



**LE RÉSEAU DE CRÉATION
ET D'ACCOMPAGNEMENT PÉDAGOGIQUES**

**Ce document a été mis en ligne par le Canopé de l'académie de Montpellier
pour la Base Nationale des Sujets d'Examens de l'enseignement professionnel.**

Ce fichier numérique ne peut être reproduit, représenté, adapté ou traduit sans autorisation.

Le dossier technique se compose de 14 pages, numérotées de 1 à 14.
Dès que le dossier technique vous est remis, assurez-vous qu'il est complet.

DOSSIER TECHNIQUE

Page de garde

Base Nationale des Sujets d'Examens de l'enseignement professionnel
Réseau Canopé

CODE : 1606-AER C U2

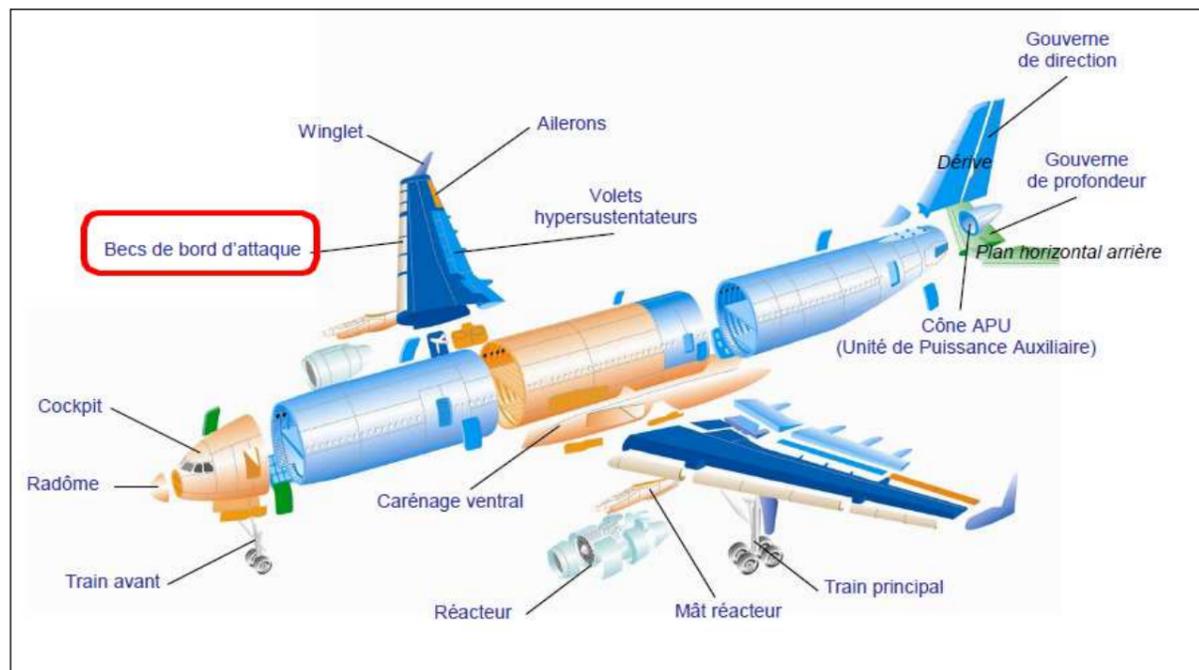
BACCALAURÉAT PROFESSIONNEL AÉRONAUTIQUE OPTION : STRUCTURE	ÉPREUVE E2 (U2)– EXPLOITATION DE LA DOCUMENTATION TECHNIQUE	DOSSIER TECHNIQUE	Durée : 4 h	Coef. : 4	Session 2016	PAGE 0
---	---	-------------------	-------------	-----------	--------------	--------

Le dossier technique se compose de 14 pages, numérotées de 1 à 14.
Dès que le dossier technique vous est remis, assurez-vous qu'il est complet.

DOSSIER TECHNIQUE

1/ Présentation du système

Les volets hypersustentateurs et les bords de bord d'attaque sont des gouvernes secondaires, leur rôle est d'améliorer le vol à basses vitesses.



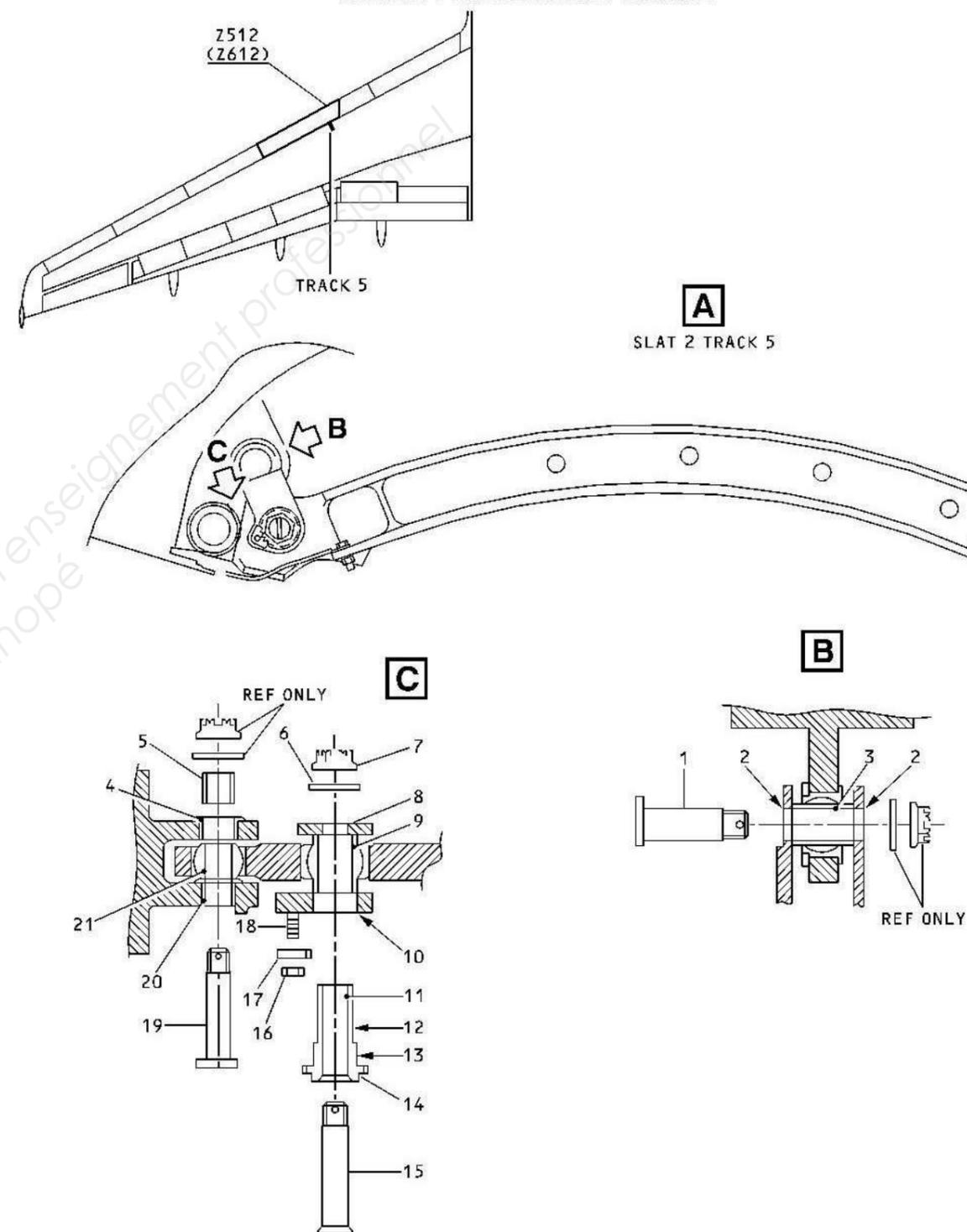
Le bec de bord d'attaque

Le bec de bord d'attaque est une petite aile auxiliaire placée en avant du bord d'attaque. Lorsqu'il est déployé à basse vitesse donc forte incidence. Le bec ouvre une fente ayant essentiellement les mêmes fonctions que les fentes du bord de fuite, canaliser l'air sous pression de l'intrados vers l'extrados pour reculer le décrochage et augmenter la portance. Cependant, étant donné que le bec est une surface portante, il vient s'ajouter à la surface de l'aile donnant une meilleure portance aux grands angles.



Données numériques pour l'aéronef AXXX	À l'atterrissage (altitude 0 m)	Croisière (altitude 13000 m)
Masse volumique de l'air (ρ)	1,22 kg/m ³	0,3 kg/m ³
Surface totale de la voilure (S)	122.6 m ²	122.6 m ²
Vitesse de l'avion/air (V)	230 km/h ou (63.89 m/s)	870 km/h ou (241.6 m/s)
Masse de l'avion (M)	64 500 kg	70 000 kg
Angle d'incidence (i)	13°	5°

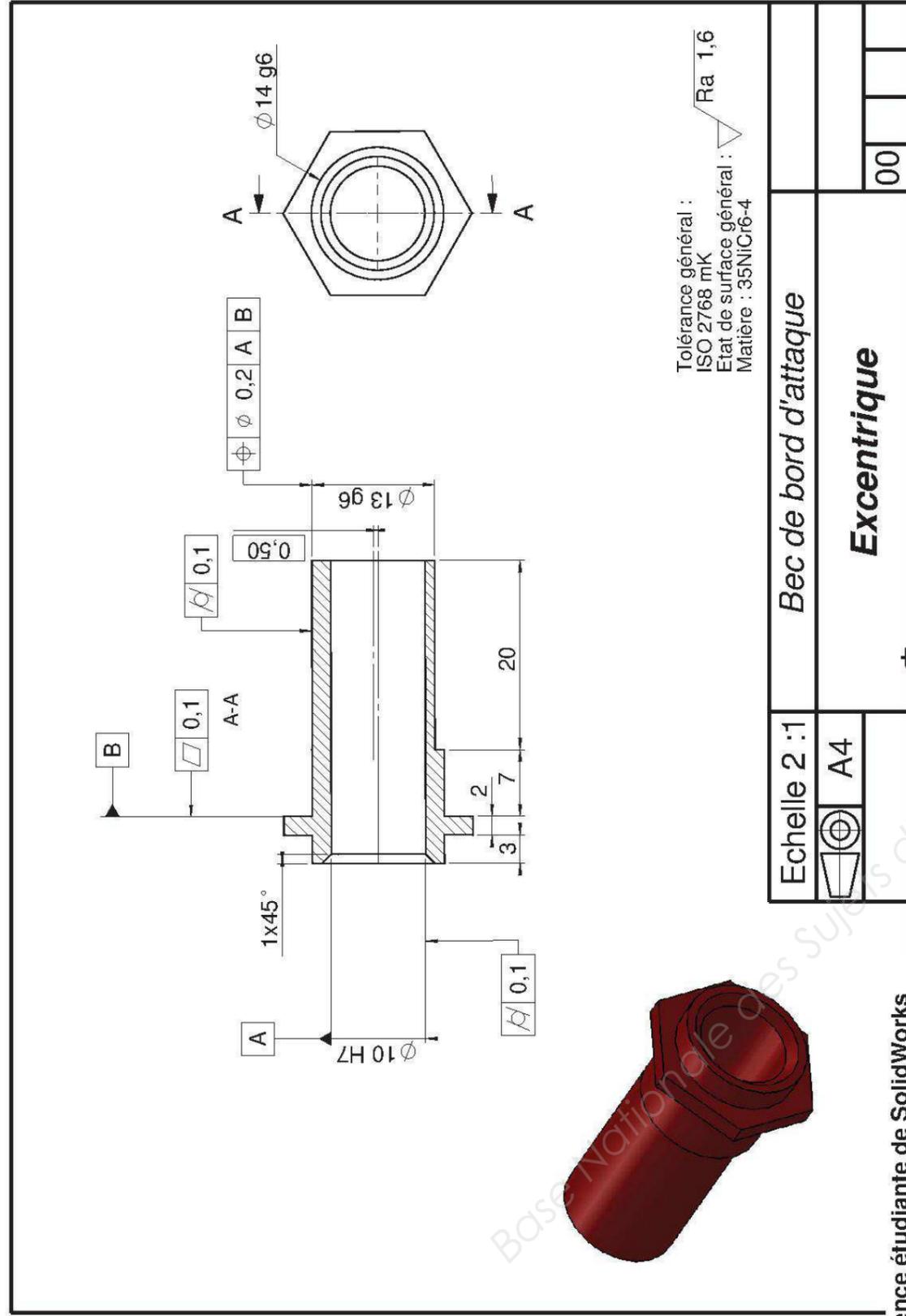
AIRCRAFT MAINTENANCE MANUAL



Slat 2, Track 5 - Attachment Details

Alésages	Jusqu'à 3 inclus	3 à 6 inclus	6 à 10	10 à 18	18 à 30	30 à 50	50 à 80	80 à 120	120 à 180	180 à 250	250 à 315	315 à 400	400 à 500
D 10	+ 60 + 20	+ 78 + 30	+ 98 + 40	+ 120 + 50	+ 149 + 65	+ 180 + 80	+ 220 + 100	+ 260 + 120	+ 305 + 145	+ 355 + 170	+ 400 + 190	+ 440 + 210	+ 480 + 230
F 7	+ 16 + 6	+ 22 + 10	+ 28 + 13	+ 34 + 16	+ 41 + 20	+ 50 + 25	+ 60 + 30	+ 71 + 36	+ 83 + 43	+ 96 + 50	+ 108 + 56	+ 119 + 62	+ 121 + 68
G 6	+ 8 + 2	+ 12 + 4	+ 14 + 5	+ 17 + 6	+ 20 + 7	+ 25 + 9	+ 29 + 10	+ 34 + 12	+ 39 + 14	+ 44 + 15	+ 49 + 17	+ 54 + 18	+ 60 + 20
H 6	+ 6 0	+ 8 0	+ 9 0	+ 11 0	+ 13 0	+ 16 0	+ 19 0	+ 22 0	+ 25 0	+ 29 0	+ 32 0	+ 36 0	+ 40 0
H 7	+ 10 0	+ 12 0	+ 15 0	+ 18 0	+ 21 0	+ 25 0	+ 30 0	+ 35 0	+ 40 0	+ 46 0	+ 52 0	+ 57 0	+ 63 0
H 8	+ 14 0	+ 18 0	+ 22 0	+ 27 0	+ 33 0	+ 39 0	+ 46 0	+ 54 0	+ 63 0	+ 72 0	+ 81 0	+ 89 0	+ 97 0
H 9	+ 25 0	+ 30 0	+ 36 0	+ 43 0	+ 52 0	+ 62 0	+ 74 0	+ 87 0	+ 100 0	+ 115 0	+ 130 0	+ 140 0	+ 155 0
H 10	+ 40 0	+ 48 0	+ 58 0	+ 70 0	+ 84 0	+ 100 0	+ 120 0	+ 140 0	+ 160 0	+ 185 0	+ 210 0	+ 230 0	+ 250 0
H 11	+ 60 0	+ 75 0	+ 90 0	+ 110 0	+ 130 0	+ 160 0	+ 190 0	+ 210 0	+ 250 0	+ 290 0	+ 320 0	+ 360 0	+ 400 0
H 12	+ 100 0	+ 120 0	+ 150 0	+ 180 0	+ 210 0	+ 250 0	+ 300 0	+ 350 0	+ 400 0	+ 460 0	+ 520 0	+ 570 0	+ 630 0
H 13	+ 140 0	+ 180 0	+ 220 0	+ 270 0	+ 330 0	+ 390 0	+ 460 0	+ 540 0	+ 630 0	+ 720 0	+ 810 0	+ 890 0	+ 970 0
J 7	+ 4 - 6	+ 6 - 6	+ 8 - 7	+ 10 - 8	+ 12 - 9	+ 14 - 11	+ 18 - 12	+ 22 - 13	+ 26 - 14	+ 30 - 16	+ 36 - 16	+ 39 - 18	+ 43 - 20
K 6	0 - 6	+ 2 - 6	+ 2 - 7	+ 2 - 9	+ 2 - 11	+ 3 - 13	+ 4 - 15	+ 4 - 18	+ 4 - 21	+ 5 - 24	+ 5 - 27	+ 7 - 29	+ 8 - 32
K 7	0 - 10	+ 3 - 9	+ 5 - 10	+ 6 - 12	+ 6 - 15	+ 7 - 18	+ 9 - 21	+ 10 - 25	+ 12 - 28	+ 13 - 33	+ 16 - 36	+ 17 - 40	+ 18 - 45
M 7	- 2 - 12	0 - 12	0 - 15	0 - 18	0 - 21	0 - 25	0 - 30	0 - 35	0 - 40	0 - 46	0 - 52	0 - 57	0 - 63
N 7	- 4 - 14	- 4 - 16	- 4 - 19	- 5 - 23	- 7 - 28	- 8 - 33	- 9 - 39	- 10 - 45	- 12 - 52	- 14 - 60	- 14 - 66	- 16 - 73	- 17 - 80
N 9	- 4 - 29	0 - 30	0 - 36	0 - 43	0 - 52	0 - 62	0 - 74	0 - 87	0 - 100	0 - 115	0 - 130	0 - 140	0 - 155
P 6	- 6 - 12	- 9 - 17	- 12 - 21	- 15 - 26	- 18 - 31	- 21 - 37	- 26 - 45	- 30 - 52	- 36 - 61	- 41 - 70	- 47 - 79	- 51 - 87	- 55 - 95
P 7	- 6 - 16	- 8 - 20	- 9 - 24	- 11 - 29	- 14 - 35	- 17 - 42	- 21 - 51	- 24 - 59	- 28 - 68	- 33 - 79	- 36 - 88	- 41 - 98	- 45 - 108
P 9	- 9 - 31	- 12 - 42	- 15 - 51	- 18 - 61	- 22 - 74	- 26 - 88	- 32 - 106	- 37 - 124	- 43 - 143	- 50 - 165	- 56 - 186	- 62 - 202	- 68 - 223

Arbres	Jusqu'à 3 inclus	3 à 6 inclus	6 à 10	10 à 18	18 à 30	30 à 50	50 à 80	80 à 120	120 à 180	180 à 250	250 à 315	315 à 400	400 à 500
a 11	- 270 - 330	- 270 - 345	- 280 - 370	- 290 - 400	- 300 - 430	- 320 - 470	- 360 - 530	- 410 - 600	- 580 - 710	- 820 - 950	- 1 050 - 1 240	- 1 350 - 1 560	- 1 650 - 1 900
c 11	- 60 - 120	- 70 - 145	- 80 - 170	- 95 - 205	- 110 - 240	- 130 - 280	- 150 - 330	- 180 - 390	- 230 - 450	- 280 - 530	- 330 - 620	- 400 - 720	- 480 - 840
d 9	- 20 - 45	- 30 - 60	- 40 - 75	- 50 - 93	- 65 - 117	- 80 - 142	- 100 - 174	- 120 - 207	- 145 - 245	- 170 - 285	- 190 - 320	- 210 - 350	- 230 - 385
d 10	- 20 - 60	- 30 - 78	- 40 - 98	- 50 - 120	- 65 - 149	- 80 - 180	- 100 - 220	- 120 - 250	- 145 - 305	- 170 - 355	- 190 - 400	- 210 - 440	- 230 - 480
d 11	- 20 - 80	- 30 - 105	- 40 - 130	- 50 - 160	- 65 - 195	- 80 - 240	- 100 - 290	- 120 - 340	- 145 - 395	- 170 - 460	- 190 - 510	- 210 - 570	- 230 - 630
e 7	- 14 - 24	- 20 - 32	- 25 - 40	- 32 - 50	- 40 - 61	- 50 - 75	- 60 - 90	- 72 - 107	- 85 - 125	- 100 - 146	- 110 - 162	- 125 - 182	- 135 - 198
e 8	- 14 - 28	- 20 - 38	- 25 - 47	- 32 - 59	- 40 - 73	- 50 - 89	- 60 - 106	- 72 - 126	- 85 - 148	- 100 - 172	- 110 - 191	- 125 - 214	- 135 - 232
e 9	- 14 - 39	- 20 - 50	- 25 - 61	- 32 - 75	- 40 - 92	- 50 - 112	- 60 - 134	- 72 - 159	- 85 - 185	- 100 - 215	- 110 - 240	- 125 - 265	- 135 - 290
f 6	- 6 - 12	- 10 - 18	- 13 - 22	- 16 - 27	- 20 - 33	- 25 - 41	- 30 - 49	- 36 - 58	- 43 - 68	- 50 - 79	- 56 - 88	- 62 - 98	- 68 - 108
f 7	- 6 - 16	- 10 - 22	- 13 - 28	- 16 - 34	- 20 - 41	- 25 - 50	- 30 - 60	- 36 - 71	- 43 - 83	- 50 - 96	- 56 - 106	- 62 - 119	- 68 - 131
f 8	- 6 - 20	- 10 - 28	- 13 - 35	- 16 - 43	- 20 - 53	- 25 - 64	- 30 - 76	- 36 - 90	- 43 - 106	- 50 - 122	- 56 - 137	- 62 - 151	- 68 - 165
g 5	- 2 - 6	- 4 - 9	- 5 - 11	- 6 - 14	- 7 - 16	- 9 - 20	- 10 - 23	- 12 - 27	- 14 - 32	- 15 - 35	- 17 - 40	- 18 - 43	- 20 - 47
g 6	- 2 - 8	- 4 - 12	- 5 - 14	- 6 - 17	- 7 - 20	- 9 - 25	- 10 - 29	- 12 - 34	- 14 - 39	- 15 - 44	- 17 - 49	- 18 - 54	- 20 - 60
h 5	0 - 4	0 - 5	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13	0 - 15	0 - 18	0 - 20	0 - 23	0 - 25	0 - 27
h 6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13	0 - 16	0 - 19	0 - 22	0 - 25	0 - 29	0 - 32	0 - 36	0 - 40
h 7	0 - 10	0 - 12	0 - 15	0 - 18	0 - 21	0 - 25	0 - 30	0 - 35	0 - 40	0 - 46	0 - 52	0 - 57	0 - 63
h 8	0 - 14	0 - 18	0 - 22	0 - 27	0 - 33	0 - 39	0 - 46	0 - 54	0 - 63	0 - 72	0 - 81	0 - 89	0 - 97
h 9	0 - 25	0 - 30	0 - 36	0 - 43	0 - 52	0 - 62	0 - 74	0 - 87	0 - 100	0 - 115	0 - 130	0 - 140	0 - 155
h 10	0 - 40	0 - 48	0 - 58	0 - 70	0 - 84	0 - 100	0 - 120	0 - 140	0 - 160	0 - 185	0 - 210	0 - 230	0 - 250
h 11	0 - 60	0 - 75	0 - 90	0 - 110	0 - 130	0 - 160	0 - 190	0 - 220	0 - 250	0 - 290	0 - 320	0 - 360	0 - 400
h 13	0 - 140	0 - 180	0 - 220	0 - 270	0 - 330	0 - 390	0 - 460	0 - 540	0 - 630	0 - 720	0 - 810	0 - 890	0 - 970
j 6	+ 4 - 2	+ 6 - 2	+ 7 - 2	+ 8 - 3	+ 9 - 4	+ 11 - 5	+ 12 - 7	+ 13 - 9	+ 14 - 11	+ 16 - 13	+ 16 - 16	+ 18 - 18	+ 20 - 20
js 5	± 2	± 2,5	± 3	± 4	± 4,5	± 5,5	± 6,5	± 7,5	± 9	± 10	± 11,5	± 12,5	± 13,5
js 6	± 3	± 4	± 4,5	± 5,5	± 6,5	± 8	± 9,5	± 11	± 12,5	± 14,5	± 16	± 18	± 20
js 9	± 12	± 15	± 18	± 21	± 26	± 31	± 37	± 43	± 50	± 57	± 65	± 70	± 77
js 11	± 30	± 37	± 45	± 55	± 65	± 80	± 95	± 110	± 125	± 145	± 160	± 180	± 200
k 5	+ 4 0	+ 6 + 1	+ 7 + 1	+ 9 + 1	+ 11 + 2	+ 13 + 2	+ 15 + 2	+ 18 + 3	+ 21 + 3	+ 24 + 4	+ 27 + 4	+ 29 + 4	+ 32 + 5
k 6	+ 6 0	+ 9 + 1	+ 10 + 1	+ 12 + 1	+ 15 + 2	+ 18 + 2	+ 21 + 2	+ 25 + 3	+ 28 + 3	+ 33 + 4	+ 36 + 4	+ 40 + 4	+ 45 + 5
m 5	+ 6 + 2	+ 9 + 4	+ 12 + 6	+ 15 + 7	+ 17 + 8	+ 20 + 9	+ 24 + 11	+ 28 + 13	+ 33 + 15	+ 37 + 17	+ 43 + 20	+ 46 + 21	+ 50 + 23
m 6	+ 8 + 2	+ 12 + 4	+ 15 + 6	+ 18 + 7	+ 21 + 8	+ 25 + 9	+ 30 + 11	+ 35 + 13	+ 40 + 15	+ 46 + 17	+ 52 + 20	+ 57 + 21	+ 63 + 23
n 6	+ 10 + 4	+ 16 + 8	+ 19 + 10	+ 23 + 12	+ 28 + 15	+ 33 + 17	+ 39 + 20	+ 45 + 23	+ 52 + 27	+ 60 + 31	+ 66 + 34	+ 73 + 37	+ 80 + 40
p 6	+ 12 + 6	+ 20 + 12	+ 24 + 15	+ 29 + 18	+ 35 + 22	+ 42 + 26	+ 51 + 32	+ 59 + 37	+ 68 + 43	+ 79 + 50	+ 88 + 56	+ 98 + 62	+ 108 + 68



Licence étudiante de SolidWorks
 Utilisation universitaire uniquement

TOLERANCEMENT NORMALISE		Eléments non idéaux		Eléments idéaux	
Symbole de la spécification		Elément(s) tolérancé(s)		Référence(s) spécifiée(s)	
Type de spécification Forme Position Planéité	Orientation Battement	Elément(s) de référence	unique multiples	simple commune système	Zone de tolérance
Condition de conformité : L'élément tolérancé doit se situer tout entier dans la zone de tolérance.		Surface nominale plane.		simple composée	Contraintes orientation et/ou position par rapport à la référence spécifiée
Schéma extrait du dessin de définition				Volume limité par deux plans parallèles distants de 0,1	

TOLEANCEMENT NORMALISE		Eléments non idéaux		Eléments idéaux	
Symbole de la spécification		Elément(s) de tolérance(s)	Elément(s) de référence	Référence(s) spécifiée(s)	Zone de tolérance
Type de spécification Exemple : Position, Orientation, Battement, Localisation	Condition de conformité : L'élément toléré doit se situer tout entier dans la zone de tolérance.	<input type="checkbox"/> unique <input type="checkbox"/> groupe	<input type="checkbox"/> unique <input type="checkbox"/> multiples	<input type="checkbox"/> simple <input type="checkbox"/> commune <input type="checkbox"/> système	<input type="checkbox"/> Contraintes orientation et position par rapport à la référence spécifique Axe C de la zone de tolérance Contraintes disant de 0.5 mm de la DROITE-A et perpendiculaire à PLAN-B
		Ligne nominalement rectiligne, axe réel d'une surface nominale cylindrique et d'une surface nominale cylindrique.	Ensemble d'une Ligne A nominalement rectiligne, axe réel d'une surface nominale cylindrique et d'une surface B nominalement planes.	Référence primaire : DROITE-A axe du cylindre associé à la surface repérée A Référence secondaire : PLAN-B associé à B, perpendiculaire à DROITE-A et contraint tangent du côté libre matière.	
Schéma extrait du dessin de définition					

FORMULAIRE

Transmission de mouvement / Cinématique :

$$r = \frac{\omega_s}{\omega_e} = \frac{Z_{\text{menantes}}}{Z_{\text{menées}}} = \frac{d_{\text{menantes}}}{d_{\text{menées}}}$$

$$d = m \cdot Z$$

$$V = \omega \cdot R$$

r = rapport de réduction sans unité
 ω = Vitesse angulaire en rad/s
 Z = nombre de dents
 d = diamètre en mm
 m = module
 V = vitesse linéaire en m/s
 R = rayon en m

Energétique :

$$\eta = P_s / P_e$$

$$P = F \times V$$

μ = rendement sans unité
 P = puissance en watt
 F = force en newton
 V = vitesse en m/s

Résistance des matériaux :

$$\tau = \frac{T}{S} \leq R_{pg} = \frac{R_{eg}}{k}$$

$$R_{eg} = 0,5 \times R_e \text{ pour } R_e \leq 270 \text{ MPa}$$

$$R_{eg} = 0,7 \times R_e \text{ pour } 270 \leq R_e \leq 520 \text{ MPa}$$

τ = contrainte de cisaillement en Mpa
 T = effort tranchant en N
 S = surface en mm²
 R_{pg} = résistance pratique au cisaillement en MPa
 R_{eg} = résistance élastique au cisaillement en MPa
 k = coefficient de sécurité sans unité
 R_e = résistance élastique au cisaillement

SERIES	ENGINES		MODEL	WEIGHT VARIANT	MAXIMUM WEIGHT (T)			ASSOCIATED MODIFICATION FOR VARIANT CHANGES				
	MANU.	TYPE			MTOW	MLW	MZFW					
A XXX	CFMI	CFM56-5B4, CFM56-5B4/2, CFM56-5B4/3, CFM56-5B4/P, CFM56-5B4/2P D ACIIC	AXXX - 214	000	73.5	64.5	60.5	-				
				001	68	64.5	60.5	20966				
				002	70	64.5	60.5	21601				
				003	75.5	64.5	60.5	22269				
				005	67	64.5	60.5	21711				
				007	77	64.5	60.5	23264				
				008	73.5	64.5	61	23900				
				009	75.5	64.5	61	22269 23900				
				010	77	64.5	61	23264 23900				
				011	75.5	66	62.5	30307				
				012	77	66	62.5	30479				
				013	71.5	64.5	61	31132				
				014	73.5	64.5	61.5	31385				
				016	73.5	66	62.5	34094				
				017	78	66	62.5	151634				
				018	71.5	66	62.5	151710				
				A XXX	CFMI	CFM56-5B5/P	A XXX - 215	000	73.5	64.5	60.5	20802
								001	68	64.5	60.5	20966
002	70	64.5	60.5					21601				
003	75.5	64.5	60.5					22269				
005	67	64.5	60.5					21711				
008	73.5	64.5	61					23900				
009	75.5	64.5	61					22269 23900				
011	75.5	66	62.5					30307				
013	71.5	64.5	61					31132				
014	73.5	64.5	61.5					31385				
016	73.5	66	62.5	34094								
018	71.5	66	62.5	151710								

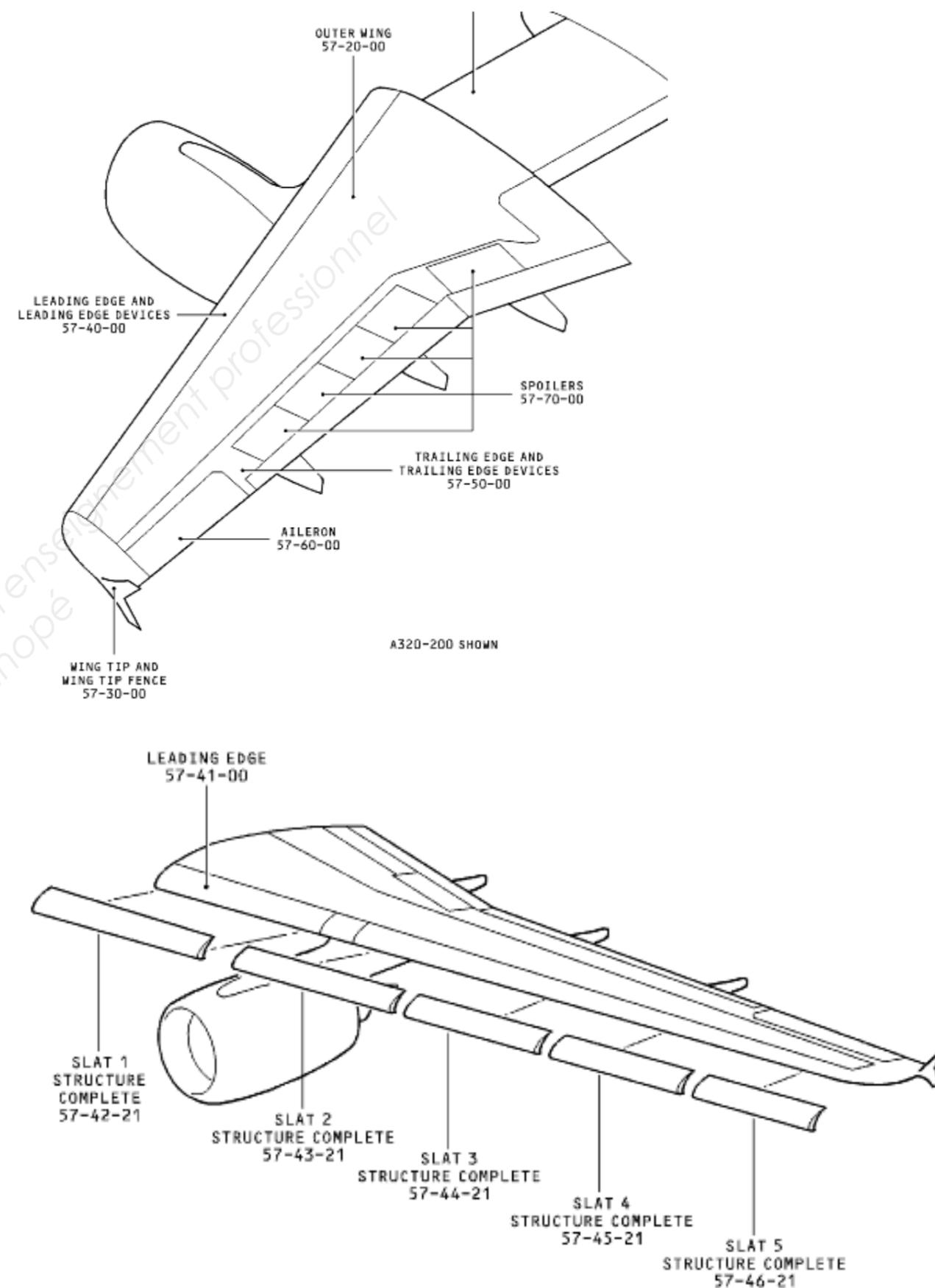
Weight Variant Identification List

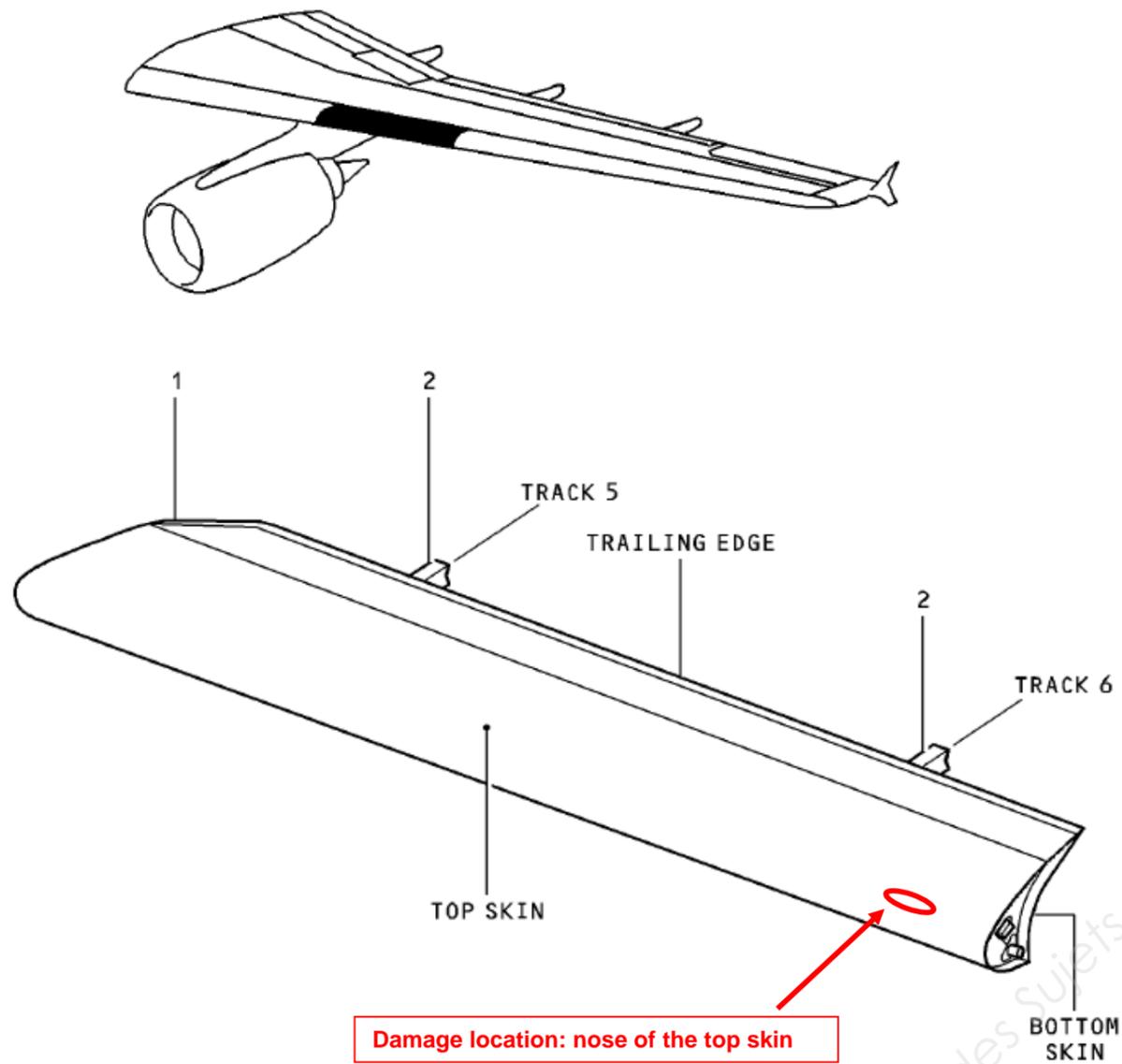
Table 7

Printed in Germany

INTRO

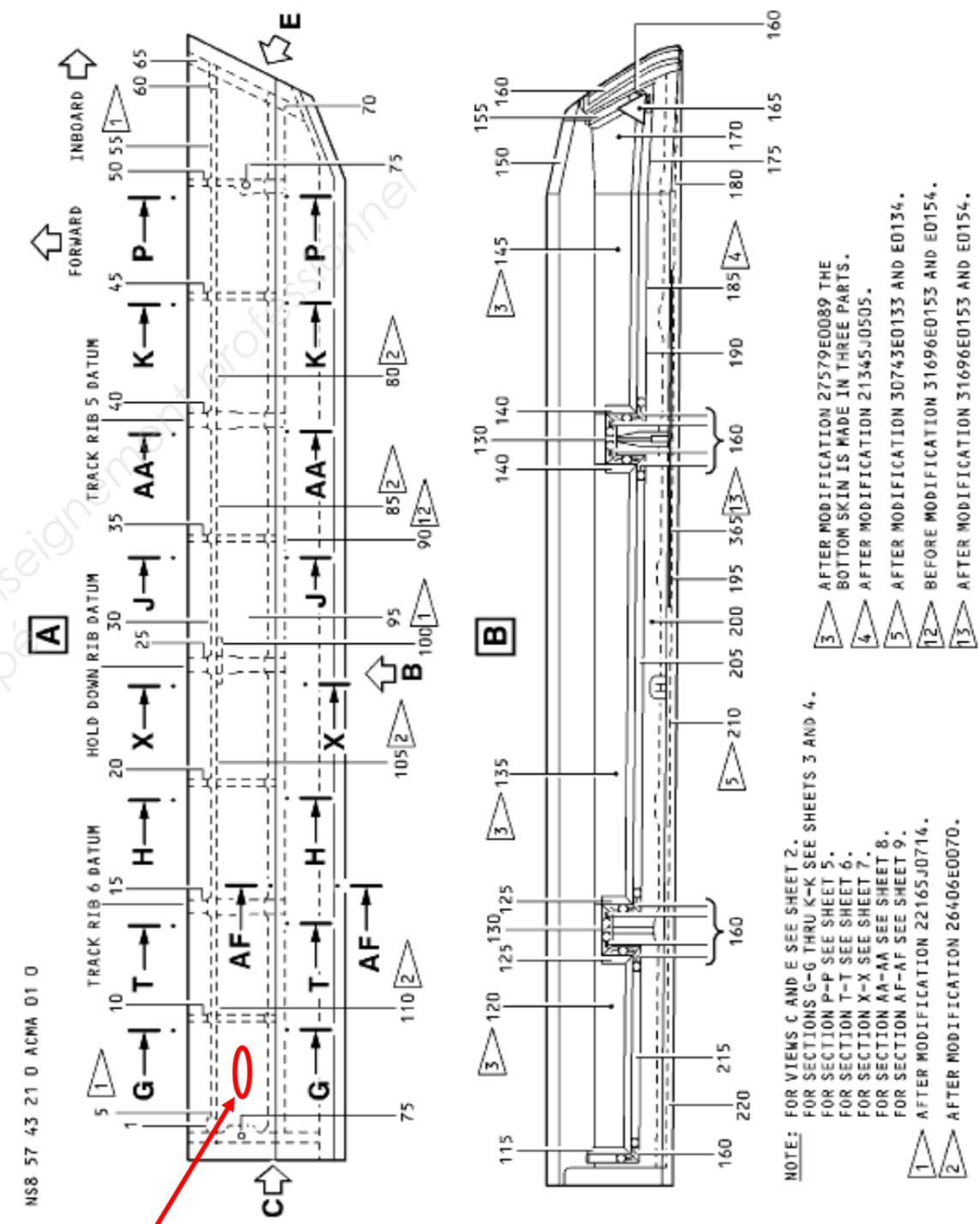
Page 26
Feb 01/11





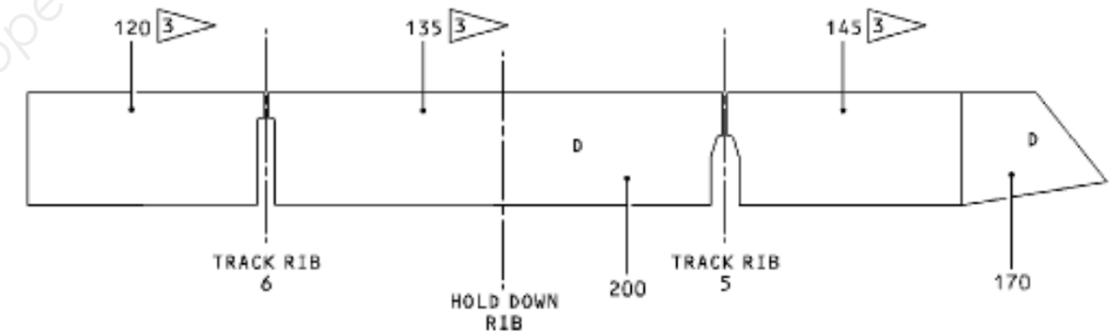
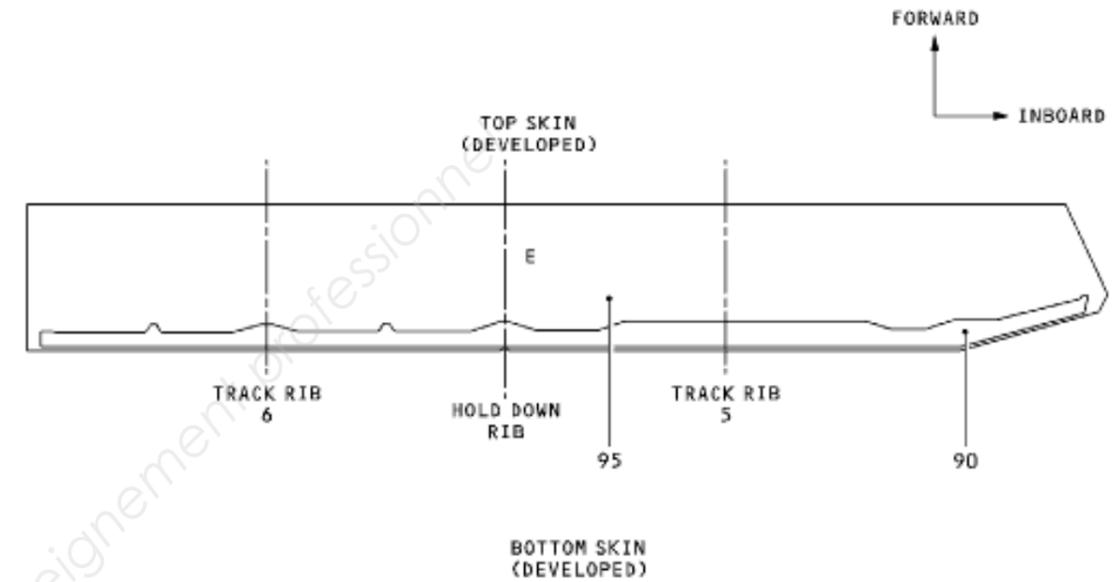
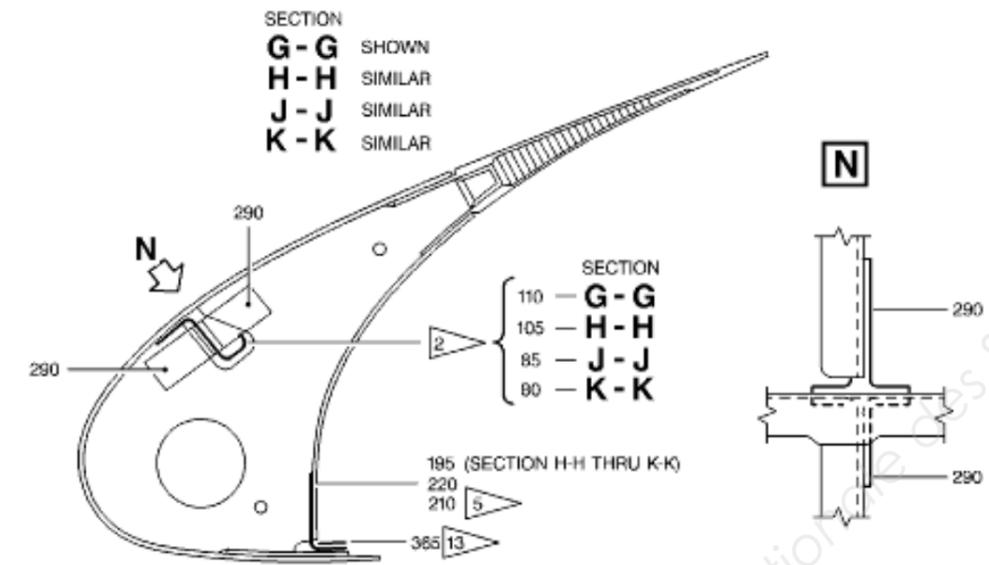
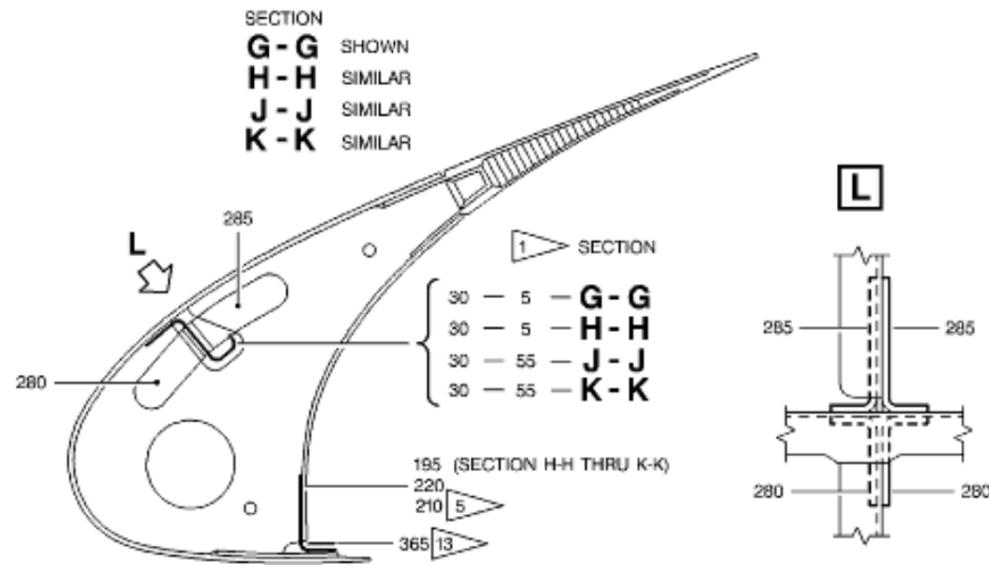
Damage location: nose of the top skin

Damage location



Slat 2 - Structure Complete
Figure 2 (sheet 1)

STRUCTURAL REPAIR MANUAL



SKIN THICKNESS TABLE

REF	A	B	C	D	E	F	G
mm	0.90	1.30	1.50	1.60	1.80	1.85	3.60
in	0.035	0.051	0.059	0.063	0.071	0.073	0.142

NOTE: THE REFERENCE LETTERS SHOW THE SKIN THICKNESSES
 3 AFTER MODIFICATION 27579E0089 THE BOTTOM SKIN IS MADE IN THREE PARTS

Slat 2 - Structure Complete
 Figure 2 (sheet 11)

NS8 57 43 21 0 ACME 01 0

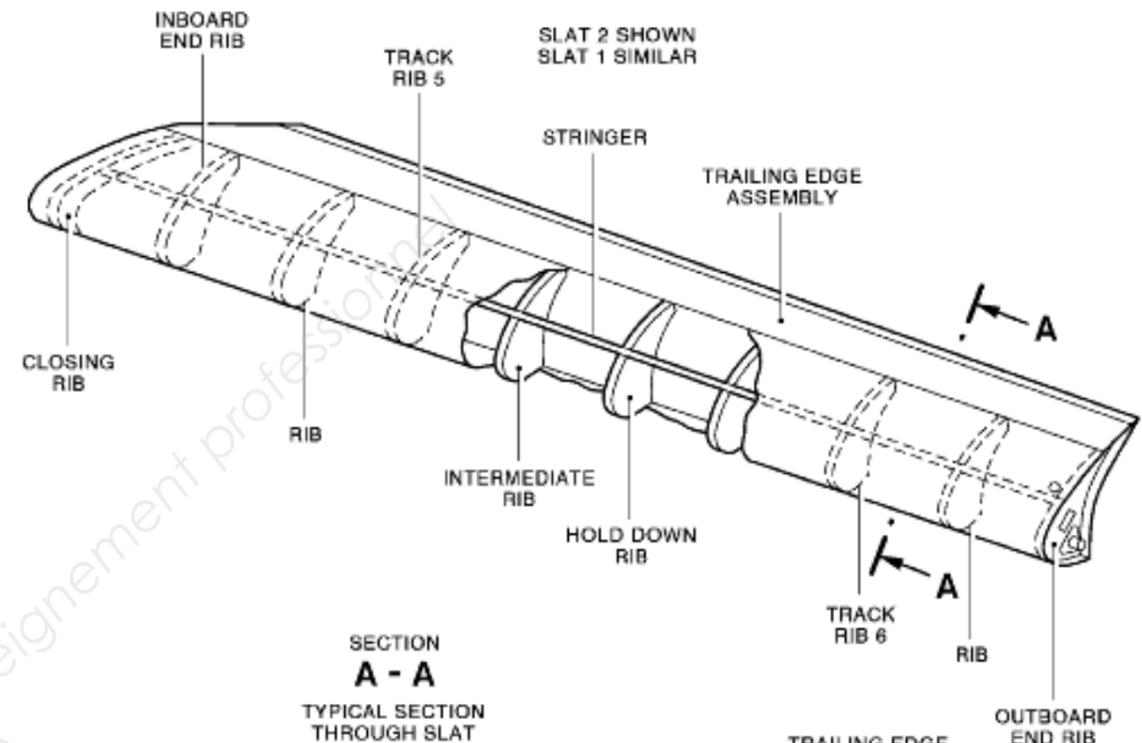
NS8 57 43 21 0 ACME 00 0

Slat 2 - Structure Complete
 Figure 2 (sheet 3)

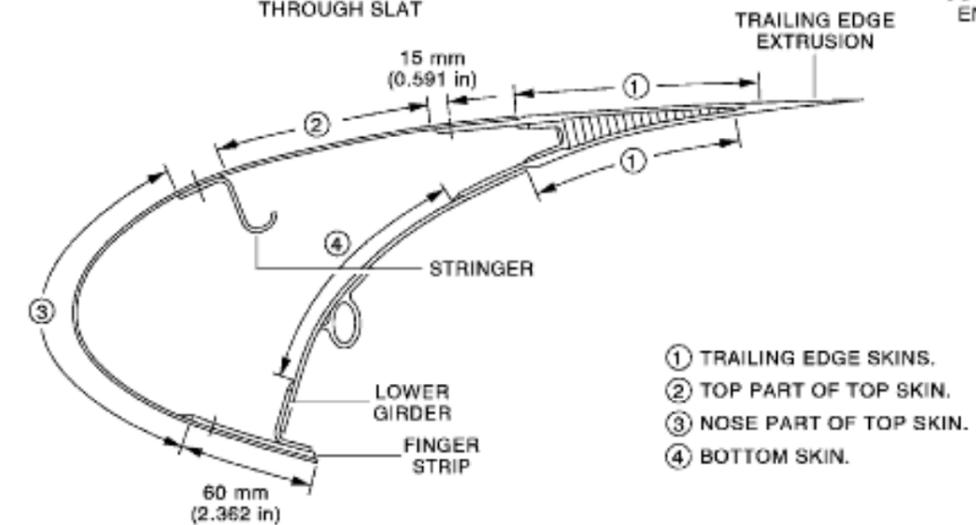
ITEM	NOMENCLATURE	SPECIFICATION AND/OR SECTION CODE	THICKNESS IN MM(IN.) AND/OR PARTNUMBER	I C	ACTION OR REPAIR	STATUS (MOD/PROP) SB/RC
75A	Lug, lifting	PA66 -GF30	ABS0411-PF12 10			
80	Stringer, Z	7075T62 ALCLAD	D57460124216 217			A26406E0070
80A	Stringer, bulb	7050T76511 AMS4340	D57460284210 211			A28587E0107
85	Stringer, Z	7075T62 ALCLAD	D57460124212 213			A26406E0070
85A	Stringer, bulb	7050T76511 AMS4340	D57460284212 213			A28587E0107
90	Fingerstrip	2024PLT3	D57460209200 201 1.80 (0.071)			
90A	Fingerstrip	2024PLT3	D57460209202 203 1.80 (0.071)			A21723J0607
90B	Fingerstrip	2024PLT3	D57460209204 205 1.80 (0.071)			A22409E0028
90C	Fingerstrip	2024PLT3	D57460270200 1.80 (0.071)			A26406E0070 B31696E0153 B31696E0154
95	Skin, top	2024PLT42	D57460203200 201 1.80 (0.071)		PB101 PB201 57-40-00	
95A	Skin, top	2024PLT42	D57460203202 203 1.80 (0.071)		PB101 PB201 57-40-00	A21723J0607
95B	Skin, top	2024PLT42	D57460203204 205 1.80 (0.071)		PB101 PB201 57-40-00	A26406E0070
100	Angle	2024PLT42	D57460164200 1.80 (0.071)			A22165J0714 B26406E0054
105	Stringer, Z	7075T62 ALCLAD	D57460124212 213			A26406E0070
105A	Stringer, bulb		D57460284214 215			A28587E0107
110	Stringer, Z		D57460124210 211			A26406E0070

ASSY Dwg.: D57460202, D57460271, D57460299

Key to Figure 2



SECTION A - A
TYPICAL SECTION THROUGH SLAT



CAUTION: OBEY THE EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 102.

NOTE: FOR AERODYNAMIC LIMITS ON DENTS SEE FIGURE 103. FOR AREAS ON THE MAIN SKINS WHERE DENTS ARE NOT ALLOWED SEE FIGURE 102. FOR DIMENSIONS OF EACH SKIN PORTION/REGION SEE SHEET 2.

NS8 57 40 00 1 AAMA 01 0

Allowable Damage Limits for Dents in Slat Skins 1 thru 5
Figure 101 (sheet 1)

4. Allowable Damage Description/Criteria

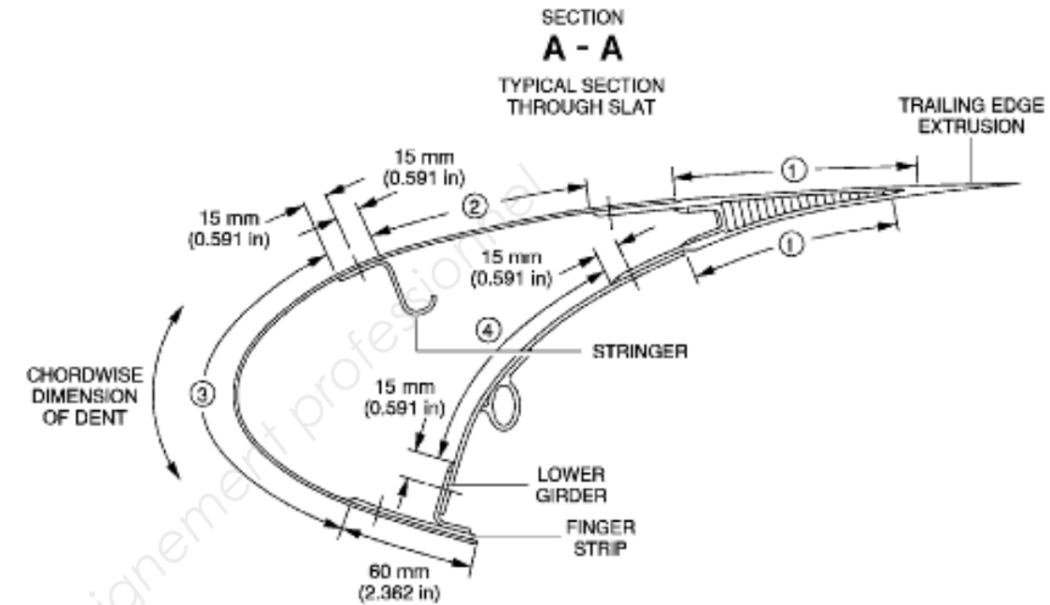
DESCRIPTION	CRITERIA/TYPE	PARAGRAPH	REPAIR CATEGORY	INSPECTION INSTRUCTION REFERENCE
Top Skins <1>	Dents	5.A.	B	Covered by MPD <2>
			C	-
	Abrasion, Scratches and Corrosion	5.B.	B	Covered by MPD <2>
			C	-
Bottom Skins and Trailing Edge Skins <1>	Dents	5.A.	A	-
	Abrasion, Scratches and Corrosion	5.B.		
Top Skins, Bottom Skins, Trailing Edge Skins	Dents	5.A.	A and C	-
	Abrasion, Scratches and Corrosion	5.B.		
Slat Tracks 1 thru 12	Abrasions, Scratches, Edge Nicks and Roller Wear Marks	5.C.	A	-

Allowable Damage Description/Criteria
Table 101

<1> Description and Repair Category data are applicable to aircraft after modification 38525K11750 (Weight Variant 015 with C.G. extended at MTOW) only.

<2> The inspection instruction data related to Repair Category 'B' is covered by the Maintenance Planning Document (MPD). Refer to the MPD's that follow for the inspections on the Top Skin permanent allowable damages:

- MPD 574204-01-1
- MPD 574304-02-1
- MPD 574404-01-1
- MPD 574504-01-1



DENT LIMITATION TABLE FOR SLATS 1 AND 2

SKIN AREA	MAX DEPTH OF DENT	REPAIR ACTION	MAX. CHORDWISE DIMENSION OF DENT
①	2 mm (0.079 in)	FILL DENT AS PER FIG 103 - NO STRUCTURAL REPAIR REQUIRED	-
②	3 mm (0.118 in)	FILL DENT AS PER FIG 103 - NO STRUCTURAL REPAIR REQUIRED	-
③	3 mm (0.118 in)	FILL DENT AS PER FIG 103 - NO STRUCTURAL REPAIR REQUIRED	-
④	10 mm (0.394 in)	FILL DENT TEMPORARILY - DO A STRUCTURAL REPAIR WITHIN 4 500 FC OR 6 000 FH OR NEXT 'C' CHECK OR 20 MONTHS	140 mm (5.512 in)
④	3 mm (0.118 in)	LEAVE DENT UNFILLED - NO STRUCTURAL REPAIR REQUIRED.	-

NS8 57 40 00 1 AAMF 02 0

CAUTION: OBEY THE EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 102.

NOTE: AREA OF ADJACENT DAMAGE MUST BE A MINIMUM OF 150 mm (5.906 in) APART.

Allowable Damage Limits for Dents in Slat Skins 1 thru 5
Figure 101 (sheet 2)

3. Repair Schemes for General Repairs

REPAIR PROCEDURE	CHAPTER	REMARKS
There are no General Repairs applicable to this topic	-	-

General Repairs

Table 201

4. Repair Scheme for Specific Repairs

REPAIR PROCEDURE	PARAGRAPH	FIGURE	REPAIR CATEGORY	INSPECTION INSTRUCTION REFERENCE
Repair of the Top Skins of Slats 2, 3, 4 and 5	5.A.	201	-	-
Repair of the Chamfered Edges at the Leading Edge (Repair 1 - Active, Repair 2 - DELETED)	5.B.	202	A	-
Repair of the Chamfered Edges away from the Leading Edge	5.C.	203	A	-
Repair to replace the Seal Packer at Slat Track 3 (Assemblies D574-61303-002/004) and Slat Track 4 (Assemblies D574-61304-002)	5.D.	204	A	-
Repair Procedure for Replacement of the Filler Blocks at Slat Tracks 3 and 4	5.E.	205	A	-
Repair of the Nose Area of the Top Skin above the ribs and between the ribs for Slats 1 thru 5 (Repair applicable for aircraft up to 89 tonnes MTOW)	5.F.	206	A	-

Specific Repairs

Table 202

CAUTION: OBEY THE REPAIR EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 207.

F. Repair of the Nose Area of the Top Skin above the ribs and between the ribs for Slats 1 thru 5

NOTE: This repair is applicable to aircraft up to 89 tonnes MTOW.

NOTE: For aircraft up to 93.5 tonnes MTOW refer to paragraph 5.G.

NOTE: It is recommended that Slats 1 thru 5 listed below be repaired with 93.5 tonnes MTOW repairs because the Slats are capable of such MTOW. These Slats are interchangeable with A318, A319 and A321-200 that are certified with 93.5 tonnes MTOW loads. This is necessary to keep the interchangeable status.

Slat 1: D574 60600 006 thru 013 and D574 60677 000 thru 005

Slat 2: D574 60278 004 thru 013 and D574 60277 000 thru 003

Slat 3: D574 60378 006 thru 011 and D574 60377 000 thru 003

Slat 4: D574 60478 006 thru 011 and D574 60477 000 thru 003

Slat 5: D574 60598 006 thru 011 and D574 60577 000 thru 003

NOTE: This repair is applicable for dent damage on Slats 1 thru 5 to the areas shown in Figure 206 (Sheets 1 thru 3). This repair is valid for the weight variants given in Table 207.

AIRCRAFT TYPE	WEIGHT VARIANT
A320-100	000, 001, 002
A320-200	000, 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 016

Effectivity per Weight Variant and Aircraft Type

Table 207

NOTE: Refer to Paragraph 23 'Weight Variant Information' in the INTRODUCTION of the SRM. Tables in the subparagraphs give the necessary data about all weight variants and their required information for allowable damage and repair applicability.

(1) Repair General

This scheme provides instructions to repair the nose area of the top skin for slats 1 thru 5.

It details instructions for a repair between the ribs and for a repair above the ribs.

For this scheme the slat is divided into repair zones (Refer to Figure 206 Sheets 1 thru 3).

(2) Repair Materials

For these repairs use only the materials that follow:

ITEM	NOMENCLATURE	QTY	MATERIAL/REMARKS
1	Backing-Plates	A/R	2024T42 or 2024T3, clad or unclad 2.00 mm (0.078 in.) thick for Slat 1. 2024T42 or 2024T3, clad or unclad 1.80 mm (0.071 in.) thick for Slats 2 thru 5 (Refer to SRM Chapter 51-31-00).
2	Backing-Plates	A/R	2024T42 clad or 2024T3 clad 2.00 mm (0.078 in.) thick for Slat 1. 2024T42 clad or 2024T3 clad 1.80 mm (0.071 in.) thick for Slats 2 thru 5 (Refer to SRM Chapter 51-31-00).
3	Skin Insert	1	2024 clad or 2024T3 clad 1.80 mm (0.071 in.) thick for Slat 1, MSN 0002-0363 and Slats 2 thru 5. 2024T42 clad or 2024T3 clad 2.00 mm (0.078 in.) thick for Slat 1, MSN 0364-9999 (Refer to SRM Chapter 51-31-00).
4	Fasteners	A/R	Refer to table 208.
5	Sealant	-	For Slats 1 and 2, Material No. 09-016 (Refer to SRM Chapter 51-35-00). For Slats 3 thru 5, Material No. 09-012A with Primer, Material No. 09-586 (Refer to CML). Material No. 09-023 is an alternative (Refer to CML).
6	Pins, Gripper	A/R	Local resources.
7	Sealing Plate	A/R	Aluminum Shim MIL-S-22499, composition 1 0.10 mm (0.004 in.) to 0.20 mm (0.008 in.) thick - alternative to Item 8.
8	Sealing Plate	A/R	2024T42 or 2024T3, 0.60 mm (0.023 in.) to 1.00 mm (0.039 in.) thick (Refer to SRM Chapter 57-31-00) - alternative to Item 7.
9	Shim	1	2024T42 clad or unclad 0.20 mm (0.008 in.) thick.

ITEM	NOMENCLATURE	QTY	MATERIAL/REMARKS
-	Sealant	A/R	Material No. 09-013 (Refer to SRM Chapter 51-35-00).
-	Sealant	A/R	Material No. 09-016 (Refer to SRM Chapter 51-35-00).
-	Cleaning Agent	A/R	Material No. 11-026 (Refer to SRM Chapter 51-35-00).
-	Epoxy Primer	A/R	Material No. 16-006B (Refer to SRM Chapter 51-35-00).
-	Bonding Primer	A/R	Material No. 08-055 (Refer to SRM Chapter 51-35-00).
-	Alodine 1200	A/R	Material No. 13-002 (Refer to SRM Chapter 51-35-00).
-	Alodine 1000 or 1500	A/R	Material No. 13-003 (Refer to SRM Chapter 51-35-00).

(3) Repair Instructions

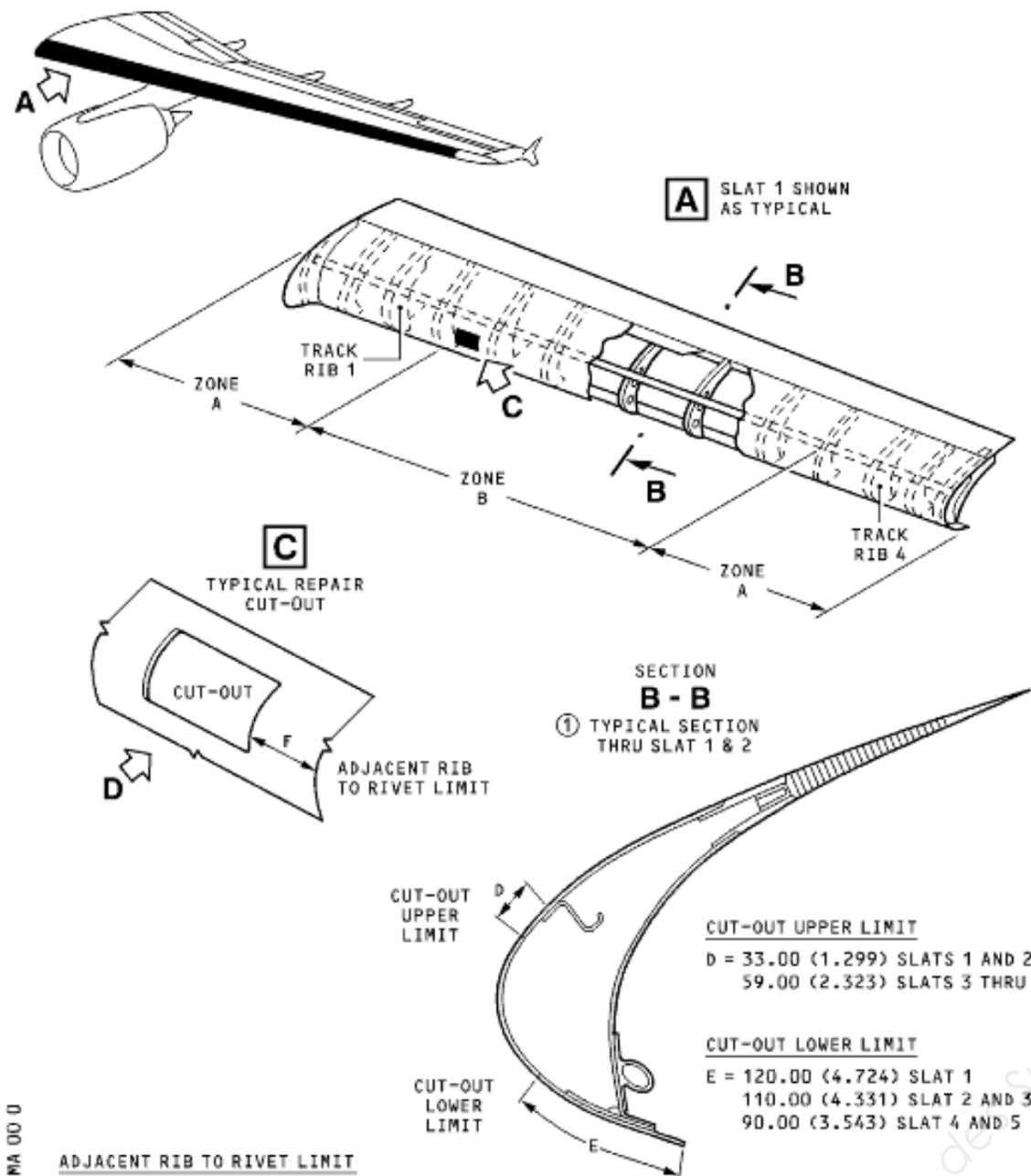
The repair schemes for Zones A and B are shown in Figure 206 (Sheets 4 thru 11). For repair zone dimensions refer to Figure 206 sheet 1).

NOTE: For the different types of fasteners permitted in each repair zone on slats 1 thru 5 see Table 208.

ITEM	ZONE	QUANTITY	FASTENER TYPE (Refer to SRM 51-40-00)
SLAT 1	A	A/R	NAS1921C05
	B	A/R	NAS1921C05
SLAT 2	A	A/R	NAS1921C05
SLAT 3	A	A/R	NAS1921C05
	B	A/R	NAS1921C05
SLAT 4	A	A/R	NAS1921C05 Alternative - CR3522P5 except inboard and outboard of the Hold Down ribs where NAS1921C05 must be used.
SLAT 5	A	A/R	NAS1921C05 Alternative - CR3522P5 except inboard and outboard of the Hold Down ribs where NAS1921C05 must be used.

Table 208

(a) Do a damage evaluation before you repair the structure (Refer to SRM Chapter 51-11-00, Page Block 101).



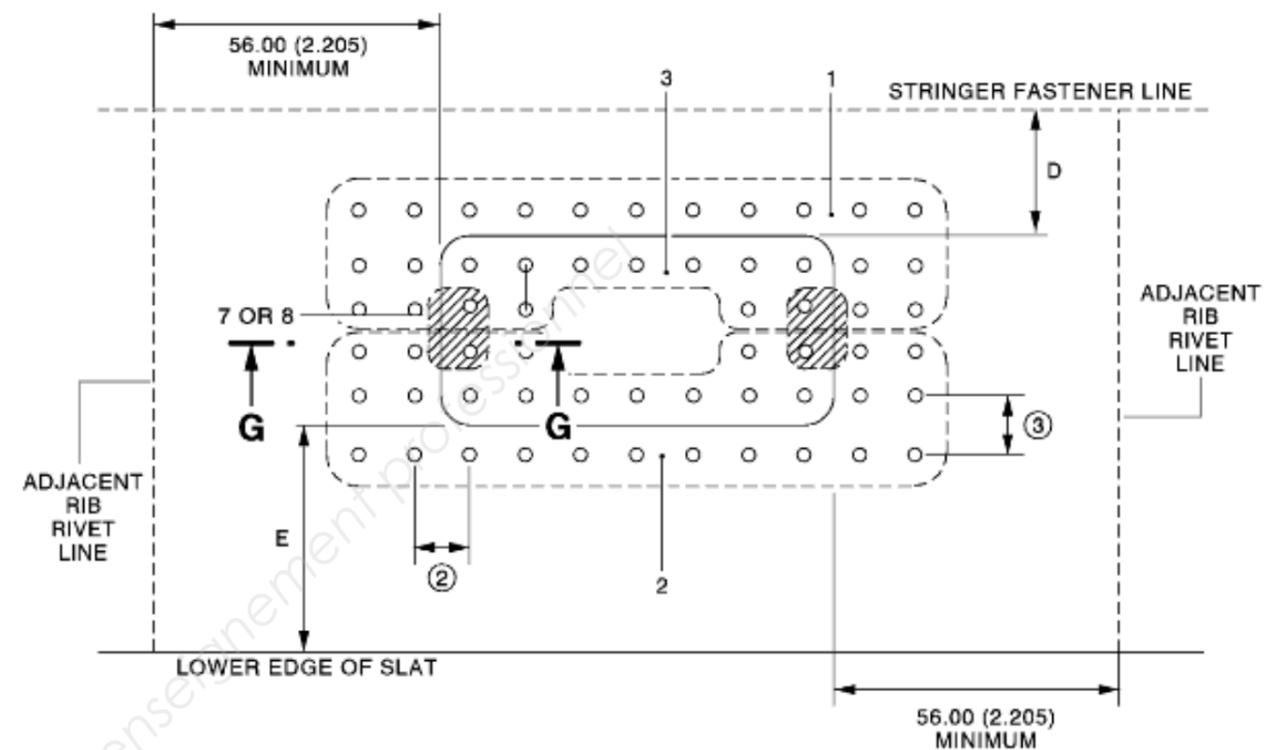
NOTE: FOR VIEW D SEE SHEET 2.
DIMENSIONS IN MILLIMETERS
(INCHES IN BRACKETS).
① BETWEEN RIB, REPAIRS ONLY.

Repair to the Nose Area of the Top Skin
Figure 206 (sheet 1)

57-40-00 Page 231
Feb 01/08

Printed in Germany

ZONE A
BETWEEN RIBS



CAUTION: OBEY THE EFFECTIVITY PER WEIGHT VARIANT AND AIRCRAFT TYPE GIVEN IN TABLE 207

NOTE: DIMENSIONS IN MILLIMETERS (INCHES IN BRACKETS).

SEALING PLATES SHOWN

AT THE SKIN/INSERT CUT-OUT, MINIMUM RADIUS DIMENSION = 8.00 (0.315),
MINIMUM GAP DIMENSION = 1.00 TO 2.00 (0.039 TO 0.079).

- ② FOR SPANWISE PITCH:
MINIMUM DIMENSION = 18.00 (0.709)
MAXIMUM DIMENSION = 20.00 (0.787)
- ③ CHORDWISE FASTENERS MUST BE IN LINE WITH THE RIB FASTENERS
FOR CHORDWISE PITCH.
MINIMUM DIMENSION = 18.00 (0.709)
MAXIMUM DIMENSION = PITCH OF THE RIB FASTENERS.
FOR SECTION G-G SEE SHEET 12.
FOR DIMENSIONS D AND E SEE SHEET 1.

Repair to the Nose Area of the Top Skin
Figure 206 (sheet 4)

57-40-00 Page 234
May 01/08

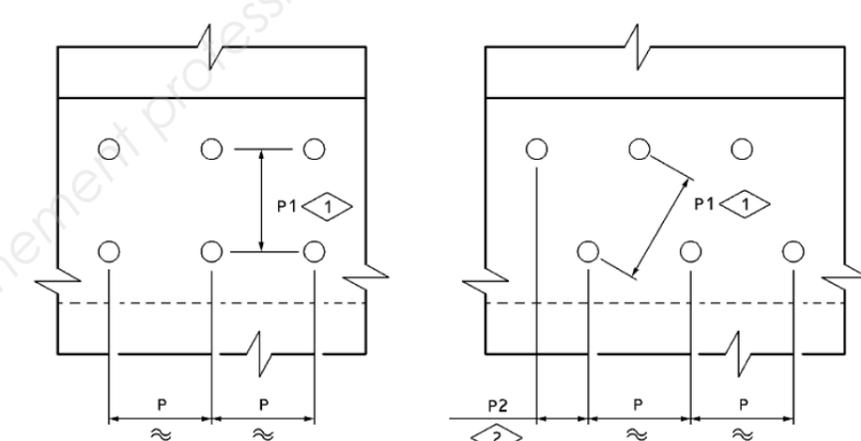
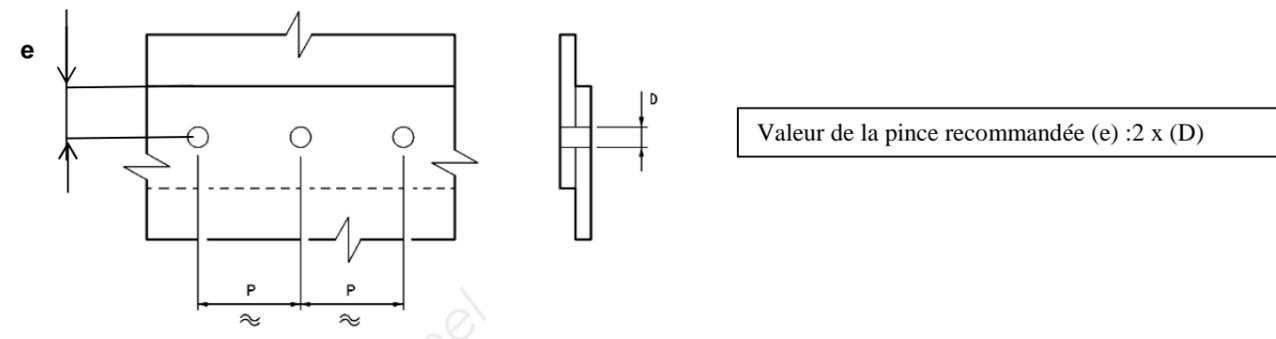
Printed in Germany

ITEM NUMBER	MATERIAL NUMBER	MATERIAL TYPE	REMARKS
12*	09-001A	PS890A - 2	Alternative for PR1422A - 2
13*	09-002A	PS890B - 1/2	Alternative for PR1422B - 1/2
14*	09-002A	PS890B - 2	Alternative for PR1422B - 2
15*	09-001C	PR1440A - 1/2	Alternative for PR1422A - 1/2
16*	09-001C	PR1440A - 2	Alternative for PR1422A - 2
17*	09-002C	PR1440B - 1/2	Alternative for PR1422B - 1/2
18*	09-002C	PR1440B - 2	Alternative for PR1422B - 2
19*	09-008A	PR1221A	Alternative for PR5401K
20	09-007	PR1005L	Alternative for PR1005CH
21	NONE	PR146	Alternative for PR147
21*	09-013	PR1436GA 1/2	
22*	09-016	PR1436GB 2	
24*		PR1436B	Alternative for PR1436GB2

Table 2

B. Repair Material Uses

- (1) PR1422A is used to make a seal layer over beads of sealant and over rows of fasteners. You can apply it with a brush.
- (2) PR1422B is used to make a bead of sealant where it is necessary. You can apply it with a spatula or an extrusion gun.
- (3) PR1431G is used as an interfay sealant. You can apply it with a brush. It has a long application life, but it also takes a long time to cure.
- (4) PR147 and PR146 are a one part liquid for brush application. They are used to promote good adhesion of sealants. Special care is necessary when using these materials on unprotected titanium structure. The titanium should only be at normal ambient temperature.
- (5) Proseal 860B 1/6 is a quick cure sealant suitable for application with a sealant gun or spatula.
- (6) PR5401K is used to make a short term repair of a fuel leak. You can apply it with a brush. It cures very quickly.
- (7) PR7422 is used to make a seal over separate fasteners.
- (8) PR1005-L or PR1005CH is used when it is necessary to put a barrier top coat that dries very quickly over other sealants.

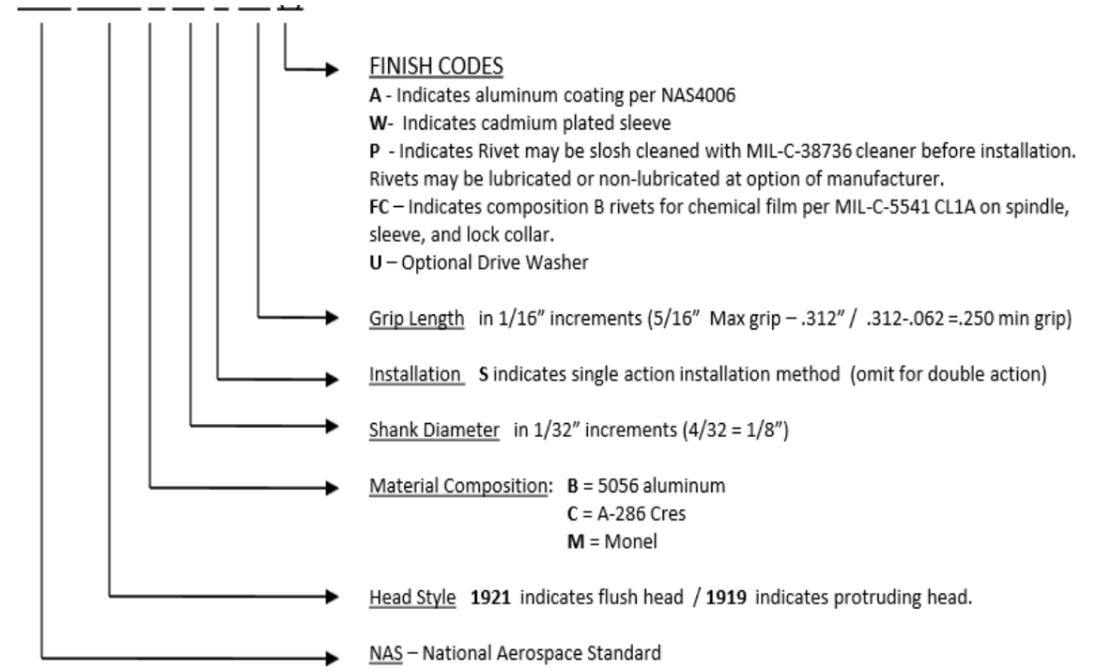


NOTE:
 1 'P1' MUST BE EQUAL OR GREATER THAN 'P' MINIMUM.
 2 'P2' MUST BE EQUAL 0.5P.

Fastener Hole Pitch Examples
Figure 1

Printed in Germany
NAS PART NUMBER SYSTEM

NAS 1921 C 05-S-04



TYPED'APPAREIL : AXXX-214	Defect Rectification Form N°05675		Zone : 512 slat 2 ATA : 57
Registration : G-F.....			Accès :
Elapsed time : 2h00 Temps alloué :	MSN : 2705	Check : C Type de visite :	Date :
Title : check dent LH slat 2			Exécutant nb. : 1
			Page 1/2

DEFECT FOUND BY:

WRITER: J-D

TASK:IAW SRM REV 92

01) BY SPECIALTY 06

CHECK DENT

MAX LENGTH:.....140.....mm

MAX WIDTH:.....70.....mm

MAX DEPTH:.....4.6.....mm

	NAME	DATE	VISA
Spé 06	Dubois	01/01/2001	

02) BY NDT

CHECK THE DENT AREA FOR FREE OF CRACK BY USING HFC INSPECTION IAW NTM 51-10-08-REV90

CRACK: YES / **NO**

IF CRACK DETECTED DAMAGE OUT OF TOLERANCE

RETURN JOB CARD TO TECHNICAL OFFICE FOR REPAIR DATA

	NAME	DATE	VISA
NDT	Dupond	01/01/2001	