

GENERAL ASSEMBLY

GEN. TOLERANCE
(SPECI No. ANSI/AIAA-S-017-1991)

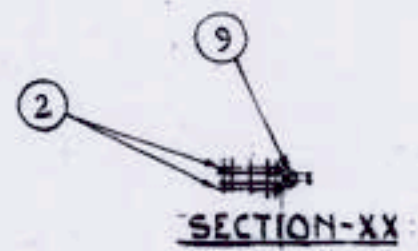
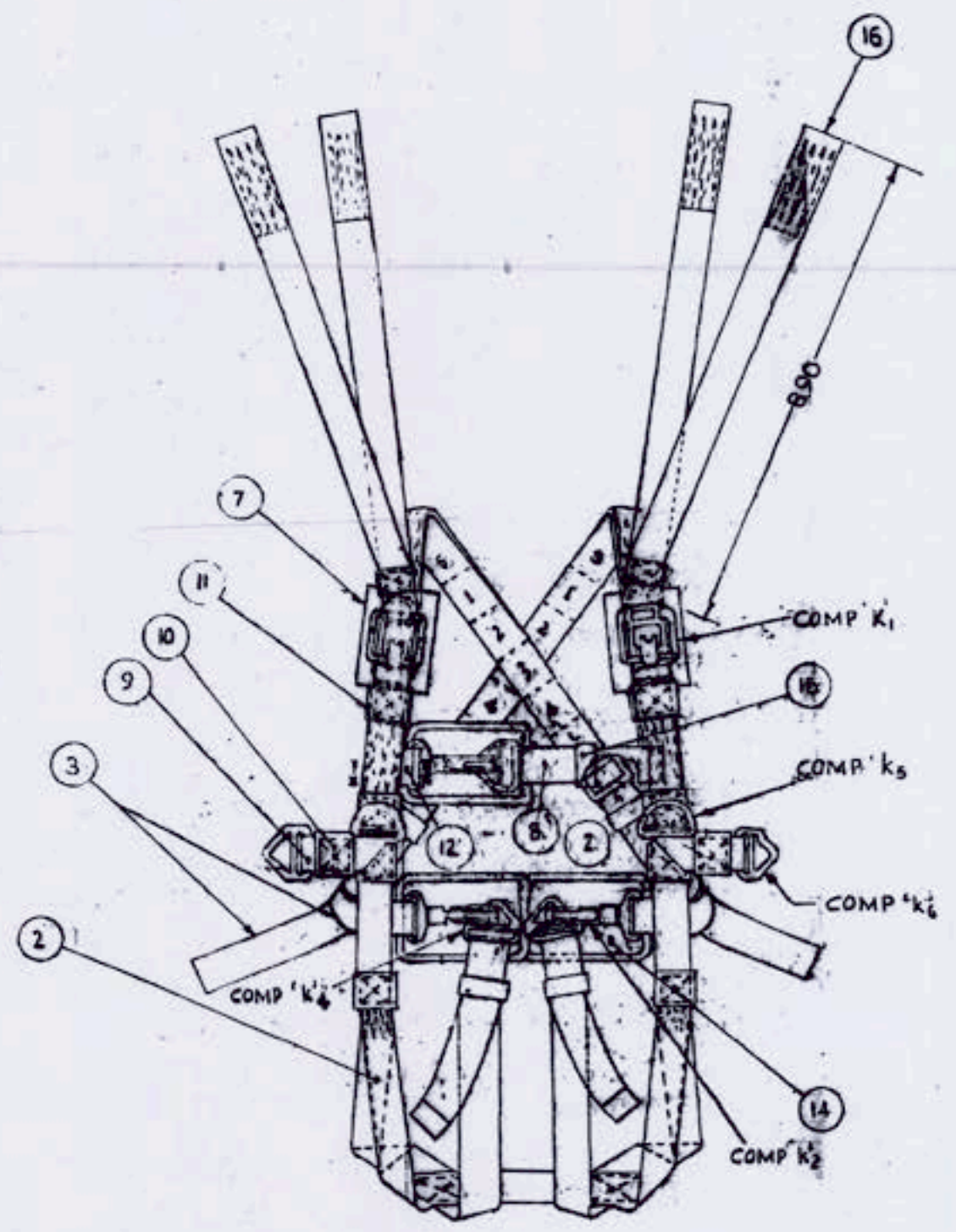
MORE THAN	BUT UPTO	TOL. ±
	2	1
2	50	2
50	250	3
250	750	6
750	1500	10
1500		1%

5	BAG CARRYING NYLON	12	ADRDE/793/A-12(μ)(d)
4	BAG INNER	58 - 80	ADRDE/1283-A4(b)
3	PACK COVER	40 - 57	ADRDE/1283-A3(c)
2	HARNES	20 - 39	ADRDE/1283-A2(μ)(f)(i)
1	MAIN CANOPY	2 - 19	ADRDE/1283-A1(μ)(e)
-	GENERAL ASSEMBLY	1	ADRDE/1283 (f)
ITEM NO.	NOMENCLATURE	SHEET Nos.	DRAWING NUMBERS

DRN: VIRDI	DRD	MATERIAL:-	ADRDE, AGRA
CHD	<i>o/c</i>	FINISH:-	
TRD	PGD	HEAT TREATMENT:-	APPROVED
COMP:	PROJ. OFFR		
SCALE:-	DIV. HEAD		
H.T.S.			
DIMENSIONS IN MM	HIGH ALTITUDE PARACHUTE (MAIN)		PROG. DIRECTOR(QA)
TOLERANCE:-			DRG. No.
			ADRDE/1283

Sl. No.	DATE	BY	AUTHORITY	BRIEF RECORD
g	28-6-19	C4, D4	QMS/PG/PAS/C	AMENDED AS PER CHANGE SHEET No. 204
1	07-11-17		QMS/PG/PAS44(A)	AMENDED AS PER CHANGE SHEET No. 107

o/c PGD



SPECN./DRGN.	QTY	DESCRIPTION	IS: 1979	QTY	REMARKS
		l	TAPE COTTAN SPECIAL 19mm OG	39	
		K6	TRIANGULAR 'D' RING BRACE PARACHUTE	2	ADRDE/109 'C'
IND/GS/1798		K5	BUCKLE 'D' SHAPED (PTR-M)	2	105/03/220
ADRDE/1211		K4	BUCKLE 'V' SHAPED WITH SLIDING BAR	3	B-0/126/177
IND/GS/1802		K3	BUCKLE WAIST ADJUSTABLE ADAPTER (PTR-M) WITH SLIDING BAR	2	COA-GC/45/407
ADRDE/1219 (c)		K2	SNAP HOOK QUICK EJECTOR	3	00/121/177
ADRDE/1233 (a)		K1	CANOPY RELEASE DEVICE WITH WIRE LOOP	2	00/126/177
		h	THREAD SEWING NYLON HEAVY UNDYED VARIETY No. 2 (20223H)	1, 2, 3, 5, 10, 11	IS: 4227/1992
		g	THREAD SEWING NYLON LIGHT OC VARIETY No. 12-12 THREAD SEWING NYLON SL LIGHT YELLOW, BONDED, 4.5 kgf	7, 14, 15	ADRDE/1211/2009/11 09.11.07.2011
		f	TAPE ELASTIC 25 mm W/D	15	IND/TC-2135
		e	TAPE NYLON 19mm O.G. BS (1893H) VARIETY No. 2	14	JSS: 8315-06
		d	POLYURETHANE FOAM	6A, 14-B	IS: 8255-1975 IS: 8255-1976
		c	DUCK NYLON 230S O.G.	216-A	ADRDE/1211/1864/20
		b	WEBBING NYLON 44mm O.G. (1895K BS)	4, 5, 6, 10, 11	IS: 4227-1958
		a	WEBBING NYLON 44mm O.G. (2950K BS)	1, 2, 3, 5, 12, 13	IS: 4227-1958
SL. No.	NOMENCLATURE			SPECN. No./DRGN.	DETAIL REF. No.

LIST OF MATERIAL

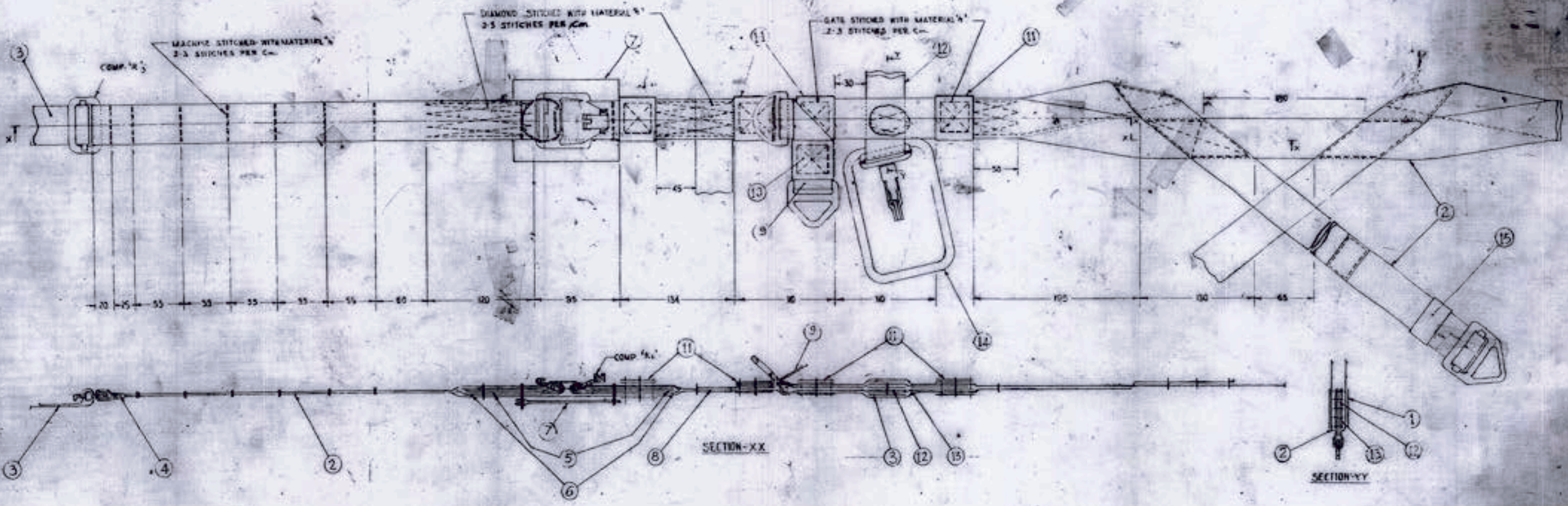
ITEM	NOMENCLATURE	QTY	REMARKS
16	RISER	39	2
15	ELASTIC BANDS	38	5
14-B	INNER PAD	37	3
14-A	DEVELOPMENT OF PADDING	36	6
14	PADDING FOR SNAP HOOK	35	3
13	RE-INFORCEMENT STRAP	34	2
12	STRAP FOR SNAP HOOK ATTACHMENT	33	1+2
11	BOX	32	8
10	BOX	31	2
9	STRAP FOR PAD BAG	30	2
8	CHEST STRAP	29	1
7	DEVELOPMENT OF COVER	18	2
6-A	SHOULDER PAD	27	2
6	RE-INFORCEMENT PIECE	26	4
5	RE-INFORCEMENT PIECE	25	4
4	RE-INFORCEMENT PIECE	24	2
3	ADJUSTMENT STRAP	23	2
2	MAIN STRAP	22	2
1	MAIN SUSPENSION STRAP	21	1
	ASSEMBLY	20	-
ITEM	NOMENCLATURE	SHEET NO.	No. OFF

ASSEMBLY

DETAIL INDEX

Sl. No.	DATE	ZONE	AUTHORITY	BRIEF RECORD
1	28-6-18		QMS/PG/PAS/44/A	AMENDED AS PER CHANGE SHEET No. 203
2	23-04-18	F-2, 3, 4	QMS/PG/PAS/44/A	AMENDED AS PER CHANGE SHEET No. 191
3	06-11-17	G-5	QMS/PG/PAS/44/A	AMENDED AS PER CHANGE SHEET No. 190
4	14-02-15	F-5	ADRDE/PAS/44/A	AMENDED AS PER CHANGE SHEET No. 38
5	14-02-15	S-G	QAC/410/16	SPECN. No. ADVANCED, MATERIAL 'g', 'k', 'k1', 'k2', 'k3', 'k4', 'k5'
6	13-02-14	S-H	AAS/44/A	MATERIAL 'f' INCLUDED

DRN/DC/202	DRD	MATERIAL	ADRDE, AGRA
CRD	TRD	FINISH	
CONR	SCALE	HEAT TREATMENT	APPROVED
	PROJ. OFFR.		
	DIV. HEAD		
DIMENSIONS IN MM			
TOLERANCE			
HIGH ALTITUDE PARACHUTE (MAIN)			PROG. DIRECTOR (R.A.)
			DRG. No.
			ADRDE/1283/A2/10/01/11/11
			DRD/170A



MAIN SUSPENSION STRAP
1-OFF

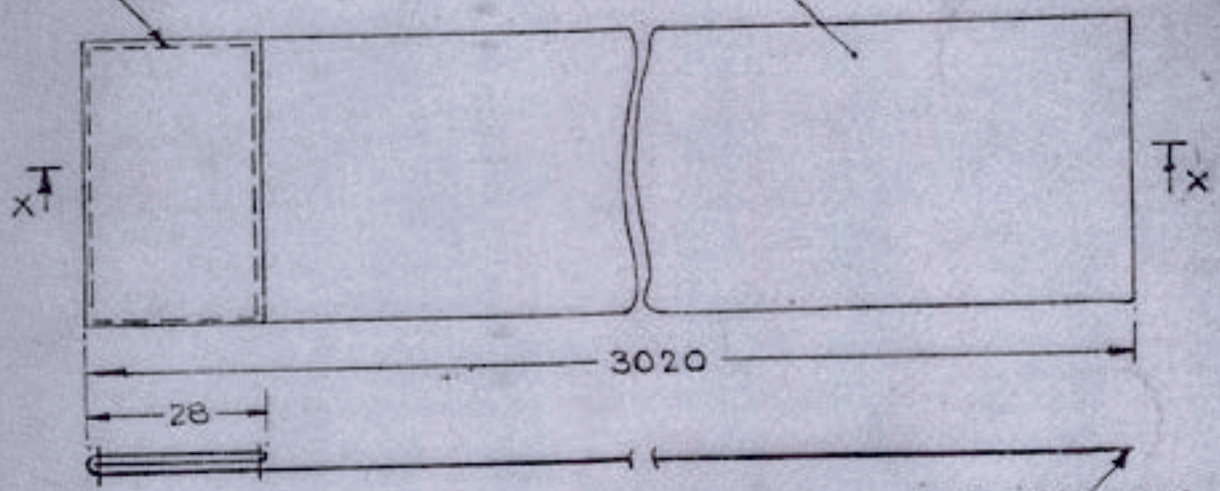
CONTROLLING OFFICE	DRD	BATERIAL	ADPDE AGRA
DATE	14	17	
SCALE - 1:2	BY: CDR MSB	CHKD: MSB	
DRAWN BY: MSB	BY: MSB		
HIGH ALTITUDE PARACHUTE (MAIN)			
APP'D:			
DATE			

ENR	DATE	TIME	AUTHORITY	INDEX	RECORDS	BY: MSB
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2

MACHINE STITCHED WITH MATERIAL 'h'
2-3 STITCHES PER CM.

MATERIAL 'h'

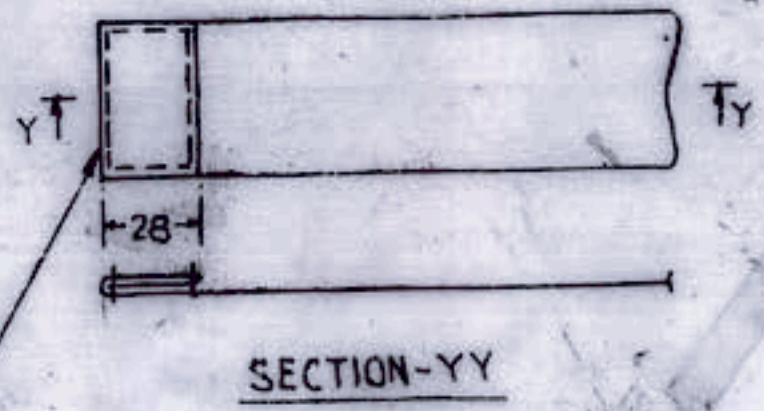
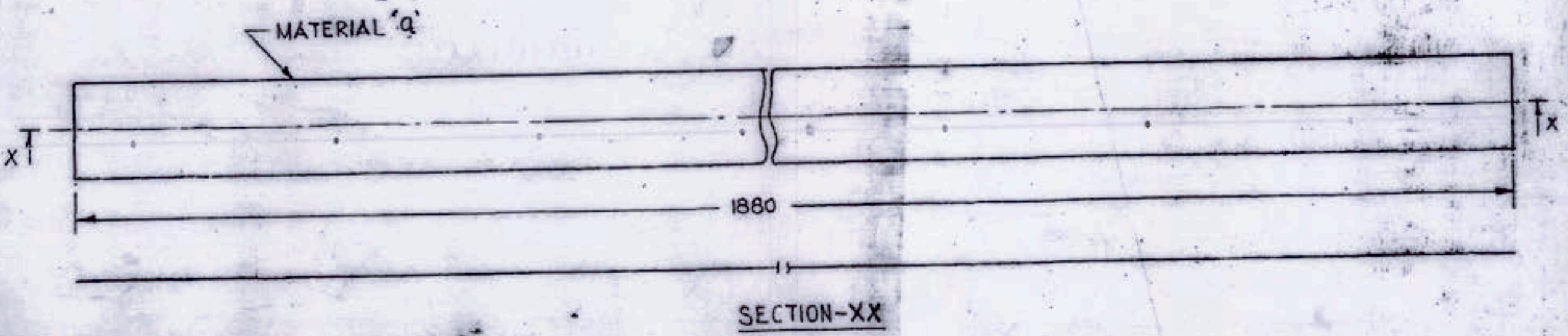


SECTION-XX

ENDS TO BE HEAT SEALED

MAIN STRAP
2-OFF

R.No.		DATE	ZONE	AUTHORITY	BRIEF RECORD		O/C	PGD
DRN.	W/C IAL	DRD		MATERIAL:-		ADRDE ; AGRA		
CHD	<i>Abadi</i>	<i>Fala</i>	<i>+</i>	FINISH:-				
TRD				HEAT TREATMENT:-				
COMP.		O/C	PGD	SCALE:- 1:1		APPROVED		
DIMENSIONS IN MM.		PROJ. OFFR. <i>ov</i>		DIV. HEAD <i>ov</i>				
TOLERANCE:-		HIGH ALTITUDE PARACHUTE (MAIN)						
ANSI/AIAA-S-017-1997						DRG. No. <i>(1) 1283/AZ 1997</i>		A. ORDE / 1283 / AZ 1997
						DRD / 3 / 98		



ADJUSTMENT STRAP

2-OFF

BOTH ENDS TO BE FOLDED AND STITCHED WITH MATERIAL 'h' AT THE TIME OF ASSEMBLY.

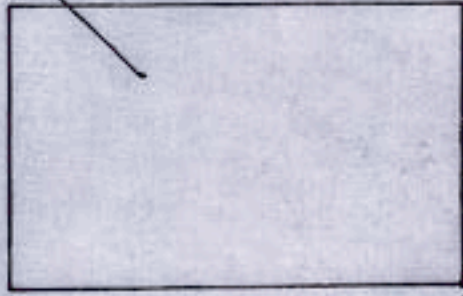
DRN: W. C. LAL	DRD	MATERIAL:-	ADR DE, AGRA
CHD: <i>Madh</i>	<i>John</i>	FINISH:-	
TRD:	<i>+</i>	HEAT TREATMENT:-	APPROVED
COMP:	O/C PGD		<i>[Signature]</i>
SCALE:- 1:2	PROJ. OFFR. <i>WY</i>		PROG. DIRECTOR (E.A.)
	DIV. HEAD <i>O/S</i>		DRG. NO. <i>(1) of (2) 1/1</i>
DIMENSIONS IN MM	HIGH ALTITUDE PARACHUTE (MAIN)		ADR DE/1283/A2 (1/1)
TOLERANCE:-			

P.No.	DATE	ZONE	AUTHORITY	BRIEF RECORD			O/C	PGD		

4

MATERIAL 'b'

ENDS TO BE HEAT SEALED



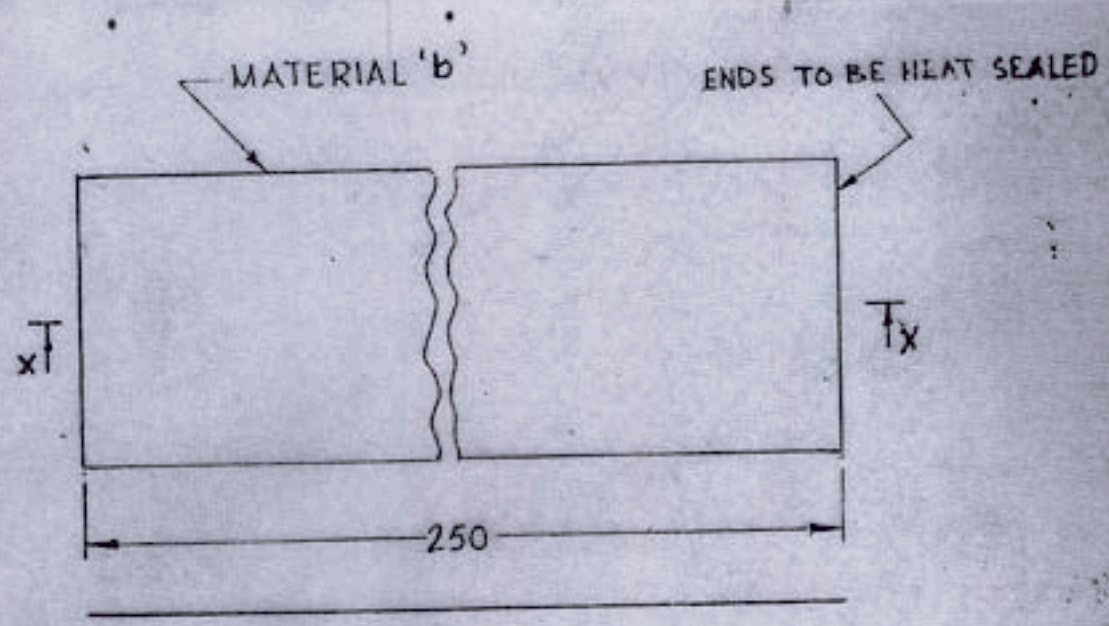
70

RE-INFORCEMENT PIECE

2-OFF

R.No		DATE	ZONE	AUTHORITY	BRIEF RECORD		o/c	PGD
DRN.	W.C. 196	DRD		MATERIAL:-		ADRDE ; AGRA		
CHD	<i>Chakr</i>	<i>John</i>	<i>+</i>	FINISH:-				
TRD		o/c	PGD	HEAT TREATMENT:-				
COMP.		PROJ. OFFR.	<i>on</i>	APPROVED				
		DIV. HEAD	<i>01-2</i>	<p>HIGH ALTITUDE PARACHUTE (MAIN)</p>				
DIMENSIONS IN MM.		TOLERANCE:-		<p>ANSI/AIAA-5-017- - 1997</p>		<p>ORG. No. <i>(11/12/83/145)</i> AORDE/1283/A2 <i>(12/83)</i></p>		

5

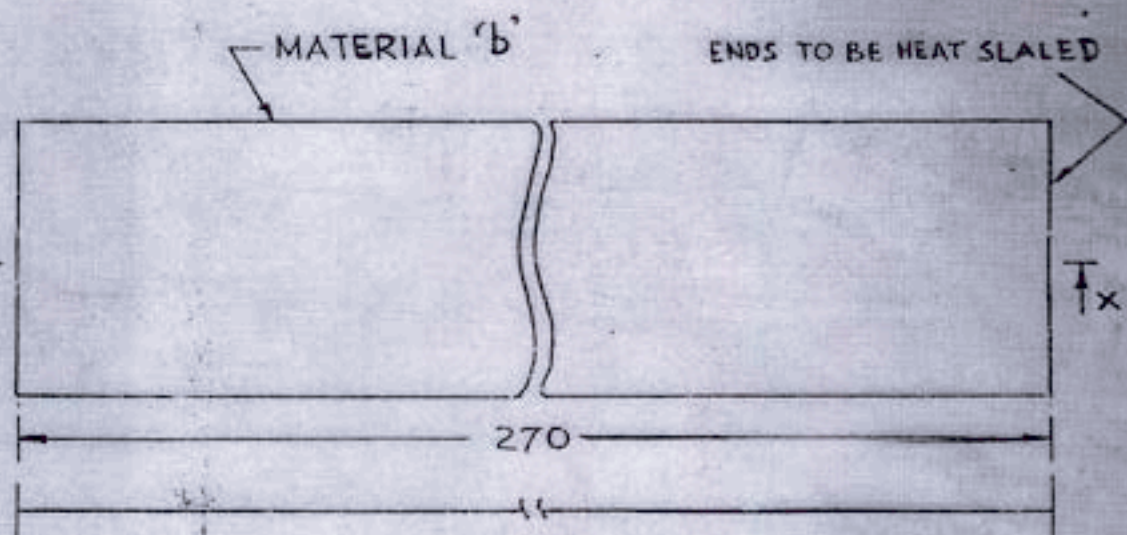


SECTION-XX
RE-INFORCEMENT PIECE
4 - OFF

R.No.		DATE		ZONE		AUTHORITY		BRIEF RECORD				o/c		PGD	
DRN. No. 122		DRD		MATERIAL:-		ADRDE; AGRA		CHD		o/c		PGD		FINISH:-	
TRD		o/c		PGD		HEAT TREATMENT:-		APPROVED		[Signature]		PROG. DIRECTOR (Q.A.)		DRG. No. 11/12/98	
COMP.		PROJ. OFFR. [Signature]		DIV. HEAD [Signature]		HIGH ALTITUDE PARACHUTE (MAIN)		SCALE:- 1:1		DIMENSIONS IN MM.		TOLERANCE:-		ANSI/AIAA-5-017-1997	
A		B		C		D		E		F		G		H	

DRD/3/98

6

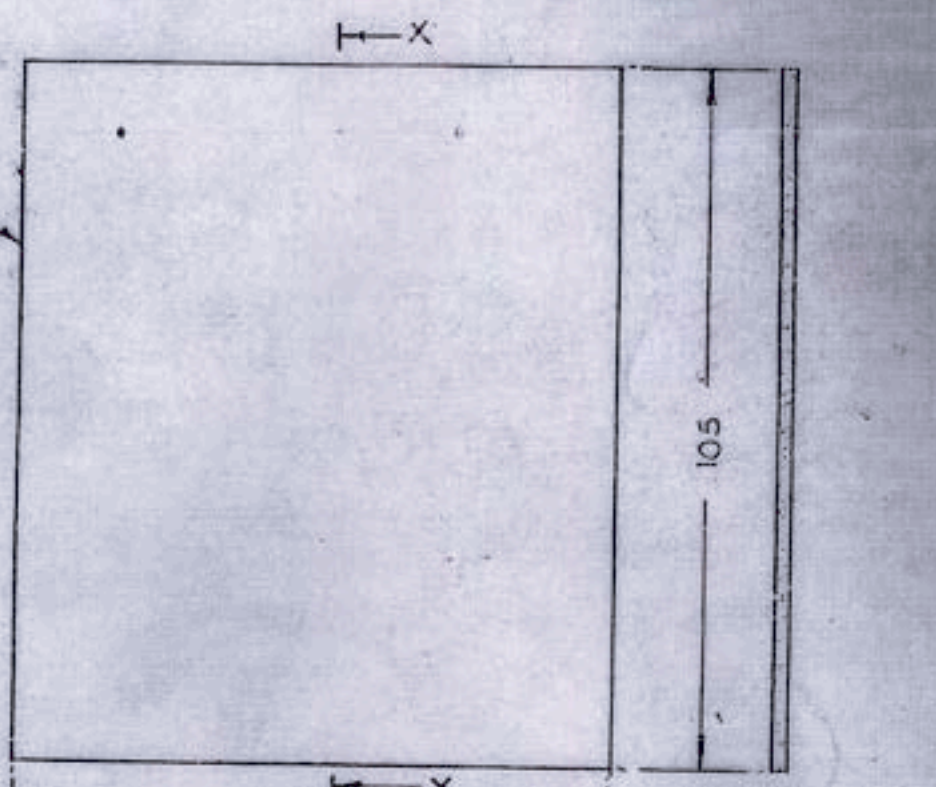


SECTION-XX
RE-INFORCEMENT PIECE
4-OFF

R.No		DATE	ZONE	AUTHORITY	BRIEF RECORD		o/c	PGD			
DRN.	W.C.LAL	DRD		MATERIAL:-		ADRDE; AGRA					
CHO	<i>Archi</i>	<i>Isl</i>	<i>+</i>	FINISH:-							
TRD		o/c	PGD	HEAT TREATMENT:-							
COMP.		PROJ. OFFR. <i>ov</i>		APPROVED							
		DIV. HEAD <i>ov</i>		<p>HIGH ALTITUDE PARACHUTE (MAIN)</p>					PROJ. DIRECTOR (Q.A.)		
SCALE:- 1:1		DIMENSIONS IN MM.		TOLERANCE:-					DRG. No: <i>M/2014</i> A ORDE/1283/A2 (2014)		
		ANSI/AIAA-5-017-1997				DRD/3/98					

(6A)

MATERIAL 'd'



SECTION-XX

SHOULDER PAD

2 - OFF

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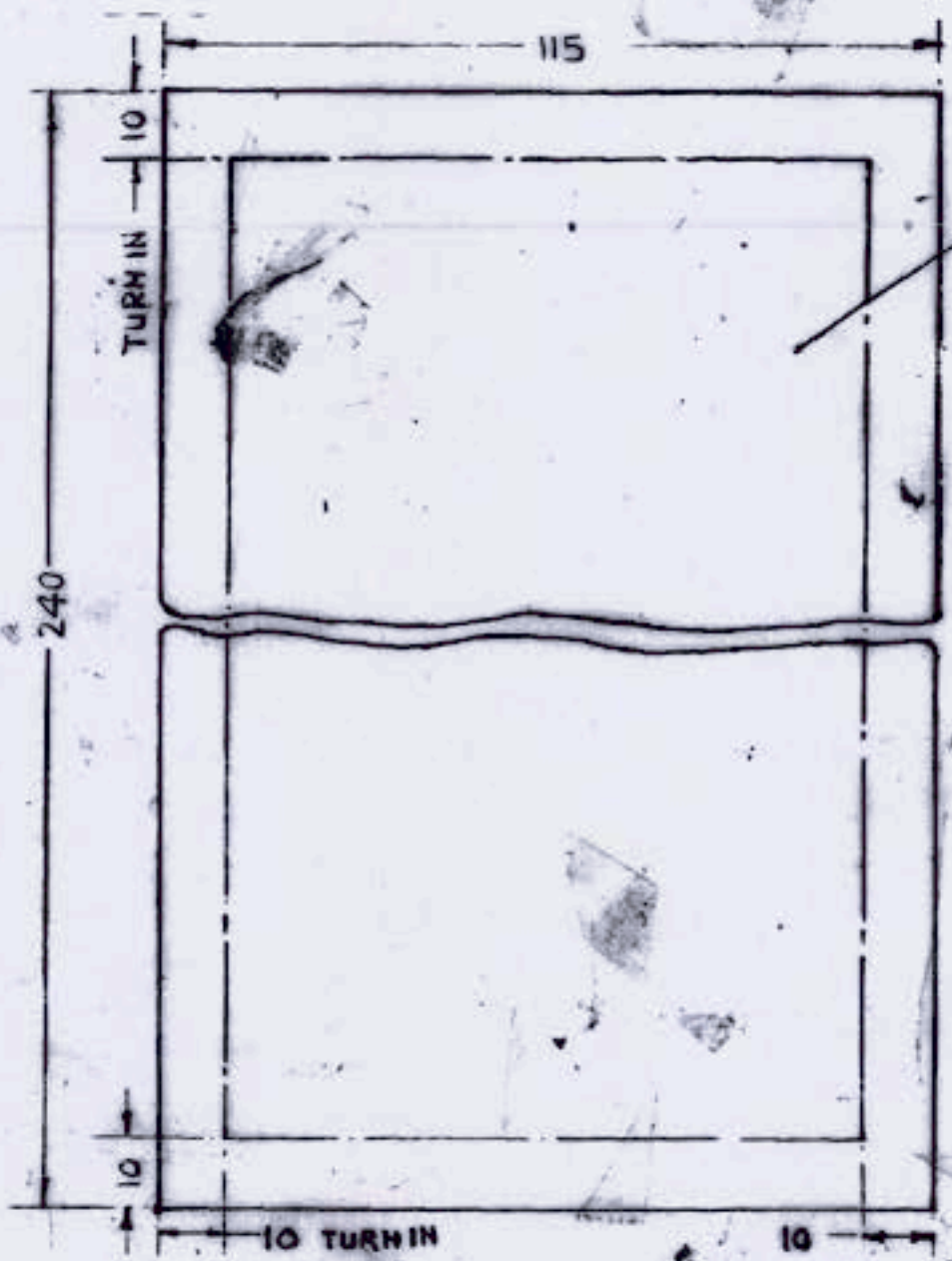
R.No	DATE	ZONE	AUTHORITY	BRIEF RECORD	O/C	PGD
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DRN. W.C.LAI	DRD		MATERIAL:-	ADRDE; AGRA
CHD <i>Abhich</i>	<i>o/c</i>	<i>PGD</i>	FINISH:-	
TRD	PROJ. OF PR. <i>cu</i>		HEAT TREATMENT:-	APPROVED
COMP	DIV. HEAD <i>Ray</i>			<i>[Signature]</i>

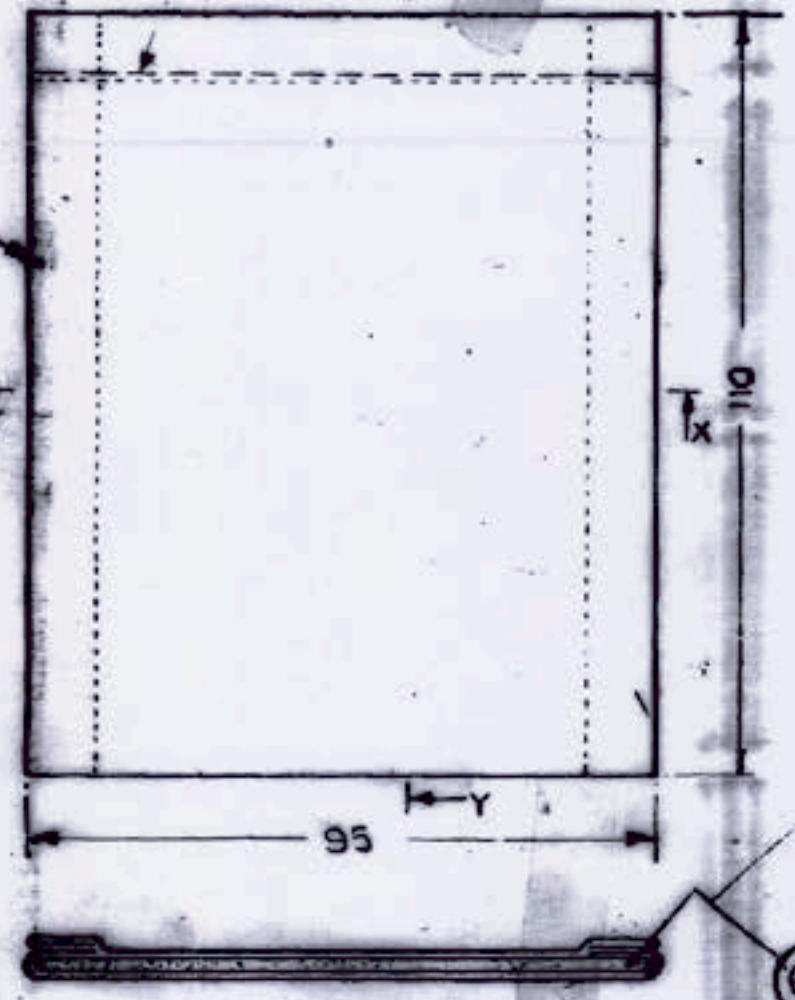
DIMENSIONS IN MM.	HIGH ALTITUDE PARACHUTE (MAIN)	PROG. DIRECTOR (Q.A.)
TOLERANCE:- ANSI/AIAA-5-017-1997		DRG. No. <i>(11/1/96)</i> AORDE/1283/A2 (91/01)

(7)

MACHINE STITCHED WITH MATERIAL 'g'
3-4 STITCHES PER CM



MATERIAL 'c'



SECTION-YY

SECTION-XX

DEVELOPMENT OF COVER
2-OFF

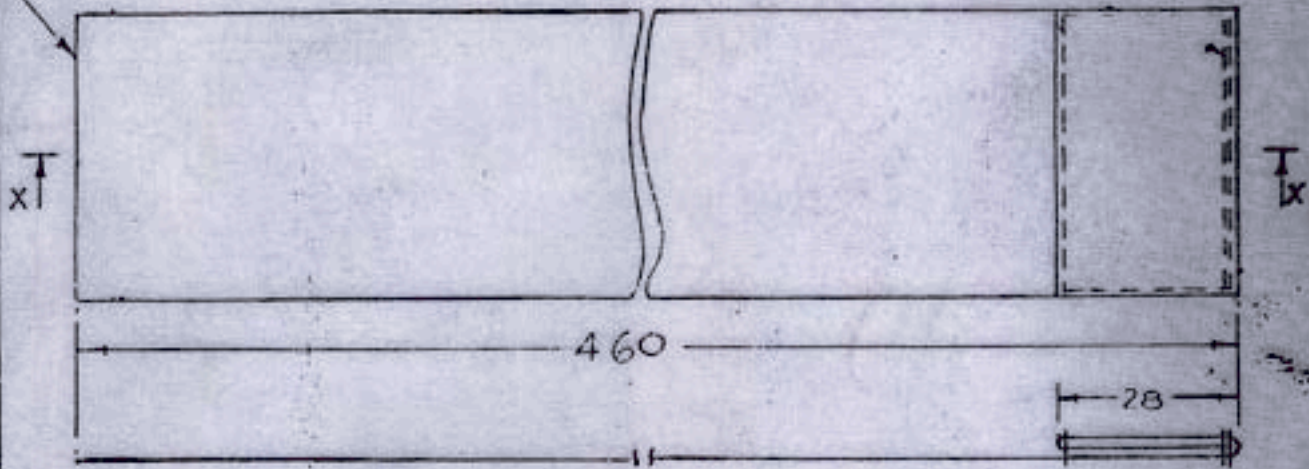
DR. No.	DATE	ZONE	AUTHORITY	BRIEF RECORD	3/c PGD
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DRN. W.C.L.L.	DRD	MATERIAL	ADRDE, AGRA
CHD <i>Abdi</i>	Td. +	FINISH	
TRD	OVC PGD	HEAT TREATMENT	APPROVED
COMP	PROJ. OFFR. <i>cm</i>		
SCALE: 1:1	DIV. HEAD <i>A</i>		PROG. DIRECTOR (R.A)
DIMENSIONS IN MM	HIGH ALTITUDE PARACHUTE (MAIN)		DRG. No. ADRDE/1283/A2
TOLERANCE			

8

MATERIAL, 'a'
END TO BE HEAT SEALED

MACHINE STITCHED WITH
MATERIAL 'b',
2-3, STITCHES PER CM.

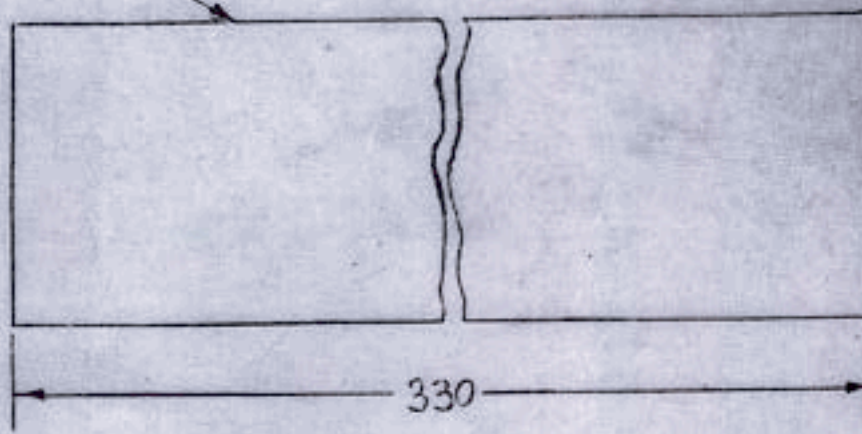


SECTION-XX
CHEST STRAP
1-OFF

R.No.	DATE	ZONE	AUTHORITY	BRIEF RECORD		o/c	PGD
DRN. W.C.LAL	DRD		MATERIAL:-		ADRDE ; AGRA		
CHD. <i>Abhishek</i>	<i>Tsl</i>	<i>+</i>	FINISH:-				
TRD.	o/c	PGD	HEAT TREATMENT:-				
COMP.	PROJ. OFFR. <i>CW</i>		DIV. HEAD <i>Dm</i>		APPROVED		
SCALE:- 1:1		HIGH ALTITUDE PARACHUTE (MAIN)					
DIMENSIONS IN MM						DRG. No. <i>(1283/A2)</i>	
TOLERANCE:- ANSI/AIAA-5-017-1997						AORDE/1283/A2	

MATERIAL 'b'

ENDS TO BE HEAT SEALED



STRAP FOR PAE BAG

2-OFF

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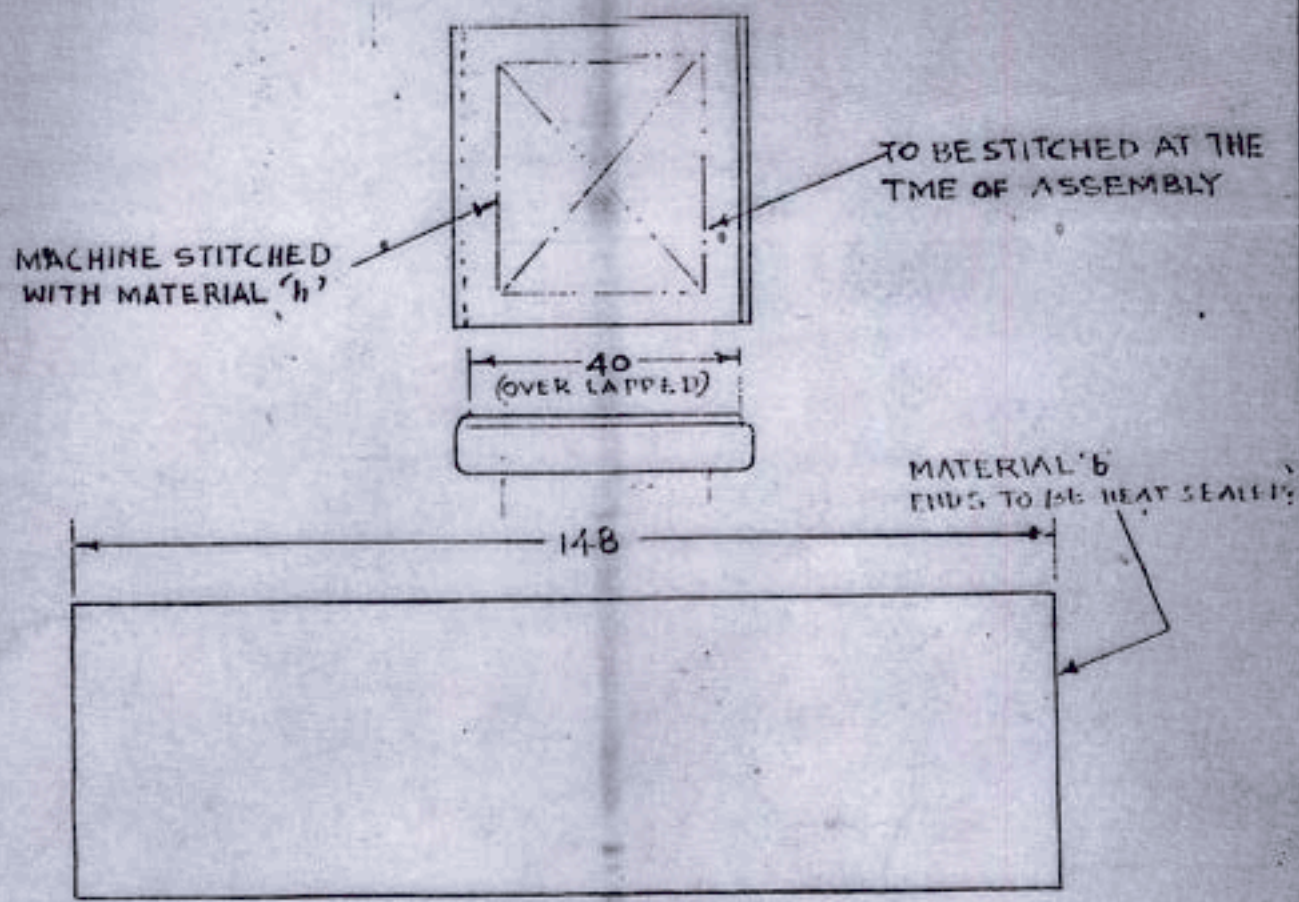
R.No. DATE ZONE AUTHORITY BRIEF RECORD o/c PGD

DRN. MC/LAL	DRD		MATERIAL:-	ADRDE; AGRA
CHD. <i>Abhis</i>	<i>Feb</i>	<i>by</i>	FINISH:-	
TRD.	<i>o/c</i>	<i>PGD</i>	HEAT TREATMENT:-	APPROVED
COMP.	PROJ. OFFR. <i>Ch</i>	DIV. HEAD <i>o/c</i>		

DIMENSIONS IN MM.
TOLERANCE:-
ANSI/AIAA-S-017-1997

HIGH ALTITUDE PARACHUTE
(MAIN)

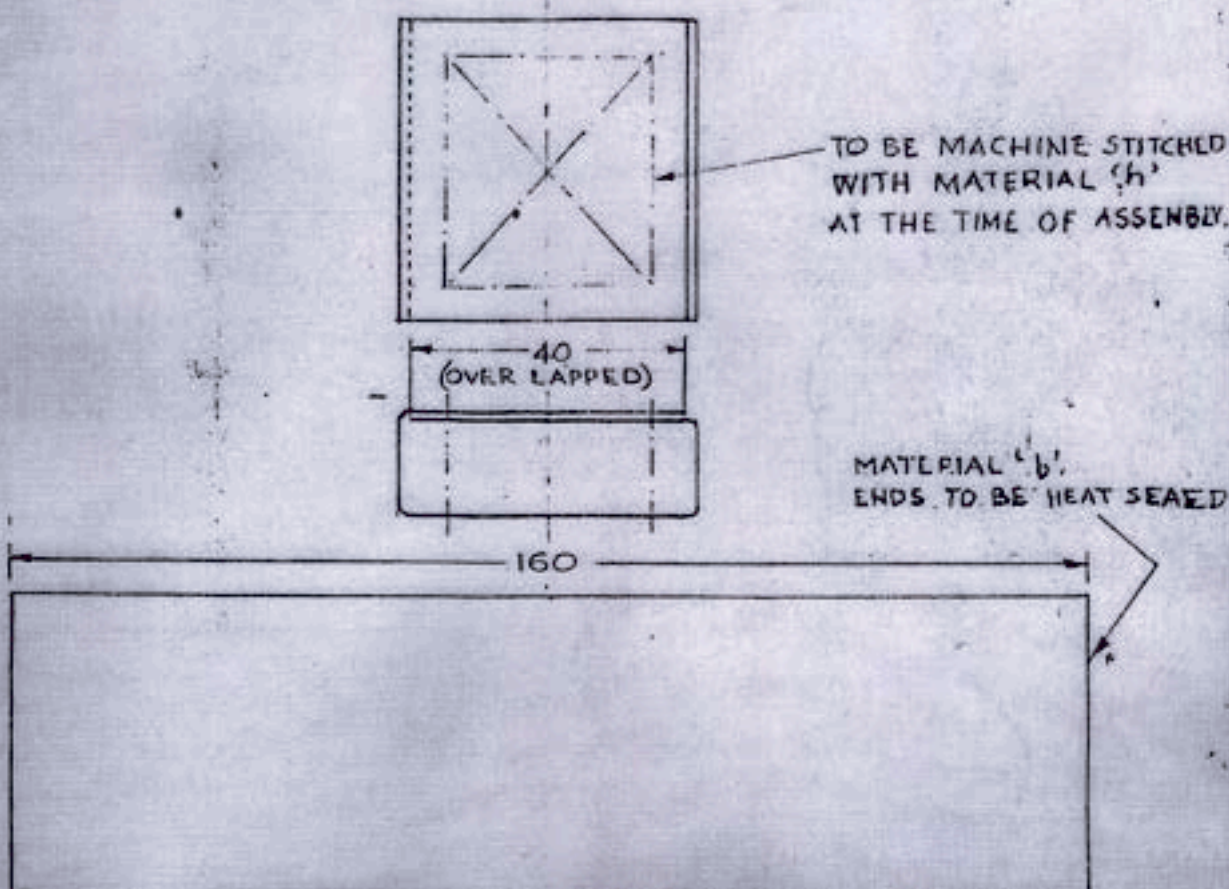
PROG. DIRECTOR (Q.A.)
DRG. No. (11/1/05) 101
ADRDE/1283/A2 (9/1/01)



DEVELOPMENT

BOX
2- OFF

R.No.		DATE	ZONE	AUTHORITY	BRIEF RECORD		O/C	PGD
DRN.	W.C.LAL	DRD		MATERIAL:-		ADRDE; AGRA		
CHD	<i>Mishra</i>	<i>Kish</i>	<i>+</i>	FINISH:-				
TRD		O/C	PGD	HEAT TREATMENT:-		APPROVED		
COMP.		PROJ. OFFR. <i>CV</i>						
SCALE:- 1:1		DIV. HEAD <i>Pr...</i>		HIGH ALTITUDE PARACHUTE (MAIN)		DRG. No. <i>17/2001/1</i> AORDE/1283/A2 (1/1)		
DIMENSIONS IN MM.						DRD/3198		
TOLERANCE:- ANSI/AIAA-S-017-1997								



DEVELOPMENT

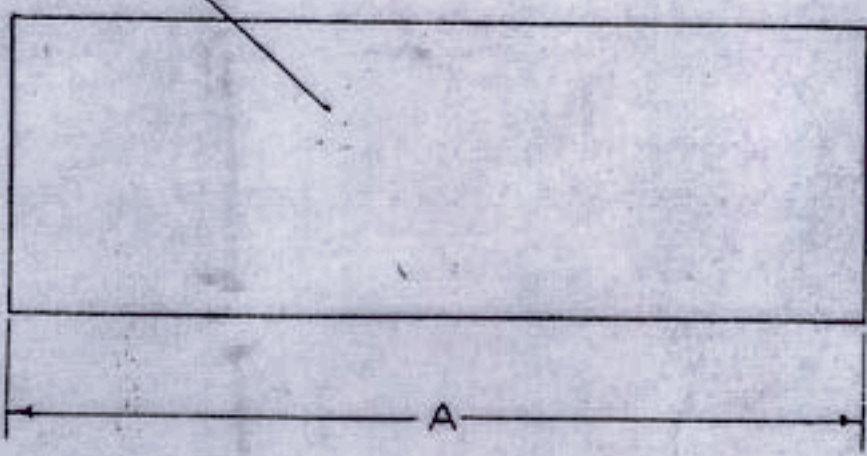
BOX
B-OFF

R.NO.		DATE		ZONE		AUTHORITY		BRIEF RECORD				O/C		PGD	
DRN: W-C-LAL		DRD		MATERIAL:-		ADRDE; AGRA									
DRD: <i>Abhish</i>		Taha		FINISH:-											
PRO: <i>o/c</i>		PGD		HEAT TREATMENT:-		APPROVED									
SCALE: 1-111		PROJ. OFFR. <i>cm</i>													
DIMENSIONS IN MM		DIV. HEAD <i>o/c</i>		HIGH ALTITUDE PARACHUTE (MAIN)											
TOLERANCE:-															
ISIRI/IAIA-5-017-1997															
						DRG. No. <i>(11/12/98)</i>									
						A. DRDE/1283/A2 <i>(10/98)</i>									
						DRD/5/98									

TABLE OF DIMENSION

	LENGTH-A	NO. OFF
CHEST STRAP	130	1
LEG STRAP	230	2

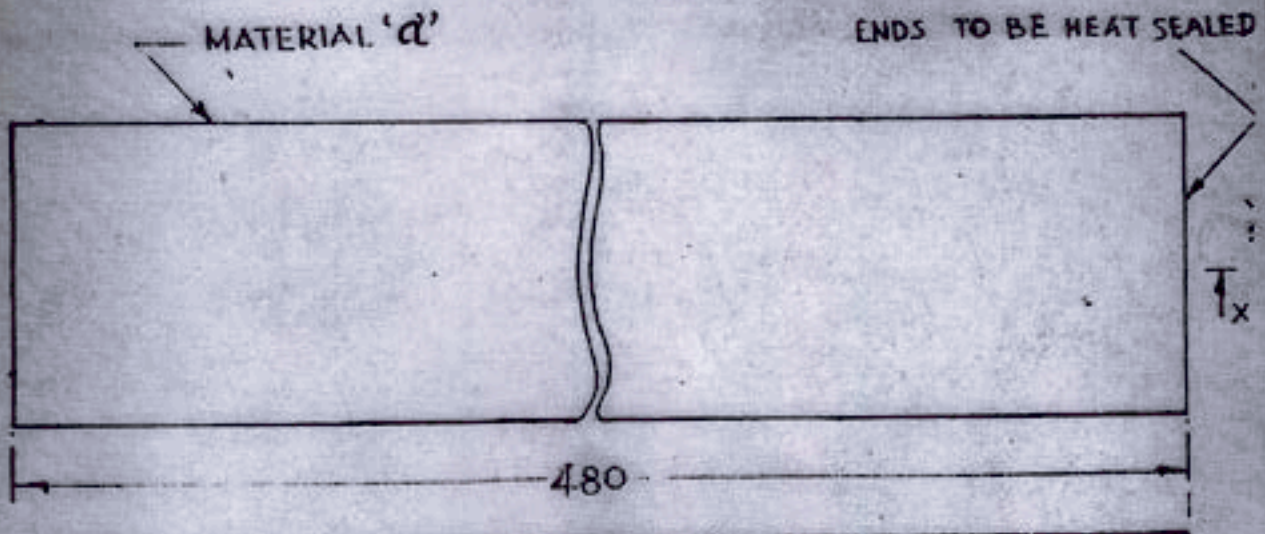
MATERIAL 'A'



STRAP FOR SNAP HOOK ATTACHMENT

R.No	DATE	ZONE	AUTHORITY	BRIEF RECORD		O/C	PGD
DRN. W.C. LAL	DRD		MATERIAL:-		ADRDE; AGRA		
CHD TRD COMP.	<i>Shukla</i>	<i>7sh</i> O/C	<i>+</i> PGD	FINISH:-			
SCALE:- 1:1	PROJ. OFFR. <i>cut</i>		HEAT TREATMENT:-		APPROVED		
DIMENSIONS IN MM.	DIV. HEAD <i>DRD</i>		HIGH ALTITUDE PARACHUTE (MAIN)				
TOLERANCE:- ANSI/AIAA-S-017-1997					DRG. No. <i>4161/101 (01)</i> & ORDE/1285/A2 (10)		

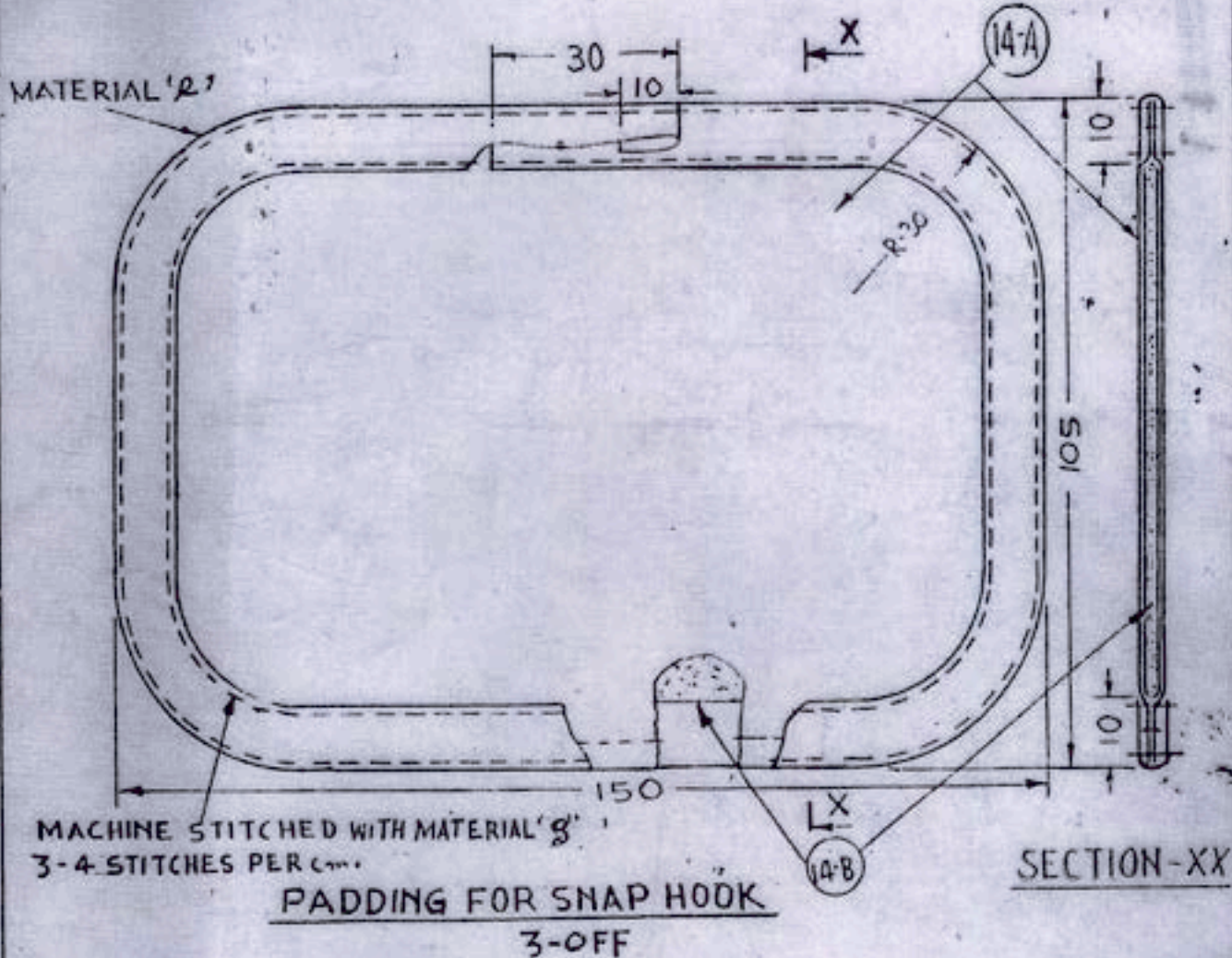
DRD/3/98



SECTION-XX
RE-INFORCEMENT STRAP
2-OFF

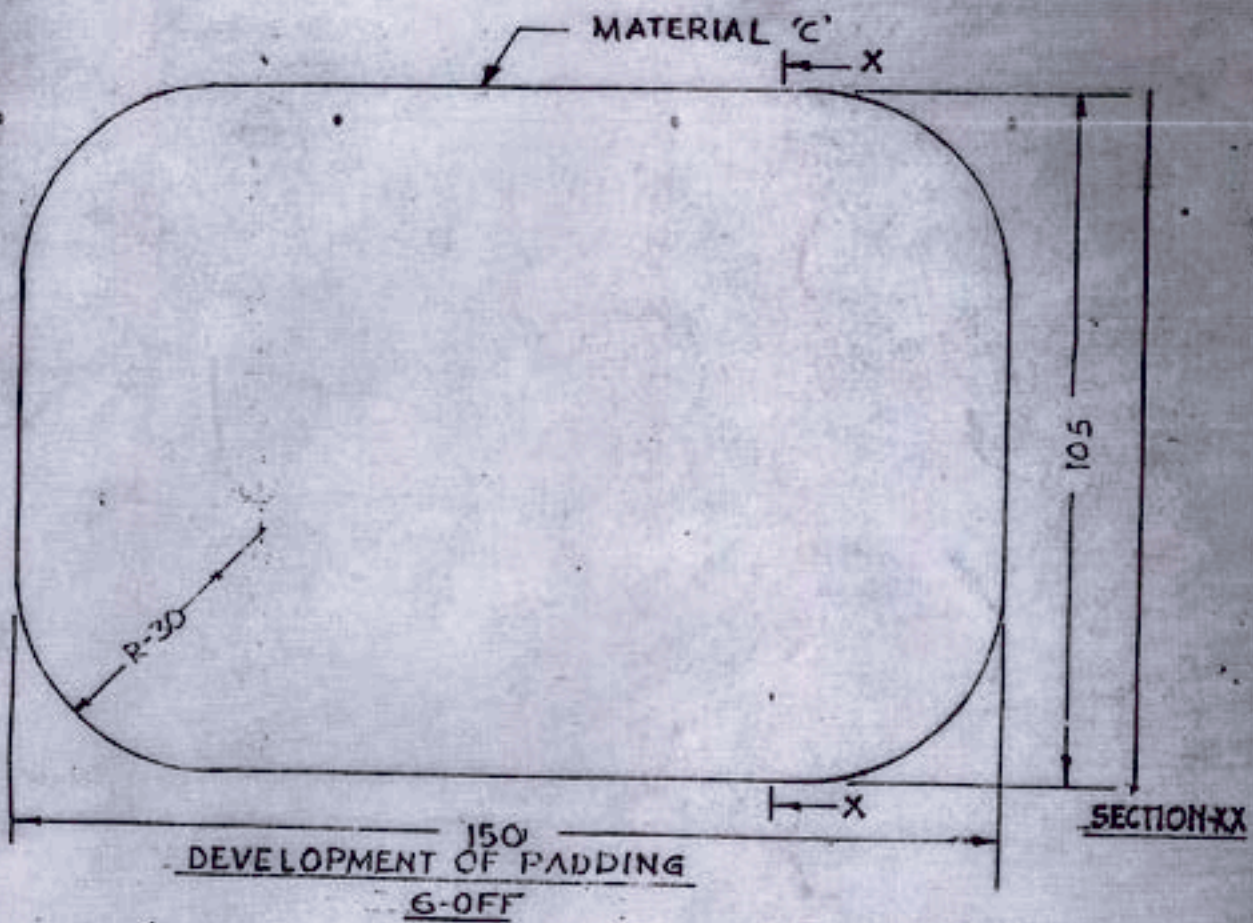
R.No	DATE	ZONE	AUTHORITY	BRIEF RECORD					O/C	PGD
DRN.	M.C. LAL	DRD		MATERIAL:-			ADRDE, AGRA			
END. PRO. COMP.	<i>Abadi</i>	Tel:	<i>+</i>	FINISH:-						
		O/C	PGD	HEAT TREATMENT:-						
SCALE:-	1:1	PROJ. OFFR. <i>C2</i>		APPROVED						
DIMENSIONS IN MM.		DIV. HEAD <i>O2</i>		<h3>HIGH ALTITUDE PARACHUTE (MAIN)</h3>						
TOLERANCE:-	ANSI/AIAA-3-017-1997									
				ORG. No. <i>(11/1) 25/147</i>			A. ORDE / 1288 / A2 <i>(15/147)</i>			
				DRD / 3 / 93						

14



R.No	DATE	ZONE	AUTHORITY	BRIEF RECORD		o/c	PGD
DRN.	M.C.LOL	DRD		MATERIAL:-		ADRDE ; AGRA	
CHD	<i>Abhishek</i>	<i>o/c</i>	<i>PGD</i>	FINISH:-			
TRD				HEAT TREATMENT:-		APPROVED	
COMP							
SCALE:- 1:1	PROJ. OFFR. <i>CR</i>				DRG. No. <i>(11/12/98) 14</i> A ORDE /1283/A2 (01/98)		
DIMENSIONS IN MM.	HIGH ALTITUDE PARACHUTE (MAIN)						
TOLERANCE:- ANSI/AIAA-5-017-1997							

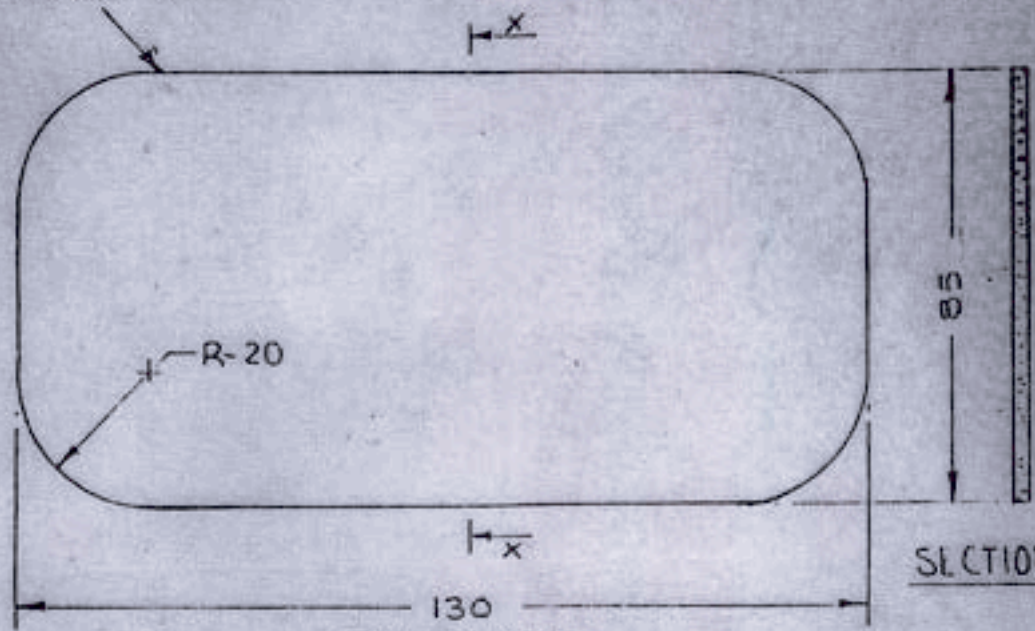
14-A



R.No		DATE	ZONE	AUTHORITY	BRIEF RECORD		O/C	PGD	
DRN.	M.C.LAL	DRD		MATERIAL:-		ADRDE; AGRA			
CHD	<i>[Signature]</i>	Tolu		FINISH:-					
TRD		o/c		HEAT TREATMENT:-					
COMP.		PGD		APPROVED					
SCALE:- 1:1		PROJ. OFFR. <i>[Signature]</i>		DIV. HEAD <i>[Signature]</i>					
DIMENSIONS IN MM.		HIGH ALTITUDE PARACHUTE (MAIN)					DRG. No. <i>(1) of 605/141</i> AORDE/1283/A2 <i>(1) of 141</i>		
TOLERANCE:-							DRD/3/98		
ANSI/AIAA-S-017-1991									

14-B

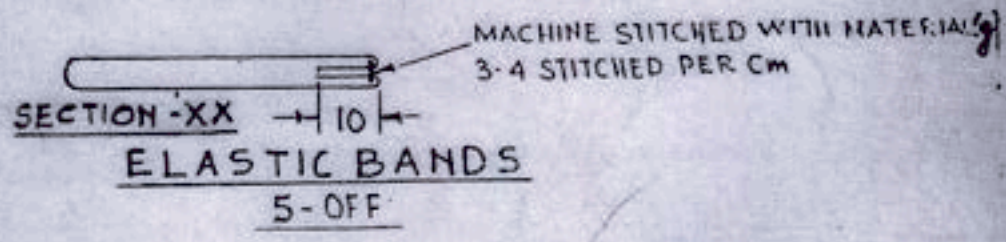
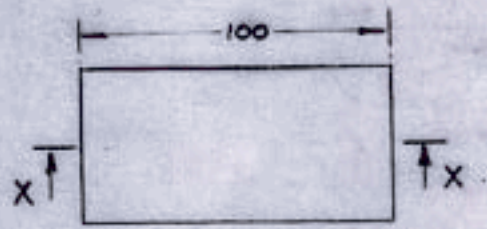
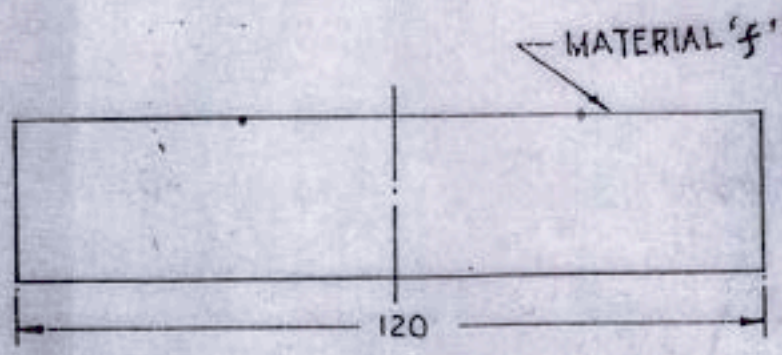
MATERIAL 'd'



INNER PAD
3-OFF

SECTION-XX

R.No.		DATE	ZONE	AUTHORITY	BRIEF RECORD		o/c	PGD
DRN.	W.C.LAL	DRD		MATERIAL:-			ADRDE; AGRA	
CHD	Abhuli	o/c	PGD	FINISH:-				
TRD		PROJ. OFFR. C		HEAT TREATMENT:-			APPROVED	
COMP.		DIV. HEAD D						
SCALE:- 1:1		DIMENSIONS IN MM.			HIGH ALTITUDE PARACHUTE (MAIN)			
TOLERANCE:-		ANSI/A13A-5-017-1991			DRG. No. 11/16/83/101 A DRDE/1283/A2/101/83			



R.No		DATE	ZONE	AUTHORITY	BRIEF RECORD		o/c	PGD
DRN.	W.C. 202	DRD		MATERIAL		ADRDE; AGRA		
CHD	Abadi	o/c	PGD	FINISH:-				
TRD		PROJ. OFFR. <i>ca</i>		HEAT TREATMENT:-		APPROVED		
COMP.		DIV. HEAD <i>ca</i>		HIGH ALTITUDE PARACHUTE (MAIN)				
DIMENSIONS IN MM.						DRG. No. <i>(11/12/98)</i> AORDE/1283/A2 (1/1)		
TOLERANCE:- ANSI/AIAA-S-017-1997						DRD/3/98		

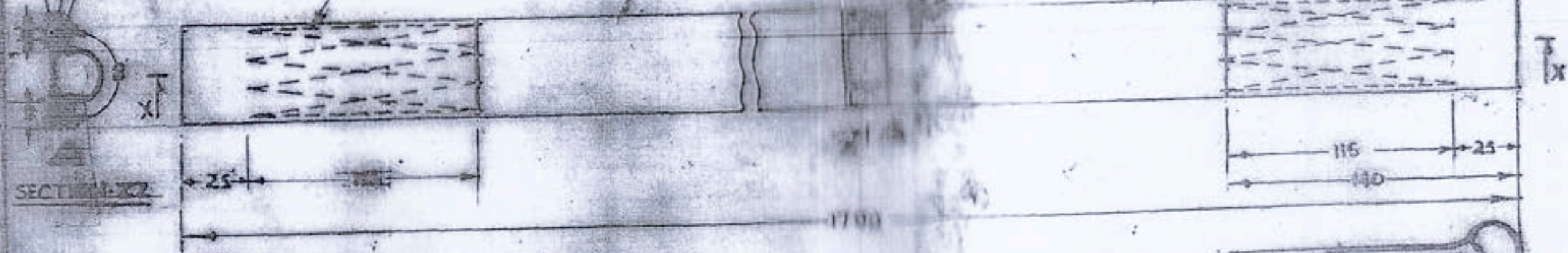
MATERIAL 'a'

MATERIAL 'b'

MACHINE STITCHED WITH MATERIAL 'b' 3-4 STITCHES PER CM.

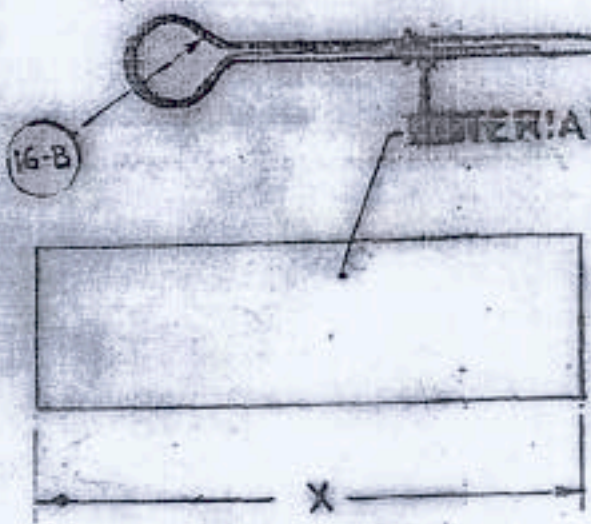
MACHINE STITCHED WITH MATERIAL 'b' 2-3 STITCHES PER CM.

MATERIAL 'a'



SECTION X-X

SECTION Y-Y



2-OFF



SECTION Y-Y

MALE PART OF COMPONENT 16

2-OFF

DETAIL No.	LENGTH	No. OFF.
16-A	160	2
16-B	130	6

TABLE OF DIMENSIONS

DRD	MATERIAL -	ADR DE, AGRA
o/c	FINISH -	APPROVED
PGO	HEAT TREATMENT -	
PROJ. OFFR.		
DIV. HEAD		

1	2	3	4	5	6	7	8	9	10

HIGH ALTITUDE PARACHUTE

APPROVED
 PROJ. DIRECTOR (R-A)