between them, extending from the apex of the canopy to the skirt.

Grommet. A metal eyelet used as a reinforcement around a hole in fabric. Grommets are used on pack flaps to fit over locking cones or loops.

Gross weight. The complete weight of the parachute assembly.

Guide or control line. One or more parachute lines that run from a slot or orifice in a steerable canopy to the harness providing better steerability.

H

HALO. High Altitude, Low Opening.

Handle. Ripcord handpull or grip.

Hardware. All metal parts associated with parachutes, parachute systems, and their suspended loads.

Harness. An arrangement of cotton, linen, or nylon webbing designed to conform to the shape of the load to be carried in order to secure it properly so that the opening shock and the weight of the load are evenly distributed during descent.

Harness keeper. Elastic webbing used to hold harness straps in place.

Harness main sling. The main load-carrying member of the harness formed by two lengths of webbing, beginning at the shoulder adapter or D-ring, continuing down across the seat and up the other side, ending at the opposite adapter or Dring.

Hesitator loop. One of a series of webbing loops that hold the suspension lines in an orderly position in the container when the parachute is packed and which pay the lines out in sequence (hesitate) for orderly deployment.

Hot knife. An electrically-heated cutting tool used to cut and sear webbing and fabrics.

Housing clamp stiffener. A metal plate sewn to the top flap of the main parachute container and used to hold the ripcord cable housing in place and to give rigidity to the housing. Designed to provide stiff separation between the housing and the top cone for an automatic opener.

Hygroscopic. A substance or material that absorbs water readily from its surroundings.

I

Initial layout. Process in which the canopy is stretched out on the table with the top center gore on top in preparation for securing proper layout.

Inspection. A step-by-step procedure for examining a parachute prior to packing to identify any damage or non-airworthy condition.

Inversion. State in which the canopy has been turned completely inside out. Also see partial inversion.

J

Joint efficiency. The comparison of the strength of the junction or joining materials against the original materials.

Jumping. To engage in a premeditated parachute jump.