

CONFIRMED
SEPTEMBER 1998

Glossary of Parachute terms

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Aerospace Standards Policy Committee (ACE/-) to Technical Committee ACE/54, upon which the following bodies were represented:

- British Fabric Association
- British Rubber Manufacturers' Association
- British Textile Employers' Association
- Man-made Fibres Producers' Committee
- Ministry of Defence
- Society of British Aerospace Companies Limited
- Society of Dyers and Colourists

This British Standard, having been prepared under the direction of the Aerospace Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 28 June 1991

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The following BSI references relate to the work on this standard:
Committee reference ACE/54
Draft for comment 90/70474 DC

ISBN 0 580 19123 0

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
Section 1. Parachute assembly	1
Section 2. Parachute systems	1
Section 3. Canopy types	3
Section 4. Parachute system components	4
Section 5. Parachute construction	6
Section 6. Performance	8
Section 7. Miscellaneous	11
Index	14
Figure 1 — Double W stitching (517)	12
Figure 2 — Examples of stopper knots (712)	13

Foreword

This British Standard has been prepared under the direction of the Aerospace Standards Policy Committee and is one of a series for aerospace purposes. It replaces and revises BS 185:Section 12, as BS 185:Sections 1 to 18 have been declared obsolescent/obsolete.

This British Standard glossary defines a parachute assembly, and terms relating to parachute systems, types, components, construction and performance. It also gives commonly used acronyms.

This glossary covers topics that are the responsibility of the Aerospace Standards Policy Committee relating to parachutes and incorporates revised definitions of many terms so as to reflect current usage and introduces new terms including those relating to ram air parachutes.

This glossary is intended as a basic reference document providing a comprehensive list of terms that will promote better understanding between various sections of the aerospace industry, and recreational agencies, facilitate trade and provide better tools for improved handling of information.

Many of the definitions in this glossary are essentially the same as those used in different British Standards already published, and as these are revised and new standards are produced, the use of the definitions given in this glossary will be encouraged to promote wider acceptance and recognition of standard terminology.

Definitions given in this glossary are intended for general use whereas definitions in other standards are intended to clarify the meaning of terms in that particular standard. Legal definitions in a particular statute are for the purposes of that statute and may be different from the definitions in this glossary.

Terms are listed alphabetically in the index and are referred to by numbers which are found against the term in the body of the standard.

Alternative terms are given in medium type below the preferred terms with their status indicated, i.e. non-preferred. These terms are not individually numbered, but are included in the index with a reference to the preferred term. Terms of more than one word, e.g. "emergency parachute", are written in a direct style, not as "parachute, emergency". The inverted term is included in the index with a reference to the direct term.

Italicized words in definitions indicate terms that are defined elsewhere in this standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 16 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

No.	Term	Definition
Section 1. Parachute assembly		
101	parachute	Aerodynamic device manufactured from textile materials to produce <i>drag</i> and possibly lift.
102	pack	Outer container into which the <i>parachute</i> components are stowed preparatory to use.
103	canopy	Fabric portion of a <i>parachute</i> which provides <i>drag</i> , or <i>drag</i> and lift, when inflated.
104	rigging line	Any cord or tape attached to the <i>canopy</i> which transmits the forces on the <i>parachute canopy</i> to the suspended load directly or via <i>lift webs</i> or <i>strops</i> .
Section 2. Parachute systems		
201	aeroplane parachute	<i>Parachute</i> intended to recover the complete aircraft and passengers in an emergency. Usually applicable only to very lightweight aircraft.
202	airborne forces parachute	<i>Personnel parachute</i> to deliver a soldier and his equipment to the ground from an aircraft in flight.
203	anti-spin parachute	<i>Parachute</i> attached to an aircraft to assist in its recovery from a spin.
204	anti-swing parachute	<i>Parachute</i> which reduces the amplitude of <i>oscillation</i> of a load supported by other <i>parachutes</i> .
205	automatic parachute	<i>Parachute</i> which is caused to deploy at a predetermined altitude, time, or rate of descent, by an automatic sensing device.
206	auxiliary parachute	Subsidiary <i>parachute</i> attached to the main <i>canopy</i> or its <i>pack</i> to assist during the <i>deployment</i> sequence; usually one of three types: <i>spring auxiliary parachute</i> , <i>hand deployed parachute</i> or <i>vane parachute</i> . NOTE In America the term used is pilot chute.
207	back type parachute	<i>Parachute</i> mounted in its <i>pack</i> worn on the back of the <i>harness</i> .
208	chest mounted parachute	<i>Parachute</i> carried in its <i>pack</i> mounted on the front of the <i>harness</i> , usually a reserve.
209	cluster	Assembly of two or more <i>parachutes</i> attached to a single load, designed to deploy simultaneously.
210	controller parachute	<i>Parachute</i> used to modify the opening characteristics of the main <i>canopy</i> , it may be external or internal to the main <i>canopy</i> .
211	decelerator parachute	<i>Parachute</i> used to reduce the speed prior to <i>deployment</i> of the main <i>parachute</i> .
212	delayed opening parachute	<i>Parachute</i> which is deployed at some time after the initiation of the opening sequence.
213	drogue parachute	Relatively small <i>parachute</i> or <i>drag</i> producer used as a <i>controller parachute</i> , a <i>decelerator parachute</i> , an <i>extractor parachute</i> or a <i>stabilizer parachute</i> .
214	emergency escape parachute emergency parachute <i>non-preferred</i>	<i>Personnel parachute</i> used by an occupant of an aircraft for an emergency descent.
215	extractor parachute	<i>Parachute</i> used for withdrawing a load from an aircraft in flight.

No.	Term	Definition
216	HAHO (high altitude high opening) system	<i>Parachute</i> system designed for high altitude exit from an aircraft with subsequent high altitude opening of the <i>parachute</i> .
217	HALO (high altitude low opening) system	<i>Parachute</i> system designed for high altitude exit from an aircraft with subsequent low altitude opening of the <i>parachute</i> .
218	hand deployed parachute	<i>Auxiliary parachute</i> manually deployed into the air stream by the parachutist.
219	hand deployed system	Method of <i>deployment</i> used in <i>free fall</i> in which the <i>auxiliary parachute</i> is introduced into the airstream by hand to initiate the main <i>canopy deployment</i> .
220	landing brake parachute aircraft brake parachute <i>non-preferred</i>	<i>Parachute</i> deployed from an aircraft to assist its deceleration on landing.
221	mains extractor parachute	System in which the main <i>parachute(s)</i> is used to extract the load from the aircraft.
222	parascending parachute	<i>Personnel parachute</i> inflated at ground level to avoid the need for an aircraft where height is obtained by towing into wind (as in a kite) or by foot down a steep hill (as in a hang glider).
223	personnel parachute	<i>Parachute</i> used for the safe descent of a person, including uses as an <i>airborne forces parachute</i> , an <i>emergency escape parachute</i> , a <i>parascending parachute</i> and a <i>sport parachute</i> .
224	recovery parachute	<i>Parachute</i> used to effect the safe recovery of a payload or vehicle.
225	reserve parachute	Additional <i>parachute</i> carried by a parachutist for emergency use when the main <i>parachute</i> normally used fails to function correctly.
226	seat type parachute	<i>Parachute</i> and <i>pack</i> on which the parachutist sits.
227	sport parachute	<i>Personnel parachute</i> used for recreational purposes.
228	spring auxiliary parachute	<i>Auxiliary parachute</i> which contains a spring to assist deployment into the air stream.
229	stabilizer parachute	<i>Parachute</i> used to stabilize a parachutist or store in ballistic flight or <i>free fall</i> .
230	supply dropping parachute	<i>Parachute</i> for delivering stores and equipment. The size can vary but may be large and/or they can be used in clusters.
231	tandem pack	<i>Pack</i> , generally with integral <i>harness</i> , with two <i>parachute</i> compartments so that both the main <i>parachute</i> and the <i>reserve parachute</i> are carried on the back of the parachutist.
232	tandem parachute	<i>Parachute</i> assembly which enables the parachutist (tandem master) to attach to his front either a person or container by means of his <i>harness</i> .
233	ULLA (ultra low level assembly)	<i>Parachute</i> system for delivering stores at very low levels, e.g. below 50 ft above ground level, using mains <i>extraction</i> for retardation and energy absorbers for relief of landing shock loads. NOTE In America the term used is LAPES (low altitude parachute extraction system).
234	vane parachute	<i>Auxiliary parachute</i> constructed with vanes to increase <i>drag</i> .
235	Webb parachute	Specific internal <i>controller parachute</i> .

No.	Term	Definition
Section 3. Canopy types		
301	annular canopy	<i>Canopy</i> designed to fly in the form of a ring with the enlarged <i>vent</i> kept low.
302	blank gore canopy	<i>Canopy</i> in which the material of the whole or part of one or more <i>gores</i> has been deleted with the <i>peripheral hem</i> and the <i>vent hems</i> retained.
303	flat circular canopy	<i>Canopy</i> constructed as a flat polygon, approximating a circle; each <i>gore</i> being a straight sided triangle.
304	conical (biconical, triconical) canopy	<i>Canopy</i> constructed from straight sided <i>panels</i> forming a multi-sided pyramid or cone (or 2 or 3 cone segments).
305	cruciform canopy	<i>Canopy</i> designed in the form of a cross when flat.
306	equiflo canopy	High speed <i>ribbon canopy</i> shaped as a <i>flat circular canopy</i> with <i>skirt</i> extension.
307	extended skirt	<i>Canopy</i> with additional material attached to the periphery in the form of a <i>skirt</i> .
308	gathered parasheet	<i>Parasheet</i> with the <i>periphery</i> restrained by a cord or tape.
309	guide surface canopy	<i>Canopy</i> shaped to have a re-entrant surface close to the periphery to act as a guide member.
310	hemisflo canopy	High speed <i>ribbon canopy</i> in a hemispherical shape with <i>skirt</i> extension.
311	parasheet	<i>Canopy</i> constructed of one piece of fabric, or more if the pieces are joined with the parallel warps in the form of a regular polygon with the <i>rigging lines</i> attached at the corners of the polygon.
312	parawing canopy	<i>Canopy</i> designed as a single surface aerofoil with one or more keels, to produce both drive and lift.
313	ram air canopy	Twin skin <i>canopy</i> , usually rectangular, with ribs at regular intervals. The fully inflated <i>canopy</i> has a lifting aerofoil cross section maintained by the ram air pressure due to its forward motion.
314	ribbon canopy	<i>Canopy</i> in which the <i>gores</i> are constructed of separate <i>ribbons</i> instead of continuous fabric.
315	ring sail canopy	<i>Canopy</i> constructed from a developed sphere with annular openings. The lower panels have fullness at the lower edges.
316	ring slot canopy	<i>Canopy</i> constructed from concentric rings of fabric separated at fixed distances and connected to each other by radial tapes at regular intervals.
317	rogallo canopy	A specific type of <i>parawing canopy</i> .
318	rota foil canopy	Specific type of rotating <i>canopy</i> developed from a flat <i>canopy</i> with radial <i>slots</i> .
319	shaped canopy	<i>Canopy</i> constructed from <i>gores</i> that are not straight sided.
320	slotted canopy	<i>Canopy</i> constructed with openings or <i>slots</i> in addition to the <i>vent</i> incorporated into the <i>canopy</i> to provide drive and steerability and increase <i>stability</i> .
321	spherical canopy	Shaped <i>canopy</i> constructed as part of the surface of a sphere.
322	square canopy	<i>Canopy</i> of square or rectangular shape when flat. NOTE This term is often misused to refer to a <i>ram air canopy</i> .
323	vortex ring canopy	<i>Canopy</i> constructed to autorotate by presenting angled <i>gores</i> to the airflow.