

TECHNICAL SPECIFICATION OF BASIC PARACHUTE SYSTEM (MAIN)

Ser	Description	Specification	Rmk
Part-1 General Specification			
1.	Nomenclature	Basic Parachute (Main)	
2.	Year of production	Not before the year of contract	
3.	Model	To be mentioned	
4.	Name of the manufacturer	To be mentioned	
5.	Country of origin	To be mentioned	
Part-2 Technical Specification			
6.	Parachute weight	Maximun 19 Kg	
7.	Payload capacity	160-200 Kg	
8.	Descent speed	Maximun 5.7 m/s	
9.	Forward speed	4-5.5 m/s	
10.	360° Turning speed	Maximun 12 sec	
11.	Aircraft speed	Maximun 150 KIAS	
12.	Minimum deployment altitude	150 m	
13.	Storage life	Minimum 12 Years	
14.	Number of jump	Minimum 200 jumps	
15.	Service life	Minimum 12 Years	
16.	Parachute opening system	Development bag system (Not pilot chute system)	
Canopy			
17.	a. No of panel	To be mentioned	
	b. No of ventilation hole	To be mentioned	
	c. No of control line/toggle line	02 nos	
	d. Area of Canopy	90-110 sq m	
	e. Shape	To be mentioned	
	f. Colour	To be mentioned	
	g. Anti-Inversion net	Yes	
Canopy Cloth			
18.	a. Material (ISO-1833)	To be mentioned	
	b. Type of weave	To be mentioned	
	c. GSM (ISO-3801)	To be mentioned	



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Ser	Description	Specification	Rmk
	d. No of threads/2.54 cm (ISO-7211) Warp Weft	To be mentioned	
	e. Denier of yarn (ISO-7211/5) Warp Weft	To be mentioned	
	f. Air permeability	To be mentioned	
	g. Tensile strength (ISO-13934-1) Longitude (Warp) Latitude (Weft)	Minimum 90 Kg Minimum 80 Kg	
	h. Sunlight test (24 hrs) (Gray scale rating) (ISO-105 B02)	4	
	j. Washing test no-2 (ISO-105 C02) (Gray scale rating)	4	
<u>Canopy Sleeve</u>			
19.	a. Colour	To be mentioned	
	b. Length	To be mentioned	
	c. Material	To be mentioned	
<u>Deployment Bag</u>			
20.	a. Colour	To be mentioned	
	b. Material	To be mentioned	
	c. Length	To be mentioned	
	d. Related materials	To be mentioned	
	e. Type of weave	To be mentioned	
	f. GSM	To be mentioned	
	g. <u>No of threads/2.54 cm</u> Warp Weft	To be mentioned	
	h. <u>Denier/Count of yarn</u> Warp Weft	To be mentioned	
	j. Tensile strength (ISO-13934-1) Longitude (Warp) Latitude (Weft)	Minimum 52 Kg Minimum 45 Kg	
	k. Sunlight test (24 hrs) (Gray scale rating)	4	
	l. Washing test no-2 (Gray scale rating)	4	



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Ser	Description	Specification	Rmk
21.	<u>Suspension Line</u>		
	a. Colour	To be mentioned	
	b. Length	Minimum 6.50 m	
	c. Circumference	To be mentioned	
	d. Weight carr capacity	Minimum 108 Kg	
	e. No of suspension line	To be mentioned	
	f. Material	To be mentioned	
	g. Tensile strength (20 cm)	Minimum 180 Kg	
	h. Construction	To be mentioned	
	j. Denier of yarn	To be mentioned	
	k. Sunlight test (24 hrs) (Gray scale rating) By Q-sun machine	4	
	l. Washing test no-2 (Gray scale rating)	4	
22.	<u>Control Strap</u>		
	a. Material (ISO-1833)	To be mentioned	
	b. Design	To be mentioned	
	c. GSM (ISO-3801)	To be mentioned	
	d. No of threads/2.54 cm (ISO-7211) Warp Weft	To be mentioned	
	e. Denier of yarn (ISO-7211/5) Warp Weft	To be mentioned	
	f. Tensile strength (20 cm) (ISO-13934-1)	Minimum 250 kg	
	g. Sunlight test (24 hrs) (Gray scale rating) (ISO-105 B02)	4	
	h. Washing test no-2 (ISO-105 C02) (Gray scale rating)	4	



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Ser	Description	Specification	Rmk
23.	<u>Harness Assembly</u>		
	a. Material (ISO 1833)	To be mentioned	
	b. Related materials	To be mentioned	
	c. Minimum webbing tensile strength	Minimum 2490 Kg	
	d. No of riser	To be mentioned	
	e. Control strap	2	
24.	<u>Strap for Harness</u>		
	a. Design	Adjustable to various sizes	
	b. Weight/Metre in gm (ISO 3801)	To be mentioned	
	c. No of threads/2.54 cm (ISO 7211) Warp & Weft	To be mentioned	
	d. Denier of yarn (ISO 7211/5) Longitude (Warp) Latitude (Weft)	To be mentioned	
	e. Sunlight test (24 hrs) (Gray scale rating) (ISO 105 B 02)	4	
	f. Washing test no-2 (Gray scale rating) (ISO 105 C 02)	4	
	g. Tensile Strength (20 cm) (ISO-13934-1)	Minimum 272.16 Kg	
25.	Release system	To be mentioned	
26.	<u>Parachute Carrying Bag</u>		
	a. Material	To be mentioned	
	b. Dimension/Size	To be mentioned	
	c. GSM (ISO 3801)	To be mentioned	
	d. No of threads/2.54 cm (ISO 7211) Warp Weft	To be mentioned	
	e. Denier of yarn (ISO 7211/5) Warp Weft	To be mentioned	
	f. Tensile strength (ISO 13934-1) Longitude (Warp) Latitude (Weft)	Minimum 124.74 Kg	
	g. Sunlight test (24 hrs) (ISO 105 B02) (Gray scale rating)	4	
	h. Utility	To be mentioned	
	j. Log book pocket	Yes	
27.	Canopy release system	To be mentioned	
28.	Packing	Each parachute is put in a plastic bag and packed in a carton box.	
29.	Provision of stabilizer jump	Yes	
30.	Facility for using Automatic Actuation Device (AAD)	Yes	



Ser	Description	Specification	Rmk
31.	Repair materials	To be supplied	
32.	Knife	To be included	
33.	Log book	To be provided	
34.	Combat equipment attachment system	To be included	
35.	Warranty/Guarantee	Minimum 1 year from delivery	
36.	After sales service	To be provided	
37.	Model validity	To be provided	
38.	Metal components	To be mentioned	
39.	Original Catalogue/Brochure	To be submitted	
40.	<u>LIST OF ITEMS ACCESSORIES</u>		
	Stabilizer	5:1	
	AAD	5:1	
<u>PART-3: TRAINING REQUIREMENT</u>			
41.	Foreign Training	To be provided as per requirement	
42.	Local Training	To be provided as per requirement	
<u>PART-4: LIST OF SPARES</u>			
43.	List of Spare Parts (On every 05 pcs of main parachutes supplier will provide 01 set of spare parts).	To be submitted	
	List of Repair and Rigging Materials	To be submitted	
<u>PART-5: REPAIR AND MAINTANANCE REQUIREMENT LESS LIST OF SPARES</u>			
44.	Level of repair	To be mentioned	
45.	Manual for preventive maintenance and Repair, checks and services	To be submitted	
46.	Publication on Maintenance and Repair	To be submitted	
<u>PART-6: TOOL LIST FOR DIFFERENT LEVEL OF MAINTENANCE</u>			
47.	Special Service Tools (SST)	To be submitted	
48.	Special Service Material (SSM)	To be submitted	
<u>PART-7: FINANCIAL SPECIFICATION</u>			
49.	Financial Implication/Specifications	To be submitted	



TECHNICAL SPECIFICATION OF BASIC PARACHUTE SYSTEM (RESERVE)

Ser	Description	Specification	Rmk
<u>Part-1 General Specification</u>			
1.	Nomenclature	Basic Parachute (Reserve)	
2.	Year of production	Not before the year of contract	
3.	Model	To be mentioned	
4.	Name of the manufacturer and year in service	To be mentioned	
5.	Country of origin	To be mentioned	
<u>Part-2 Technical Specification</u>			
6.	Parachute weight	Maximum 8 Kg	
7.	Payload capacity	Minimum 162.66 Kg	
8.	Descent speed	Maximum 8 m/s	
9.	Minimum deployment altitude	150 m	
10.	Aircraft speed	150 KIAS	
11.	Storage life	Minimum 12 Years	
12.	Number of opening for reserve parachute	Multiple for low spd malfunction and one if deployed during high spd malfunction.	
<u>Canopy</u>			
13.	a. Basic cloth	To be mentioned	
	b. No of panels	To be mentioned	
	c. Area of canopy	Max 65 sq m	
	d. Length of canopy	To be mentioned	
<u>Canopy Cloth</u>			
14.	a. Material (ISO 1833)	To be mentioned	
	b. Type of weave	To be mentioned	
	c. GSM (ISO 3801)	To be mentioned	
	d. No of threads/2.54 cm (ISO 7211) Longitude (Warp) Latitude (Weft)	To be mentioned	
	e. Denier of yarn (ISO 7211/5) Longitude (Warp) Latitude (Weft)	To be mentioned	
	f. Air permeability (EN ISO 9237)	To be mentioned	
	g. Tensile strength (ISO 13934-1) Longitude (Warp) Latitude (Weft)	Minimum 20.4 Kg per inch	
	h. Sunlight test (24 hrs) (Gray scale rating)	4	
	j. Washing test no-2 (Gray scale rating)	4	
	15.	Pilot chute	To be mentioned



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Ser	Description	Specification	Rmk
Suspension Line (Reserve Parachute)			
16.	a. Material (ISO 1833)	To be mentioned	
	b. Length	To be mentioned	
	c. No of suspension line	To be mentioned	
	d. Circumference	To be mentioned	
	e. Weight Capacity	Minimum 163 Kg	
	f. Tensile Strength (20 cm) (ISO-13934-1)	Minimum 190 Kg	
	g. Construction	To be mentioned	
	h. Denier of yarn (ISO 7211/5)	To be mentioned	
	j. Sunlight test (24 hrs) (Gray scale rating) (ISO 105 B02)	4	
	k. Washing test no-2 (ISO 105 C02) (Gray scale rating)	4	
Control Strap			
17.	a. Material (ISO-1833)	To be mentioned	
	b. No of control strap	2 to 4 Risers	
	c. Width of nylon tape	To be mentioned	
	d. Design	To be mentioned	
	e. GSM (ISO-3801)	To be mentioned	
	f. No of threads/2.54 cm (ISO-7211) Longitude (Warp) Latitude (Weft)	To be mentioned	
	g. Denier of yarn (ISO-7211/5) Longitude (Warp) Latitude (Weft)	To be mentioned	
	h. Tensile strength (20 cm) (ISO-13934-1)	Minimum 249.48 Kg	
	j. Sunlight test (24 hrs) (Gray scale rating) (ISO-105 B02)	4	
	k. Washing test no-2 (ISO-105 C02) (Gray scale rating)	4	
18.	Pack tray assembly	To be mentioned	



Ser	Description	Specification	Rmk
Parachute Bag			
19.	a. Material	To be mentioned	
	b. Dimension/Size	To be mentioned	
	c. GSM (ISO 3801)	To be mentioned	
	d. No of threads/2.54 cm (ISO 7211) Longitude (Warp) Latitude (Weft)	To be mentioned	
	e. Denier of yarn (ISO 7211/5) Longitude (Warp) Latitude (Weft)	To be mentioned	
	f. Tensile strength (ISO 13934-1) Longitude (Warp) Latitude (Weft)	To be mentioned	
	g. Sunlight test (24 hrs) (ISO 105 B02) (Gray scale rating)	To be mentioned	
	h. Utility	To be provided	
	j. Log book pocket	Yes	
20.	Ripcord handle with rip cord	Minimum 01 (Details to be provided)	
21.	Length of Ripcord	Ability to deployed with use of heavy winter gloves	
22.	Log book	To be included	
23.	Metal components	To be mentioned	
24.	Packing	Standard packing	
25.	Repair materials	To be supplied	
26.	Warranty/Guarantee	Minimum 01 year from delivery	
27.	After sales service	To be provided	
28.	Model validity	To be provided	
29.	Original Catalogue/Brochure	To be submitted	
<u>Part-3: Training Requirement</u>			
30.	Foreign Training	To be provided as per requirements	
31.	Local Training	To be provided as per requirements	
<u>Part-4: LIST OF SPARES</u>			
32.	List of Spare Parts (1:5 on every 05 pcs of reserve parachutes supplier will provide 01 set of spare parts)	To be submitted	
	Repair, Packing and Rigging Materials	To be submitted	
	List of packing materials	To be submitted	



Ser	Description	Specification	Rmk
<u>Part-5: LIST OF SPARES</u>			
33.	List of standard spare parts, tools and accessories	To be submitted	
<u>PART-6: TOOL LIST FOR DIFFERENT LEVEL OF MAINTENANCE</u>			
34.	Special Service Tools (SST)	To be submitted	
35.	Special Service Material (SSM)	To be submitted	
<u>PART-7: FINANCIAL SPECIFICATION</u>			
36.	Financial Implication/Specifications	To be submitted	



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**TECHNICAL SPECIFICATION OF FREE-FALL PARACHUTE SYSTEM
(INCLUDING RESERVE)**

Ser	Description	Specification	Rmk
<u>Part-1 General Specification</u>			
1.	Nomenclature	Free-Fall Parachute (Including Reserve)	
2.	Year of production	Not before the year of contract	
3.	Model	To be mentioned	
4.	Name of the manufacturer	To be mentioned	
5.	Country of origin	To be mentioned	
<u>Part-2 Technical Specification</u>			
6.	Parachute weight	Maximum 23 Kg	
7.	Payload capacity	Minimum 144.69 Kg	
8.	Descent speed	Maximum 5 m/s	
9.	Forward speed	Maximum 12 m/s	
10.	360 ^o Turning speed	Maximum 4 Sec	
11.	Maximum aircraft speed	150 KIAS	
12.	Minimum deployment altitude	150 m	
13.	Maximum deployment altitude (HAHO)	10000 m	
14.	Storage life	Minimum 20 Years	
15.	Number of jump	Minimum 1000 jumps (Extendable by rigger)	
16.	Service life	Minimum 20 Years	
<u>Canopy</u>			
17.	a. Material	To be mentioned	
	b. Colour	To be mentioned	
	c. Length of canopy	To be mentioned	
	d. Width of canopy	To be mentioned	
	e. Area of canopy	To be mentioned	
	f. No of Air Cell	To be mentioned	
<u>Canopy Cloth</u>			
18.	a. Material (ISO 1833)	To be mentioned	
	b. Type of weave	To be mentioned	
	c. GSM (ISO 3801)	To be mentioned	
	d. No of threads/2.54 cm (ISO 7211) Longitude (Warp) & Latitude (Weft)	To be mentioned	
	e. Denier of yarn (ISO 7211/5) Longitude (Warp) & Latitude (Weft)	To be mentioned	
	f. Air Permeability (EN ISO 9237)	(00) Zero	



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Ser	Description	Specification	Rmk
	g. Tensile strength (ISO 13934-1) Longitude (Warp) Latitude (Weft)	Minimum 86 Kg Minimum 79 Kg	
	h. Sunlight test (24 hrs) (Gray scale rating) (ISO 105 B02)	4	
	j. Washing test no-2 (ISO 105 C02) (Gray scale rating)	4	
<u>Canopy Sleeve</u>			
19.	Material	To be mentioned	
20.	Slider	Collapsible	
21.	Pilot chute	BOC or OTS or Ripcord	
<u>Control Strap</u>			
22.	a. Material (ISO 1833)	To be mentioned	
	b. Design	To be mentioned	
	c. GSM (ISO 3801)	To be mentioned	
	d. No of threads/2.54 cm (ISO 7211) Longitude (Warp) & Latitude (Weft)	To be mentioned	
	e. Denier of yarn (ISO 7211/5) Longitude (Warp) & Latitude (Weft)	To be mentioned	
	f. Tensile strength (20 cm) (ISO-13934-1)	Maximum 668.6 Kg	
	g. Sunlight test (24 hrs) (Gray scale rating) (ISO 105 B02)	4	
	h. Washing test no-2 (ISO 105 C02) (Gray scale rating)	4	
<u>Suspension Line</u>			
23.	a. Material (ISO 1833)	To be mentioned	
	b. No of groups	To be mentioned	
	c. No of suspension	To be mentioned	
	d. Weight bearing capacity	Minimum 163.2 Kg	
	e. Tensile strength (20 cm)	Minimum 317.5 Kg	
	f. Construction	To be mentioned	
	g. Denier of yarn (ISO 7211/5)	To be mentioned	
	h. Sunlight test (24 hrs) (Gray scale rating) (ISO 105 B02)	4	
	j. Washing test no-2 (ISO 105 C02) (Gray scale rating)	4	



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Ser	Description	Specification	Rmk
<u>Harness Assembly</u>			
24.	a. Material (ISO-1833)	To be mentioned	
	b. Weight bearing capacity	Minimum 163.3 Kg	
	c. Number of riser	To be mentioned	
	d. Steering line	To be mentioned	
<u>Strap for Harness</u>			
25.	a. Design	To be mentioned	
	b. Weight/Meter in gm (ISO 3801)	To be mentioned	
	c. Tensile Strength (20 cm) (ISO-13934-1)	Minimum 670 Kg	
	d. No of threads/2.54 cm (ISO 7211) Longitude (Warp) Latitude (Weft)	To be mentioned	
	e. Denier of yarn (ISO-7211/5) Longitude (Warp) Latitude (Weft)	To be mentioned	
	f. Sunlight test (24 hrs) (Gray scale rating) (ISO-105 B02)	4	
	g. Washing test no-2 (ISO-105 C02) (Gray scale rating)	4	
	26.	Container	To be mentioned
<u>Reserve Parachute</u>			
27.	a. Material	To be mentioned	
	b. Colour	To be mentioned	
	c. Length	To be mentioned	
	d. Width of canopy	Minimum 3.46 m	
	e. Area of canopy	Minimum 26.94 sq m	
	f. No of air cell	9 Cell	
	g. Type of weave	To be mentioned	
	h. GSM (ISO 3801)	To be mentioned	
	j. No of threads/2.54 cm (ISO 7211) Longitude (Warp) Latitude (Weft)	To be mentioned	
	k. Denier of yarn (ISO 7211/5) Longitude (Warp) Latitude (Weft)	To be mentioned	
	l. Air permeability (EN ISO 9237)	To be mentioned	



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Ser	Description	Specification	Rmk
	m. Tensile strength (ISO 13934-1) Longitude (Warp) Latitude (Weft)	Minimum 90 Kg Minimum 80 Kg	
	n. Sunlight test (24 hrs) (ISO 105 B02) (Gray scale rating)	4	
	p. Washing test no-2 (ISO-105 C02) (Gray scale rating)	4	
Release System			
28.	a. Method	To be mentioned	
	b. Strength to open	Maximum 16 Kg	
29.	Opening method	To be mentioned	
30.	AAD	To be mentioned	
31.	Log book	Yes	
Parachute Carrying Bag			
32.	a. Material	To be mentioned	
	b. Dimension/Size	To be mentioned	
	c. GSM (ISO 3801)	To be mentioned	
	d. No of threads/2.54 cm (ISO 7211) Longitude (Warp) Latitude (Weft)	To be mentioned	
	e. Denier of yarn (ISO 7211/5) Longitude (Warp) Latitude (Weft)	To be mentioned	
	f. Tensile strength (ISO 13934-1) Longitude (Warp) Latitude (Weft)	Minimum 147 Kg Minimum 125 Kg	
	g. Sunlight test (24 hrs) (Gray scale rating) (ISO 105 B02)	4	
	h. Washing test no-2 (ISO 105 C02) (Gray scale rating)	4	
	j. Utility	To be mentioned	
33.	Packing	To be mentioned	
34.	Repair materials	To be provided	
35.	Warranty/Guarantee	Minimum One year after delivery	



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Serial	Description	Specification	Rmk
36.	<u>Performance</u>	<p>a. The function and capacity of reserve parachute is same as main parachute.</p> <p>b. Opening shock is no more than 950 kg.</p> <p>c. When pulling down the toggles, the horizontal speed must be 0, while the vertical speed will not increase within 2-3 seconds.</p> <p>d. For stalled gliding, the vertical descent speed is less than 8 m/s.</p>	
37.	Metal components	Stainless Steel	
38.	After sales service	To be provided	
39.	Model validity	To be provided	
40.	Original Catalogue/Brochure	To be submitted	
41.	Combat equipment attachment system	To be supplied	
<u>Part-3: Training Requirement</u>			
42.	Foreign Training	To be provide as per requirement	
43.	Local Training	To be provide as per requirement	
<u>Part-4: List of Spares</u>			
44.	List of Spare Parts (1.10 on every 10 pcs parachutes supplier will provide 01 set of spare parts)	To be submitted	
	Repair, Packing and Rigging Materials	To be submitted	
	List of packing materials	To be submitted	
<u>PART-5: LIST OF SPARES</u>			
45.	List of standard spare parts, tools and accessories	To be submitted	
<u>PART-6: TOOL LIST FOR DIFFERENT LEVEL OF MAINTENANCE</u>			
46.	Special Service Tools (SST)	To be submitted	
47.	Special Service Material (SSM)	To be submitted	
<u>PART-7: FINANCIAL SPECIFICATION</u>			
48.	Financial Implication/Specifications	To be submitted	

