

Specifications of Coverall Flying

General description

Coverall is a type of garment which is usually used as protective clothing during flight and working at flying environment. It is a one- piece garment with full-length sleeves and legs, but usually less tight-fitting. Its main feature is that it has no gap between jacket and trousers or between lapels. The fabric of the coverall is to be of **Nomex** standard (flame-resistant meta-aramid) to protect aircrew from any flash fires and may incorporate a carbon core fibre to minimize static build up. The fibres will not melt, burn, drip or support combustion in air. The coverall should be tailored for maximum comfort and may feature straight/angled zippered breast pockets, zippered shin pockets for miscellaneous gear and check list binders, velcro waist band to adjust sizing with minimum one blank name tag. This type of flight suit is to be sewn to military specifications. Considering the hot and humid weather of the country, light weight 'summer' type coverall would be most appropriate for Bangladesh Air Force. Sizes should be as heights (5'4" to 6'4") of general pilot population and measurement table.

Basic specification

- | | | | | | | | | | | | | |
|------------------|-------------------------------------|---------------|--|-------------|---|---------------|-------------|---|--------------|------------------|---|--------|
| 1. | Model & part no | : | CWU-27/P, F511546388 Nomex, FNS/PD966-17 (MIL-C-1314A) | | | | | | | | | |
| 2. | Specification | : | To be provided in the sticker/label {NOMEX standard with REPEL/standard plain scoured finish as per Military stitching specifications FNS/PD 96-17(MIL-C-83141A)}. | | | | | | | | | |
| 3. | Colour | : | Sage Green for normal operation. | | | | | | | | | |
| 4. | Fabric content/Material | : | <table border="0"> <tr> <td>Meta Aramid</td> <td>-</td> <td>More than 92%</td> </tr> <tr> <td>Para aramid</td> <td>-</td> <td>Less than 5%</td> </tr> <tr> <td>Conductive fibre</td> <td>-</td> <td>Min 3%</td> </tr> </table> | Meta Aramid | - | More than 92% | Para aramid | - | Less than 5% | Conductive fibre | - | Min 3% |
| Meta Aramid | - | More than 92% | | | | | | | | | | |
| Para aramid | - | Less than 5% | | | | | | | | | | |
| Conductive fibre | - | Min 3% | | | | | | | | | | |
| 5 | Coverall Features | : | <p>Front opening with two-way fastening die cast zipper (flame retardant) and gusseted back.</p> <p>Adjustable waist tabs/belt with Velcro to improve fit/fastener.</p> <p>Adjustable cuff tabs (touch and close fasteners).</p> <p>Breast pockets with zip fastener.</p> <p>Pencil pocket-Three compartments on left sleeve.</p> <p>Side pockets (Optional)</p> <p>Right thigh pocket</p> <p>Lower leg pockets.</p> <p>Knife pocket on left inseam (Optional)</p> <p>Epaulettes with touch and closed fasteners (Optional).</p> | | | | | | | | | |
| 6. | Flame resistant standard | : | As approved/contract sample. | | | | | | | | | |
| 7. | Weaving style (yarn/thread density) | : | Should not be too dense, so as to allow evaporation and should not be rare either so as to effect durability adversely or render it see through. | | | | | | | | | |
| 8. | Durability | : | At least 02 years. | | | | | | | | | |
| 9. | Country of origin & Manufacturer | : | USA & UK. | | | | | | | | | |

Technical Specifications

1. Yarn/Thread (warp) reqr
 - a. Longitudinal thread count: 20/2^s (resultant 20) \pm 2
 - b. Ends per inch (e.p.i): Minimum 70 \pm 2 e.p.i
 - c. Percentage of shrinkage: 1% (Max)
 - d. Average breaking strength: 215 kg \pm 5 kg
2. Yarn/Thread (weft) reqr
 - a. Lateral thread count: 20/2^s (resultant 20) \pm 2
 - b. Picks per inch (p.p.i): Minimum 60 \pm 2 p.p.i
 - c. Percentage of shrinkage: 1% (Max)
 - d. Average breaking strength: 140 kg \pm 3 kg
3. Weight / Sq meter (GSM) : 150 gm \pm 5 gm
4. Colour fastness test :
 - a. Washing Test No-2 : Grade 4-5
 - b. Washing Test No-4 : Grade 4-5
 - c. Hot pressing in dry condition : Grade 4-5
 - d. Hot pressing in damp condition : Grade 4-5
 - e. Hot pressing Wet condition : Grade 4-5
 - f. Sun-light Test : Grade 4-5
5. Additional details/results :
 - a. Fabric flame test (smoke density and flame resistance) :
 - b. Effect of temperature :
 - c. Humidity :
 - d. Solar radiation :
 - e. Color fastness to light :
 - f. Fungus resistance :
 - g. Rain :
 - h. Contamination resistance :
 - j. Air Permeability : Average 40.1 cm³/cm²/sec
 - k. Clearance certificate to fly on fast jets :



6. Figure of Coverall:

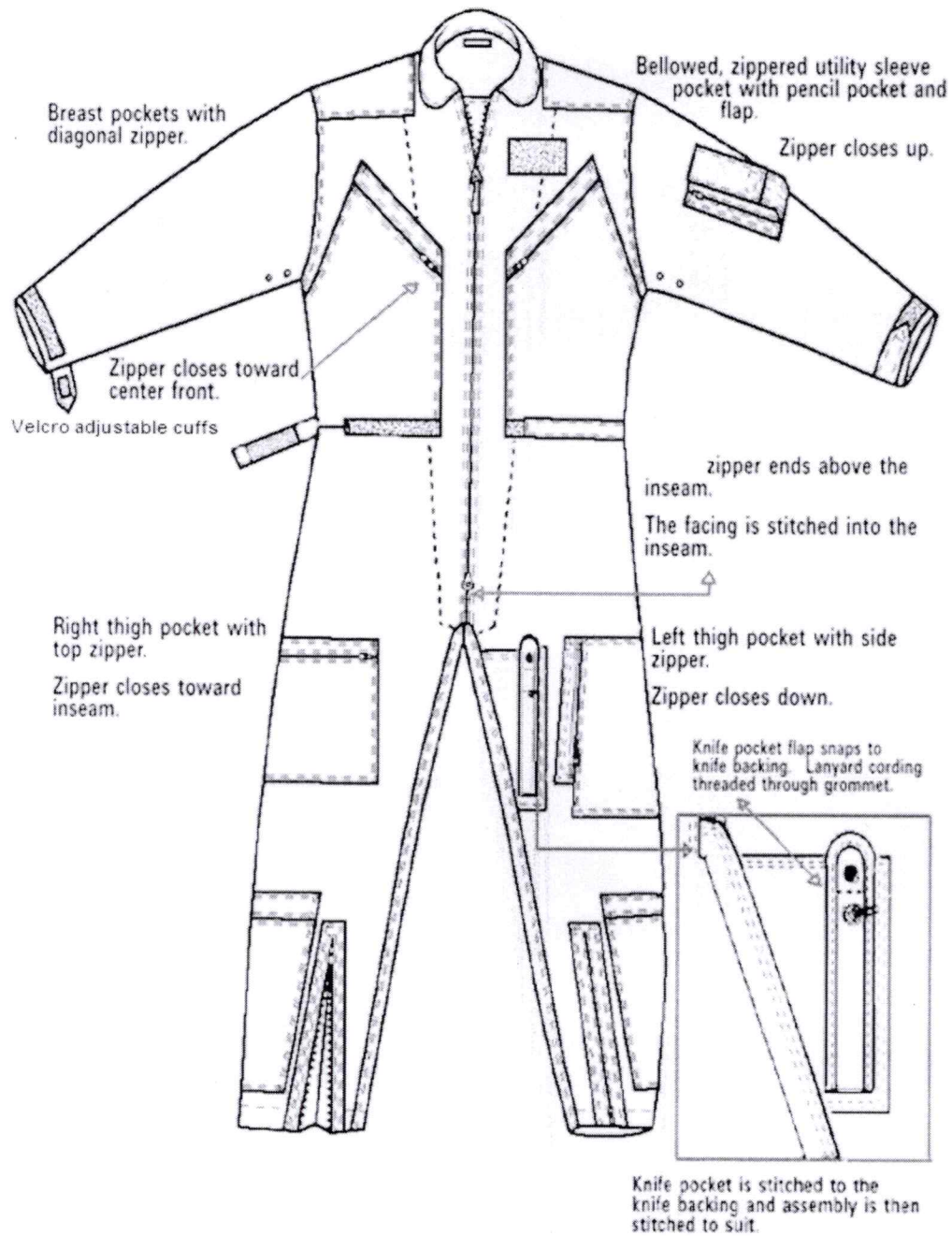
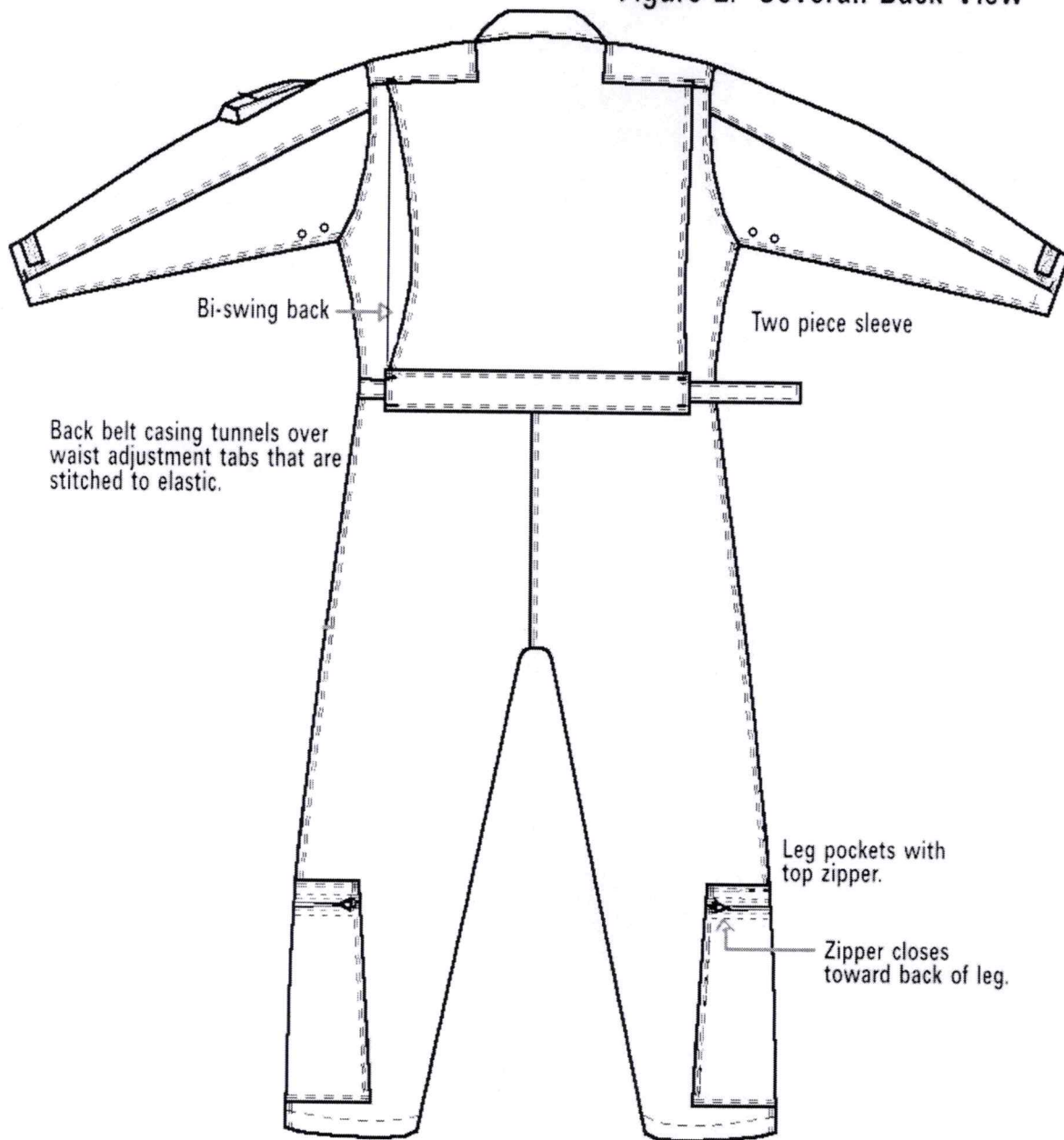


Figure 1. Coverall Front View

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Figure 2. Coverall Back View



Bottom edges of pockets are 3-3/4" above finished hems at side seams and approximately 4" above finished hems at front and back corners.

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7. Measurement Guideline for Coverall Flying:

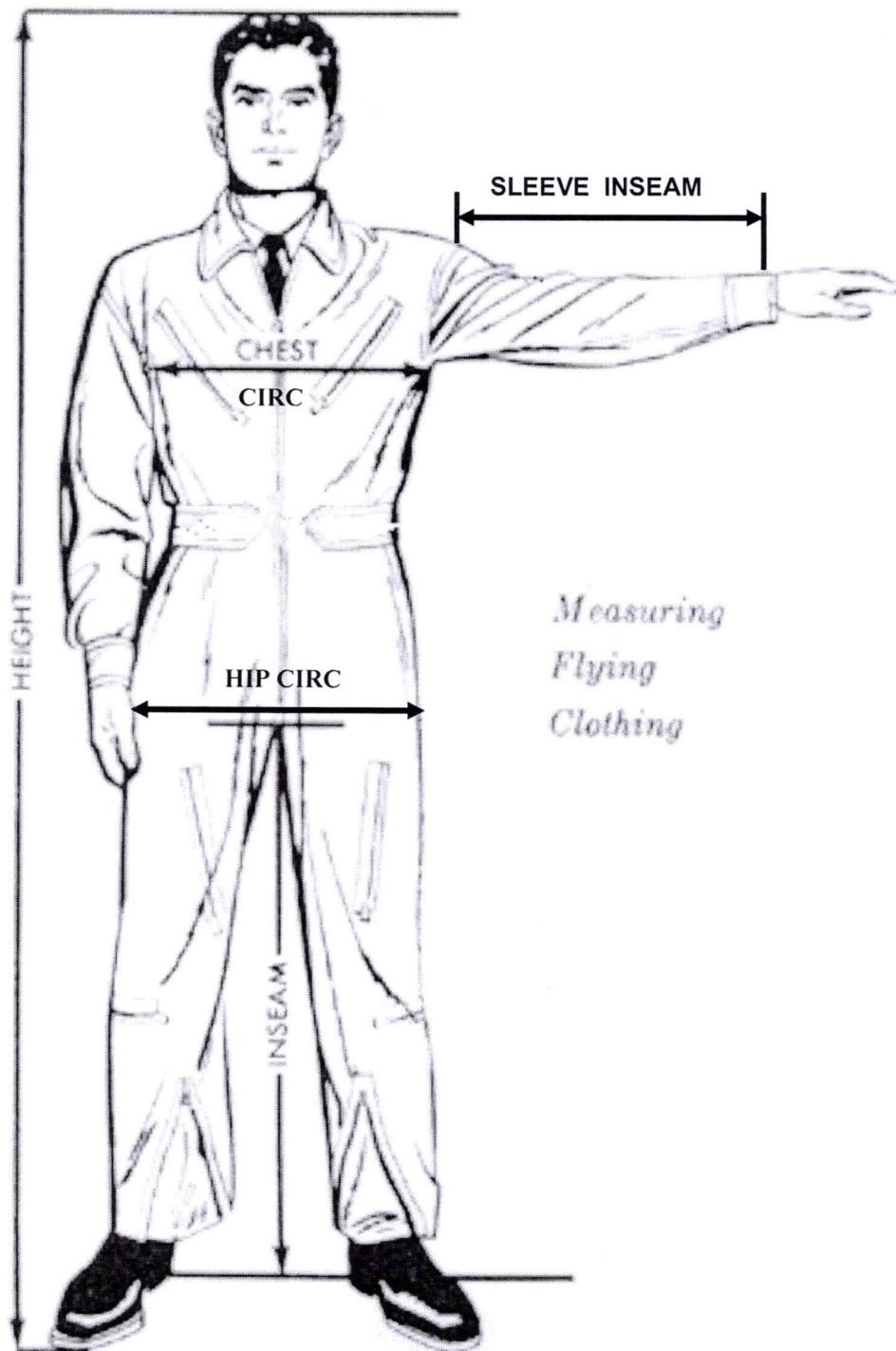


Figure 3. Measurement Guideline

Handwritten signature or initials in blue ink.

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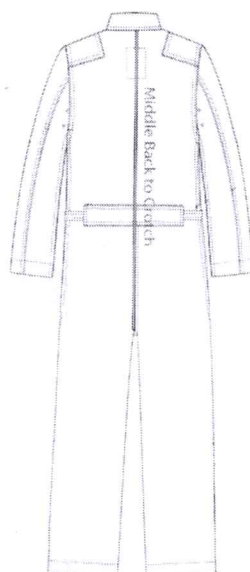
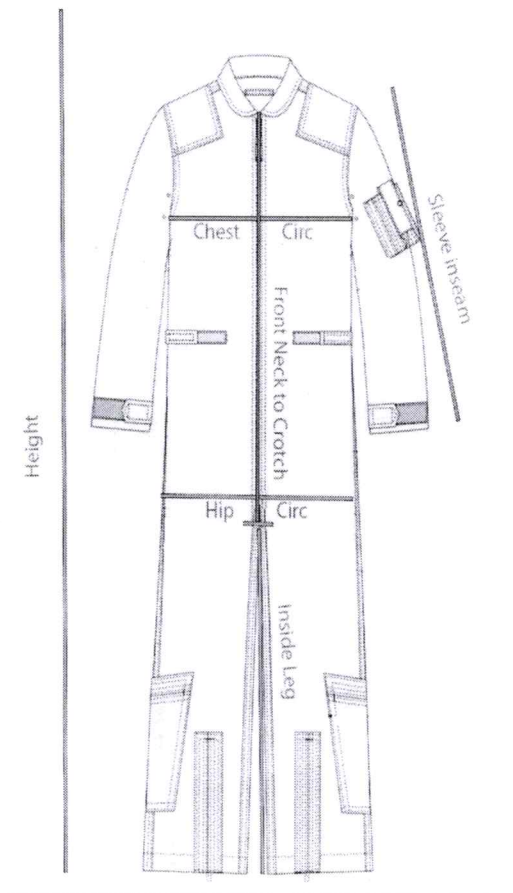


Figure 4. Measurement Guideline

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9. Measurement of Coverall Flying:

Size		Height (+/- 2 Inches)	1/2 CHEST	1/2 HIP	SLEEVE LENGTH	LEG LENGTH	BACK MIDDLE LENGTH CROTCH	FORNT NECK TO CROTCH	WAIST
SHORT	34	5' - 7"	19 3/8	20 1/8	21 1/8	28 1/8	34 1/3	28 1/4	16 1/2
	36		20 3/8	21 1/4	21 1/4	28 1/4	35	28 7/9	17 1/2
	38		21 3/8	22 1/4	21 3/8	28 3/8	35 5/7	29 1/3	18 1/2
	40		22 3/8	23 1/4	21 1/2	28 1/2	36 2/5	29 8/9	19 1/2
	42		23 3/8	24 3/8	21 5/8	28 5/8	37 1/9	30 4/9	20 1/2
	44		24 3/8	25 3/8	21 3/4	28 3/4	37 4/5	31	21 1/2
	46		25 3/8	26 3/8	21 7/8	28 7/8	38 1/2	31 5/9	22 1/2
	48		26 3/8	27 3/8	22	29	-	-	-
REGULAR	34	6' - 0"	19 3/8	20 1/8	22 5/8	30 1/8	34 1/3	28 1/4	16 1/2
	36		20 3/8	21 1/4	22 3/4	30 1/4	35	28 7/9	17 1/2
	38		21 3/8	22 1/4	22 7/8	30 3/8	35 5/7	29 1/3	18 1/2
	40		22 3/8	23 1/4	23	30 1/2	36 2/5	29 8/9	19 1/2
	42		23 3/8	24 3/8	23 1/8	30 5/8	37 1/9	30 4/9	20 1/2
	44		24 3/8	25 3/8	23 1/4	30 3/4	37 4/5	31	21 1/2
	46		25 3/8	26 3/8	23 3/8	30 7/8	38 1/2	31 5/9	22 1/2
	48		26 3/8	27 1/2	23 1/2	31	-	-	-
	50		27 3/8	28 1/2	23 5/8	31 1/8	-	-	-
	52		28 3/8	29 5/8	23 3/4	31 1/4	-	-	-
LONG	34	6' - 3"	19 3/8	20 1/8	24 1/8	32 1/8	34 1/3	28 1/4	16 1/2
	36		20 3/8	21 1/4	24 1/4	32 1/4	35	28 7/9	17 1/2
	38		21 3/8	22 1/4	24 3/8	32 3/8	35 5/7	29 1/3	18 1/2
	40		22 3/8	23 1/4	24 1/2	32 1/2	36 2/5	29 8/9	19 1/2
	42		23 3/8	24 3/8	24 5/8	32 5/8	37 1/9	30 4/9	20 1/2
	44		24 3/8	25 3/8	24 3/4	32 3/4	37 4/5	31	21 1/2
	46		25 3/8	26 3/8	24 7/8	32 7/8	38 1/2	31 5/9	22 1/2
	48		26 3/8	27 1/2	25	33	-	-	-
	50		27 3/8	28 1/2	25 1/8	33 1/8	-	-	-
	52		28 3/8	29 5/8	25 1/4	33 1/4	-	-	-

Terms & Conditions for supply of Coverall Flying

1. Items must be as per the contract (approved) sample, brand new and of the latest production lot. Date of production should not be earlier than January 2026.
2. Quotations are to be submitted along with 03 X samples of Coverall Flying and brochure/catalogue which are to be forwarded to Air HQ for necessary vetting. **The sizes and qty of the samples must be as 40R-01 each, 40S-01 each & 40L-01 each.**
3. **Any quotation without sample will not be considered. Any offer/quotation referring the previously submitted sample/previous contract sample will also not be considered.**
4. Country of origin and name of manufacturer: Must be mentioned in the quotation.
5. If the supplier and the manufacturer are not the same, the supplier is to provide the particulars of the manufacturer and the assurance certificate from the manufacturer for supply of the item as per the contracted terms & conditions.
6. Air/Sea worthy packing must be provided.
7. Standard warranty/guarantee certificates are to be provided by the manufacturer at the time of delivery of item.
8. Each Coverall Flying is to be packed properly for safe transit and storage. A label/sticker bearing name of the supplier, size and other information like basic specifications ser no-2, material percentage, care instruction etc must be attached at the inner side below the collar of each coverall.
9. 50 Each Coverall Flying is to be packed in a hard carton / wooden box with proper packing material.
10. If the items are found defective/damaged during inspection, the same are to be replaced with new ones by the supplier at their own risk, arrangement and expenses within 60 days.
11. Part delivery and part payment are not allowed.
12. **Delivery and Inspection place.** 201 MU BAF, Dhaka Cantonment, Dhaka. Inspection of the items will be carried out by CQCU BAF.
13. Qty and Sizes of coverall will be intimated before signing the contract.
14. Delivery is to be completed within 120 days from the date of signing the contract.
15. Necessary lab test will be carried out during vetting of offered samples as well as before accepting bulk supplied items. Qty 01 each additional coverall Flying must be supplied with the contracted qty for lab test purpose.
16. On arrival of the items at Airport/Seaport, the same will be cleared from the Airport/Seaport on following conditions:
 - a. A copy of LC and contract or valid documents in favour of the contract are to be provided/submitted to BAF Embarkation Unit, Chattogram/201MU BAF (Air Freight) as applicable.
 - b. In case of shipment by Air, No 201 MU BAF, Dhaka Cantt, Dhaka will clear the items from HSIA (Hazrat Shahjalal International Airport), Dhaka as defence goods with an exemption of custom duties and taxes as per Ministry of Finance Memo no.9 (41)/NBR/CUS-IV/72/146 dated 10 April 1981. All the charges including port duties and expenses related to transportation from the Airport to upto 201 MU BAF shall be paid by the supplier.



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c. In case of shipment by Sea, BAF Embarkation Unit, Chattogram will clear the items from Chattogram Sea Port as defence goods with an exemption of custom duties and taxes as per Ministry of Finance Memo no.9 (41)/NBR/CUS-IV/72/146 dated 10 April 1981. After clearance of the item from the port, the supplier will arrange dispatch of the items to 201 MU BAF at their own responsibility. All the charges including port duties and expenses related to transportation from Chattogram to 201 MU BAF shall be paid by the supplier.

d. In that case, the bidder is to quote the price of the items excluding custom duties & taxes and port handling/other charges.

17. **Payment Terms.** Payment will be made through an irrevocable letter of credit (LC) as per following:

a. 100% CFR/CPT value will be paid/released on receipt of written clearance from DGDP after satisfactory acceptance of the contracted items by BAF, after inspection/functional test (as applicable), on production of Certificate Receipt Voucher (CRV) from 201 MU BAF and on presentation of shipping documents.

b. AWB /BL/Road Transport Bill must be in the name of consignee.

18. **Freight Charge.** Freight charge will be paid at actual but not more than the contracted freight. As such, the freight is to be mentioned in appropriate column of AWB/BL/Road Transport Bill, otherwise only FOB/FCA value will be paid.

Miscellaneous:

19. The bidder must mention the name and full address of the local agent in the offer.

20. Due to the fault of the supplier if any change is required in contract/LC, then all the expenses shall be borne by the supplier.

21. Trans-shipment is not normally allowed, if the bidder needs trans-shipment, then are to mention in the offer about their requirement. In case of such requirement, the trans-shipment will only be allowed under single AWB/BL.

22. The bidder is to mention the port/country of shipment in the offer.

23. The cost of item is to be '**Firm & Fixed**'. No increase of price at any stage after submission of offer will be accepted by BAF.

24. Price of item and freight charges (both by air and sea) are to be mentioned separately and clearly in US Dollar.

25. For failure to supply the contracted goods in time, DGDP may cancel the contract with nec punitive action.

26. The offer must be valid up to 06 months.

27. Air HQ may decrease the indented quantity of item without assigning any reason.

28. Any other terms & conditions not covered here will be as per DGDP rules and regulations.

29. Compliance of tender terms & conditions should be mentioned in the quotations by the bidders as per sequence above.

