

A330

MODEL: A330-243F

US

AIRPLANE FLIGHT MANUAL

ALL FLIGHTS MUST BE DONE IN ACCORDANCE WITH THE LIMITATIONS INCLUDED IN THIS MANUAL

APPROVED BY: EASA

Date: 04 MAY 10 Reference: 2010 (D) 52161

AIRBUS SAS
CUSTOMER SERVICES DIRECTORATE
31707 BLAGNAC CEDEX
FRANCE

Reference: STL 33000





1204. - 2017012593 Medellín, 08 de abril de 2017

Capitán SANTIAGO MARTÍNEZ

TAMPA CARGO

AEROPUERTO INTERNACIONAL JOSÉ MARÍA CÓRDOVA, ZONA DE CARGA
RIONEGRO

Asunto:

ACEPTACIÓN MANUALES OPERACIONALES

En respuesta a sus radicados No. 2017024691 y 2017024689 del 29-03-17 me permito aceptar las siguientes publicaciones respectivamente:

- 1) AIRPLANE FLIGHT MANUAL del equipo A-330 200F, revisión de fecha 28 de febrero de 2017.
- 2) FLIGHT CREW OPERATING MANUAL (FCOM) & A-330 QUICK REFERENCE HANDBOOK (QRH), revision de fecha 06 de marzo de 2017.

Favor enterar las tripulaciones y actualizar la documentación en las aeronaves, simulador y bibliotecas correspondientes.

CAP. JUAN CARLOS ESCALANTE M. INSPECTOR DE SEGURIDAD AÉREA U.A.E.A.C.

POI TAMPA

Ruta electrónica: \bog7\ADI\Externo\2017012593

Clave: GDIR-3.0-12-08 Versión: 01 Fecha: 20/09/2011 Página: 1 de 2



TRANSMITTAL LETTER

A330 AIRPLANE FLIGHT MANUAL

Issue date: 28 FEB 17

This is the AIRPLANE FLIGHT MANUAL at issue date 28 FEB 17 for the A330-243F and replacing last issue dated 05 JAN 17

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Please incorporate this revision as follow:

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R	NORM-22-PA	Precision Approach	28 FEB 17
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	MCDL-23-01	Static Discharger	19 JUL 16
	MCDL-27-02	Slat Track Closing Plate	18 SEP 12
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	MCDL-27-04	Aileron Rubber Seal	17 SEP 14
	MCDL-27-05	Aileron Servo Actuator Fairing	18 SEP 12
	MCDL-27-06	Slat End Blade Seal	17 SEP 14
	MCDL-27-07	Flap Blade Seal and Triangular Cushion Seal	18 SEP 12
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	MCDL-28-01	Refuel/Defuel Coupling Cap	22 JAN 14
	MCDL-28-02	Refuel/Defuel Control Panel Access Door on Belly Fairing	22 JAN 14
	MCDL-28-04	Fuel Pump Fairing	13 APR 16
	MCDL-29-01	Ground Green Hydraulic Connection Access Door	18 SEP 12
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	MCDL-30-01	Icing Indicator	18 SEP 12
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	MCDL-33-03	Runway Turnoff Light	22 JAN 14
	MCDL-33-04	Logo Light Lens	13 APR 16
	MCDL-33-05	Rear Navigation/Strobe Lights Glazing	18 SEP 12
	MCDL-33-06	Upper Anti-Collision (Beacon) Light Cover	22 JAN 14
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	MCDL-51-02	Passenger Door Scuff Plate	18 SEP 12
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	MCDL-51-04	Passenger Door Gutter	18 SEP 12
	MCDL-52-02	Forward Cargo Loading Operation Control Panel Door	18 SEP 12
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	MCDL-52-07	Potable Water Service Door	22 JAN 14
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	MCDL-52-09	Fuel Center Tank Water Drain Access Door	13 APR 16
	MCDL-52-10	Cargo Door Indicator Flag	22 JAN 14
	MCDL-52-11	Potable Water Forward Drain Panel Access Door	18 SEP 12
	MCDL-52-12	Forward Cargo Door Access Cover Panel	19 JUL 16
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	MCDL-52-14	Passenger Door and Emergency Exits Upper Cover Plate	18 SEP 12
	MCDL-53-01	"Dog House" Closing Panel	18 SEP 12
	MCDL-53-02	Belly Fairing Sliding Panel	18 SEP 12
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	MCDL-78-12	Thrust Reverser Hinge Access Cover	22 JAN 14
	MCDL-78-13	Thrust Reverser Bavette Fairing	22 JAN 14
	MCDL-78-14	Thrust Reverser Door Actuator Pit Fairing	22 JAN 14
	MCDL-78-15	Thrust Reverser Pivot Door Access Panel	18 SEP 12
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	MCDL-78-17	Thrust Reverser Triangular Movable Panel	22 JAN 14
	MCDL-78-18	Common Nozzle Assembly Hoist Point Plug	18 SEP 12
	MCDL-78-19	Common Nozzle Assembly Pylon Fairing Trailing Edge	22 JAN 14
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⁽¹⁾ Evolution code: N=New, R=Revised, E=Effectivity, M=Moved

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R	PLP-LEDU		List of Effective Documentary Uni	ts		28 FEB 17
			• •	ved by 2	Airbus under the authori	ty of DOA ref.
	APPRO-HEAD		Heading Approbation A330-243F L	JS	00005052.0016002	04 MAY 10
	Approval reference: 20) 10 (i		ved by		
	Criteria: 330-243F	(т., •= . • .			
	Specific to: FAA					
i	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	APPRO-TR	Х	Towbarless operations		00017236.0001001	13 OCT 15
i	Approval reference: 10	00550	093 Appro	ved by	EASA	
	Criteria: A330			•		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR	Х	Landing distance determination in	n case	00015798.0001001	11 DEC 14
			of in-flight failure			
	Approval reference: 10	00516	S06 Appro	ved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR	Х	SATCOM Voice system		00010330.0003001	23 MAR 15
	Approval reference: 10	0052	695 Appro	ved by	ÉASA	
	***		0F or 330-300) and 200593)			
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR	Х	Autoland Databases with Honeyw ADIRU	ell	00014122.0003001	03 NOV 15
	Approval reference: 10			ved by		
		064	or 202164 or 202791 or 203869 or 20	3870 or	55346 or 56497 or 56609	or 56720 or
	58415))					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR		DISPLAY UNIT FAILURE		00014697.0001001	01 MAR 13
	Approval reference: 10		377 Appro	ved by	EASA	
	Criteria: (A330 and 200	,				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
$oxed{oxed}$	Impacted DU: NONE				1	
	APPRO-TR		Inertial Reference System (IRS)		00014739.0001001	16 JUL 15
	Approval reference: 10			ved by	EASA	
	Criteria: (A330 and (203		",			
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IVI`	Localization	I''	DU Title		DU identification	DU date
	APPRO-TR	Х	A330 MCDL 32.08 NOSE LANDING GEAR DOOR SEAL		00016169.0001001	03 JUN 15
	Approval reference: 10	0053	530 Approved	l by l	EASA	
	Criteria: A330					
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR	Х	Abnormal V Alpha Prot		00015959.0001001	08 MAY 15
	Approval reference: 10	0053	264 Approved	l by l	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR	Х	MCDL 55-01 Slidelip of the Apron		00015972.0001001	25 MAR 15
			Fairing Parts			
	Approval reference: 10	0052	741 Approved	l by l	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR		MCDL 23-01 Static Discharger		00016526.0001001	04 APR 16
	Approval reference: 10	0057	663 Approved	l by l	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	APPRO-TR		High-speed Tape Inspection for A330		00017264.0001001	22 MAR 16
	Approval reference: 10	0057	Approved	l by l	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE				1 00010707 0001001	00 4110 40
	APPRO-TR		Complementary Performance Data Fi		00019767.0001001	09 AUG 16
	Approval reference: 10 Criteria: A330	JUSSI	O75 Approved	ı by ı	EASA	
	Applicable to: MSN 13	CO 1	200 1420 1440 1524			
	Impacted DU: NONE	00, I	300, 1420, 1440, 1334			
	GEN-INTR		Introduction		00005876.0001001	11 OCT 16
	Approval reference: 10	JUEO.		l hv		1100116
	Criteria: A330	JUJ3	Approved	ı by I	LAUA	
	Applicable to: MSN 13	68 1	380 1428 1448 1534			
	GEN-DESC	50, 1	Approved AFM Format		00014235.0001001	19 JUN 13
	Approval reference: 10	1050. 		l hv		19 0011 13
	Criteria: A330	3003	Арріочес	ı Dy I	LAUA	
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	GEN-DESC		Customized AFM		00005878.0001001	26 NOV 09
	Approval reference: 10	059	726	Approved by	ÉASA	
	Criteria: A330					
	Applicable to: MSN 13					
	GEN-DESC		Organization of the Manua		00005879.0001001	26 NOV 09
	Approval reference: 10	059	726	Approved by	ÉASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	GEN-DESC		Documentary Unit (DU)		00005880.0001001	11 OCT 16
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13		<u> </u>			
	GEN-DESC		Identification Strip		00005881.0001002	18 NOV 13
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
Į	Specific to: FAA					
	Applicable to: MSN 13					
	GEN-DESC		Approval Information		00020276.0001001	11 OCT 16
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	<u> </u>			
	GEN-DESC		AFM Revision		00008475.0001001	11 OCT 16
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1			1	
	GEN-DESC	<u> </u>	Temporary Revision (TR)		00005882.0001001	11 OCT 16
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1			1	
	GEN-DEF		Warning Definition		00005883.0001001	26 NOV 09
	Approval reference: 10	JU59	726	Approved by	EASA	
	Criteria: A330	co 4	000 1400 1440 1504			
	Applicable to: MSN 13	68, I			1 00005004 0004004	00 1101/00
	GEN-DEF	DOEC.	Caution Definition	Annuared by	00005884.0001001	26 NOV 09
	Approval reference: 10 Criteria: A330	JUDY	120	Approved by	EASA	
	Applicable to: MSN 13	60 1	200 1420 1440 1524			
	GEN-DEF	<u> </u>			00005885.0001001	26 NOV 09
	GEN-DEF Approval reference: 10		Note Definition	Approved by	I .	20 110 109
	Criteria: A330	JU39	120	Approved by	LASA	
	Applicable to: MSN 13	6 <u>8</u> 1	380 1428 1448 1534			
	Applicable to: INISIN 13	υυ, I	000, 1720, 1770, 1304			



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	GEN-DEF	Ì	LAND ASAP Definition		00005211.0001001	25 JUL 14
	Approval reference: 1	0059	726	Approved by	ĖASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
R	GEN-ABB		Abbreviations		00009715.0001001	28 FEB 17
	Approval reference: L	R03E	17006026	Approved by EASA. 21J.03	Airbus under the authori	ty of DOA ref.
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	GEN-UNIT		Correspondence between	Units	00005886.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68 <u>,</u> 1				
	GEN-VIEW		3-View Drawing		00005209.0004001	28 NOV 16
	Approval reference: L	R00F	M1606155	Approved by EASA. 21J.03	Airbus under the authori	ty of DOA ref.
	Criteria: 330-200F					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-GEN		Introduction		00005442.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	ĖASA	
	Criteria: A330					
j i	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-GEN		Kind of Operations		00005446.0002001	16 APR 10
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: 330-200F					
i i	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-GEN		Minimum Flight Crew		00005447.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-GEN		Maximum Operating Altitud	de	00005448.0002001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: (A330 and 525	36)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-GEN		Maneuver Limit Load Facto	ors	00005449.0001001	25 JUL 14
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-GEN		Icing Conditions Definition	l	00005140.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					the fellowine was



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 13	368, 13	80, 1428, 1448, 1534			•
	LIM-GEN		Carriage of occupants in c	ourier area	00009979.0001002	23 MAR 11
	Approval reference: 1	005972	26	Approved by	EASA	,
	Criteria: 330-200F					
	Specific to: FAA					
	Applicable to: MSN 13	368, 13	80, 1428, 1448, 1534			
	LIM-WGHT		Weight Limitations		00005162.0066001	25 JUL 14
	Approval reference: 1			Approved by E	EASA	
	Criteria: ((330-223F or		, ,			
	Applicable to: MSN 13		, , , , , , , , , , , , , , , , , , ,			
	LIM-WGHT		Center of Gravity Envelope		00005141.0157001	25 JUL 14
	Approval reference: 1			Approved by E	EASA	
<u> </u>			89) or (330-243F and 20098	9))		
	Applicable to: MSN 13		<u>, , , , , , , , , , , , , , , , , , , </u>			
	LIM-WGHT		Performance Limitations		00005683.0001001	26 NOV 09
	Approval reference: 1	005972	26	Approved by E	EASA	
<u> </u>	Criteria: A330					
	Applicable to: MSN 13	368, 13	80, 1428, 1448, 1534			
	LIM-WGHT	ון	Loading		00005684.0001001	26 NOV 09
	Approval reference: 1	005972	26	Approved by E	EASA	
	Criteria: A330					
	Applicable to: MSN 13					
	LIM-SPD		VMO/MMO		00006064.0001001	26 NOV 09
	Approval reference: 1	005972	26	Approved by E	EASA	
	Criteria: A330					
	Applicable to: MSN 13	_ _	· · · · ·			
	LIM-SPD		VA		00008345.0001001	16 APR 10
	Approval reference: 1			Approved by I	EASA	
	Criteria: (330-200 or 33					
$oxed{oxed}$	Applicable to: MSN 13					
	LIM-SPD		VFE		00005224.0001001	26 NOV 09
	Approval reference: 1	005972	26	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13					
	LIM-SPD		VLO/MLO and VLE/MLE		00005241.0001001	26 NOV 09
	Approval reference: 1	005972	26	Approved by E	EASA	
	Criteria: A330					
	Applicable to: MSN 13					
	LIM-OPS		Environmental Envelope		00005456.0003001	28 FEB 11
	Approval reference: 1	005972	26	Approved by I	EASA	

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date				
	Criteria: ((330-301 or 33	30-32	1 or 330-322 or 330-323 or 33	0-341 or 330-34	12 or 330-343 or 330-200 o	r 330-200F)				
	and 52536)									
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	LIM-OPS		Crosswind		00005967.0001001	16 APR 10				
	Approval reference: 1			Approved by	EASA					
	`		BF or 330-341 or 330-342 or 3	30-343)						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	LIM-OPS		Tailwind		00005458.0001001	26 NOV 09				
	Approval reference: 1	0059	726	Approved by	EASA					
	Criteria: A330									
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	LIM-OPS		Runway Slope		00005460.0001001	26 NOV 09				
	Approval reference: 1	0059	726	Approved by	EASA					
	Criteria: A330									
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	LIM-09		Maneuvers on Ground		00005491.0002001	16 APR 10				
	Approval reference: 1	0059	726	Approved by	ĖASA '					
	Criteria: ((330-302 or 33	30-30	3 or 330-323 or 330-342 or 33	0-343 or 330-20	00 or 330-200F) and (4302	9 and 47701))				
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	LIM-09	Х	Towbarless Operations		00017235.0001001	13 OCT 15				
	Approval reference: 1	0055	093	Approved by	ĖASA '					
	Criteria: A330									
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	Impacted DU: 0000549	3 Тои	vbarless Operations							
	LIM-09		Towbarless Operations		00005493.0001001	28 FEB 11				
	Approval reference: 1	0059	726	Approved by	ĖASA					
	Criteria: A330									
l	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	Impacted by TDU: 0001	17235	Towbarless Operations							
	LIM-21		Cabin Pressurization		00005486.0002001	16 APR 10				
	Approval reference: 1			Approved by						
	Criteria: ((330-301 or 33	30-30	2 or 330-303 or 330-323 or 33	0-342 or 330-34	13 or 330-200 or 330-200F) and 48980)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	LIM-22-FMS		General		00008415.0002001	19 JUN 13				
	Approval reference: 1	0059	726	Approved by	EASA					
	Criteria: (A330 and (443	308 o	r 44339 or 46572 or 46893))							
	Applicable to: MSN 13									
	LIM-22-FMS		Airworthiness Standard Co	mpliance	00008416.0006001	25 JUL 14				
	Approval reference: 1			Approved by						
	' ''		or 48766 or 57320 or 57910) a	nd (44308 or 44	1339 or 46572 or 46893)))					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date				
	LIM-22-FMS		Navigation Performance		00008417.0010001	19 JUN 13				
	Approval reference: 1		726	Approved by I	ÉASA					
	Criteria: (A330 and 200	624)								
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534							
	LIM-22-FMS		Use of NAV Mode		00008428.0002001	19 JUN 13				
	Approval reference: 1			Approved by I	EASA					
	, ,		r 44339 or 46572 or 46893))							
$oxed{oxed}$	Applicable to: MSN 13	368, 1								
	LIM-22-FMS	<u> </u>	Approaches		00008429.0006001	19 JUN 13				
	Approval reference: 1			Approved by I		- (200)\\\				
	, ,,		or 44339 or 46572 or 46893) a	and (4/45/ or 4/	'462 or 48/65 or 48/66 or	54096)))				
	Applicable to: MSN 13	368, 1			00000710 0001000	10 110) / 10				
	LIM-22-FGS	0050	Airworthiness Standard Co		00008719.0001002	18 NOV 13				
	Approval reference: 10059726 Approved by EASA									
	Criteria: A330									
	Specific to: FAA Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	LIM-22-FGS		Autoland Databases with I	Janariirali	00009353.0007001	03 NOV 15				
	LIIVI-22-FGS	Х	ADIRU	ioneyweii	00009353.0007001	03 NOV 15				
	Approval reference: 1	0055]	Approved by I	 					
			or 202164 or 202791 or 2038			or 56720 or				
	58415))		0. 202.10.10.1202.10.10.1200			0. 007 20 0.				
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534							
	Impacted DU: NONE	,	, , ,							
	LIM-22-FGS		Autoland		00008419.0006001	19 JUN 13				
i	Approval reference: 1	0059	726	Approved by I	EASA					
	Criteria: (330-200F and	l (575	45 or 57547))	,						
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534							
	LIM-22-FGS		Minimum Height for Use o	f the Autopilot	00008423.0001001	26 NOV 09				
	Approval reference: 1	0059	726	Approved by I	EASA					
	Criteria: A330									
	Applicable to: MSN 13	368, 1								
	LIM-22-FGS		CAT II / CAT III Operations		00008425.0001001	26 NOV 09				
	Approval reference: 1	0059	726	Approved by I	EASA					
	Criteria: A330									
$oxed{oxed}$	Applicable to: MSN 13									
	LIM-23		SATCOM Voice system		00010328.0003001	23 MAR 15				
	Approval reference: 1			Approved by I	EASA					
	***		0F or 330-300) and 200593)							
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534							
	Impacted DU: NONE									

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
141	LIM-23	Ŀ	SATCOM Voice system		00014205.0001001	19 JUN 13
	Approval reference: 10	00E0.		Approved by		19 0011 13
	Criteria: (A330 and 200		120	Approved by	EAGA	
ł	Applicable to: MSN 13		280 1/28 1//8 153/			
	LIM-28	00, 1	Fuel and Additive Specification	tions	00005472.0003001	19 JUN 13
	Approval reference: 10	00E0.		Approved by		19 3011 13
			3F or 330-341 or 330-342 or 3		EAJA	
-	Applicable to: MSN 13			30-343)		
	LIM-28	00, 1			00005474.0003001	26 NOV 09
	LIM-20 Approval reference: 10	00E0	Usable Fuel	Approved by		20 110 109
			6) or (330-200F and 58623))	Approved by	EASA	
	Applicable to: MSN 13		, ,			
	LIM-28	00, 1			00005479 0000001	16 ADD 10
	LIM-28 Approval reference: 10	JOEC.	Fuel Imbalance	Approved by	00005478.0002001	16 APR 10
	Criteria: 330-200F	JUSS	720	Approved by	EAJA	
1	Applicable to: MSN 13	6Q 1	280 1/28 1//8 153/			
	LIM-28	00, 1	Fuel Temperature Limits		00005480.0003001	28 FEB 11
	LIM-20 Approval reference: 10) 		Approved by		20 FED 11
			7 26 3F or 330-341 or 330-342 or 3		EASA	
	Applicable to: MSN 13			30-343)		
	LIM-29	00, 1	Hvdraulic Fluid		00005489.0001001	26 NOV 09
	Approval reference: 10	00E0.		Approved by		20 110 09
	Criteria: A330	0059	120	Approved by	EASA	
	Applicable to: MSN 13	6Q 1	280 1/28 1//8 153/			
	LIM-32	00, 1	Tire Speed		00010874.0001001	02 JUL 10
	Approval reference: 10	00E0.		Approved by		02 JUL 10
	Criteria: A330	0039	120	Approved by	EAGA	
ł	Applicable to: MSN 13	6Q 1	280 1/28 1//8 153/			
	<u> </u>		Inertial Reference System	IDC)	00014738.0002001	16 JUL 15
	LIMI-34 Approval reference: 10			Approved by		10 JUL 13
	Criteria: (A330 and (203			Approved by	LAUA	
1	Applicable to: MSN 13					
l	,		rtial Reference System (IRS)			
	LIM-34	11101	Inertial Reference System	(IDC)	00005500.0002001	26 NOV 09
	Approval reference: 10	1050.		Approved by		20100109
	Criteria: (A330 and (510			Approved by	LAUA	
l	Applicable to: MSN 13		"			
			B Inertial Reference System (II	3.5)		
	LIM-34	,, 50	Reduced Vertical Separation	,	00005496.0001001	26 NOV 09
	LIIVI-04		(RVSM)	ni wiiiiiiiiiiiii	00000430.0001001	20110109
	Approval reference: 10	1 1050:	,	Approved by	FΔSΔ	
	Approval relevence. It	0000		Approved by	LAUA	



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: (A330 and 435	,				
	Applicable to: MSN 13	68 <u>,</u> 1	<u>, , , , , , , , , , , , , , , , , , , </u>			
	LIM-34		Mode S - EHS Enhanced Surveilla	ance	00005504.0001001	26 NOV 09
	Approval reference: 1	0059	726 Appro	oved by E	EASA	
	Criteria: (A330 and 542					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-46		FANS - ATC Datalink Application		00005509.0006001	19 JUN 13
			System			
	Approval reference: 1			oved by E	EASA	
	'		and 200860 and 52426))			
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-49		Auxiliary Power Unit (APU)		00005485.0001001	26 NOV 09
	Approval reference: 1	0059	726 Appro	oved by E	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-70		Main Engines		00005464.0009001	16 APR 10
	Approval reference: 1	0059	726 Appro	oved by E	EASA	
	Criteria: (330-243 or 33	0-243	F or 330-343)			
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-70		Engine Parameters		00005465.0003001	16 APR 10
	Approval reference: 1	0059	726 Appro	oved by E	EASA	
			3F or 330-341 or 330-342 or 330-343)		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-70		Crosswind		00005461.0001001	16 APR 10
	Approval reference: 1			oved by E	EASA	
	,		3F or 330-341 or 330-342 or 330-343)		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-70		Reverse Thrust		00005466.0001001	26 NOV 09
	Approval reference: 1	0059	726 Appro	oved by E	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	LIM-70		Oil		00005467.0003001	16 APR 10
	Approval reference: 1			oved by E	EASA	
	\ \ \		3F or 330-341 or 330-342 or 330-343)		
	Applicable to: MSN 13	68, 1				
	LIM-70		Reduced Thrust Takeoff		00005468.0007001	16 APR 10
	Approval reference: 1			oved by E	EASA	
			3F or 330-343) and 55212)			
	Applicable to: MSN 13	68, 1				
	LIM-70		Operations in Icing Conditions		00005469.0001001	26 NOV 09
	Approval reference: 1	0059	726 Appro	oved by E		
					Continued on	the following pa



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	EMER-GEN		Introduction		00005704.0001001	19 JUN 13
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	÷				
	EMER-GEN	X	Landing Distance Determine of In-flight Failure		00014413.0002001	11 DEC 14
	Approval reference: 1	0051	606	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE					
	EMER-GEN		Landing Distance Determin	nation in case	00014576.0001001	19 JUN 13
			of In-Flight Failure			
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330		000 4400 4440 4504			
	Applicable to: MSN 13				00005705 0004004	00 NOV 00
	EMER-GEN		FIRE/SMOKE	Ammunum d bus	00005705.0001001	26 NOV 09
	Approval reference: 10 Criteria: A330	0059	720	Approved by I	EASA	
	Applicable to: MSN 13	68 1	280 1/28 1//8 153/			
	EMER-21	100, 1	CAB PR - EXCESS CAB AL	т	00005759.0004001	19 JUN 13
	Approval reference: 1	UUZO.		Approved by E		19 0011 13
	Criteria: 330-200F	0033	120	Approved by I	-AUA	
E	Applicable to: MSN 14	48. 1	534			
N	EMER-21	,	CAB PR - EXCESS CAB AL	Т	00005759.0007001	05 JAN 17
i ''	Approval reference: G	01M			Airbus under the authori	-
				EASA. 21J.031		,
	Criteria: (330-200F and	2044	49)			
i	Applicable to: MSN 13	68, 1	380, 1428			
	EMER-21		CAB PR - EXCESS RESIDU	IAL PR	00008430.0002001	16 APR 10
i	Approval reference: 1	0059	726	Approved by I	ASA	
	Criteria: 330-200F					
	Applicable to: MSN 13					
	EMER-24		ELEC - EMER CONFIG		00005218.0002001	20 DEC 16
	Approval reference: G	01M	16014101	Approved by A EASA. 21J.031	Airbus under the authori	ty of DOA ref.
	Criteria: (A330 and 479	30)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	EMER-26		ENG FIRE (In Flight)		00005711.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
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$\mathbf{M}^{(1)}$	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	EMER-26		ENG FIRE (On Ground)		00005712.0005001	16 APR 10
	Approval reference: 10	0059	726	Approved by	ĖASA	
	Criteria: 330-200F					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	EMER-26		APU FIRE		00005713.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by	ĖASA	•
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	EMER-26		SMOKE - LD FWD, LD AFT	or BULK	00014238.0001001	19 JUN 13
			SMOKE			
	Approval reference: 10			Approved by	EASA	
	Criteria: (330-200F and		,			
	Applicable to: MSN 13		<u>, , , , , , , , , , , , , , , , , , , </u>			
	EMER-26		SMOKE - MD SMOKE		00014239.0001001	19 JUN 13
	Approval reference: 10			Approved by	EASA	
	Criteria: (330-200F and					
	Applicable to: MSN 13					
	EMER-26		SMOKE - AVNCS VENT SM		00005716.0002001	25 JUL 14
	Approval reference: 10			Approved by	EASA	
	Criteria: (330-200F and					
	Applicable to: MSN 13					
	EMER-26		SMOKE - LAVATORY SMO		00008422.0002001	16 APR 10
	Approval reference: 10	0059	/26	Approved by	EASA	
	Criteria: 330-200F	CO 1	200 1400 1440 1524			
	Applicable to: MSN 13			7	00040005 0004004	40 ADD 40
	EMER-26		SMOKE - STOWAGE SMOK		00010225.0001001	16 APR 10
	Approval reference: 10 Criteria: 330-200F	บบอย	720	Approved by	EASA	
	Applicable to: MSN 13	60 1	200 1/20 1//0 152/			
	EMER-26		SMOKE/FUMES/AVNCS/MD	CMOKE	00014240.0001001	19 JUN 13
	Approval reference: 10			Approved by		19 0014 13
	Criteria: (330-200F and			Approved by	LAUA	
	Applicable to: MSN 13		,			
R	EMER-26	1	REMOVAL OF SMOKE/FUN	IFS	00005219.0003001	28 FEB 17
11	Approval reference: L	I В03Г			Airbus under the authori	
	Approvation of officer L		1100000	EASA. 21J.03		., or bon 101.
	Criteria: (330-200F and	2005	590)		•	
	Applicable to: MSN 13		,			
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	EMER-27		F/CTL - FLAP LVR NOT ZE	RO	00005757.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	EMER-27		F/CTL - L+R ELEV FAULT		00005758.0001001	19 JUN 13
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	EMER-28		FUEL - EXCESS AFT CG		00005756.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	<u>, , , , , , , , , , , , , , , , , , , </u>			
	EMER-29		HYD - G+B SYS LO PR		00005726.0001001	19 JUN 13
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	EMER-29		HYD - B+Y SYS LO PR		00005727.0001001	19 JUN 13
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	EMER-29		HYD - G+Y SYS LO PR		00005728.0001001	19 JUN 13
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
E	Applicable to: MSN 14	48, 1				
N	EMER-29		HYD - G+Y SYS LO PR		00005728.0004001	05 JAN 17
	Approval reference: G	01M	16014405		Airbus under the authori	ty of DOA ref.
				EASA. 21J.03		
	Criteria: (A330 and 204					
	Applicable to: MSN 13	68, 1				
	EMER-32		L/G - GEAR NOT DOWNLO		00005725.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
_	Criteria: A330					
E	Applicable to: MSN 14	48, 1				
N	EMER-32		L/G - GEAR NOT DOWNLO		00005725.0002001	05 JAN 17
	Approval reference: G		16014405	Approved by A EASA. 21J.03	Airbus under the authori	ty of DOA ref.
	Criteria: (A330 and 204	,				
	Applicable to: MSN 13	68 <u>,</u> 1	380, 1428			
	EMER-32		LOSS OF BRAKING		00009839.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
-	Applicable to: MSN 13				20 100111110011011	20 44.0
	EMER-34		Abnormal V Alpha Prot		00015960.0001001	08 MAY 15
	Approval reference: 10			Approved by		00 1117 11 10
	Criteria: A330		•••			
i	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE	•	, , ,			
N	EMER-70		ENG - ALL ENGINES FAILU	IRE	00020344.0004001	05 JAN 17
	Approval reference: G	01M1	6014405	Approved by	Airbus under the authori	ty of DOA ref.
				EASA. 21J.03	1	
	Criteria: (330-200F and		,			
	Applicable to: MSN 13	68, 1	380, 1428			
	EMER-70		ENG - ALL ENG FLAME OU	IT	00005706.0002001	16 APR 10
	Approval reference: 10	00597	726	Approved by	ÉASA	
	Criteria: 330-200F					
E	Applicable to: MSN 14	48, 1				
	EMER-70		ENG - N1 (N2) (N3) OVERLI		00005707.0003001	16 APR 10
	Approval reference: 10			Approved by	EASA	
	· '		F or 330-341 or 330-342 or 33	30-343)		
	Applicable to: MSN 13					
	EMER-70		ENG - TURBINE OVHT		00005708.0001001	16 APR 10
	Approval reference: 10			Approved by	EASA	
			F or 330-341 or 330-342 or 33	30-343)		
	Applicable to: MSN 13					1
	EMER-70		ENG - OIL LO PR		00005710.0002001	02 JUL 10
	Approval reference: 10		726	Approved by	EASA	
	Criteria: (A330 and 5875		200 1400 1440 1504			
	Applicable to: MSN 13				1 00005000 0000001	00 DEO 10
	EMER-90		EMER DESCENT	A	00005222.0002001	20 DEC 16
	Approval reference: G	UTIVIT	6014101	EASA. 21J.03	Airbus under the authori	ty of DOA ref.
	Criteria: 330-200F			EASA. 213.03		
ŀ	Applicable to: MSN 13	68 1:	380 1428 1448 1534			
	FMFR-90	55, 1	DITCHING		00005215.0005001	19 JUN 13
	Approval reference: 10	1 10597		Approved by		13 0011 10
	Criteria: 330-200F	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Approved by	LAVA	
E	Applicable to: MSN 14	48. 1	534			
N	EMER-90		DITCHING		00005215.0008001	05 JAN 17
.,	Approval reference: G	01M1		Approved by	Airbus under the authori	
		- 1 1.61 1		EASA. 21J.03		., ., ., ., ., ., ., ., ., ., ., ., ., .
	Criteria: (330-200F and	2044	49)	21.11.21.31.00		
	Applicable to: MSN 13		,			
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date			
	EMER-90		FORCED LANDING		00005213.0005001	19 JUN 13			
	Approval reference: 1	0059	726	Approved by	ËASA				
	Criteria: 330-200F								
E	Applicable to: MSN 14	48, 1	534						
N	EMER-90		FORCED LANDING		00005213.0008001	05 JAN 17			
	Approval reference: G	01M	16014405	Approved by	Airbus under the authori	ty of DOA ref.			
				EASA. 21J.03	1				
	Criteria: (330-200F and								
	Applicable to: MSN 13	68, 1	380, 1428						
	EMER-90		EMERGENCY EVACUATION		00005796.0004001	16 APR 10			
	Approval reference: 1	0059	726	Approved by	EASA				
	Criteria: 330-200F								
	Applicable to: MSN 13	68, 1							
	EMER-90		STALL RECOVERY		00013149.0001001	28 FEB 11			
	Approval reference: 1	0059	726	Approved by	EASA				
	Criteria: A330								
	Applicable to: MSN 13								
	ABN-GEN		Introduction		00008347.0001001	19 JUN 13			
	Approval reference: 1	0059	726	Approved by	EASA				
ļ	Criteria: A330								
	Applicable to: MSN 13	—	<u> </u>						
	ABN-GEN	Х	Landing Distance Determin	ation in case	00014414.0002001	11 DEC 14			
		<u> </u>	of In-Flight Failure		<u> </u>				
	Approval reference: 1	0051	606	Approved by	EASA				
	Criteria: A330	1	000 1400 1440 1504						
	Applicable to: MSN 13	108, I	380, 1428, 1448, 1534						
_	Impacted DU: NONE		I and a Distance Date and		00044577 0004004	40 1111140			
	ABN-GEN		Landing Distance Determin	lation in case	00014577.0001001	19 JUN 13			
	Ammunual vafavaman, 1	00E0.	of In-Flight Failure	Ammunuad bu	 				
	Approval reference: 1 Criteria: A330	0059	726	Approved by	EASA				
l	Applicable to: MSN 13	60 1	200 1/20 1//0 152/						
	ABN-OEI-TO	100, 1	Engine Failure before V1 (F	Deiested	00005371.0001001	26 NOV 09			
	ADIN-UEI-1U		Takeoff)	rejected	00005371.0001001	20 110 0 09			
	Approval reference: 1	UUZO.	,	Approved by	 Fasa				
	Criteria: A330	5005		rippioted by					
	Applicable to: MSN 13	68. 1	380, 1428, 1448, 1534						
	ABN-OEI-TO	, .	Engine Failure between V1	and V2	00005121.0001001	25 JUL 14			
	Approval reference: 1	0059		Approved by		20002 11			
	• •		or 330-301 or 330-341 or 330		-				
	Applicable to: MSN 13			,,					
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	ABN-OEI-TO		Engine Failure during Initia	I Climb Out	00005372.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	•
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	ABN-OEI-LDG		Approach and Landing		00005374.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	ABN-OEI-LDG		Missed Approach (from Int	ermediate	00005375.0001001	26 NOV 09
			Approach Configuration)			
	Approval reference: 10	0059	726	Approved by I	EASA	
ļ	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	ABN-OEI-LDG		Balked Landing		00005377.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
<u> </u>	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	ABN-21		AIR - PACK 1 + 2 FAULT		00005691.0001001	28 FEB 11
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330					
Е	Applicable to: MSN 14	48, 1				
N	ABN-21		AIR - PACK 1 + 2 FAULT		00005691.0002001	09 JAN 17
	Approval reference: 10			Approved by I	EASA	
			17) or (A330 and 204449))			
	Applicable to: MSN 13	68, 1				
	ABN-21		VENT - OVBD VALVE FAUI		00005692.0001001	28 FEB 11
	Approval reference: 10	0059	726	Approved by I	EASA	
_	Criteria: A330					
Е	Applicable to: MSN 14	48, 1				
N	ABN-21	<u> </u>	VENT - OVBD VALVE FAUI		00005692.0002001	09 JAN 17
	Approval reference: 10			Approved by I	EASA	
			17) or (A330 and 204449))			
	Applicable to: MSN 13	68, 1				
	ABN-21	<u> </u>	VENT - BLOWING FAULT		00005693.0002001	26 NOV 09
	Approval reference: 10		/26	Approved by I	EASA	
	Criteria: (A330 and 567)	,	000 4400 4440 4504			
	Applicable to: MSN 13	68, 1				
	ABN-21		CAB PR - SYS 1 + 2 FAULT		00005137.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330		000 4400 4440 4504			
l	Applicable to: MSN 13	168, 1	380, 1428, 1448, 1534			



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date			
	ABN-21		CAB PR - SAFETY VALVE (OPEN	00005694.0003001	26 NOV 09			
	Approval reference: 10059726 Approved by EASA								
	Criteria: (A330 and (565	51 o	r 56729))						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534						
	ABN-22-AUTOFLT		AUTO FLT - FM 1+2 FAULT		00005414.0001001	26 NOV 09			
	Approval reference: 10	0059	726	Approved by I	ASA				
	Criteria: A330								
	Applicable to: MSN 13	68, 1							
	ABN-22-CATII		Multiple Failures or Warnin	• • •	00008350.0001001	26 NOV 09			
	Approval reference: 10	0059	726	Approved by I	EASA				
ļ	Criteria: A330								
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534								
	ABN-22-CATII		Altitude Loss with Autopilo	t Malfunction	00009853.0001001	26 NOV 09			
			(CAT II)						
	Approval reference: 10059726 Approved by EASA								
ļ	Criteria: A330								
	Applicable to: MSN 13	68, 1							
	ABN-22-CATII		Failure Leading to Slats/Fla	ps less than	00008352.0001001	26 NOV 09			
		<u> </u>	CONF 3 (CAT II)						
	Approval reference: 10	0059	726	Approved by I	EASA				
	Criteria: A330	^ 4	000 4400 4440 4504						
	Applicable to: MSN 13	68, 1				00.1/01/00			
	ABN-22-CATII		Antiskid System and/or No	sewheel	00008353.0001001	26 NOV 09			
	Ammunual mafamaman di		Steering Failure (CAT II)	Ammuna d has f					
	Approval reference: 10	JU59	/26	Approved by I	EASA				
	Criteria: A330	CO 1	200 1400 1440 1524						
	Applicable to: MSN 13	00, I		T II\	00000054 0001004	06 NOV 00			
	ABN-22-CATII Approval reference: 10	0050	Alpha Floor Activation (CA	Approved by E	00008354.0001001	26 NOV 09			
	Criteria: A330	JU39	120	Approved by I	EASA				
	Applicable to: MSN 13	6Q 1	380 1/28 1//8 153/						
	ABN-22-CATII	UO, I	One Engine Failure (CAT II)		00008355.0001001	26 NOV 09			
	Approval reference: 10) 	, ,	Approved by I		20 110 1 09			
	Criteria: A330	0003	120	Approved by I	LAUA				
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534								
	ABN-22-CATII	55, 1	Red "RA" on two PFDs (CA	T II)	00008356,0001001	26 NOV 09			
	Approval reference: 10	1 1050		Approved by I		20110103			
	Criteria: A330	0000	I EU	Approved by I	-nun				
	Applicable to: MSN 13	68 1	380 1428 1448 1534						
	Applicable to: IIIOII 10	50, 1	000, 1720, 1770, 1007						

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	1	DU data			
IVI			DU Title	DU identification	DU date			
	ABN-22-CATII		Amber "CHECK ATT" on two PFDs (CAT II)	00008357.0001001	26 NOV 09			
	Approval reference: 1		•	EASA				
	Criteria: A330							
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534							
	ABN-22-CATII		Red "ATT" on one PFD (CAT II)	00008358.0001001	26 NOV 09			
	Approval reference: 1	00597	26 Approved by	ĖASA				
	Criteria: A330							
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534							
	ABN-22-CATII		Diagonal Line or "INVALID DATA" on	00008359.0001001	26 NOV 09			
			one PFD and ND (CAT II)					
	Approval reference: 10059726 Approved by EASA							
	Criteria: A330							
$oxed{}$	Applicable to: MSN 13			1				
	ABN-22-CATII		Amber "CHECK HDG" on two NDs and	00008360.0001001	26 NOV 09			
			two PFDs (CAT II)					
	Approval reference: 1	00597	26 Approved by	EASA				
	Criteria: A330	200 10	000 1400 1440 1504					
_	Applicable to: MSN 13		Red "HDG" on one ND and one PFD	00000001 0001001	00 NOV 00			
	ABN-22-CATII		(CAT II)	00008361.0001001	26 NOV 09			
	Annroyal reference: 1		` ,	 EACA				
	Approval reference: 10059726 Approved by EASA Criteria: A330							
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534							
	ABN-22-CATII		Red "SPD" on one PFD (CAT II)	00008362.0001001	26 NOV 09			
	Approval reference: 1				201101 00			
	Criteria: A330							
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534							
	ABN-22-CATII	ΤÍ	"AP OFF" Warnings (CAT II)	00008363.0001001	26 NOV 09			
	Approval reference: 1							
	Criteria: A330		., ,					
İ	Applicable to: MSN 13	368, 13	380, 1428, 1448, 1534					
	ABN-22-CATII		Loss of "CAT II" (CAT II)	00008351.0001001	26 NOV 09			
	Approval reference: 1	00597	26 Approved by	ĖASA				
	Criteria: A330							
	Applicable to: MSN 13							
	ABN-22-CATII		LOC or G/S Excessive Deviation on PFD (CAT II)	00008364.0001001	26 NOV 09			
	Approval reference: 1	00597	26 Approved by	EASA				
	Criteria: A330							
	Applicable to: MSN 13	368, <u>1</u> 3	380, 1428, 1448, 1534					
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M ⁽¹⁾	Localization	T ⁽²⁾			DU identification	DU date	
	ABN-22-CATII		"AUTOLAND" Light (CAT II)	00008365.0001001	26 NOV 09	
	Approval reference: 1	0059	726	Approved by	EASA		
	Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATII		A/THR Fault (CAT II)		00008366.0001001	26 NOV 09	
	Approval reference: 1	0059	726	Approved by	EASA		
	Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATII		No "LAND" at 350 ft (CAT I	l)	00008367.0001001	26 NOV 09	
	Approval reference: 1	0059	726	Approved by I	EASA		
	Criteria: A330						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	ABN-22-CATII		Incorrect Selected Course	at 350 ft > 5	00008368.0001001	26 NOV 09	
			deg (CAT II)				
	Approval reference: 1	0059	726	Approved by I	EASA		
	Criteria: A330						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	ABN-22-CATII		No "FLARE" at 30 ft (CAT I	l)	00008369.0001001	19 JUN 13	
	Approval reference: 1	0059	726	Approved by I	EASA		
	Criteria: A330						
	Applicable to: MSN 13	68, 1					
	ABN-22-CATIIIDH		Multiple Failures or Warnin	gs (CAT III	00008370.0001001	26 NOV 09	
			DH)				
	Approval reference: 1	0059	726	Approved by I	EASA		
ļ	Criteria: A330 Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH		Failure Leading SLATS/FLA	APS less than	00008371.0001001	26 NOV 09	
			CONF 3 (CAT III DH)				
	Approval reference: 1	0059	726	Approved by I	EASA		
	Criteria: A330						
	Applicable to: MSN 13	68, 1					
	ABN-22-CATIIIDH		Nosewheel Steering Failure			26 NOV 09	
	Approval reference: 1	0059	726	Approved by I	EASA		
	Criteria: A330						
	Applicable to: MSN 13					1	
	ABN-22-CATIIIDH		Antiskid Failure (CAT III Di	•	00008372.0001001	26 NOV 09	
	Approval reference: 1	0059	726	Approved by I	EASA		
	Criteria: A330						
	Applicable to: MSN 13	68, 1				1	
	ABN-22-CATIIIDH		Alpha Floor Activation (CA		00008374.0001001	26 NOV 09	
	Approval reference: 1	U059	726	Approved by I	EASA	the entre line and a second	



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date	
	Criteria: A330						
$oxed{oxed}$	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH		One Engine Failure (CAT III DH)		00008375.0001001	26 NOV 09	
	Approval reference: 1	0059	726 Approve	d by	EASA		
	Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH		Autocallout RA Failure (CAT III DH)		00008376.0001001	26 NOV 09	
	Approval reference: 10059726 Approved by EASA						
	Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH		Red "RA" Flag (Radio Altimeter) on t	wo	00008377.0001001	26 NOV 09	
	Ammunual mafamamana 4	 	PFDs (CAT III DH)	d la	 		
	Approval reference: 1 Criteria: A330	0059	726 Approve	ו עס ג	EASA		
	•	060 1	200 1420 1440 1524				
	Applicable to: MSN 13 ABN-22-CATIIIDH	1		·D-	00000070 0001001	00 NOV 00	
	ABN-22-CATIIIDH		Amber "CHECK ATT" Flag on two PF	·DS	00008378.0001001	26 NOV 09	
	Approval reference: 1	0020. 	(CAT III DH) 726 Approve	hu	 EAGA		
	Criteria: A330	0033	Approved	ı by	EAGA		
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH	1	Red "ATT" Flag on one PFD (CAT III	UII)	00008379.0001001	26 NOV 09	
	Approval reference: 1	UUZO.				20 110 0 03	
	Approval reference: 10059726 Approved by EASA Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH	ŕ	Amber "CHECK HDG" on two NDs ar	nd	00008380.0001001	26 NOV 09	
			on two PFDs (CAT III DH)				
	Approval reference: 1	0059		d by	ĖASA		
	Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH		Red "HDG" Flag on one ND and one	PFD	00008383.0001001	26 NOV 09	
			(CAT III DH)				
	Approval reference: 1	0059	726 Approve	d by	ĖASA		
	Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH		Red "SPD" Flag on one PFD (CAT III			26 NOV 09	
	Approval reference: 1	0059	726 Approve	by l	EASA		
	Criteria: A330						
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	ABN-22-CATIIIDH		"AP OFF" Warnings (CAT III DH)		00008385.0001001	26 NOV 09	
	Approval reference: 1	0059	726 Approve	by l	EASA		
	Criteria: A330				O-ntineed		



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534			
	ABN-22-CATIIIDH		Capability Decrease (exce	ot if due to	00008386.0001001	26 NOV 09
			A/THR loss) (CAT III DH).			
	Approval reference: 1	0059	726	Approved by I	ASA	
	Criteria: A330					
		368, 1	380, 1428, 1448, 1534			
	ABN-22-CATIIIDH		Total loss of A/THR ("CAT	III" decreases	00008387.0001001	26 NOV 09
			to "CAT II") (CAT III DH)			
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
		368, 1	380, 1428, 1448, 1534			
	ABN-22-CATIIIDH		LOC or G/S Excessive Dev	iation on PFD	00008388.0001001	26 NOV 09
			(CAT III DH)			
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
			380, 1428, 1448, 1534			
	ABN-22-CATIIIDH		"AUTOLAND" Light (CAT I		00008389.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13		380, 1428, 1448, 1534			
	ABN-22-CATIIIDH		No "LAND" at 350 ft (CAT		00008390.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534			
	ABN-22-CATIIIDH		Incorrect Selected Course	at 350 ft > 5	00008391.0001001	26 NOV 09
			deg (CAT III DH)			
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13		<u>, , , , , , , , , , , , , , , , , , , </u>			
	ABN-22-CATIIIDH		No "FLARE" at 30ft (CAT II	,	00008392.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
		368, 1	380, 1428, 1448, 1534			
	ABN-22-CATIIInoDH		Multiple Failures or Warnin	ngs (CAT III no	00008395.0001001	26 NOV 09
			DH)			
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
		368, 1	380, 1428, 1448, 1534			
	ABN-22-CATIIInoDH		Failure Leading SLATS/FL	APS less than	00008393.0001001	26 NOV 09
			CONF 3 (CAT III no DH)			
	Approval reference: 1	0059	726	Approved by I	EASA	



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date			
	Criteria: A330				•				
İ	Applicable to: MSN 1368, 1380, 1428, 1448, 1534								
	ABN-22-CATIIInoDH		Nosewheel Steering Failure (CAT II	l no	00008396.0001001	26 NOV 09			
			DH)						
	Approval reference: 1	0059	726 Approv	ed by	EASA				
	Criteria: A330								
	Applicable to: MSN 13								
	ABN-22-CATIIInoDH		Antiskid Failure (CAT III no DH)		00008397.0001001	26 NOV 09			
	Approval reference: 1	0059	726 Approv	ed by	EASA				
	Criteria: A330								
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534						
	ABN-22-CATIIInoDH		Alpha Floor Activation (CAT III no I		00008398.0001001	26 NOV 09			
	Approval reference: 1	0059	726 Approv	ed by	EASA				
	Criteria: A330								
	Applicable to: MSN 13								
	ABN-22-CATIIInoDH		One Engine Failure (CAT III no DH)		00008399.0001001	26 NOV 09			
	Approval reference: 1	0059	726 Approv	ed by	EASA				
	Criteria: A330								
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534						
	ABN-22-CATIIInoDH		Autocallout RA Failure (CAT III no I	DH)	00008400.0001001	26 NOV 09			
	Approval reference: 1	0059	726 Approv	ed by	EASA				
	Criteria: A330								
	Applicable to: MSN 13	868, 1							
	ABN-22-CATIIInoDH		Red "RA" (Radio Altimeter) Flag on	ı two	00008401.0001001	26 NOV 09			
			PFDs (CAT III no DH)						
	Approval reference: 1	0059	726 Approv	ed by	EASA				
Į	Criteria: A330								
	Applicable to: MSN 13	368, 1	<u> </u>						
	ABN-22-CATIIInoDH		Amber "CHECK ATT" on two PFDs	(CAT	00008402.0001001	26 NOV 09			
			III no DH)						
	Approval reference: 1	0059	726 Approv	ed by	EASA				
•	Criteria: A330								
	Applicable to: MSN 13								
	ABN-22-CATIIInoDH		Red "ATT" on one PFD (CAT III no		00008403.0001001	26 NOV 09			
	Approval reference: 1	0059	726 Approv	ed by	EASA				
	Criteria: A330								
	Applicable to: MSN 13	868, 1							
	ABN-22-CATIIInoDH		Amber "CHECK HDG" on two NDs	and	00008404.0001001	26 NOV 09			
		<u> </u>	two PFDs (CAT III no DH)						
	Approval reference: 1	0059	726 Approv	ed by	EASA				
	Criteria: A330								



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534	`	,
	ABN-22-CATIIInoDH		Red "HDG" on one ND and one PFD	00008405.0001001	26 NOV 09
			(CAT III no DH)		
	Approval reference: 1	00597	726 Approved b	y EASA	
	Criteria: A330				
	Applicable to: MSN 13				
	ABN-22-CATIIInoDH		Red "SPD" on one PFD (CAT III no DH)		26 NOV 09
	Approval reference: 1	00597	726 Approved b	y EASA	
	Criteria: A330		000 1400 1440 1504		
	Applicable to: MSN 13			1 00000407 0004004	1 00 1101/00
	ABN-22-CATIIInoDH		"AP OFF" Warnings (CAT III no DH)	00008407.0001001	26 NOV 09
	Approval reference: 10 Criteria: A330	0059	726 Approved b	y EASA	
	Applicable to: MSN 13	60 1	200 1420 1440 1524		
	ABN-22-CATIIInoDH	100, 1		00000400 0004004	00 NOV 00
	ABN-22-CATIIINODH		Capability Decrease (except if due to A/THR loss) (CAT III no DH)	00008408.0001001	26 NOV 09
	Approval reference: 1	0020. 		 EACA	l
	Criteria: A330	0039	Approved L	y EASA	
	Applicable to: MSN 13	68 1	380 1428 1448 1534		
	ABN-22-CATIIInoDH	,,,,	Total Loss of A/THR ("CAT III" decreas	e 00008409.0001001	26 NOV 09
	ADIN-22-OATIIIIODIT		to "CAT II") (CAT III no DH)	5 00000403.0001001	201101 03
	Approval reference: 1	00597	, ,	V EASA	l
	Criteria: A330		т.рр. от от т	,	
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534		
	ABN-22-CATIIInoDH		LOC or G/S Excessive Deviation on PF	D 00008410.0001001	26 NOV 09
			(CAT III no DH)		
	Approval reference: 1	0059	726 Approved b	y ĖASA	-
	Criteria: A330				
	Applicable to: MSN 13				
	ABN-22-CATIIInoDH		"AUTOLAND" Light (CAT III no DH)	00008411.0001001	26 NOV 09
	Approval reference: 1	00597	726 Approved b	y EASA	
	Criteria: A330				
	Applicable to: MSN 13				
	ABN-22-CATIIInoDH		NO "LAND" at 350 ft (CAT III no DH)	00008412.0001001	26 NOV 09
	Approval reference: 1	00597	726 Approved b	y EASA	
	Criteria: A330	4	000 1400 1440 1504		
	Applicable to: MSN 13	68, 1		00000440 0004554	00.1101/40
	ABN-22-CATIIInoDH		Incorrect Selected Course at 350 ft >5	00008413.0001001	26 NOV 09
	Ammunual vafavar ass 4	0050	deg (CAT III no DH)	W EACA	
	Approval reference: 1 Criteria: A330	บบอษ	726 Approved b	y EASA	
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534			
	ABN-22-CATIIInoDH		No "FLARE" at 30 ft(CAT II		00008414.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	368, 1			1 00005001 0001001	00 1101100
	ABN-24		ELEC - AC BUS 1 FAULT	Ammunum al lave l	00005681.0001001	26 NOV 09
	Approval reference: 1 Criteria: A330	0059	726	Approved by	EASA	
ΙE	Applicable to: MSN 14	148 1	534			
N	ABN-24	170, 1	ELEC - AC BUS 1 FAULT		00005681.0002001	05 JAN 17
'`	Approval reference: G	1 01M		Approved by	Airbus under the authori	
				EASA. 21J.03		.,
	Criteria: (330-200F and	2044	149)			
İ	Applicable to: MSN 13	368, 1	380, 1428			
	ABN-24		ELEC - AC BUS 2 FAULT		00005682.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	ÉASA	
<u> </u>	Criteria: A330					
E	Applicable to: MSN 14					
N	ABN-24		ELEC - AC BUS 2 FAULT		00005682.0002001	05 JAN 17
	Approval reference: G	i01M	16014405		Airbus under the authori	ty of DOA ref.
	Criteria: (330-200F and	204/	140)	EASA. 21J.03		
	Applicable to: MSN 13					
	ABN-24	1	ELEC - AC ESS BUS FAUL	Т	00005685.0002001	26 NOV 09
	Approval reference: 1	0059		Approved by I		201101 03
			or 50616) and (51790 or 5478			
i	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534	,,,		
	ABN-24		ELEC - DC BUS 2 FAULT		00005686.0002001	19 JUN 13
	Approval reference: 1		726	Approved by	Easa	
	Criteria: (A330 and 496	,				
	Applicable to: MSN 13	368, 1				
	ABN-24		ELEC - DC BUS 1+2 FAUL		00005687.0001001	19 JUN 13
	Approval reference: 1			Approved by I	EASA	
ΙE	Criteria: (330-300 or (33					
	ABN-24	140, 1	ELEC - DC ESS BUS FAUL	т	00005688.0002001	26 NOV 09
	Approval reference: 1	 0050		Approved by I		20 110 109
	Criteria: (A330 and 496			Approved by	LAVA	
	Applicable to: MSN 13		380, 1428, 1448, 1534			
	ABN-24	, .	ELEC - DC ESS BUS SHED		00005689.0003001	16 APR 10
	Approval reference: 1	0059		Approved by I		
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: 330-200F					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-27		F/CTL - FLAPS FAULT		00005412.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	ABN-27		F/CTL - FLAPS LOCKED		00005122.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
E	Applicable to: MSN 14	48, 1				
N	ABN-27	l	F/CTL - FLAPS LOCKED		00005122.0002001	05 JAN 17
	Approval reference: G	01M	16014405		Airbus under the authori	ty of DOA ref.
	0 ::	4.40)		EASA. 21J.03	1	
	Criteria: (A330 and 204		000 1400			
	Applicable to: MSN 13	68, 1			1	221121122
	ABN-27		F/CTL - SLATS FAULT		00005417.0001001	26 NOV 09
	Approval reference: 10	0059	/26	Approved by	EASA	
	Criteria: A330	co 1	000 1400 1440 1504			
	Applicable to: MSN 13	68, 1			1 00005104 0001004	00 1101/ 00
	ABN-27		F/CTL - SLATS LOCKED	Ammunum al last	00005124.0001001	26 NOV 09
	Approval reference: 10 Criteria: A330	ມບວອ	720	Approved by	EASA	
	Applicable to: MSN 13	60 1	200 1/20 1//0 152/			
		00, 1		and Landing	00005100 0001001	10 11 10 10
	ABN-27		Approach Speed Increment Distance Correction	and Landing	00005123.0001001	19 JUN 13
	Approval reference: 10	JU20.		Approved by	 Faga	
	Criteria: A330	0000	120	Approved by	EAGA	
	Applicable to: MSN 13	68 1	380 1428 1448 1534			
	ABN-27	00, 1	Performance Limitation for	I anding in	00005418.0004001	02 JUL 10
	ADIN'2/		Clean Configuration	Lanuling III	00003410.0004001	02 JUL 10
	Approval reference: 10)059. I		Approved by	FASA	
	Criteria: (330-200 or 33)			rippiotou by		
	Applicable to: MSN 13		,			
	ABN-27	, .	F/CTL - SPD BRK DISAGRE	E	00005421.0001001	26 NOV 09
	Approval reference: 10	0059		Approved by		
	Criteria: A330			,,		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-27		F/CTL RUDDER TRIM RUNA	\WAY	00005422.0003001	16 APR 10
	Approval reference: 10	0059		Approved by	I	
			2 or 330-303 or 330-323 or 33			93 or 54786)
	and (51802 or 51805 or				, ((,
			111			



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534		
	ABN-27		F/CTL RUDDER JAM	00005423.0002001	19 JUN 13
	Approval reference: 10		The second secon		
	\\\	30-30	2 or 330-303 or 330-323 or 330-343 or 330-	200 or 330-200F) and (5180	2 or 51805 or
	51806))	1	000 1400 1440 1504		
	Applicable to: MSN 13	108, 1	<u>, , , , , , , , , , , , , , , , , , , </u>	00000000 0000001	10 ADD 10
	ABN-27 Approval reference: 10	00E0.	F/CTL - RUD NORM CTL FAULT 726 Approved b	00008583.0002001	16 APR 10
			2 or 330-303 or 330-323 or 330-343 or 330-		90 or 54786)
	and (51802 or 51805 or			200 01 330-2001) and ((317	30 01 34700)
	Applicable to: MSN 13		,,,		
	ABN-27		F/CTL - RUDDER FAULT	00008594.0002001	19 JUN 13
	Approval reference: 10				
			2 or 330-303 or 330-323 or 330-343 or 330-		51 or 56729)
	and (51802 or 51805 or	5180	06)))	,	,
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534		
	ABN-27		F/CTL RUD PEDAL FAULT	00008595.0001001	16 APR 10
	Approval reference: 10		•		
			2 or 330-303 or 330-323 or 330-343 or 330-	200 or 330-200F) and ((491	93 or 51790 or
ļ	54786) and (51802 or 5		***		
	Applicable to: MSN 13	68, 1			10 11 11
ļ	ABN-27		F/CTL - SPLR FAULT	00005127.0001001	19 JUN 13
	Approval reference: 10 Criteria: A330	0059	726 Approved b	y EASA	
	Applicable to: MSN 13	60 1	200 1420 1440 1524		
	ABN-27	100, 1	F/CTL - GND SPLR FAULT	00005424.0001001	26 NOV 09
	Approval reference: 10	l nnsa			20 110 10 03
	Criteria: A330	0033	Approved b	y LAUA	
	Applicable to: MSN 13	68. 1	380. 1428. 1448. 1534		
	ABN-27	1	F/CTL - L(R) ELEV FAULT	00005425.0001001	19 JUN 13
	Approval reference: 10	0059	` '		
	Criteria: A330				
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534		
	ABN-27		F/CTL - ELEV REDUND LOST	00005426.0001001	26 NOV 09
	Approval reference: 10	0059	726 Approved b	y EASA	
	Criteria: A330				
E	Applicable to: MSN 14	48, 1			
N	ABN-27		F/CTL - ELEV REDUND LOST	00005426.0002001	09 JAN 17
	Approval reference: 10		•	y EASA	
	***		17) or (A330 and 204449))		
	Applicable to: MSN 13	68, 1	380, 1428		



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IVI	ABN-27	<u> </u>	F/CTL - FCDC 1+2 FAULT		00005428.0002001	16 APR 10				
	Approval reference: 1	0050		Approved by		I TO APR TO				
						00 or E4706\				
	Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and ((49193 or 54786) and (51802 or 51805 or 51806)))									
	Applicable to: MSN 13		,,,							
	- ' '	100, 1	, , ,		1 00005400 0004004	40 1111140				
	ABN-27		F/CTL - PRIM FAULT	A	00005430.0001001	19 JUN 13				
	Approval reference: 1	00597	26	Approved by	EASA					
	Criteria: A330		000 4400 4440 4504							
	Applicable to: MSN 13				1	10 11 11 10				
	ABN-27		F/CTL - STAB CTL FAULT		00005221.0001001	19 JUN 13				
	Approval reference: 1	00597	726	Approved by I	EASA					
	Criteria: A330									
	Applicable to: MSN 13	868, 1								
	ABN-27		F/CTL - ALTN LAW (PROT I		00005125.0001001	26 NOV 09				
	Approval reference: 1	00597	726	Approved by	EASA					
	Criteria: A330									
	Applicable to: MSN 13		, , ,							
	ABN-27		F/CTL - DIRECT LAW (PRO	T LOST)	00005126.0001001	26 NOV 09				
	Approval reference: 1	00597	726	Approved by	EASA					
	Criteria: A330									
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534							
N	ABN-28		FUEL - CTR TK XFR FAULT		00020386.0001001	09 JAN 17				
	Approval reference: 1			Approved by	EASA					
	Criteria: ((330-200 and	2048	17) or (A330 and 204449))							
	Applicable to: MSN 13	868, 1	380, 1428							
	ABN-28		FUEL - CELL NOT FULL		00010060.0001001	02 JUL 10				
	Approval reference: 1	00597	726	Approved by	ĖASA					
	Criteria: (A330 and (200	0004	and 58751))							
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534							
	ABN-28		FUEL - FUEL LO TEMP		00005388.0002001	26 NOV 09				
	Approval reference: 1	00597	726	Approved by	ĖASA					
	Criteria: (A330 and (551	191 oı	55982))	,						
	Applicable to: MSN 13									
	ABN-28		FUEL - APU AFT PUMP FAL	JLT	00005390.0001001	26 NOV 09				
	Approval reference: 1	00597	726	Approved by						
	Criteria: A330									
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534							
	ABN-28		FUEL - ABNORM MAN FWD	XFR	00005391.0001001	26 NOV 09				
	Approval reference: 1	00597		Approved by						
	Criteria: A330									
	Applicable to: MSN 13	868. 1	380. 1428. 1448. 1534							
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date			
IVI		-	FUEL - WING X FEED FAUI	т					
	ABN-28 Approval reference: 10	0050		-। Approved by ∣	00005392.0001001	26 NOV 09			
	Criteria: A330	JUDB	120	Approved by	EASA				
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534								
				10.00	00005000 0000004	00 1111 40			
	ABN-28 Approval reference: 10		FUEL - L (R) WING PUMPS		00005393.0003001	02 JUL 10			
	The second second			Approved by	EASA				
	Criteria: (A330 and (201 Applicable to: MSN 14		0(36/31))						
		40	FUEL 1 (D) WING BUMBO	10.00	00005000 0004004	05 1111 44			
	ABN-28		FUEL - L (R) WING PUMPS		00005393.0004001	25 JUL 14			
	Approval reference: 10		/26	Approved by	EASA				
_	Criteria: (A330 and 2023	,							
E	Applicable to: MSN 15		FUEL 1 (D) WING BUMBO	10.00	00005000 0000004	05 141147			
N	ABN-28		FUEL - L (R) WING PUMPS		00005393.0006001	05 JAN 17			
	Approval reference: G	OTMT	16014405	EASA. 21J.03	Airbus under the authori	ty of DOA ref.			
	Criteria: (A330 and 2044	449)		LAGA: 210.00	•				
	Applicable to: MSN 13		380, 1428						
	ABN-28		FUEL IMBALANCE		00005132.0001001	26 NOV 09			
	Approval reference: 10	00597		Approved by					
	Criteria: A330								
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534						
	ABN-28		FUEL GRAVITY FEEDING		00005133.0002001	16 APR 10			
	Approval reference: 10	0059	726	Approved by	EASA				
	Criteria: (330-243 or 330	0-243	BF)	,,					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534						
	ABN-28		FUEL - ENG FEEDLINE BU	RST	00009200.0001001	26 NOV 09			
	Approval reference: 10	0059	726	Approved by	ËASA				
	Criteria: (A330 and (565	51 o	r 56729))						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534						
	ABN-28		FUEL - L (R) WING TK LO L	.VL	00015261.0005001	25 JUL 14			
	Approval reference: 10			Approved by	ËASA				
	Criteria: ((330-300 and 2	2005	90) or (330-200F and (200590	and 58623)))					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534						
	ABN-28		FUEL - L+R WING TK LO L	VL	00005395.0003001	26 NOV 09			
	Approval reference: 10	0059	726	Approved by	ËASA				
			9) or (330-200F and (56729 ar	nd 58623)))					
Ε	Applicable to: MSN 14	48, 1	534						
N	ABN-28		FUEL - L+R WING TK LO L	VL	00005395.0007001	20 FEB 17			
	Approval reference: Fi	M170	0474	Approved by EASA, 21J.03	Airbus under the authori	ty of DOA ref.			
	Criteria: ((330-300 and)	2044	49) or (330-200F and (58623 a						
	Omena. ((000-000 and 2		70) 01 (000-2001 and (00020)	and 204440)))	Continued on	the following page			



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 13	368, 1	380, 1428			
R	ABN-28 Approval reference: F	 M170	FUEL - FCMC 1+2 FAULT 00474	Approved by A	00005396.0001001 Airbus under the authori	20 FEB 17 ity of DOA ref.
	Criteria: (330-300 or (3 Applicable to: MSN 13		380, 1428, 1448, 1534			
	ABN-28 Approval reference: 1 Criteria: (330-300 or (3			.T Approved by I	00005397.0001001 EASA	26 NOV 09
	Applicable to: MSN 1		380, 1428, 1448, 1534		00005000 0001001	00 NOV 00
	ABN-28 Approval reference: 1			Approved by I	00005398.0001001 EASA	26 NOV 09
			380, 1428, 1448, 1534			
	ABN-28 Approval reference: 1 Criteria: (330-300 or (3			BLE Approved by I	00005135.0001001 EASA	19 JUN 13
	Applicable to: MSN 1		380, 1428, 1448, 1534		00005104 0004001	00 FED 11
	ABN-28 Approval reference: 1			Approved by I	00005134.0004001 EASA	28 FEB 11
			380, 1428, 1448, 1534			
	ABN-28 Approval reference: 1			ROCEDURE Approved by I	00005136.0001001 EASA	26 NOV 09
	Criteria: (330-300 or (3 Applicable to: MSN 13		380, 1428, 1448, 1534			
	ABN-29 Approval reference: 1	 0059	HYD - G SYS LEAK 726	Approved by I	00005690.0001001 EASA	26 NOV 09
	···	368, 1	380, 1428, 1448, 1534			
	ABN-29 Approval reference: 1	 0059	HYD - RSVR LO AIR PR 726	Approved by I	00005729.0001001 EASA	26 NOV 09
	··-	368, 1	380, 1428, 1448, 1534		00005700 0004654	00 1101/ 00
	ABN-29 Approval reference: 1	 0059	HYD - RSVR OVHT 726	Approved by I	00005730.0001001 EASA	26 NOV 09
		368, 1	380, 1428, 1448, 1534		00005704 0004004	00 NOV 00
	ABN-29 Approval reference: 1	 0059	HYD - RSVR LO LVL 726	Approved by I	00005731.0001001 EASA	26 NOV 09
l	Criteria: A330					



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-29		HYD - G SYS LO PR		00005130.0001001	19 JUN 13
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534			
	ABN-29		HYD - B SYS LO PR		00005118.0001001	19 JUN 13
	Approval reference: 1	0059		Approved by I		
	Criteria: A330			1.0 7		
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534			
	ABN-29	Ó	HYD - Y SYS LO PR		00005119.0001001	19 JUN 13
	Approval reference: 1	00597		Approved by		
	Criteria: A330					
	Applicable to: MSN 13	868. 1	380, 1428, 1448, 1534			
	ABN-30	r i	A.ICE - L INR (R INR) (L OU	JTR) (R OUTR)	00005406.0001001	26 NOV 09
	, 12.1. 00		WING LO PR	, , , , , , , , , , , , , , , , , , , ,		201101 00
	Approval reference: 1	00597		Approved by	EASA	
	Criteria: A330			7.pp.0100.03		
	Applicable to: MSN 13	868. 1	380, 1428, 1448, 1534			
	ABN-30		A.ICE - WING VLVE NOT O	PFN	00005407.0001001	26 NOV 09
	Approval reference: 1			Approved by		201101 00
	Criteria: A330	00001		Approved by	LAOA	
	Applicable to: MSN 13	868. 1	380, 1428, 1448, 1534			
	ABN-30		A.ICE - ENG VALVE CLOS	FD	00005408.0001001	26 NOV 09
	Approval reference: 1	1 00597		Approved by I		201101 00
	Criteria: A330	00331	20	Approved by	LAUA	
	Applicable to: MSN 13	868. 1	380, 1428, 1448, 1534			
	ABN-30		A.ICE - WAI SYS FAULT or	OFF	00005120.0002001	20 DEC 16
	Approval reference: G	I 01M1			Airbus under the authori	
	Approvariorororo		0014101	EASA. 21J.03		ly of Bon ion
	Criteria: (A330 and 587	51)		LAGA: 210.00		
	Applicable to: MSN 13		380 1428 1448 1534			
	ABN-30	700, .	A.ICE - L (R) (L INR) (R INF	N/I OUTR\/R	00005409.0002001	19 JUN 13
	ADIVOO		OUTR) WING OPEN	i) (L 00111) (II	00003403.0002001	13 0011 10
	Approval reference: 1	1 00597	•	Approved by	I Fasa	
	Criteria: (A330 and 200			Approved by	LAVA	
	Applicable to: MSN 13		380, 1428, 1448, 1534			
	ABN-30	,55, 1	A.ICE - CAPT (F/O) (STBY)	PITOT (AOA)	00005410.0003001	26 NOV 09
	VDIA-00		(L STAT) (R STAT) HEAT F		00003410.0003001	20 110 1 09
	Approval reference: 1	 		Approved by I	FASA	
	Criteria: (A330 and (517			Approved by	LAUA	
	Applicable to: MSN 13					
	Applicable to: MOM 13	,,,,,	000, 1720, 1770, 1337			



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date			
	ABN-30		A.ICE - CAPT (F/O) (STBY) HEAT FAULT	PROBES	00005411.0003001	26 NOV 09			
	Approval reference: 10			Approved by	EASA				
	Criteria: (A330 and (51790 or 54786))								
	Applicable to: MSN 13	68, 1							
	ABN-30		DOUBLE AOA (STAT) (PITO FAULT	OT) HEAT	00005413.0001001	26 NOV 09			
	Approval reference: 10	0059	726	Approved by I	EASA				
	Criteria: A330								
	Applicable to: MSN 13	68, 1		077010 (5/0	1 00000717 0000001	00 1101/ 00			
	ABN-30		A.ICE - CAPT + F/O (CAPT - + STBY) PITOT HEAT FAUL		00008717.0002001	26 NOV 09			
	Approval reference: 10	JU20.	,	.ı Approved by I	 FASA				
	Criteria: (A330 and (517			Approved by	LAUA				
	Applicable to: MSN 13								
	ABN-30	-, -	A.ICE - ALL PITOT HEAT FA	AULT	00008718.0002001	26 NOV 09			
	Approval reference: 10	0059		Approved by					
	Criteria: (A330 and (517		r 54786))						
	Applicable to: MSN 13								
	ABN-31		DISPLAY UNIT FAILURE		00014121.0001001	01 MAR 13			
	Approval reference: 10		377	Approved by I	EASA				
	Criteria: (A330 and 2000		000 1400 1440 1504						
	Applicable to: MSN 13 Impacted DU: 00005418								
	ABN-31	טוט כ	DISPLAY UNIT FAILURE		00005415.0002001	26 NOV 09			
	Approval reference: 10)059 [.]		Approved by		201101 03			
	Criteria: (A330 and (475								
	Applicable to: MSN 13								
	Impacted by TDU: 0001	4121	DISPLAY UNIT FAILURE						
	ABN-31		FWS - SDAC 1+2 FAULT		00005416.0001001	26 NOV 09			
	Approval reference: 10	0059	726	Approved by I	EASA				
	Criteria: A330								
	Applicable to: MSN 13	68, 1							
	ABN-32	0050	L/G GRAVITY EXTENSION	A	00005129.0001001	19 JUN 13			
	Approval reference: 10 Criteria: A330	JU59	720	Approved by	EASA				
	Applicable to: MSN 13	6 <u>8</u> 1	380 1428 1448 1534						
	ABN-32	JU, 1	BRAKES - ANTI SKID FAUL	Tor A/SKID	00005131.0001001	19 JUN 13			
	ADIN-02		N/WS OFF	I UI A/SKID	00003131.0001001	19 0011 13			
	Approval reference: 10	0059		Approved by	EASA				
	Criteria: A330			,,					



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 1	368. 13	380, 1428, 1448, 1534			
	ABN-32		BRAKES - BRAKES HOT		00005376.0002001	26 NOV 09
	Approval reference: 1			Approved by		1
	Criteria: (A330 and 496	532)		,,		
İ	Applicable to: MSN 1	448				
	ABN-32		BRAKES - BRAKES HOT		00005376.0003001	25 JUL 14
	Approval reference: 1	100597	26	Approved by	ĖASA	
	Criteria: (A330 and 202	2363)				
	Applicable to: MSN 1		, ,			_
	ABN-32		AUTOBRAKE		00005378.0001001	26 NOV 09
	Approval reference: 1	100597	26	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 1					
	ABN-32		BRAKES - RELEASED		00005379.0001001	19 JUN 13
	Approval reference: 1	100597	26	Approved by	EASA	
ļ	Criteria: A330					
	Applicable to: MSN 1		, , ,			
	ABN-32		L/G - LGCIU FAULT		00005380.0001001	26 NOV 09
	Approval reference: 1	100597	26	Approved by	EASA	
	Criteria: A330		200 4400 4440 4504			
	Applicable to: MSN 1				1 00005004 0004004	00 1101/00
	ABN-32		L/G - LGCIU 1 + 2 FAULT	A	00005381.0001001	26 NOV 09
	Approval reference: 1	100597	26	Approved by	EASA	
	Criteria: A330	200 10	000 1400 1440 1504			
	Applicable to: MSN 1		, , ,	D	00005000 0001001	00 NOV 00
	ABN-32		L/G - DOORS NOT CLOSE		00005382.0001001	26 NOV 09
	Approval reference: 1 Criteria: A330	100597	20	Approved by	EASA	
	Applicable to: MSN 1	260 12	200 1420 1440 1524			
	ABN-32		BRAKES - RESIDUAL BRA	KINC	00008647.0001001	26 NOV 09
	ADN-32 Approval reference: 1			Approved by		1 20 NOV 09
	Criteria: (A330 and (51			Approved by	EAGA	
l	Applicable to: MSN 1		,,			
	ABN-32		L/G - GEAR NOT UPLOCK	FD	00005384.0001001	26 NOV 09
	Approval reference: 1			Approved by		201101 03
	Criteria: A330			rippioted by	271071	
1	Applicable to: MSN 1	368. 13	380, 1428, 1448, 1534			
	ABN-32		L/G - RETRACTION FAULT		00005385.0001001	26 NOV 09
	Approval reference: 1			Approved by		
	Criteria: A330			,,p		
	Applicable to: MSN 1	368, 13	380, 1428, 1448, 1534			
			, -, -,			



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$\mathbf{M}^{(1)}$	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	ABN-32		L/G - GEAR UPLOCK FAUL	.T	00005386.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13					
	ABN-32		L/G - L(R) LENGTHENING F	AULT	00005387.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-34		NAV - RA 1+2 FAULT		00014755.0002001	25 JUL 14
	Approval reference: 10	00597	726	Approved by	EASA	
	Criteria: (A330 and 202					
	Applicable to: MSN 13	68, 1	· · · · · · · · · · · · · · · · · · ·			
	ABN-34		NAV - RA 1+2 (1) (2) FAULT		00005399.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by	EASA	
	Criteria: A330					
E	Applicable to: MSN 14	48				
	ABN-34		NAV - IR 1 (2) (3) FAULT		00005400.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by	EASA	
	Criteria: A330					
E	Applicable to: MSN 14	48, 1	534			
N	ABN-34		NAV - IR 1 (2) (3) FAULT		00005400.0003001	05 JAN 17
	Approval reference: G	01M1	6014405	Approved by	Airbus under the authori	ty of DOA ref.
				EASA. 21J.03	1	
	Criteria: (A330 and 204					
	Applicable to: MSN 13	<u>68, 1</u>				
	ABN-34		NAV - IR 1+2 (2+3) (1+3) FA		00005401.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by	EASA	
_	Criteria: A330					
E	Applicable to: MSN 14	48, 1				
N	ABN-34		NAV - IR 1+2 (2+3) (1+3) FA		00005401.0003001	05 JAN 17
	Approval reference: G	01M1	16014405		Airbus under the authori	ty of DOA ref.
	0 11 1 /4000 1001	4.40\		EASA. 21J.03		
	Criteria: (A330 and 204		000 4400			
	Applicable to: MSN 13		<u>'</u>		1	00.1101/00
	ABN-34		NAV - IR DISAGREE		00008668.0001001	26 NOV 09
	Approval reference: 10			Approved by	EASA	
	Criteria: (A330 and (491					
	Applicable to: MSN 13	68, 1				00 115::
	ABN-34		NAV - ADR 1 (2) (3) FAULT		00005402.0002001	26 NOV 09
	Approval reference: 10			Approved by	EASA	
	Criteria: (A330 and (517	90 0	154/86))			No o following a so



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 13	68, 138	30, 1428, 1448, 1534			
R	ABN-34	N	IAV - ADR 1+2 FAULT		00005403.0002001	20 FEB 17
	Approval reference: Fi			Approved by A EASA. 21J.031	Airbus under the authori	ty of DOA ref.
	Criteria: (A330 and (517		,,			
	Applicable to: MSN 13	,	, , ,			
R	ABN-34		IAV - ADR 1+3 (2+3) FAUL		00005404.0002001	20 FEB 17
	Approval reference: Fl			EASA. 21J.031	Airbus under the authori	ty of DOA ref.
_	Criteria: (A330 and (517					
E	Applicable to: MSN 14			-		05 141147
N	ABN-34		IAV - ADR 1+3 (2+3) FAUL		00005404.0003001	05 JAN 17
	Approval reference: G		014405	EASA. 21J.031	Airbus under the authori	y of DOA ref.
	Criteria: (A330 and 2044	,	20. 4400			
	Applicable to: MSN 13	,	,			
R	ABN-34		AV - ADR DISAGREE		00008712.0001001	20 FEB 17
	Approval reference: Fi			EASA. 21J.031	Airbus under the authori I	ty of DOA ref.
ļ	Criteria: (A330 and (491		,,			
	Applicable to: MSN 13		, , ,			
	ABN-34		JNRELIABLE AIRSPEED IN		00005138.0001001	26 NOV 09
	Approval reference: 10	005972	6	Approved by E	EASA	
	Criteria: A330	CO 100	00 1400 1440 1504			
	Applicable to: MSN 13		· · · · · ·		00005117 0001001	00 NOV 00
	ABN-36		AIR - ENG BLEED FAULT	Approved by E	00005117.0001001	26 NOV 09
	Approval reference: 10 Criteria: A330	005972	0	Approved by I	EASA	
ΙE	Applicable to: MSN 14	//R 1E2	24			
N	ABN-36		AIR - ENG BLEED FAULT		00005117.0002001	05 JAN 17
I IN	Approval reference: G			Annroyed by	Airbus under the authori	
	Approvar reference. G	10 1111 10	017700	EASA. 21J.031		ly of DOA let.
	Criteria: (A330 and 2044	449)				
	Applicable to: MSN 13		30, 1428			
	ABN-36		AIR - ENG 1+2 BLEED FAU	LT	00015227.0001001	25 JUL 14
	Approval reference: 10			Approved by	ASA	
	Criteria: (A330 and 2020	363)				
E	Applicable to: MSN 15					
N	ABN-36		AIR - ENG 1+2 BLEED FAU		00015227.0002001	09 JAN 17
	Approval reference: 10			Approved by E	ASA	
	Criteria: ((330-200 and 2	204817) or (A330 and 204449))			



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M ⁽¹⁾		T ⁽²⁾	DU Title		DU identification	DU date
	Applicable to: MSN 13	68, 1	380, 1428			
	ABN-36		AIR - X BLEED FAULT		00005695.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	368, 1				
	ABN-36		AIR - BLEED LO TEMP		00005696.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
ļ	Criteria: A330					
	Applicable to: MSN 13	868, 1				
	ABN-36		AIR - L (R) WING LEAK		00005697.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by I	EASA	
_	Criteria: A330					
E	Applicable to: MSN 14	48, 1				
N	ABN-36		AIR - L (R) WING LEAK		00005697.0002001	05 JAN 17
	Approval reference: G	i01M	16014405		Airbus under the authori	ty of DOA ret.
	Ouitania, (4000 and 004	4.40\		EASA. 21J.031		
	Criteria: (A330 and 204 Applicable to: MSN 13		200 1420			
	ABN-36	100, 1			0000000000001001	26 NOV 09
	ABIN-36 Approval reference: 1	00E0.	AIR - ENG BLEED LEAK	Approved by E	00005698.0001001	26 NOV 09
	Criteria: A330	UUD9	720	Approved by I	EASA	
ΙE	Applicable to: MSN 14	148 1	534			
N	ABN-36	1 1	AIR - ENG BLEED LEAK		00005698.0002001	05 JAN 17
11	Approval reference: G	 01M:		Annroyed by	Airbus under the authori	
	Approvar reference: c	10 1 141	10014403	EASA. 21J.031		ly of DOA left.
	Criteria: (A330 and 204					
	Applicable to: MSN 13	368, 1	380, 1428			
	ABN-36		AIR - APU BLEED LEAK		00005699.0001001	26 NOV 09
	Approval reference: 1			Approved by I	EASA	
	Criteria: (A330 and (517		,,			
E	Applicable to: MSN 14	48, 1				
N	ABN-36		AIR - APU BLEED LEAK		00005699.0002001	05 JAN 17
	Approval reference: G	101M	16014405		Airbus under the authori	ty of DOA ref.
				EASA. 21J.031		
	Criteria: (A330 and 204					
	Applicable to: MSN 13	68, 1				
	ABN-52		DOOR - FWD CABIN		00010453.0001001	28 FEB 11
	Approval reference: 1	0059	726	Approved by I	EASA	
_	Criteria: A330	140 4	504			
E	Applicable to: MSN 14	148, 1	534			

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date				
N	ABN-52		DOOR - FWD CABIN		00010453.0002001	09 JAN 17				
	Approval reference: 1	0060	569	Approved by I	ĖASA					
	Criteria: ((330-200 and	2048	17) or (A330 and 204449))							
	Applicable to: MSN 13	868, 1	380, 1428							
	ABN-52		DOOR - MAIN CARGO		00010451.0001001	28 FEB 11				
	Approval reference: 1	0059	726	Approved by I	EASA					
	Criteria: 330-200F									
E	Applicable to: MSN 14	148, 1	534							
N	ABN-52		DOOR - MAIN CARGO		00010451.0002001	05 JAN 17				
	Approval reference: G	01M	i6014405	Approved by A EASA. 21J.03	Airbus under the authori	ty of DOA ref.				
	Criteria: (330-200F and 204449)									
	Applicable to: MSN 13	868, 1	380, 1428							
	ABN-52		DOOR - LOWER CARGO (A	AFT or FWD)	00010450.0001001	28 FEB 11				
	Approval reference: 1	0059	726	Approved by I	ĖASA					
	Criteria: 330-200F									
E	Applicable to: MSN 14	148, 1	534							
N	ABN-52		DOOR - LOWER CARGO (A	,	00010450.0002001	05 JAN 17				
	Approval reference: G			Approved by A EASA. 21J.03	Airbus under the authori	ty of DOA ref.				
	Criteria: (330-200F and	2044	49)							
	Applicable to: MSN 13	868, 1	380, 1428							
	ABN-52		DOOR - AVIONIC or BULK	CARGO	00010449.0001001	28 FEB 11				
	Approval reference: 1	0059	726	Approved by I	EASA					
	Criteria: A330									
E	Applicable to: MSN 14	48, 1								
N	ABN-52		DOOR - AVIONIC or BULK		00010449.0002001	09 JAN 17				
	Approval reference: 1			Approved by I	EASA					
			17) or (A330 and 204449))							
	Applicable to: MSN 13	368, 1								
	ABN-70		ENG - FAIL		00005265.0006001	26 NOV 09				
	Approval reference: 1			Approved by I						
			11 or 330-342 or 330-343) and	d 49632) or ((330	D-243 or 330-243F or 330-	341 or 330-342				
	or 330-343) and (56551		,,,,							
	Applicable to: MSN 13	508, 1	<u> </u>		1 00005007 000000	00 550 45				
R	ABN-70		ENG - SHUTDOWN		00005267.0002001	20 FEB 17				
	Approval reference: F			Approved by A EASA. 21J.03	Airbus under the authori 1	ty of DOA ref.				
	Criteria: (A330 and (565									
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534							
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	ABN-70		ENG - REV UNLOCKED		00005368.0002001	19 JUN 13
	Approval reference: 10	059	726	Approved by	ĖASA	
	Criteria: (A330 and 4963	32)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
R	ABN-70		ENG - REV PRESSURIZED		00005359.0001001	20 FEB 17
	Approval reference: FI	M170	0474	Approved by	Airbus under the authori	ty of DOA ref.
				EASA. 21J.03		•
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-70		ENG - FADEC FAULT		00005360.0001001	26 NOV 09
	Approval reference: 10	059	726	Approved by		
	Criteria: A330			,,		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-70		ENG - FADEC OVHT		00005361.0001001	26 NOV 09
	Approval reference: 10	059	726	Approved by	ĖASA	
	Criteria: A330			,		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-70		ENG - EPR MODE FAULT		00008553.0001001	19 JUN 13
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: (330-223 or 330	0-223	BF or 330-243 or 330-243F or	330-321 or 330-	-322 or 330-323 or 330-34	1 or 330-342 or
	330-343)					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-70		ENG - OIL HI TEMP		00005362.0002001	16 APR 10
	Approval reference: 10	0059	726	Approved by	EASA	
			3F or 330-341 or 330-342 or 3	30-343)		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	ABN-70		ENG - EGT OVERLIMIT		00005363.0001001	16 APR 10
	Approval reference: 10	0059	726	Approved by	EASA	
	'	0-202	or 330-203 or 330-243 or 33	0-243F or 330-3	01 or 330-302 or 330-303	or 330-341 or
	330-342 or 330-343)					
	Applicable to: MSN 13	68 <u>,</u> 1				
R	ABN-70		ENG - THR LEVER FAULT		00005364.0001001	20 FEB 17
	Approval reference: Fi	M170	0474	Approved by	Airbus under the authori	ty of DOA ref.
				EASA. 21J.03	1	
	Criteria: A330					
	Applicable to: MSN 13	68 <u>,</u> 1				
R	ABN-70		ENG - THR LEVER DISAGF		00005365.0002001	20 FEB 17
	Approval reference: Fi	M170	0474		Airbus under the authori	ty of DOA ref.
				EASA. 21J.03	1	
	Criteria: (A330 and 4960	32)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date			
	ABN-70		ENG RELIGHT IN FLIGHT		00005116.0002001	25 JUL 14			
	Approval reference: 1	10059	726	Approved by	EASA				
	Criteria: (330-243 or 33	30-24	3F or 330-341 or 330-342 or 3	30-343)					
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534								
	ABN-70		ENG - XWIND PROT FAUL	Γ	00008560.0001001	16 APR 10			
	Approval reference: 1			Approved by	EASA	•			
	Criteria: (330-243 or 33	30-24	3F or 330-341 or 330-342 or 3	30-343)					
	Applicable to: MSN 1	368, 1	380, 1428, 1448, 1534						
	ABN-70		ENG - START VALVE FAU	LT (NOT	00005369.0001001	26 NOV 09			
			CLOSED)						
	Approval reference: 1	10059	726	Approved by	EASA				
	Criteria: A330								
	Applicable to: MSN 1	368 , 1	380, 1428, 1448, 1534						
	ABN-70		ENG - START VALVE FAU OPEN)	LT (NOT	00005370.0001001	26 NOV 09			
	Approval reference: 1	0059	726	Approved by	ËASA	•			
	Criteria: A330								
İ	Applicable to: MSN 1	368 , 1	1380, 1428, 1448, 1534						
	ABN-70		ENG - THRUST LIMITED		00013096.0001001	28 FEB 11			
	Approval reference: 1			Approved by		•			
	Criteria: (((330-243 or 3	330-3	41 or 330-342 or 330-343) and	d 58751) or 330-	·243F)				
İ	Applicable to: MSN 1	368 , 1	1380, 1428, 1448, 1534						
	ABN-90		TAIL STRIKE		00009202.0001001	26 NOV 09			
	Approval reference: 1	10059	726	Approved by	EASA				
	Criteria: A330								
E	Applicable to: MSN 1	448, 1	1534						
N	ABN-90		TAIL STRIKE		00009202.0002001	09 JAN 17			
	Approval reference: 1			Approved by	EASA				
	***		17) or (A330 and 204449))						
	Applicable to: MSN 1	368 , 1	1380, 1428						
	ABN-90		OVERWEIGHT LANDING		00005383.0001001	26 NOV 09			
	Approval reference: 1	10059	726	Approved by	EASA				
	Criteria: A330								
	Applicable to: MSN 1	368 , 1	380, 1428, 1448, 1534						
	ABN-90		REJECTED TAKEOFF WIT ENGINES OPERATIVE	H ALL	00005389.0001001	26 NOV 09			
	Approval reference: 1	0059	726	Approved by	EASA				
	Criteria: A330								
	Applicable to: MSN 1	368 , 1	1380, 1428, 1448, 1534						
	ABN-90		BOMB ON BOARD		00005596.0004001	28 FEB 11			
	Approval reference: 1	0059	726	Approved by	EASA				



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: 330-200F					
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-GEN		Introduction		00005798.0001001	28 FEB 11
	Approval reference: 10	0059	726	Approved by	ĖASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-PFLT		Batteries		00005799.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-PFLT		ECAM Alerts		00005800.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-PFLT		Cockpit Door		00005801.0002002	04 MAY 10
	Approval reference: 10	00597	726	Approved by	EASA	
	Criteria: 330-200F					
	Specific to: FAA					
	Applicable to: MSN 13					
	NORM-TO		Takeoff Procedure		00005804.0004001	19 JUN 13
	Approval reference: 10			Approved by		
	'''		3F or 330-341 or 330-342 or 3	330-343) and 46	6874)	
	Applicable to: MSN 13					
	NORM-FLT		Buffet Onset		00005806.0001001	02 JUL 10
	Approval reference: 10	00597	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	NORM-FLT		Severe Turbulence		00005809.0002001	16 NOV 16
	Approval reference: G	01FN	11605798	,	Airbus under the authori	ty of DOA ref.
	0.11.1.1000.00000	0 000	\ F \	EASA. 21J.03	1	
	Criteria: (330-200 or 33		,			
	Applicable to: MSN 13		<u>, , , , , , , , , , , , , , , , , , , </u>			00 1101/ 00
	NORM-LDG		Normal Landing		00005810.0001001	26 NOV 09
	Approval reference: 10	0059	/26	Approved by	EASA	
	Criteria: A330 Applicable to: MSN 13	60 4	200 1420 1440 1524			
		υο, I		o Operation\	00005011 0001004	06 NOV 00
	NORM-LDG	0050	Balked Landing (All Engine			26 NOV 09
	Approval reference: 10 Criteria: A330	UU09	720	Approved by	EASA	
	Applicable to: MSN 13	60 1	200 1/20 1//0 152/			
	Applicable to: M2M 13	UO, I	300, 1420, 1440, 1334			the following page

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	NORM-LDG		Reverse Thrust		00005812.0001001	26 NOV 09
	Approval reference: 10	0059		Approved by I		201101 00
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-LDG		Autobrake		00005813.0001001	26 NOV 09
	Approval reference: 10	059	726	Approved by I	EASA	
	Criteria: A330					
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-22-CONF		AP/FD, Speed Modes, Auto	thrust	00008431.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	<u> </u>				
	NORM-22-CONF		Takeoff		00008432.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	<u> </u>			
	NORM-22-CONF		Climb, Cruise, Descent		00008433.0001001	26 NOV 09
	Approval reference: 10	00597	726	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13				i	
	NORM-22-CONF		Non Precision Approach		00008434.0001001	26 NOV 09
	Approval reference: 10	JU59	/26	Approved by I	EASA	
	Criteria: A330	CO 1	200 1400 1440 1524			
	Applicable to: MSN 13	00, 1			00000405 0001001	00 NOV 00
	NORM-22-CONF Approval reference: 10	0050	CAT I ILS Approach	Approved by	00008435.0001001	26 NOV 09
	Criteria: A330	JUDY	720	Approved by	EASA	
ŀ	Applicable to: MSN 13	6Q 1	280 1/28 1//8 152/			
	NORM-22-CONF		CAT II ILS Approach		00008436.0001001	26 NOV 09
	Approval reference: 10		• •	Approved by I		201101 09
	Criteria: A330	JUJ31	120	Approved by	LAGA	
	Applicable to: MSN 13	68. 1	380, 1428, 1448, 1534			
	NORM-22-CONF		CAT II/III ILS Approach and	Automatic	00008437.0001001	26 NOV 09
	11011111 22 00111		Landing	7.010010	0000010710001001	201101 00
	Approval reference: 10	059		Approved by I	EASA	
	Criteria: A330			,,		
i	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-22-CONF		Go-Around		00008438.0001001	26 NOV 09
	Approval reference: 10	059		Approved by I	l .	
	Criteria: A330			•		
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date				
	NORM-22-CONF		Altitude Loss After Automatic	c	00005821.0001001	26 NOV 09				
			Go-Around Initiation							
	Approval reference: 10	0597	726 A	pproved by I	EASA					
	Criteria: A330									
	Applicable to: MSN 13	68, 1								
	NORM-22-CONF		Maximum Encountered Wind Flight Tests (CAT II or Cat III)		00008272.0001001	26 NOV 09				
	Approval reference: 10	0597		pproved by E	ASA					
	Criteria: A330									
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	NORM-22-NPA		General		00008439.0001001	19 JUN 13				
	Approval reference: 10	059	726 A	pproved by I	ASA					
	Criteria: (330-200 or 330)-300)							
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	NORM-22-NPA		Instrument Approach Using I	NAV Mode	00008445.0007001	19 JUN 13				
			or FINAL APP Mode							
	Approval reference: 10	059	726 A	pproved by I	ASA					
	Criteria: (A330 and ((44	308 c	or 44339 or 46572 or 46893) and	200309))						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	NORM-22-PA		CAT II and CAT III Approach	and/or	00008441.0001001	28 FEB 11				
			Automatic Landing							
	Approval reference: 10	0597	726 A	pproved by I	EASA					
	Criteria: A330									
	Applicable to: MSN 13	68, 1								
R	NORM-22-PA		Required Equipment for CAT III Approach and Landing	II and CAT	00008444.0002001	28 FEB 17				
	Approval reference: Li	RO3D			Airbus under the authori	ty of DOA ref.				
				ASA. 21J.031						
	***	0-30	2 or 330-303 or 330-323 or 330-	343 or 330-20	00 or 330-200F) and (5180	2 or 51805 or				
	51806))									
	Applicable to: MSN 13	68, 1								
	NORM-23		Communications		00005817.0001001	26 NOV 09				
	Approval reference: 10	0597	726 A	pproved by I	EASA					
	Criteria: A330									
	Applicable to: MSN 13	68, 1								
	NORM-28		Fuel System		00008270.0002001	16 APR 10				
	Approval reference: 10			pproved by I	EASA					
			or 330-203 or 330-243 or 330-2	243F)						
	Applicable to: MSN 13	68, 1								
	NORM-30		Operations in Icing Condition		00005814.0001001	19 JUN 13				
	Approval reference: 10	00597	726 A	pproved by I	EASA					



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: A330					
	Applicable to: MSN 13	68, 1				
	NORM-30		Ground Ice Shedding Proce		00008271.0001001	19 JUN 13
	Approval reference: 1			Approved by	ÉASA	
	Criteria: (330-243 or 33	0-243	BF or 330-341 or 330-342 or 33	80-343)		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-30		Rain Repellent (If Activated)	00005816.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	ÉASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-34		Ground Proximity Warning	System	00005818.0001001	26 NOV 09
			(GPWS)			
	Approval reference: 1	0059	726	Approved by	ÉASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-34		Inertial Reference System (IRS)	00005819.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	ĖASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-34		Integrated Standby Instrum	ent System	00005820.0001001	26 NOV 09
			(ISIS)			
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: (A330 and 472	,				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-34		Windshear Warning and Gu	iidance	00005824.0001001	26 NOV 09
			System			
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-34		Traffic Alert and Collision A	voidance	00008285.0004001	19 JUN 13
			System (TCAS)			
	Approval reference: 1			Approved by	EASA	
	Criteria: (A330 and (576					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	NORM-34		Reduced Vertical Separatio (RVSM)	n Minimum	00005825.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: (A330 and 435	37)		•		
	Applicable to: MSN 13		380, 1428, 1448, 1534			
	NORM-49		Auxiliary Power Unit (APU)		00005815.0002001	26 NOV 09
	Approval reference: 1	0059		Approved by	EASA	



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: (A330 and 525	,				
	Applicable to: MSN 13	68, 1	· · · · · ·			
	PERF-GEN		Introduction		00005827.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330		000 4400 4440 4504			
	Applicable to: MSN 13	68, 1	<u>, , , , , , , , , , , , , , , , , , , </u>		00005000 0001001	00 1101/ 00
	PERF-GEN		Aircraft Configuration	A	00005829.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330	CO 1	200 1400 1440 1524			
	Applicable to: MSN 13	00, 1			0000000000000000	10 ADD 10
	PERF-GEN		Maximum Demonstrated Ci	osswing at	00005830.0004001	16 APR 10
	Approval reference: 10	00E0.	Takeoff and Landing	Approved by I	 = A C A	
	Criteria: ((330-243 or 33			Approved by I	EASA	
	Applicable to: MSN 13		,			
	PERF-CAL-TO		Speed Corrections in Grou	nd Effoot	00005832.0002001	16 APR 10
	Approval reference: 10			Approved by I		I TO APK TO
	Criteria: (330-200 or 330			Approved by I	EAJA	
	Applicable to: MSN 13		,			
	PERF-CAL-TO	,	Speed Corrections out of G	round Effort	00008442 0001001	26 NOV 09
	Approval reference: 10			Approved by I		20110103
	Criteria: A330	0000	120	Approved by I	LAUA	
1	Applicable to: MSN 13	68. 1	380, 1428, 1448, 1534			
	PERF-CAL-TO		Altitude Corrections		00008443.0001001	26 NOV 09
	Approval reference: 10			Approved by E		201101 00
	Criteria: A330		· - •			
i	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	PERF-CAL-CRU		Speed and Mach Correction	ns	00005836.0001001	26 NOV 09
	Approval reference: 10	ı	ļ .	Approved by I		
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	PERF-CAL-CRU	Ĺ	Altitude Corrections		00005837.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by	EASA	
	Criteria: A330			,		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	PERF-CAL-LDG		Speed Corrections		00005839.0001001	26 NOV 09
	Approval reference: 10			Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	PERF-CAL-LDG		Altitude Corrections		00005840.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: A330	-				
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534			
	PERF-TO		Speeds Definitions		00005845.0001001	26 NOV 09
	Approval reference: 1	0059		Approved by	ĖASA	
	Criteria: A330					
	Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534			
	PERF-TO		Distances Definitions		00005846.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	368, 1				
	PERF-TO		Takeoff Performance		00005847.0001001	26 NOV 09
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	368, 1				
	PERF-TO		Takeoff Flight Path		00005848.0001001	02 JUL 10
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13		<u>, , , , , , , , , , , , , , , , , , , </u>			
	PERF-FLT		In-Flight Performance		00008394.0001001	19 JUN 13
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330					
	Applicable to: MSN 13	368, 1	<u> </u>		1	
	PERF-LDG		Approach Climb and Landi	•	00005164.0001001	19 JUN 13
	Approval reference: 1	0059	726	Approved by	EASA	
	Criteria: A330	1	000 1400 1440 1504			
	Applicable to: MSN 13	568, 1			00005050 0001001	00 1101/ 00
	PERF-LDG		Approach and Landing Spe Definition	eas	00005852.0001001	26 NOV 09
	Ammunual mafamamana d			Ammunum d lave	 	
	Approval reference: 1 Criteria: A330	0059	720	Approved by	EASA	
	Applicable to: MSN 13	060 1	200 1420 1440 1524			
	PERF-LDG	1	Landing Distance Definition	•	00005853.0001001	26 NOV 09
	Approval reference: 1	0020. 		Approved by		26 NOV 09
	Criteria: A330	0059	120	Approved by	EASA	
	Applicable to: MSN 13	169 1	380 1/28 1//8 153/			
	PERF-LDG	1	Landing Performance		00005054 0001001	26 NOV 09
	Approval reference: 1	0050		Approved by	00005854.0001001 EASA	20 110 0 09
	Criteria: A330	0039	120	Approved by	LAUA	
	Applicable to: MSN 13	168 1	380 1428 1448 1534			
	PERF-LDG	100, 1	Autoland Landing Distance	Increment	00009381.0001001	02 JUL 10
	Approval reference: 1	UU20.		Approved by		02 JUL 10
	Approvariererence:	0009	120	Approved by		he following pag



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$\mathbf{M}^{(1)}$	Localization	T ⁽²⁾	DU Title		DU identification	DU date
	Criteria: (330-243 or 330					
	Applicable to: MSN 13					
	PERF-OCTO		General		00019768.0001001	09 AUG 16
	Approval reference: 10	0059	075	Approved by I	EASA	
	Criteria: A330					
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	Impacted DU: NONE				·	
	PERF-OCTO	<u> </u>	Performance Database		00005244.0049001	25 JUL 14
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: 330-243F	co 1	000 1400 1440 1504			
	Applicable to: MSN 13			D-1- F''-	00040700 0004004	00 4110 40
			Complementary Performan		00019769.0001001	09 AUG 16
	Approval reference: 10 Criteria: A330	JUSSI	U/5	Approved by I	EASA	
	Applicable to: MSN 13	60 1	200 1420 1440 1524			
	Impacted DU: NONE	00, 1	300, 1420, 1440, 1334			
	PERF-ENG		Engine Management Takeo	ff Thruct	00005841.0007001	16 APR 10
	Approval reference: 10	UU20.	, ,	Approved by E		IO AFN IO
			3F or 330-343) and 55212)	Approved by I	LAUA	
	Applicable to: MSN 13		, ,			
	PERF-ENG		Engine Management Maxin	num	00005842.0005001	16 APR 10
	TEIN ENG		Continuous Thrust	iuiii	00000012.0000001	107411110
	Approval reference: 10	0059		Approved by	EASA	
	Criteria: (330-243 or 330			.,		
	Applicable to: MSN 13		,			
	PERF-ENG	ŕ	Engine Management Go-A	ound Thrust	00005843.0005001	16 APR 10
	Approval reference: 10			Approved by		
	Criteria: (330-243 or 330	0-243	BF or 330-343)			
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	APP-NOI		General		00005206.0002002	18 NOV 13
	Approval reference: 10	0059	726	Approved by	EASA	
	`	0-243	3 or 330-321 or 330-322 or 330)-323 or 330-34	1 or 330-342 or 330-343 o	r 330-200F)
	Specific to: FAA					
	Applicable to: MSN 13	68, 1				
	APP-NOI		External Noise		00008555.0037001	25 JUL 14
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: 330-243F					
\Box	Applicable to: MSN 13	68, 1				
	APP-INOP		General		00005139.0001001	26 NOV 09
	Approval reference: 10	0059	726	Approved by I	EASA	
	Criteria: A330				• "	



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	9	DU identification	DU date
	Applicable to: MSN 13	368, 1380, 14	128, 1448, 1534		•	•
	APP-INOP	Perfo	rmance		00005537.0002001	16 APR 10
	Approval reference: 1	0059726		Approved by	ĖASA	•
	Criteria: (330-243 or 33	0-243F or 33	30-341 or 330-342 o	r 330-343)		
	Applicable to: MSN 13	368, 1380, 14	128, 1448, 1534			
	APP-ETOPS	Gene	ral		00005538.0005002	18 NOV 13
	Approval reference: 1	0059726		Approved by	ÉASA	
	Criteria: 330-200F					
	Specific to: FAA					
	Applicable to: MSN 13	<u> </u>			<u>.</u>	
	APP-ETOPS	Limita	ations		00005539.0006002	18 NOV 13
	Approval reference: 1	0059726		Approved by	EASA	
	Criteria: 330-200F					
	Specific to: FAA					
	Applicable to: MSN 13	<u> </u>				
	APP-ETOPS		dures		00005541.0001002	26 NOV 09
	Approval reference: 1	0059726		Approved by	EASA	
	Criteria: A330					
	Specific to: FAA					
	Applicable to: MSN 13		<u> </u>		1	
	APP-ETOPS		rmance		00005542.0001001	19 JUN 13
	Approval reference: 1	0059726		Approved by	EASA	
	Criteria: A330	200 4000 4	100 1440 1504			
	Applicable to: MSN 13	<u> </u>	<u> </u>		1 00005504 0004004	10 400 10
	APP-N1-GEN	Gene	ral	A	00005564.0001001	16 APR 10
	Approval reference: 1		20 201 ~* 220 200 .	Approved by		040 av 000 040E
	or 330-343) and 46874		30-321 01 330-322 0)i 330-323 0i 330-	341 or 330-342) or ((330-2	243 01 330-2435
	Applicable to: MSN 13	, ,	100 1440 1524			
	APP-N1-LIM	Limita			00005565.0001001	19 JUN 13
	Approval reference: 1		ations	Approved by		19 3014 19
			30-321 or 330-322		341 or 330-342) or ((330-2	0/13 or 330-2/13E
	or 330-343) and 46874		00-021 01 000-022 0	01 000-020 01 000-	041 01 000-042) 01 ((000-2	243 01 330-2431
	Applicable to: MSN 13	, ,	128 1448 1534			
	APP-N1-NORM		off Procedure		00005566.0003001	16 APR 10
	Approval reference: 1		ni riocedule	Approved by		IO AI' II IU
	Criteria: ((330-243 or 3		30-341 or 330-342 (
	Applicable to: MSN 13			3, 550 540, and 40	,o/-1)	
	APP-N1-PERF		rmance		00005567.0001001	16 APR 10
	Approval reference: 1	1 1	illunoc	Approved by	1	10 /11 110
	Trippioral foldiorder i	0000120		Approved by	Continued on	the fellowing page

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$\mathbf{M}^{(1)}$	Localization	T ⁽²⁾	DU Title		DU identification	DU date				
	Criteria: ((330-223 or 330-223F or 330-321 or 330-322 or 330-323 or 330-341 or 330-342) or ((330-243 or 330-243F									
	or 330-343) and 46874))									
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	APP-N1-PERF Engine Management Takeoff Thrust 00005568.0003001 16 APR 10									
	Approval reference: 10059726 Approved by EASA Criteria: (330-243 or 330-243F or 330-343)									
	Applicable to: MSN 13		- /							
	APP-N1-PERF	1	Engine Management Maximi	ım	00005569.0003001	16 APR 10				
	7.11 1 4 1 1 L 111		Continuous Thrust	4111	000000000000000	107411110				
	Approval reference: 10	0059		Approved by I	ASA					
	Criteria: (330-243 or 33	0-243								
i i	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	APP-N1-PERF		Engine Management Go-Aro	und Thrust	00005570.0003001	16 APR 10				
	Approval reference: 10			Approved by I	EASA					
	Criteria: (330-243 or 33		,							
	Applicable to: MSN 13	68, 1				10.155.10				
	APP-N1-APP		Appendices and Supplemen		00005571.0001001	16 APR 10				
	Approval reference: 10		726 3F or 330-321 or 330-322 or 33	Approved by I		12 or 220 242E				
	or 330-343) and 46874)		3F 01 330-321 01 330-322 01 33	0-323 01 330-3	141 01 330-342) 01 ((330-2	43 01 330-2436				
	Applicable to: MSN 13	,	380, 1428, 1448, 1534							
	APP-TAWS		General		00005590.0001001	25 JUL 14				
	Approval reference: 10	0059 [.]		Approved by E						
	Criteria: (A330 and (463	324 o	r 52992 or 53919 or 58449))							
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
			Introduction		00017267.0001001	22 MAR 16				
	Approval reference: 10	0057	334 <i>J</i>	Approved by I	ASA					
	Criteria: A330									
	Applicable to: MSN 13									
	Impacted DU: 0000885	i intr			00000051 0001001	10 11 11 10				
	MCDL-GEN-INTR Approval reference: 10	0020. 	Introduction	Approved by I	00008851.0001001	19 JUN 13				
	Criteria: A330	0033	120	approved by i	EAGA					
	Applicable to: MSN 13	68. 1	380, 1428, 1448, 1534							
	Impacted by TDU: 0001									
	MCDL-GEN-LIM		Limitations		00008852.0001001	26 NOV 09				
	Approval reference: 10	0059	726	Approved by I						
	Criteria: A330									
	Applicable to: MSN 13	68, 1								
	MCDL-GEN-PERF		Performance Determination		00008853.0001001	26 NOV 09				
	Approval reference: 10	0059	726	Approved by I	EASA	h - f-lli				



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. . (1)	1 1 11	T ⁽²⁾	BUTU	1	rne previous page					
M ⁽¹⁾	Localization	1'-	DU Title	DU identification	DU date					
	Criteria: A330	•• •								
	Applicable to: MSN 13	68, 1		1	22.1101/22					
	MCDL-GEN-PERF		Performance Penalties Published in the	00008854.0001001	26 NOV 09					
	A		Airplane Flight Manual MCDL Chapter							
	Approval reference: 10059726 Approved by EASA Criteria: A330									
	Applicable to: MSN 13	60 1	290 1429 1449 1524							
	MCDL-GEN-PERF	00, 1	Performance Penalties Calculated with	00008855.0001001	19 JUN 13					
	WIGDL-GEN-PENF		AFM OCTO Software	000000000000000000000000000000000000000	19 0011 13					
	Approval reference: 10	1050.	. –	 EASA						
	Criteria: A330	JUJ3	720 Approved by	LAGA						
	Applicable to: MSN 13	68. 1	380, 1428, 1448, 1534							
	MCDL-21-01	-	Ram Air Inlet Flap	00009315.0001001	19 JUN 13					
	Approval reference: 10	0059		1						
	Criteria: A330		. 20							
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-21-01		Illustration Ram Air Inlet Flap	00009316.0001001	26 NOV 09					
	Criteria: A330									
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-21-02		Ram Air Outlet Flap	00009317.0001001	19 JUN 13					
	Approval reference: 10	059	726 Approved by	ĖASA						
	Criteria: A330									
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	MCDL-21-02		Illustration Ram Air Outlet Flap	00009318.0001001	26 NOV 09					
	Criteria: A330									
	Applicable to: MSN 13									
	MCDL-23-01		Static Discharger	00016527.0001001	04 APR 16					
	Approval reference: 10	0057	663 Approved by	EASA						
	Criteria: A330									
	Applicable to: MSN 13									
	Impacted DU: 00008858	3 Sta		1	(2.11.11.12					
	MCDL-23-01		Static Discharger	00008858.0001001	19 JUN 13					
	Approval reference: 10	JU59	726 Approved by	EASA						
	Criteria: A330 Applicable to: MSN 13	CO 1	200 1400 1440 1524							
	Impacted by TDU: 0001	,								
	MCDL-23-01	0027	Illustration Static Discharger	00008859.0001001	26 NOV 09					
	Criteria: A330		Inustration Static Discharger	000000000000000000000000000000000000000	20 1101 09					
	Applicable to: MSN 13	68 1	380 1428 1448 1534							
	MCDL-27-02	00, 1	Slat Track Closing Plate	00008862.0001001	26 NOV 09					
	Approval reference: 10	1 1050			20110109					
	Approval reference. It	,,,,,	Approved by		he following page					



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	Criteria: A330				
İ	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534		
	MCDL-27-02		Illustration Slat Track Closing Plate	00008863.0001001	26 NOV 09
	Criteria: A330	•			
	Applicable to: MSN 1	368, 1	380, 1428, 1448, 1534		
	MCDL-27-03		Rubber Seal under Slats	00008864.0001001	26 NOV 09
	Approval reference: 1	0059	726 Approved by I	EASA	
	Criteria: A330				
		368, 1	380, 1428, 1448, 1534		
	MCDL-27-03		Illustration Rubber Seal under Slats	00008865.0001001	26 NOV 09
	Criteria: A330				
		368, 1	380, 1428, 1448, 1534		
	MCDL-27-04		Aileron Rubber Seal	00008866.0001001	25 JUL 14
	Approval reference: 1	0059	726 Approved by I	EASA	
	Criteria: A330				
		368, 1	380, 1428, 1448, 1534		
	MCDL-27-04		Illustration Aileron Rubber Seal	00008867.0001001	26 NOV 09
ļ	Criteria: A330				
	,		380, 1428, 1448, 1534		
	MCDL-27-05		Aileron Servo Actuator Fairing	00008868.0001001	26 NOV 09
	Approval reference: 1	0059	726 Approved by I	EASA	
	Criteria: A330				
	,	368, 1	380, 1428, 1448, 1534	1	
	MCDL-27-05		Illustration Aileron Servo Actuator	00008869.0001001	26 NOV 09
			Fairing		
	Criteria: A330	000 4	000 1400 1440 1504		
		368, 1	380, 1428, 1448, 1534	00000070 0004004	05 1111 44
	MCDL-27-06		Slat End Blade Seal	00008870.0001001	25 JUL 14
	Approval reference: 1 Criteria: A330	10059	726 Approved by I	EASA	
		260 1	380, 1428, 1448, 1534		
	MCDL-27-06	J00, I	Illustration Slat End Blade Seal	00008871.0001001	26 NOV 09
	Criteria: A330		Illustration Stat End Blade Seat	00000071.0001001	20 110 1 09
		36 <u>8</u> 1	380, 1428, 1448, 1534		
	MCDL-27-07	JJU, 1	Flap Blade Seal and Triangular Cushion	00008873.0001001	26 NOV 09
	IVIODE-27-07		Seal	00000073.0001001	20 NOV 09
	Approval reference: 1	10050		FASA	
	Criteria: A330	0009	720 Approved by I	LAUA	
		368 1	380, 1428, 1448, 1534		
	Applicable to: MON I	550, 1	000, 1720, 1770, 1007		

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Localization	T (2)		DU identification	DU date
MCDL-27-07		Illustration Flap Blade Seal and Triangular Cushion Seal	00008875.0001001	26 NOV 09
Criteria: A330	•	-	•	
Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534		
MCDL-27-08		Slat End Filling	00008877.0001001	19 JUN 13
Approval reference: 1	0059	726 Approved by	EASA	
Criteria: A330				
Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534		
MCDL-27-08		Illustration Slat End Filling	00008878.0001001	26 NOV 09
Criteria: A330				
Applicable to: MSN 13	868, 1			
MCDL-27-10		Inner Aileron Seal (Upper and Lower)	00008880.0001001	26 NOV 09
Approval reference: 1	0059	726 Approved by	EASA	
Criteria: A330				
Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534		
MCDL-27-10		Illustration Inner Aileron Seal (Upper and Lower)	00008881.0001001	26 NOV 09
Criteria: A330	•	,		
Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534		
MCDL-27-11	Ė	Inner Aileron Large Seal	00008882.0001001	19 JUN 13
Approval reference: 1		•		
Criteria: A330		, ,,		
Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534		
MCDL-27-11	Ĺ		00008883.0001001	26 NOV 09
Criteria: A330		, 		
Applicable to: MSN 13	868, 1	380, 1428, 1448, 1534		
			00009002.0002001	19 JUN 13
		3 - 1		
		380. 1428. 1448. 1534		
	Ť		00009003 0001001	26 NOV 09
		machaniem Heraenzenaer eeuphing eup		201101 00
	868. 1	380. 1428. 1448. 1534		
	, cc, .		00009004 0001001	19 JUN 13
MODE 20 02			00000001.0001001	10 0011 10
Approval reference: 1	002a.		FASA	
	0000	Approved by		
	168 1	380 1428 1448 1534		
	,50, 1		00009005 0001001	26 NOV 09
WIODE-20-02			000000000000000000000000000000000000000	20110109
Criteria: A330		Access bool oil belly railing		
Onicha. A000			Continued on	the following nac
	MCDL-27-07 Criteria: A330 Applicable to: MSN 13 MCDL-27-08 Approval reference: 1 Criteria: A330 Applicable to: MSN 13 MCDL-27-08 Criteria: A330 Applicable to: MSN 13 MCDL-27-10 Approval reference: 1 Criteria: A330 Applicable to: MSN 13 MCDL-27-10 Criteria: A330 Applicable to: MSN 13 MCDL-27-11 Approval reference: 1 Criteria: A330 Applicable to: MSN 13 MCDL-27-11 Criteria: A330 Applicable to: MSN 13 MCDL-27-11 Criteria: A330 Applicable to: MSN 13 MCDL-28-01 Approval reference: 1 Criteria: A330 Applicable to: MSN 13 MCDL-28-01 Criteria: A330 Applicable to: MSN 13 MCDL-28-01 Criteria: A330 Applicable to: MSN 13 MCDL-28-02 Approval reference: 1 Criteria: A330	MCDL-27-07 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-27-08 Approval reference: 100597 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-27-08 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-27-10 Approval reference: 100597 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-27-10 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-27-11 Approval reference: 100597 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-27-11 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-27-11 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-28-01 Approval reference: 100597 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-28-01 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-28-02 Approval reference: 100597 Criteria: A330 Applicable to: MSN 1368, 1 MCDL-28-02 Approval reference: 100597 Criteria: A330 Applicable to: MSN 1368, 1	MCDL-27-07	Localization T(2)



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	Applicable to: MSN 13	368, 1380	0, 1428, 1448, 1534							
	MCDL-28-04		uel Pump Fairing	00017268.0001001	22 MAR 16					
	Approval reference: 10057334 Approved by EASA									
	Criteria: A330									
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	Impacted DU: 00009011 Fuel Pump Fairing									
	MCDL-28-04		uel Pump Fairing	00009011.0001001	19 JUN 13					
	Approval reference: 10	0059726	Approved by I	:ASA						
	Criteria: A330	00 100	0 1400 1440 1504							
	Applicable to: MSN 13 Impacted by TDU: 0001									
	MCDL-28-04		ustration Fuel Pump Fairing	00009012.0001001	26 NOV 09					
	Criteria: A330		ustration ruel rump raining	00009012.0001001	20 NOV 09					
	Applicable to: MSN 13	128 128	0 1428 1448 1534							
	MCDL-29-01		round Green Hydraulic Connection	00009022.0001001	26 NOV 09					
	WIGDL-23-01		ccess Door	00003022.0001001	20 110 1 03					
	Approval reference: 10			ΙΔΟΔ						
	Criteria: A330	0000120	Approved by I	-non						
	Applicable to: MSN 13	368. 1380	0. 1428. 1448. 1534							
	MCDL-29-01		ustration Ground Green Hydraulic	00009023.0001001	26 NOV 09					
			onnection Access Door							
	Criteria: A330									
	Applicable to: MSN 13	368, 1380	0, 1428, 1448, 1534							
	MCDL-29-02	G	round Blue Hydraulic Connection	00009024.0001001	26 NOV 09					
			ccess Door							
	Approval reference: 10	0059726	Approved by I	EASA						
	Criteria: A330									
<u> </u>	Applicable to: MSN 13									
	MCDL-29-02		ustration Ground Blue Hydraulic	00009025.0001001	26 NOV 09					
	Ouitania, A000	C	onnection Access Door							
	Criteria: A330	00 100	0 1400 1440 1504							
	Applicable to: MSN 13 MCDL-29-03		round Yellow Hydraulic Connection	00009026.0001001	26 NOV 09					
	MCDL-29-03		•	00009026.0001001	26 NOV 09					
	Approval reference: 10		ccess Door Approved by E	EASA						
	Criteria: A330	0003120	Approved by i	LAUA						
	Applicable to: MSN 13	368, 1380	0. 1428. 1448. 1534							
	MCDL-29-03		ustration Ground Yellow Hydraulic	00009027.0001001	26 NOV 09					
	1110000		onnection Access Door	0000027.0001001	201101 00					
	Criteria: A330									
	Applicable to: MSN 13	368, 1380	0, 1428, 1448, 1534							



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date			
	MCDL-30-01		Icing Indicator	00009028.0001001	26 NOV 09			
	Approval reference: 1	0059	726 Approved by I	EASA				
	Criteria: A330							
	Applicable to: MSN 13	68, 1						
	MCDL-30-01		Illustration Icing Indicator	00009029.0001001	26 NOV 09			
	Criteria: A330							
	Applicable to: MSN 13	68, 1						
	MCDL-32-01		Center Landing Gear Door Ground	00010871.0001001	02 JUL 10			
			Opening Access Door					
	Approval reference: 1	0059	726 Approved by I	EASA				
	Criteria: A330							
	Applicable to: MSN 13	68, 1						
	MCDL-32-01		Illustration Center Landing Gear Door	00010872.0001001	02 JUL 10			
			Ground Opening Access Door					
	Criteria: A330							
	Applicable to: MSN 13	68, 1		1	22.1101/22			
	MCDL-32-02		Main Landing Gear Door Seal	00009441.0001001	26 NOV 09			
	Approval reference: 1	0059	726 Approved by I	EASA				
	Criteria: A330	1	000 1400 1440 1504					
$ldsymbol{ld}}}}}}$	Applicable to: MSN 13	68, 1		1	22.11011.22			
	MCDL-32-02		Illustration Main Landing Gear Door Seal	00009442.0001001	26 NOV 09			
	Criteria: A330							
	Applicable to: MSN 13	68, 1	<u> </u>	1				
	MCDL-32-03		Main Landing Gear Leg Door and	00009030.0001001	26 NOV 09			
			Hinged Door Rubber Seal					
	Approval reference: 10 Criteria: A330	0059	726 Approved by I	EASA				
ŀ		CO 1	200 1420 1440 1524					
	Applicable to: MSN 13	00, 1		00000001 0001001	00 NOV 00			
	MCDL-32-03		Illustration Main Landing Gear Leg Door and Hinged Door Rubber Seal	00009031.0001001	26 NOV 09			
	Criteria: A330		and ninged boor hubber Sear					
	Applicable to: MSN 13	6Q 1	380 1438 1448 1534					
	MCDL-32-04	1	Nose Fitting Towing	00009032.0001001	19 JUN 13			
	Approval reference: 1	UUEU. 			19 0011 13			
	Criteria: A330	0033	720 Approved by I	LAGA				
	Applicable to: MSN 13	68 1	380 1428 1448 1534					
	MCDL-32-04	55, 1	Illustration Nose Fitting Towing	00009033.0001001	26 NOV 09			
	Criteria: A330		musuation 11056 Fitting Towning	00003000.0001001	20110103			
	Applicable to: MSN 13	68 1	380 1428 1448 1534					
	MCDL-32-05	1	Nose Landing Gear Wheel Hubcap	00010862.0001001	19 JUN 13			
	Approval reference: 1	UUZO.			13 0011 13			
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	Criteria: A330									
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	MCDL-32-05		Illustration Nose Landing Gear Wheel Hubcap	00010863.0001001	02 JUL 10					
	Criteria: A330	Criteria: A330								
	Applicable to: MSN 13	68, 1								
	MCDL-32-06		Main Landing Gear Wheel Hubcap	00010879.0001001	19 JUN 13					
	Approval reference: 10	0059	726 Approved by	EASA						
	Criteria: A330									
$oxed{oxed}$	Applicable to: MSN 13	68, 1								
	MCDL-32-06		Illustration Main Landing Gear Wheel Hubcap	00010880.0001001	02 JUL 10					
	Criteria: A330									
	Applicable to: MSN 13									
	MCDL-32-08		Nose Landing Gear Door Seal	00016165.0001001	03 JUN 15					
	Approval reference: 10	0053	530 Approved by	EASA						
	Criteria: A330									
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	Impacted DU: NONE									
	MCDL-32-08	Х	Illustration Nose Landing Gear Door Seal	00016166.0001001	03 JUN 15					
	Approval reference: 10	0053	530 Approved by	EASA						
	Criteria: A330 Applicable to: MSN 13	68 1	380 1428 1448 1534							
	Impacted DU: NONE	, -	, - :, - : :, :							
	MCDL-33-01		Wing/Landing Light Glazing	00009035.0001001	19 JUN 13					
	Approval reference: 10	0059								
	Criteria: A330		, pr							
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-33-01		Illustration Wing/Landing Light Glazing	00009036.0001001	26 NOV 09					
	Criteria: A330									
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-33-02		Taxi/Takeoff Light	00009037.0001001	19 JUN 13					
	Approval reference: 10	0059	726 Approved by	EASA						
	Criteria: A330		•							
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-33-02		Illustration Taxi/Takeoff Light	00009038.0001001	26 NOV 09					
	Criteria: A330		-							
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-33-03		Runway Turnoff Light	00009039.0001001	19 JUN 13					
	Approval reference: 10	0059	726 Approved by	EASA						



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$\mathbf{M}^{(1)}$	Localization	T ⁽²⁾	DU Title	DU identification	DU date				
	Criteria: A330								
İ	Applicable to: MSN 1368, 1380, 1428, 1448, 1534								
	MCDL-33-03		Illustration Runway Turnoff Light	00009040.0001001	26 NOV 09				
	Criteria: A330								
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534								
	MCDL-33-04		Logo Light Lens	00017604.0001001	22 MAR 16				
	Approval reference: 1	0057	Approved by I	EASA					
<u> </u>	Criteria: A330								
	Applicable to: MSN 13	,							
	Impacted DU: 0000904	1 Log							
	MCDL-33-04	<u> </u>	Logo Light Lens	00009041.0001001	19 JUN 13				
	Approval reference: 1	0059	726 Approved by I	EASA					
	Criteria: A330		000 4400 4440 4504						
	Applicable to: MSN 13	,							
	Impacted by TDU: 0001	7604	<u> </u>	00000040 0004004	00 NOV 00				
	MCDL-33-04 Criteria: A330		Illustration Logo Light Lens	00009042.0001001	26 NOV 09				
	Applicable to: MSN 13	60 1	200 1420 1440 1524						
	MCDL-33-05	00, 1	Rear Navigation/Strobe Lights Glazing	00009043.0001001	28 FEB 11				
	Approval reference: 1	00E0.	, , , , , , , , , , , , , , , , , , , ,	l l	20 FED 11				
	Criteria: A330	UUJS	726 Approved by 1	EASA					
	Applicable to: MSN 13	68. 1	380, 1428, 1448, 1534						
	MCDL-33-05	1	Illustration Rear Navigation/Strobe	00009044.0001001	26 NOV 09				
	111000000		Lights Glazing	0000001110001001	201101 00				
	Criteria: A330		1 = 19.110 0.1111119						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534						
	MCDL-33-06		Upper Anti-Collision (Beacon) Light	00009046.0001001	19 JUN 13				
			Cover						
	Approval reference: 1	0059	726 Approved by I	ËASA					
	Criteria: A330								
	Applicable to: MSN 13	68, 1							
	MCDL-33-06		Illustration Upper Anti-Collision	00009047.0001001	26 NOV 09				
			(Beacon) Light Cover						
	Criteria: A330								
	Applicable to: MSN 13	68, 1							
	MCDL-33-07		Lower Anti-Collision (Beacon) Light Cover	00009048.0001001	19 JUN 13				
	Approval reference: 1	1 1059		FASA					
	Criteria: A330		Approved by						
	Applicable to: MSN 13	68. 1	380. 1428. 1448. 1534						
	Continued on the following nace								

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date				
	MCDL-33-07		Illustration Lower Anti-Collision	00009049.0001001	26 NOV 09				
			(Beacon) Light Cover						
	Criteria: A330								
	Applicable to: MSN 13	68, 1							
	MCDL-51-02	<u> </u>	Passenger Door Scuff Plate	00009052.0002001	16 APR 10				
	Approval reference: 1	0059	726 Approved by	EASA					
	Criteria: 330-200F								
	Applicable to: MSN 13	68, 1							
	MCDL-51-02		Illustration Passenger Door Scuff Plate	00009053.0002001	16 APR 10				
	Criteria: 330-200F								
	Applicable to: MSN 13	68, 1		i					
	MCDL-51-03		Bulk Door Scuff Plate	00009054.0001001	26 NOV 09				
	Approval reference: 1	0059	726 Approved by	EASA					
	Criteria: A330		000 4400 4440 4504						
	Applicable to: MSN 13	68, 1			22.11011.22				
	MCDL-51-03		Illustration Bulk Door Scuff Plate	00009055.0001001	26 NOV 09				
	Criteria: A330	co 1	000 1400 1440 1504						
	Applicable to: MSN 13	68, 1		00000050 0000001	10 100 10				
	MCDL-51-04		Passenger Door Gutter	00009056.0002001	16 APR 10				
	Approval reference: 10 Criteria: 330-200F	0059	726 Approved by	EASA					
	••	CO 1	200 1420 1440 1524						
	Applicable to: MSN 13	00, 1		00000057 0000001	10 ADD 10				
	MCDL-51-04		Illustration Passenger Door Gutter	00009057.0002001	16 APR 10				
	Criteria: 330-200F	CO 1	200 1420 1440 1524						
	Applicable to: MSN 13	00, 1		000000000000000000000000000000000000000	00 NOV 00				
	MCDL-52-02		Forward Cargo Loading Operation Control Panel Door	00009059.0001001	26 NOV 09				
	Approval reference: 1	00E0.		 					
	Criteria: A330	บบอย	Approved by	EASA					
	Applicable to: MSN 13	6Q 1	380 1438 1448 1534						
	MCDL-52-02	JU, 1	Illustration Forward Cargo Loading	00009060.0001001	26 NOV 09				
	INICDL-32-02		Operation Control Panel Door	00003000.0001001	20 110 1 03				
	Criteria: A330		Operation Control Faller Door						
	Applicable to: MSN 13	68 1	380, 1428, 1448, 1534						
	MCDL-52-03	1	Aft Cargo Door Control Panel Access	00009061.0001001	26 NOV 09				
	WODE OF OO		Door	00000001.0001001	20110103				
	Approval reference: 1	0059 [.]		EASA					
	Criteria: A330	- 555							
	Applicable to: MSN 13	68. 1	380. 1428. 1448. 1534						
	Applicable to: more 1000, 1420, 1440, 1004								

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date					
	MCDL-52-03		Illustration Aft Cargo Door Control Panel Access Door	00009062.0001001	26 NOV 09					
	Criteria: A330									
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534									
	MCDL-52-04		Aft Cargo Loading Operation Control Panel Door	00009063.0001001	26 NOV 09					
İ	Approval reference: 1	0059	726 Approved by I	EASA						
	Criteria: A330									
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-52-04		Illustration Aft Cargo Loading Operation Control Panel Door	00009064.0001001	26 NOV 09					
İ	Criteria: A330	•								
ĺ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-52-07		Potable Water Service Door	00009069.0002001	19 JUN 13					
	Approval reference: 1	0059	726 Approved by I	ĖASA						
	Criteria: 330-200F									
ĺ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-52-07		Illustration Potable Water Service Door	00009070.0002001	19 JUN 13					
	Criteria: 330-200F	•								
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-52-08		Vacuum Toilet Service Door	00009071.0002001	19 JUN 13					
ĺ	Approval reference: 1	0059	726 Approved by I	EASA						
	Criteria: 330-200F									
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-52-08		Illustration Vacuum Toilet Service Door	00009072.0002001	19 JUN 13					
	Criteria: 330-200F	•								
ĺ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534							
	MCDL-52-09	Х	Fuel Center Tank Water Drain Access Door	00017605.0001001	22 MAR 16					
	Approval reference: 1	0057	334 Approved by I	EASA						
	Criteria: A330									
	Applicable to: MSN 13									
	Impacted DU: 0000907	3 Fue	el Center Tank Water Drain Access Door							
	MCDL-52-09		Fuel Center Tank Water Drain Access Door	00009073.0001001	19 JUN 13					
	Approval reference: 1	0059	726 Approved by I	EASA						
	Criteria: A330									
	Applicable to: MSN 13									
İ	Impacted by TDU: 0001	17605	Fuel Center Tank Water Drain Access Door							
				Continued on t	he following page					

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	MCDL-52-09		Illustration Fuel Center Tank Water	00009074.0001001	26 NOV 09
			Drain Access Door		
	Criteria: A330				
	Applicable to: MSN 13	68, 1			
	MCDL-52-10		Cargo Door Indicator Flag	00009075.0001001	19 JUN 13
	Approval reference: 10	00597	726 Approved by	EASA	
ļ	Criteria: A330				
	Applicable to: MSN 13	68, 1			
	MCDL-52-10		Illustration Cargo Door Indicator Flag	00009076.0001001	26 NOV 09
	Criteria: A330				
	Applicable to: MSN 13	68, 1	, , ,		
	MCDL-52-11		Potable Water Forward Drain Panel	00009077.0001001	26 NOV 09
			Access Door		
	Approval reference: 10	00597	726 Approved by	EASA	
	Criteria: A330				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534		
	MCDL-52-11		Illustration Potable Water Forward Drain	00009078.0001001	26 NOV 09
			Panel Access Door		
	Criteria: A330				
	Applicable to: MSN 13	68, 1			
	MCDL-52-12		Forward Cargo Door Access Cover	00009079.0001001	26 NOV 09
			Panel		
	Approval reference: 10	00597	726 Approved by	EASA	
	Criteria: A330				
	Applicable to: MSN 13	<u>68, 1</u>			
	MCDL-52-12		Illustration Forward Cargo Door Access	00009080.0001001	28 JUN 16
			Cover Panel		
	Criteria: A330				
	Applicable to: MSN 13	68, 1			
	MCDL-52-13		Aft Cargo Door Access Cover Panel	00009081.0001001	26 NOV 09
	Approval reference: 10	00597	726 Approved by	EASA	
	Criteria: A330				
	Applicable to: MSN 13	68, 1			
	MCDL-52-13		Illustration Aft Cargo Door Access	00009082.0001001	28 JUN 16
			Cover Panel		
	Criteria: A330				
	Applicable to: MSN 13	68, 1			
	MCDL-52-14		Passenger Door and Emergency Exits	00009083.0002001	28 FEB 11
			Upper Cover Plate		
	Approval reference: 10	00597	726 Approved by	EASA	
	Criteria: 330-200F				



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 13	368, 1	380, 1428, 1448, 1534		
	MCDL-52-14		Illustration Passenger Door and Emergency Exits Upper Cover Plate	00009084.0002001	12 SEP 11
	Criteria: 330-200F				
	Applicable to: MSN 13	368, 1	, , ,		
	MCDL-53-01		"Dog House" Closing Panel	00009091.0001001	26 NOV 09
	Approval reference: 1	0059	726 Approved by I	EASA	
	Criteria: A330				
	Applicable to: MSN 13	368, 1			
	MCDL-53-01		Illustration "Dog House" Closing Panel	00009092.0001001	26 NOV 09
	Criteria: A330				
	Applicable to: MSN 13	368, 1			
	MCDL-53-02	<u> </u>	Belly Fairing Sliding Panel	00009094.0001001	26 NOV 09
	Approval reference: 1	0059	726 Approved by I	EASA	
	Criteria: A330				
	Applicable to: MSN 13	368, 1			
	MCDL-53-02		Illustration Belly Fairing Sliding Panel	00009095.0001001	26 NOV 09
	Criteria: A330				
	Applicable to: MSN 13	368, 1			
	MCDL-53-03		Flap Valve Assy	00009097.0001001	28 FEB 11
	Approval reference: 1	0059	726 Approved by I	EASA	
	Criteria: A330				
	Applicable to: MSN 13	368, 1			
	MCDL-53-03		Illustration Flap Valve Assy	00009098.0001001	26 NOV 09
	Criteria: A330				
	Applicable to: MSN 13	368, 1			
	MCDL-53-04		Belly Fairing Seal	00009099.0001001	26 NOV 09
	Approval reference: 1	0059	726 Approved by I	EASA	
	Criteria: A330		000 4400 4440 4504		
	Applicable to: MSN 13	368, 1			22.110.1.22
	MCDL-53-04		Illustration Belly Fairing Seal	00009100.0001001	26 NOV 09
	Criteria: A330	4	000 4400 4440 4504		
	Applicable to: MSN 13				10.155.10
	MCDL-54-03		Spring Plate	00009111.0001001	16 APR 10
	Approval reference: 10			EASA	
	\ \ \		3F or 330-341 or 330-342 or 330-343)		
	Applicable to: MSN 13	508, 1		00000110 0001551	10.400.10
	MCDL-54-03		Illustration Spring Plate	00009112.0001001	16 APR 10
			3F or 330-341 or 330-342 or 330-343)		
	Applicable to: MSN 13	568, 1	380, 1428, 1448, 1534		

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date		
	MCDL-54-04		Pylon Access Panel	00009113.0001001	26 NOV 09		
	Approval reference: 10	0059					
	Criteria: (330-243 or 33	0-243	3F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	MCDL-54-04		Illustration Pylon Access Panel	00009114.0001001	26 NOV 09		
	Criteria: A330						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	MCDL-55-01	Х	Slidelip of the Apron Fairing Parts	00015919.0001001	25 MAR 15		
	Approval reference: 10	0052	741 Approved by I	EASA			
	Criteria: A330						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	Impacted DU: NONE						
	MCDL-55-01	Х	Illustration of Slidelip of the Apron	00015920.0001001	25 MAR 15		
			Fairing Parts				
	Approval reference: 10	0052	741 Approved by I	EASA			
	Criteria: A330						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	Impacted DU: NONE						
	MCDL-57-01		Underwing Plug for Jacking Point	00009115.0001001	26 NOV 09		
	Approval reference: 10	0059	726 Approved by I	EASA			
	Criteria: A330						
	Applicable to: MSN 13	68, 1	, , ,				
	MCDL-57-01		Illustration Underwing Plug for Jacking Point	00009116.0001001	26 NOV 09		
	Criteria: A330						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	MCDL-57-02		Winglet	00009117.0002001	19 JUN 13		
	Approval reference: 10	0059	726 Approved by I	EASA			
	`	0-202	2 or 330-203 or 330-223 or 330-243 or 330-30	2 or 330-303 or 330-323 o	r 330-343 or		
	330-200F)						
	Applicable to: MSN 13	68, 1	<u>, , , , , , , , , , , , , , , , , , , </u>				
	MCDL-57-02		Illustration Winglet	00009118.0001001	26 NOV 09		
	Criteria: A330						
	Applicable to: MSN 13						
	MCDL-57-04		Flap Track Fairing	00009119.0001001	25 JUL 14		
	Approval reference: 10	0059	726 Approved by I	EASA			
	Criteria: A330						
Ш	Applicable to: MSN 13	68, 1					
	MCDL-57-04		Illustration Flap Track Fairing	00009120.0001001	26 NOV 09		
	Criteria: A330						
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date		
	MCDL-57-05	Х	Access Panel to Slat Actuator	00017606.0001001	22 MAR 16		
			Overtorque Indicator Flag				
	Approval reference: 1	ence: 10057334 Approved by EASA					
	Criteria: A330	a: A330					
			380, 1428, 1448, 1534				
	,	21 Acc	cess Panel to Slat Actuator Overtorque Indica				
	MCDL-57-05		Access Panel to Slat Actuator	00009121.0001001	25 JUL 14		
		<u> </u>	Overtorque Indicator Flag	<u> </u>			
	Approval reference: 1	10059	726 Approved by	EASA			
	Criteria: A330						
			380, 1428, 1448, 1534				
_		1/606	Access Panel to Slat Actuator Overtorque In				
	MCDL-57-05		Illustration Access Panel to Slat	00009122.0001001	02 JUL 10		
	0.11.1.1.1000		Actuator Overtorque Indicator Flag				
	Criteria: A330						
			380, 1428, 1448, 1534				
	MCDL-57-07		Flap Track Fairing Cover	00017269.0001001	22 MAR 16		
	Approval reference: 1	10057	334 Approved by	EASA			
	Criteria: A330						
			380, 1428, 1448, 1534				
	Impacted DU: 0000912	23 Fla					
	MCDL-57-07	<u> </u>	Flap Track Fairing Cover	00009123.0001001	19 JUN 13		
	Approval reference: 1	10059	726 Approved by	EASA			
	Criteria: A330						
			380, 1428, 1448, 1534				
	, ,	1/269	P Flap Track Fairing Cover				
	MCDL-57-07		Illustration Flap Track Fairing Cover	00009124.0001001	26 NOV 09		
	Criteria: A330	000 4	000 4400 4440 4504				
	- ' '	368, 1	380, 1428, 1448, 1534		1		
	MCDL-57-08	<u> </u>	Flap to Movable Flap Track Fairing Seal	00009125.0001001	26 NOV 09		
	Approval reference: 1	10059	726 Approved by	EASA			
	Criteria: A330						
		368, 1	380, 1428, 1448, 1534				
	MCDL-57-08		Illustration Flap to Movable Flap Track	00009126.0001001	26 NOV 09		
			Fairing Seal				
	Criteria: A330						
	<u>''</u>		380, 1428, 1448, 1534				
	MCDL-57-09		Cover on Flap Track Fixed Fairing	00017270.0001001	22 MAR 16		
	Approval reference: 1	0057	Approved by	EASA			
	Criteria: A330						
	Applicable to: MSN 1	368, 1	380, 1428, 1448, 1534				
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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date	
	Impacted DU: 0001087	7 Co	ver on Flap Track Fixed Fairing			
	MCDL-57-09		Cover on Flap Track Fixed Fairing	00010877.0001001	19 JUN 13	
	Approval reference: 10059726 Approved by EASA					
	Criteria: A330					
	Applicable to: MSN 13	,				
	, ,	7270	Oover on Flap Track Fixed Fairing			
	MCDL-57-09		Illustration Cover on Flap Track Fixed Fairing	00010878.0001001	02 JUL 10	
	Criteria: A330		raining			
	Applicable to: MSN 13	68 1	380 1428 1448 1534			
	MCDL-71-05	00, 1	Fan Cowl Door Hoist Point Plug	00009309.0001001	16 APR 10	
	Approval reference: 10	JU20.			IO AFN IO	
			3F or 330-341 or 330-342 or 330-343)	LAGA		
	Applicable to: MSN 13		,			
	MCDL-71-05	00, 1	Illustration Fan Cowl Door Hoist Point	00009310.0001001	16 APR 10	
	WODE 71 03		Plug	00003010.0001001	10 /11 10	
	Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)					
	Applicable to: MSN 13		,			
	MCDL-71-06			00009311.0001001	19 JUN 13	
	Approval reference: 10059726 Approved by EASA					
	Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)					
	Applicable to: MSN 13					
	MCDL-71-06		Illustration Fan Cowl Door Hold Open	00009312.0001001	16 APR 10	
			Rod			
	Criteria: (330-243 or 330	0-243	3F or 330-341 or 330-342 or 330-343)			
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	MCDL-71-07		Nacelle Hoist Point Plug Nose Cowl	00009313.0001001	16 APR 10	
	Approval reference: 10			EASA		
			BF or 330-341 or 330-342 or 330-343)			
	Applicable to: MSN 13	68, 1				
	MCDL-71-07		Illustration Nacelle Hoist Point Plug Noise Cowl	00009314.0001001	28 FEB 11	
	Critoria: (330-243 or 33)	N-2//?	Noise Cowi BF or 330-341 or 330-342 or 330-343)			
	Applicable to: MSN 13		,			
	MCDL-78-08	00, 1	Thrust Reverser Hoist Point Plug	00009403.0001001	16 APR 10	
	Approval reference: 10	JU20.			IU AFN IU	
			BF or 330-341 or 330-342 or 330-343)	LAUA		
	Applicable to: MSN 13		,			
	MCDL-78-08	55, 1	Illustration Thrust Reverser Hoist Point	00009404.0001001	16 APR 10	
	WODE 70 00		Plug	00000707.0001001	10 /11 11 10	
	Criteria: (330-243 or 330	1 0-243	BF or 330-341 or 330-342 or 330-343)			
1	2		5. 555 511 61 666 612 61 666 610)			



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date		
	Applicable to: MSN 1	368, 1	380, 1428, 1448, 1534				
	MCDL-78-09		Thrust Reverser Cinching Device	00009405.0001001	16 APR 10		
	Approval reference: 10059726 Approved by EASA						
	Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)						
	Applicable to: MSN 1	368, 1					
	MCDL-78-09		Illustration Thrust Reverser Cinching Device	00009406.0001001	16 APR 10		
	Criteria: (330-243 or 33	30-243	F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 1	368, 1	380, 1428, 1448, 1534				
	MCDL-78-10		Thrust Reverser "C" Duct Actuation System	00009407.0001001	19 JUN 13		
	Approval reference: 1	0059	726 Approved by I	ĖASA			
	Criteria: (330-243 or 33	30-243	3F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 1	368, 1	380, 1428, 1448, 1534				
	MCDL-78-10		Illustration Thrust Reverser "C" Duct Actuation System	00009408.0001001	16 APR 10		
	Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)						
İ	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	MCDL-78-11		Thrust Reverser Front and Rear Hold Open Rod	00009409.0001001	19 JUN 13		
	Approval reference: 1			EASA			
	,		3F or 330-341 or 330-342 or 330-343) 380, 1428, 1448, 1534				
	MCDL-78-11		Illustration Thrust Reverser Front and Rear Hold Open Rod	00009410.0001001	16 APR 10		
			3F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 1						
	MCDL-78-12		Thrust Reverser Hinge Access Cover	00009411.0001001	19 JUN 13		
	Approval reference: 1			EASA			
	`		3F or 330-341 or 330-342 or 330-343) 380, 1428, 1448, 1534				
	MCDL-78-12		Illustration Thrust Reverser Hinge Access Cover	00009412.0001001	16 APR 10		
	Criteria: (330-243 or 33	30-243	F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 1	368, 1	380, 1428, 1448, 1534				
	MCDL-78-13		Thrust Reverser Bavette Fairing	00009413.0001001	19 JUN 13		
	Approval reference: 1			EASA			
	,		BF or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 1	3 <u>68,</u> 1	380, 1428, 1448, 1534				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date		
	MCDL-78-13		Illustration Thrust Reverser Bavette	00009414.0001001	16 APR 10		
			Fairing				
	Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)						
	Applicable to: MSN 13	68, 1	<u> </u>				
	MCDL-78-14		Thrust Reverser Door Actuator Pit Fairing	00009415.0001001	19 JUN 13		
	Approval reference: 10	1059.		I FASA			
	• •		BF or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 13		,				
	MCDL-78-14	ŕ	Illustration Thrust Reverser Door	00009416.0001001	16 APR 10		
			Actuator Pit Fairing				
	Criteria: (330-243 or 330	0 -243	3F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	MCDL-78-15		Thrust Reverser Pivot Door Access	00009417.0001001	16 APR 10		
			Panel				
	Approval reference: 10			EASA			
	'		3F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 13	68, 1					
	MCDL-78-15		Illustration Thrust Reverser Pivot Door	00009418.0001001	16 APR 10		
	0 1: 1: (000 0 10		Access Panel				
			3F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 13	68, 1					
	MCDL-78-16		Thrust Reverser Rectangular Movable	00009419.0001001	19 JUN 13		
	Ammunual mafamaman di		Panel	1			
	Approval reference: 10		726 Approved by I 3F or 330-341 or 330-342 or 330-343)	EASA			
	Applicable to: MSN 13		,				
	MCDL-78-16	00, 1	Illustration Thrust Reverser Rectangular	00009420.0001001	16 APR 10		
	WICDL-70-10		Movable Panel	00003420.0001001	IU AFN IU		
	Criteria: (330-243 or 330	I 0-243	BF or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 13						
	MCDL-78-17	-, .	Thrust Reverser Triangular Movable	00009421.0001001	19 JUN 13		
			Panel				
	Approval reference: 10	0059		EASA			
	Criteria: (330-243 or 330	0-243	3F or 330-341 or 330-342 or 330-343)				
İ	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				
	MCDL-78-17		Illustration Thrust Reverser Triangular	00009422.0001001	16 APR 10		
			Movable Panel				
	\		3F or 330-341 or 330-342 or 330-343)				
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date	
	MCDL-78-18		Common Nozzle Assembly Hoist Point	00009423.0001001	16 APR 10	
			Plug			
	Approval reference: 10	EASA				
	Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) Applicable to: MSN 1368, 1380, 1428, 1448, 1534					
		68, 1		00000404 0004004	10.400.10	
	MCDL-78-18		Illustration Common Nozzle Assembly Hoist Point Plug	00009424.0001001	16 APR 10	
			BF or 330-341 or 330-342 or 330-343)			
$oxed{oxed}$	Applicable to: MSN 13	68, 1				
	MCDL-78-19		Common Nozzle Assembly Pylon Fairing Trailing Edge	00009425.0001001	19 JUN 13	
	Approval reference: 10			EASA		
	`		BF or 330-341 or 330-342 or 330-343)		_	
	Applicable to: MSN 13	68, 1				
	MCDL-78-19		Illustration Common Nozzle Assembly Pylon Fairing Trailing Edge	00009426.0001001	16 APR 10	
	١ ،		3F or 330-341 or 330-342 or 330-343)			
	Applicable to: MSN 13	68, 1				
	MCDL-78-20		Latch Number 4 Access Panel	00009427.0001001	16 APR 10	
	Approval reference: 10			EASA		
	`		3F or 330-341 or 330-342 or 330-343)			
Ш	Applicable to: MSN 13	68, 1	 			
	MCDL-78-20		Illustration Latch Number 4 Access Panel	00009428.0001001	16 APR 10	
	\		3F or 330-341 or 330-342 or 330-343)			
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	SPERF-CONT-GEN		General	00005593.0001001	26 NOV 09	
	Approval reference: 10	0059	726 Approved by	EASA		
	Criteria: A330					
$oxed{oxed}$	Applicable to: MSN 13	68, 1		1	00.1101/.05	
	SPERF-CONT-LIM		Limitations	00005594.0001001	26 NOV 09	
	Approval reference: 10	JU59	726 Approved by	EASA		
	Criteria: A330	CO 4	200 1420 1440 1524			
	Applicable to: MSN 13			00005050 0001001	06 NOV 00	
	SPERF-CONT-PERF Approval reference: 10		Aircraft Configuration 726 Approved by	00005850.0001001	26 NOV 09	
	Criteria: A330	JUJ9	Approved by	LAUA		
	Applicable to: MSN 13	68, 1	380, 1428, 1448, 1534			
	SPERF-CONT-PERF		Takeoff and Landing Performance	00005595.0001001	26 NOV 09	
	Approval reference: 10	0059	726 Approved by	ĖASA		
	Criteria: A330					



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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date	
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534					

(1) Evolution code : N=New, R=Revised, E=Effectivity

(2) Temporary information

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M ⁽¹⁾	TR identification		TR Title	Deleted by
		date		
			DISPLAY UNIT FAILURE	
	Approval reference:		Approved by EASA	
	Criteria: (A330 and 2			
	Applicable to: MSN			
			Inertial Reference System (IRS)	
	Approval reference		Approved by EASA	
	Criteria: (A330 and (2		"	
	Applicable to: MSN		, ,	
	TR457 issue 1		Landing distance determination in case of in-flight failure	
İ	Approval reference	10051606	Approved by EASA	•
	Criteria: A330			
	Applicable to: MSN			
	TR477 issue 1	23 MAR 15	SATCOM Voice system	
	Approval reference	10052695	Approved by EASA	
	Criteria: ((330-200 or	330-200F or 33	30-300) and 200593)	
	Applicable to: MSN	1368, 1380, 14	28, 1448, 1534	
	TR528 issue 2	08 MAY 15	Abnormal V Alpha Prot	
	Approval reference	10053264	Approved by EASA	•
	Criteria: A330			
	Applicable to: MSN			
	TR531 issue 1	25 MAR 15	MCDL 55-01 Slidelip of the Apron Fairing Pa	rts
	Approval reference	: 10052741	Approved by EASA	
	Criteria: A330			
	Applicable to: MSN			
	TR597 issue 1		A330 MCDL 32.08 NOSE LANDING GEAR DO	OOR
			SEAL	
	Approval reference	: 10053530	Approved by EASA	
	Criteria: A330			
	Applicable to: MSN			
			MCDL 23-01 Static Discharger	
	Approval reference	: 10057663	Approved by EASA	
	Criteria: A330			
	Applicable to: MSN			
	TR677 issue 1	03 NOV 15	Autoland Databases with Honeywell ADIRU	MOD 203206 or 203871 or 203712
	Approval reference		Approved by EASA	
	Criteria: (A330 and (258415))	200064 or 2021	64 or 202791 or 203869 or 203870 or 55346 or 5	6497 or 56609 or 56720 or
	Applicable to: MSN	1368, 1380, 14	28. 1448. 1534	
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M ⁽¹⁾	TR identification	TR approval	TR Title	Deleted by		
INI.	Tit identification	1 1 1	III THE	Deleted by		
		date				
	TR687 issue 1	13 OCT 15	Towbarless operations			
	Approval reference	: 10055093	Approved by EASA			
	Criteria: A330					
	Applicable to: MSN	1368, 1380, 14	28, 1448, 1534			
	TR692 issue 1	22 MAR 16	High-speed Tape Inspection for A330			
	Approval reference	: 10057334	Approved by EASA	·		
	Criteria: A330					
	Applicable to: MSN	1368, 1380, 14	28, 1448, 1534			
	TR732 issue 1	09 AUG 16	Complementary Performance Data File			
	Approval reference	10059075	Approved by EASA	·		
	Criteria: A330					
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534					

⁽¹⁾ Evolution code: N=New, R=Revised, E=Effectivity

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LIST OF APPROVAL REFERENCES

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Approval Date	Approval Reference	Approved By
28 FEB 17	LR03D17006026	Airbus under the authority of DOA ref. EASA. 21J.031
20 FEB 17	FM1700474	Airbus under the authority of DOA ref. EASA. 21J.031
09 JAN 17	10060569	EASA
05 JAN 17	G01M16014405	Airbus under the authority of DOA ref. EASA. 21J.031
20 DEC 16	G01M16014101	Airbus under the authority of DOA ref. EASA. 21J.031
28 NOV 16	LR00FM1606155	Airbus under the authority of DOA ref. EASA. 21J.031
16 NOV 16	G01FM1605798	Airbus under the authority of DOA ref. EASA. 21J.031
11 OCT 16	10059726	EASA
11 OCT 16	10059726	EASA

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M ⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date	Title			
	40176		22 JAN 14	FUEL-REFUEL COUPLING-INSTALL ON THE LEFT WING			
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	43029		18 SEP 12	LANDING GEAR - MAIN GEAR - FIT STRENGTHENED MAIN LANDING GEAR FOR GROWTH A/C			
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	43537		18 SEP 12	NAVIGATION - ADIRS - FIT REDUCED VERTICAL SEPARATION MINIMUM (RVSM)			
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534				
	46324 Applicable to: MSN 130	68, 1380, 1428, 14	22 JAN 14 48, 1534	NAVIGATION - GPWS - ACTIVATE ENHANCED GPWS			
	46874		18 SEP 12	ENGINE AND FUEL CONTROL-FADEC- ACTIVATE FUNCTION MODIFIED ENGINE ACCELERATION SCHEDULE FOR TAKE-OFF (MEASTO)			
	Applicable to: MSN 13	68, 1380, 1428, 14					
	46893		18 SEP 12	NAVIGATION - MMR - INSTALL COLLINS MULTI-MODE RECEIVERS P/N 822-1152-121			
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	47244		18 SEP 12	NAVIGATION-STANDBY NAVIGATION SYSTEMS- INSTALL SEXTANT AVIONICS INTEGRATED STANDBY INSTRUMENT SYSTEM (ISIS)			
	Applicable to: MSN 130	68, 1380, 1428, 14					
	47462		18 SEP 12	AUTO FLIGHT - FMGEC - INSTALL FMGEC P1-CD7 FOR RR OR PW ENGINES			
	Applicable to: MSN 13	68, 1380, 1428, 1 4					
	47524		18 SEP 12	INDICATING/RECORDING SYSTEMS-ELECTRONIC INSTRUMENT SYSTEM - INSTALL NEW DISPLAY SYSTEM (EIS2) EQTS (DMC/DU/DISKETTES)			
	Applicable to: MSN 13	68, 1380, 1428, 1 4	48, 1534				
	47701		18 SEP 12	LANDING GEAR - NOSE GEAR DOORS - CHANGE MARKINGS FOR MAXIMUM TOWING/PUSHBACK TURNING ANGLE			
	Applicable to: MSN 130	68, 1380, 1428, 14	48, 1534				
	47930		18 SEP 12	FUEL - FCMS - INSTALL FCMC STAGE 9.0			
	Applicable to: MSN 13	58, 1380, 1428, 14		AUTO FUOLIT. FMOTO, INICTALL FMOTO CONTINUE			
	48765		18 SEP 12	AUTO FLIGHT - FMGES - INSTALL FMGEC SEXTANT FOR PW/RR ENGINES			
$oxed{oxed}$	Applicable to: MSN 13	68, 1380, 1428, 14					
	48980		18 SEP 12	FUSELAGE - GENERAL - REAR FUSELAGE INTRODUCE CFRP PRESSURE BULKHEAD FRAME			
	Applicable to: MSN 130	68, 1380, 1428, 14	48, 1534	0.45.			

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M ⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date		
	49193		18 SEP 12	INDICATING/RECORDING SYSTEMS - FWC - INSTALL NEW STANDARD K7	
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534				
	49632		18 SEP 12	INDICATING/RECORDING SYSTEMS - FWC - REPLACE THE EXISTING STANDARD FWC BY A NEW STD K6 FOR A330 - FAR 121-344	
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534		
	50616		18 SEP 12	INDICATING/RECORDING SYSTEMS - EIS - INTALL NEW EIS2 STANDARD L4 ON A330/A340 ENHANCED	
	Applicable to: MSN 13	68, 1380, 1428, 14			
	51144		18 SEP 12	NAVIGATION - ADIRS- INSTALL 4MCU ADIRS HONEYWELL (AE21)	
	Applicable to: MSN 13	68, 1380, 1428, 14			
	51790		18 SEP 12	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER - INSTALL NEW FWC STANDARD K8 ON A330	
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534				
	51802		18 SEP 12	GENERAL-DESIGN WEIGHTS-CERTIFY A330-200 WV050 MTOW 230T, MLW 180T, MZFW 168T WITH REVISED A/C DESIGN SERVICE GOAL	
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534		
	52426		18 SEP 12	INFORMATION SYSTEMS - GENERAL - CERTIFY FANS A+ CONFIGURATIONS (OVERALL MODIFICATION)	
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534	·	
	52536		18 SEP 12	GENERAL-TECHNICAL INFO ,WEIGHT AND GC - INCREASE MAXIMUM OPERATING ALTITUDE FROM 41100 TO 41450 FEET	
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534		
	53919		22 JAN 14	NAVIGATION - EGPWS - USE LATERAL GPS POSITION WITH AUTOMATIC DESELECTION	
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534				
	54096		22 JAN 14	AUTO-FLIGHT - FMGEC - INSTALL NEW PERFORMANCE DATA BASE THALES ON FMS2	
	Applicable to: MSN 13	68, 1380, 1428, 14			
	54227	00 4000 4400 4	08 NOV 16	NAVIGATION - ATC - CERTIFY EHS FUNCTION	
	Applicable to: MSN 13	68, 1380, 1428, 14		INDICATING/DECORDING OVOTEMO, ELICUT	
	55191		18 SEP 12	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER - INSTALL FWC STANDARD K9-486 ON A330	
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534		



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M ⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date	Title			
	55212		18 SEP 12	CERTIFICATION DOCUMENTS - GENERAL - CERTIFY THE FLEX TEMPERATURE EXTENTION FOR A330			
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	55346		10 APR 13	NAVIGATION-AIR DATA INERTIAL REFERENCE SYSTEM (ADIRS) - INSTALL HONEYWELL ADIRS -AE23			
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	55982		18 SEP 12	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD T1-0			
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534				
	56720		05 NOV 15	NAVIGATION - ADIRU - INSTALL NEW HONEYWELL ADIRU BLOCK III STANDARD L3.5			
	Applicable to: MSN 13	68, 1380, 1428, 1 4					
	56729		18 SEP 12	INDICATING / RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD T2-0.			
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	57545		22 JAN 14	AUTO FLIGHT - FMGEC - INSTALL FMGEC P4HJ1 WITH GENEPI HARDWARE AND FMS HONEYWELL RELEASE 1A ON A330 WITH PW/RR			
	Applicable to: MSN 13	68, 1380, 1428, 1 4					
	57609		18 SEP 12	NAVIGATION - TCAS - INSTALL TCAS HONEYWELL TPA-100B CHANGE 7.1 CAPABLE OF ATSAW			
	Applicable to: MSN 13	68, 1380, 1428, 14					
	57910		22 JAN 14	AUTO FLIGHT -FMGEC -INSTALL FMGEC T2HJ0 WITH GENEPI HARDWARE ON A330 WITH PW/RR ENGINES			
	Applicable to: MSN 13	68, 1380, 1428, 14					
	58415		05 NOV 15	NAVIGATION - ADIRU - INSTALL NEW HARDWARE ADIRU HONEYWELL BLOCK III BE03			
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534						
	58623		18 SEP 12	FUEL-TANKS- REMOVE OF THE CENTRE TANK CAPABILITY			
	Applicable to: MSN 13	68, 1380, 1428, 14					
	58751		18 SEP 12	INDICATING/RECORDING SYSTEMS - FWC - INSTALL FWC STANDARD T3-0 ON LR A/C			
	Applicable to: MSN 13	68, 1380, 1428, 14					
	200004		18 SEP 12	FUEL-FUEL CONTROL AND MONITORING SYSTEM (FCMS)-UPDATE FCMC SOFTWARE TO STAGE 12			
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534				

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M ⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date	Title		
	200024		13 MAR 13	INDICATING/RECORDING SYSTEMS - DMC - INSTALL		
				ENHANCED DU INSTEAD OF EIS2 LCDU		
	Applicable to: MSN 1368, 1380, 1428, 1448, 1534					
	200064		05 NOV 15	NAVIGATION - ADIRS - INSTALL SPECIFIC		
	Applicable to: MSN 13	EO 1200 1420 14	 40 1524	OPERATIONAL SOFTWARE FOR ADIRU BASELINE		
	200309	00, 1300, 1420, 14	27 FEB 13	AUTO FLIGHT - FLIGHT MANAGEMENT (FM)		
	200309		27 FEB 13	ACTIVATE BARO RADIO SETTING FUNCTION WITH		
				OPC OPTION		
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534			
	200590		18 SEP 12	INDICATING/RECORDING SYSTEMS - FWC -		
				INTRODUCE NEW FWC STANDARD T4 ON LR A/C		
	Applicable to: MSN 13	68, 1380, 1428, 14				
	200593		22 JAN 14	COMMUNICATIONS - SATELLITE COMMUNICATION		
				- CERTIFY: USE OF SATCOM COCKPIT VOICE FOR		
	Applicable to: MSN 13	EO 1200 1420 14	/0 152/	ATC		
	200624	00, 1300, 1420, 14	18 SEP 12	NAVIGATION - GENERAL - FLIGHT MANUAL		
	200024		10 SEF 12	EXTENSION TO RNP AR 0.3 CAPABILITY - A330		
				CONFIGURATION		
	Applicable to: MSN 13	68, 1380, 1428, 14	48, 1534			
	200859		18 SEP 12	INFORMATION SYSTEMS - ATIMS - INSTALL NEW		
				ATC ARINC 623 FOR DATALINK RECORDING		
				FUNCTION		
	Applicable to: MSN 13	68, 1380, 1428, 14				
	200860		18 SEP 12	INFORMATION SYSTEMS - ATIMS - INSTALL NEW		
				ATC FANS A+ APPLICATIONS FOR FANS A+ AND DATALINK RECORDING FUNCTIONS		
	Applicable to: MSN 13	68. 1380. 1428. 14	l 48. 1534	DATALINK NEOONDING FONOTIONS		
	200989	, 1000, 1120, 11	18 SEP 12	MISCELLANEOUS - DESIGN WEIGHTS-		
				CERTIFY A330-200F LINEAR VARIATION OF		
				MTOW/MZFW ,WV002		
	Applicable to: MSN 13	68, 1380, 1428, 14				
	202164		05 NOV 15	NAVIGATION-AIR DATA/INERTIAL REFERENCE		
				SYSTEM-INSTALL NEW ADIRU HONEYWELL STD		
	Applicable to: MCN 40	0 1000 1400 14	40 1504	L4.2 (HYBRID FPA WITHIN BLOCK III ADIRU		
	Applicable to: MSN 13	00, 1380, 1428, 14	48, 1534 16 DEC 14	INDICATING/RECORDING SYSTEMS - FLIGHT		
	202303		16 DEC 14	WARNING COMPUTER (FWC) - INTRODUCE NEW		
				FWC STANDARD T5		
	Applicable to: MSN 1368, 1380, 1428, 1534					
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M ⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date	Title
	204449			INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INTRODUCE FWC STANDARD T6
	Applicable to: MSN 13	68, 1380, 1428		

(1) Evolution code: N=New, R=Revised, E=Effectivity

TPA A330-243F FLEET PLP-LOM P 5/6 AFM 08 NOV 16



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 TPA A330-243F FLEET
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SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
APPRO-PLP-TOC TEMPORARY REVISIONS		1	Documentation update: Deletion of the "00016958 A330-200F FWC T6" table of content entry.
			Documentation update: Deletion of the "00016378 A330 FWC T6" table of content entry.
			Documentation update: Deletion of the "00016686 Flight Warning Computer T6 (A330-200F)" table of content entry.
			Documentation update: Deletion of the "00016699 FWC T6" table of content entry.
			Documentation update: Deletion of the "00020056 FWC T2 - LWR STOWAGE SMOKE" table of content entry.
			Documentation update: Deletion of the "00016958.0001001 A330-200F FWC T6" documentary unit.
			Documentation update: Deletion of the "00016378.0001001 A330 FWC T6" documentary unit.
			Documentation update: Deletion of the "00016686.0001001 A330-200F FWC T6 - All Engines Failure and Ditching/Forced Landing" documentary unit.
			Documentation update: Deletion of the "00016699.0002001 A330-200F FWC T6 without Center Tank" documentary unit.
			Documentation update: Deletion of the "00020056.0001001 A330 FWC T2 - LWR STOWAGE SMOKE" documentary unit.
		İ	TR incorporation
	I	Ī	Incorporation of TR



APPROVAL DATA PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

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APPROVAL DATA TEMPORARY REVISIONS

A330 AIRPLANE FLIGHT MANUAL

TR687 Issue 1 TOWBARLESS OPERATIONS

Ident.: TDU / APPRO-TR-00017236.0001001 / 13 OCT 15

APPROVED

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 13 OCT 15
Approval reference: 10055093

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This Temporary Revision is issued to cover the new WISE ISI reference on

towbarless operations.

Applicable to: A330 aircraft

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00017236.0001001/13 OCT 15 LIM-09-00017235.0001001/13 OCT 15



APPROVAL DATA TEMPORARY REVISIONS

TR457 Issue 1 LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE

Ident.: TDU / APPRO-TR-00015798.0001001 / 11 DEC 14 APPROVED

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 11 DEC 14
Approval reference: 10051606

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This Temporary Revision is issued to provide new failure database

(LLRC02.fail) for in flight landing distance determination for A330. The file

LLRB01.fail is no longer applicable.

Applicable to: All A330.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00015798.0001001/11 DEC 14 EMER-GEN-00014413.0002001/11 DEC 14 ABN-GEN-00014414.0002001/11 DEC 14



APPROVAL DATA TEMPORARY REVISIONS

A330 AIRPLANE FLIGHT MANUAL

TR477 Issue 1 SATCOM VOICE SYSTEM

Ident.: TDU / APPRO-TR-00010330.0003001 / 23 MAR 15

Criteria: ((330-200 or 330-200F or 330-300) and 200593)

Impacted DU: NONE

APPROVED

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 23 MAR 15
Approval reference: 10052695

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This Temporary Revision (TR) provides the compliance to the FAA AC

20-150A.

Applicable to: A330 aircraft fitted with MOD 200593.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00010330.0003001/23 MAR 15 LIM-23-00010328.0003001/23 MAR 15



APPROVAL DATA TEMPORARY REVISIONS

TR677 Issue 1 AUTOLAND DATABASES WITH HONEYWELL ADIRU

Ident.: TDU / APPRO-TR-00014122.0003001 / 03 NOV 15

APPROVED

Criteria: (A330 and (200064 or 202164 or 202791 or 203869 or 203870 or 55346 or 56497 or 56609 or 56720 or 58415))

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 03 NOV 15
Approval reference: 10055269

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This TR is issued because some Honeywell ADIRU magnetic variation

databases are obsolete since 2005. The guaranteed value for the magnetic heading accuracy is no longer respected in some areas of the world. Some operational limitations have been assessed when the error between the

magnetic heading and the QFU is greater than 3 °.

Applicable to: A330 aircraft with Honeywell ADIRUs.

Cancelled by: MOD 203206 or 203871 or 203712

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00014122.0003001/03 NOV 15 LIM-22-FGS-00009353.0007001/03 NOV 15



APPROVAL DATA TEMPORARY REVISIONS

A330 AIRPLANE FLIGHT MANUAL

TR306 Issue 1 DISPLAY UNIT FAILURE

Ident.: TDU / APPRO-TR-00014697.0001001 / 01 MAR 13

APPROVED

Criteria: (A330 and 200024) Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 01 MAR 13
Approval reference: 10043877

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This TR introduces a temporary procedure in the case of Display Unit (DU)

brightness reduction to the minimum.

Applicable to: A330 aircraft that have the Enhanced Display Unit (MOD 200024).

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00014697.0001001/01 MAR 13 ABN-31-00014121.0001001/01 MAR 13



APPROVAL DATA TEMPORARY REVISIONS

TR311 Issue 2 INERTIAL REFERENCE SYSTEM (IRS)

Ident.: TDU / APPRO-TR-00014739.0001001 / 16 JUL 15

Criteria: (A330 and (203206 or 51096 or 51144))

Impacted DU: NONE

APPROVED

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 16 JUL 15
Approval reference: 10054062

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This TR provides the new limitations to use IRS.

Issue2: the validity is extended to old ADIRS that are capable to keep the

position accuracy during 24 h.

Applicable to: A330 aircraft fitted with ADIRS capable to keep the position accuracy during

24 h.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00014739.0001001/16.JUL 15

LIM-34-00014738.0002001/16.JUL 15



APPROVAL DATA TEMPORARY REVISIONS

A330
AIRPLANE FLIGHT MANUAL

TR597 Issue 1 A330 MCDL 32.08 NOSE LANDING GEAR DOOR SEAL

Ident.: TDU / APPRO-TR-00016169.0001001 / 03 JUN 15

APPROVED

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 03 JUN 15
Approval reference: 10053530

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This TR provides the dispatch conditions of the MCDL item 32-08 Nose

Landing Gear Door Seal.

Applicable to: A330 aircraft.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00016169.0001001/03 JUN 15 MCDL-32-08-00016165.0001001/03 JUN 15 MCDL-32-08-00016166.0001001/03 JUN 15



APPROVAL DATA TEMPORARY REVISIONS

TR528 Issue 2 ABNORMAL V ALPHA PROT

Ident.: TDU / APPRO-TR-00015959.0001001 / 08 MAY 15

APPROVED

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 08 MAY 15
Approval reference: 10053264

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: Issue 2: This Temporary Revision is revised in order to modify the condition

that is based on Alpha Prot strip display on the PFD.

Issue 1: This Temporary Revision is issued to provide the Abnormal V Alpha

Prot procedure.

Applicable to: All A330 aircraft.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00015959 0001001/08 MAY 15 FMFR-34-00015960 0001001/08 MAY 15



APPROVAL DATA TEMPORARY REVISIONS

A330 AIRPLANE FLIGHT MANUAL

TR531 Issue 1 MCDL 55-01 SLIDELIP OF THE APRON FAIRING PARTS

Ident.: TDU / APPRO-TR-00015972.0001001 / 25 MAR 15

APPROVED

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 25 MAR 15
Approval reference: 10052741

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This Temporary Revision is issued to provide new MCDL item 55-01 that

covers the slidelip of the apron fairing parts.

Applicable to: A330 aircraft

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00015972.0001001/25 MAR 15 MCDL-55-01-00015919.0001001/25 MAR 15 MCDL-55-01-00015920.0001001/25 MAR 15

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AFM I 28 FEB 17



APPROVAL DATA TEMPORARY REVISIONS

TR608 Issue 2 MCDL 23-01 STATIC DISCHARGER

Ident.: TDU / APPRO-TR-00016526.0001001 / 04 APR 16

APPROVED

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 04 APR 16
Approval reference: 10057663

Do not remove this Temporary Revision until instructed to do so.

Reason for revision:

The issue 2 of this Temporary Revision introduces the following

modifications:

- Removal of the quantity of static dischargers in the MCDL item 23.01

- Addition of a note which refers to the Illustrated Part Catalog (IPC) for the

exact number of static dischargers installed.

Reason for issue: This Temporary Revision introduces the quantity of static dischargers by

aircraft areas.

Applicable to: A330 aircraft.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00016526.0001001/04 APR 16 MCDL-23-01-00016527.0001001/04 APR 16



APPROVAL DATA TEMPORARY REVISIONS

A330 AIRPLANE FLIGHT MANUAL

TR692 Issue 1 HIGH-SPEED TAPE INSPECTION FOR A330

Ident.: TDU / APPRO-TR-00017264.0001001 / 22 MAR 16

APPROVED

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 22 MAR 16
Approval reference: 10057334

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This Temporary Revision (TR) is issued to update the CDL in order to clarify

the High Speed Tape inspection interval.

Applicable to: A330 aircraft.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00017264.0001001/22 MAR 16 MCDL-GEN-INTR-00017267.0001001/22 MAR 16 MCDL-28-04-00017268.0001001/22 MAR 16 MCDL-33-04-00017604.0001001/22 MAR 16 MCDL-52-09-00017605.0001001/22 MAR 16 MCDL-57-05-00017606.0001001/22 MAR 16 MCDL-57-07-00017269.0001001/22 MAR 16 MCDL-57-09-00017270.0001001/22 MAR 16



TEMPORARY REVISIONS

APPROVAL DATA

APPROVED

A330 AIRPLANE FLIGHT MANUAL

TR732 Issue 1 COMPLEMENTARY PERFORMANCE DATA FILE

Ident.: TDU / APPRO-TR-00019767.0001001 / 09 AUG 16

Criteria: A330 Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA
Approval date: 09 AUG 16
Approval reference: 10059075

Do not remove this Temporary Revision until instructed to do so.

Reason for issue: This Temporary Revision is issued to introduce the Complementary

Performance Data File.

Applicable to: A330 Aircraft.

This Temporary Revision is made up of the following Temporary Documentary Units:

APPRO-TR-00019767.0001001/09 AUG 16 PERF-OCTO-00019768.0001001/09 AUG 16 PERF-OCTO-00019769.0001001/09 AUG 16







GENERAL

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GENERAL PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
GEN-ABB	Α	1	The abbreviation "PNF" is replaced by "PM" (Pilot Monitoring). No
Abbreviations			other technical change.

TPA A330-243F FLEET GEN-PLP-SOH P 1/2



GENERAL PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

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GENERAL INTRODUCTION

INTRODUCTION

|dent.: GEN-INTR-00005876.0001001 / 11 OCT 16 | APPROVED

Criteria: A330

This Airplane Flight Manual (AFM) is a reference document published in English. It is not established as an operational document to be used directly by the crew in flight.

Flight crew documents available in flight must include an Operational Manual, with appropriate contents and language as required by the National Regulations.

Note: Any Flight Crew Operating Manual (FCOM) reference within the AFM must be considered as advisory information, the FCOM being a not approved document.

This AFM is specific to a given certified aircraft model, which is specified in the Heading Approbation Documentary Unit (*Refer to APPRO-HEAD Heading Approbation*).

It was approved by the Direction Générale de l'Aviation Civile (DGAC) prior to 28 September 2003 and is since approved by the European Aviation Safety Agency (EASA), or by Airbus under Design Organisation Approval (DOA) reference EASA .21J.031 for AFM minor changes. When applicable, it is approved by the EASA on behalf and according to the requirements of the importing Authority, e.g. the US Federal Aviation Administration (FAA) for US registered aircraft.



GENERAL INTRODUCTION

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TPA A330-243F FLEET GEN-INTR P 2/2
AFM 08 NOV 16



GENERAL AFM DESCRIPTION

APPROVED AFM FORMAT

Ident.: GEN-DESC-00014235.0001001 / 19 JUN 13

APPROVED

Criteria: A330

The AFM is approved in both PDF and Ops Library Browser (OLB) formats.

Note: OLB version 5.1 or higher must be used to consult the AFM in OLB format.

CUSTOMIZED AFM

Ident.: GEN-DESC-00005878.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The customized airline AFM:

- Is extracted from a non customized aircraft model envelope AFM
- Is an approved document related to an operator's/owner's fleet
- Takes into account the specific configuration of each aircraft of the concerned fleet.

Airbus will provide a manual which reflects the aircraft configuration at delivery, and the necessary revisions to reflect configuration changes due to Airbus approved modifications.

The operator/owner must inform Airbus without delay of the effective changes to the aircraft delivery configuration made through Airbus Service Bulletin (SB). This allows Airbus to provide AFM revisions/updates to the operator/owner.

Airbus will not provide revisions, and will not take responsibility for any effect on the AFM:

- Due to modifications installed by third parties without an Airbus SB, and/or
- Due to modifications installed through an Airbus SB, if Airbus is not informed of the SB embodiment

ORGANIZATION OF THE MANUAL

Ident.: GEN-DESC-00005879.0001001 / 26 NOV 09

Criteria: A330

<u>APPROVED</u>

The AFM is divided into 11 chapters:

- Approval data
- General
- Limitations
- Emergency procedures
- Abnormal procedures
- Normal procedures
- Performance (dry and wet runway)
- Appendices and supplements
- Master Configuration Deviation List (MCDL)



GENERAL

AFM DESCRIPTION

A330AIRPLANE FLIGHT MANUAL

- Supplementary performance (contaminated runway)
- Regulatory differences (when applicable).

DOCUMENTARY UNIT (DU)

Ident.: GEN-DESC-00005880,0001001 / 11 OCT 16

APPROVED

Criteria: A330

The AFM is made of Documentary Units (DU). The DU is the smallest part of information with a technical content.

The DU s are listed in the "List of Effective Documentary Unit" (LEDU).

The LEDU is produced and approved by Airbus under the authority of DOA reference EASA.21J.031.

IDENTIFICATION STRIP

Ident.: GEN-DESC-00005881.0001002 / 18 NOV 13

APPROVED

Criteria: A330 Specific: FAA

Below the title of the DU, an identification strip is provided with each DU and consists of:

- Ident.: Each DU is identified by its own unique identification number
- The approval date of the DU
- The approval marking

Note: For non approved DU, this field is replaced by the label: FOR INFORMATION ONLY.

 Criteria: This field provides the type of aircraft and associated configuration for which the DU is applicable

Note: This field is not customized for a specific approval authority. Therefore, when there is more than one modification / aircraft model in the list, some of the modifications / aircraft models may not be approved by the FAA.

- Specific: When necessary, this field provides the code of the specific regulation applicable to the DU
- Impacted by TDU: When applicable, this field provides the identification number and the title of the Temporary Documentary Unit (TDU) impacting the DU
- Belonging to: When applicable, this field provides the number of the TR to which the TDU belongs
- Impacted DU: When applicable, this field provides the identification number and the title of the DU impacted by the TDU.



GENERAL AFM DESCRIPTION

APPROVAL INFORMATION

Ident.: GEN-DESC-00020276.0001001 / 11 OCT 16 APPROVED

Criteria: A330

For each DU, the following information is provided in the LEDU:

- The approval reference of the DU
- The authority/organization that approved the DU
- The approval date of the DU.

AFM REVISION

Ident.: GEN-DESC-00008475.0001001 / 11 OCT 16 APPROVED

Criteria: A330

For each revision, a new LEDU is issued.

The LEDU contains:

- The DU identification and title
- The approval information (Refer to GEN-DESC Approval Information)
- The "M" field that may provide the following Evolution Code:
 - The "R" letter indicates a revised DU: The content of the DU is updated by the revision. A
 vertical line in the margin of the DU locates the modified part
 - The "N" letter indicates a new DU introduced by the revision
 - The "E" letter indicates an aircraft validity change for the DU: The list of MSN s for which the DU is effective has been changed compared to the previous LEDU, by addition or deletion of one or several MSN.
- The "T" field (Temporary Information) that contains a cross if the associated DU is a TDU
- Other fields that contain the list of MSN s to which the DU applies.

The holder of the AFM must check that the manual is in accordance with the LEDU of the latest approved revision.

The aircraft model envelope AFM is continuously updated with new or revised technical information. A revision of the operator/owner AFM is issued based on the latest approved aircraft model envelope AFM.

In addition, an operator/owner AFM revision may be issued following a fleet modification or an SB embodiment.

TEMPORARY REVISION (TR)

Ident.: GEN-DESC-00005882.0001001 / 11 OCT 16

Criteria: A330

A Temporary Revision (TR) is related to temporary amendments of the AFM . A TR is made of Temporary Documentary Units (TDU).



GENERAL

AFM DESCRIPTION

A330
AIRPLANE FLIGHT MANUAL

The TR s are identified with a dedicated layout and are listed in the "List of Effective Temporary Revisions" (LETR).

A TR always has priority over the AFM content modified by the TR (a TDU always has priority over the content of the impacted DU).



GENERAL WORDING DEFINITIONS

WARNING DEFINITION

Ident.: GEN-DEF-00005883.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The following is the official definition of a WARNING, taken directly from the CS -25 (Chapter AMC 25.1581, paragraph 3-e) and applicable to Airbus flight operational documentation:

WARNING

An operating procedure, technique, etc... which may result in personal injury or loss of life if not carefully followed.

CAUTION DEFINITION

Ident.: GEN-DEF-00005884.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The following is the official definition of a CAUTION, taken directly from the CS -25 (Chapter AMC 25.1581, paragraph 3-e) and applicable to Airbus flight operational documentation:

CAUTION

An operating procedure, technique, etc... which may result in damage to equipment if not carefully followed.

NOTE DEFINITION

Ident : GEN-DEF-00005885 0001001 / 26 NOV 09

APPROVED

Criteria: A330

The following is the official definition of a NOTE, taken directly from the CS -25 (Chapter AMC 25.1581, paragraph 3-e) and applicable to Airbus flight operational documentation:

Note: An operating procedure, technique, etc... considered essential to emphasize. Information contained in notes may also be safety related.

LAND ASAP DEFINITION

Ident : GEN-DEF-00005211.0001001 / 25 JUL 14

APPROVED

Criteria: A330

LAND ASAP (red)

Land as soon as possible at the nearest airport at which a safe landing can be made.

Note: LAND ASAP (red) information is applicable to a time-critical situation.

LAND ASAP (amber)

Consider landing at the nearest suitable airport.

The suitability criteria should be defined in accordance with the Operator's policy. Note:



GENERAL WORDING DEFINITIONS

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 TPA A330-243F FLEET
 GEN-DEF P 2/2

 AFM
 17 SEP 14



GENERAL ABBREVIATIONS

A330 AIRPLANE FLIGHT MANUAL

ABBREVIATIONS

Ident.: GEN-ABB-00009715.0001001 / 28 FEB 17 APPROVED

Criteria: A330

Α

Abbreviation	Term
A/C	Aircraft
A/THR	Autothrust
AC	Advisory Circular
	Alternative Current
ACARS	ARINC Communication Addressing and Reporting System
ACD	Airworthiness Compliance Document
ACJ	Advisory Circular-Joint
ADIRU	Air Data Inertial Reference Unit
ADR	Air Data Reference
ADS-B	Automatic Dependant Surveillance - Broadcast
ADS-C	Automatic Dependant Surveillance - Contract
AFM	Airplane Flight Manual
AGL	Above Ground Level
AIME	Autonomous Integrity Monitoring Extrapolation
AINS	Aircraft Information Network System
AIRB	Airborne
ALT	Altitude
AMC	Acceptable Means of Compliance
AMJ	Advisory Material-Joint
AMM	Aircraft Maintenance Manual
ANSU	Aircraft Network Server Unit
AOA	Angle of Attack
AOC	Airlines Operational Control
AP	Autopilot
APU	Auxiliary Power Unit
AR	Authorization Required
ARINC	Aeronautical Radio INC
ASD	Accelerate Stop Distance
ASDA	Accelerate Stop Distance Available
ASI	Airspeed Indicator
ATA	Air Transport Association
ATC	Air Traffic Control
ATSU	Air Traffic Service Unit
ATSAW	Airborne Traffic Situational Awareness
AWO	All Weather Operations



GENERAL ABBREVIATIONS

В

Abbreviation	Term
BC	Back Course
BSCU	Braking and Steering Control Unit

<u>C</u>

Abbreviation	Term
CAA	Civil Aviation Authority
CCOM	Cabin Crew Operating Manual
CDL	Configuration Deviation List
CDLS	Cockpit Door Locking System
CFR	Code of Federal Regulations
CG	Center of Gravity
CIS	Commonwealth of Independent States
CLB	Climb
CML	Consumable Material List
CMP	Configuration, Maintenance and Procedures
CPDLC	Controller Pilot Datalink Communication
CS	Certification Specifications
CSM/G	Constant Speed Motor Generator
CWY	Clearway

D

Abbreviation	Term
D-ATIS	Digital Automatic Terminal Information Service
DA	Decision Altitude
DC	Direct Current
DCL	Departure Clearance
DGAC	Direction Générale de l'Aviation Civile
DH	Decision Height
DMC	Display Management Computer
DME	Distance Measuring Equipment
DNA	Dirección Nacional de Aeronavegabilidad
DNAR	Dirección Nacional de Aeronavegabilidad Regulations
DO	Document Order (RTCA)
DU	Display Unit
	Documentary Unit



GENERAL ABBREVIATIONS

A330 AIRPLANE FLIGHT MANUAL

E

Abbreviation	Term	
EASA	European Aviation Safety Agency	
ECAM	Electronic Centralized Aircraft Monitoring	
ED	EUROCAE Document	
EDTO	Extended Diversion Time Operations	
EFIS	Electronic Flight Instrument System	
EGPWS	Enhanced Ground Proximity Warning System	
EGT	Exhaust Gas Temperature	
EHS	Enhanced Surveillance	
ELT	Emergency Locator Transmitter	
ENG	Engine	
EPR	Engine Pressure Ratio	
ETOPS	Extended Range Operations for Two Engine Aeroplanes (EASA)	
	Extended Operations (FAA)	
EWD	Engine Warning Display	

<u>F</u>

Abbreviation	Term
F-PLN	Flight Plan
FAA	Federal Aviation Administration
FADEC	Full Authority Digital Engine Control
FAF	Final Approach Fix
FANS	Future Air Navigation System
FAP	Final Approach Point
FAR	Federal Aviation Regulations
FCMC	Fuel Control and Monitoring Computer
FCOM	Flight Crew Operating Manual
FCU	Flight Control Unit
FD	Flight Director
FLS	FMS Landing System
FM	Flight Management
FMA	Flight Mode Annunciator
FMGEC	Flight Management and Guidance Envelope Computer
FMGES	Flight Management and Guidance Envelope System
FMS	Flight Management System
FOB	Fuel on Board
FPA	Flight Path Angle
FQI	Fuel Quantity Indication
FU	Fuel Used
FWC	Flight Warning Computer



GENERAL ABBREVIATIONS

G

Abbreviation	Term
	Glide Slope
GEN	Generator
GLS	GNSS (Global Navigation Satellite System) Landing System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GPWS	Ground Proximity Warning System

<u>H</u>

Abbreviation	Term
HF	High Frequency
HI	High
HKCAD	Hong Kong Civil Aviation Department
HUD	Head Up Display

Abbreviation	Term
IAS	Indicated Airspeed
ICAO	International Civil Aviation Organization
IDG	Integrated Drive Generator
IFR	Instrument Flight Rules
IGN	Ignition
IL	Information Leaflet
ILS	Instrument Landing System
IR	Inertial Reference
IRS	Inertial Reference System
ISA	International Standard Atmosphere
ISIS	Integrated Standby Instrument System
ISPSS	In-Seat Power Supply System
ITP	In-Trail Procedure

J

Abbreviation	Term
JAA	Joint Aviation Authorities
JAR	Joint Aviation Regulations

L

Abbreviation	Term
LDA	Localizer Directional Aid
LEDU	List of Effective Documentary Units

Continued on the following page



ARBUS ABBR A330 AIRPLANE FLIGHT MANUAL

GENERAL ABBREVIATIONS

Continued from the previous page

Abbreviation	Term
LETR	List of Effective Temporary Revisions
LGCIU	Landing Gear Control and Indicator Unit
LNAV	Lateral Navigation
LOC	Localizer
LRBL	Least Risk Bomb Location
LS	Landing System

M

Abbreviation	Term
MAC	Mean Aerodynamic Chord
MAP	Missed Approach Point
MAPSC	Maximum Approved Passenger Seating Capacity
MASPS	Minimum Aviation System Performance Standards
MAX	Maximum
MCDL	Master Configuration Deviation List
MCDU	Multipurpose Control and Display Unit
MCPSC	Maximum Certificated Passenger Seating Capacity
MCT	Maximum Continuous Thrust
MDA	Minimum Descent Altitude
MDCC	Main Deck Cargo Compartment
MDH	Minimum Descent Height
MEA	Minimum En route Altitude
MLE	Maximum Landing Gear Extended Mach
MLO	Maximum Landing Gear Operating Mach
MLS	Microwave Landing System
MLW	Maximum Landing Weight
MMEL	Master Minimum Equipment List
MMO	Maximum Operating Mach
MOD	Modification
MOPS	Minimum Operational Performance Standards
MORA	Minimum Off Route Altitude
MSA	Minimum Safe Altitude
MSN	Manufacturer Serial Number
MTOW	Maximum Takeoff Weight
MZFW	Maximum Zero Fuel Weight



GENERAL ABBREVIATIONS

N

Abbreviation	Term
N1	Low Pressure Rotor Speed
N2	Intermediate Pressure Rotor Speed (in %) for Rolls Royce engines/High Pressure Rotor
	Speed (in %) for General Electric or Pratt and Whitney engines
N3	High Pressure Rotor Speed (Rolls Royce engines)
ND	Navigation Display
NDB	Non-Directional Beacon
NORM	Normal
NSA	Norme Sud Aviation

0

Abbreviation	Term
OAT	Outside Air Temperature
OCL	Oceanic Clearance
OIT	Onboard Information Terminal
OLB	OPS Library Browser
OLD	Operational Landing Distance
OMTS	On-Board Mobile Telephony System
OVHT	Overheat
OW	Operational Weight

1 <u>P</u>

Abbreviation	Term
PC	Personal Computer
PED	Portable Electronic Devices
PF	Pilot Flying
PFD	Primary Flight Display
PM	Pilot Monitoring
POS	Position
PRIM	Flight Control Primary Computer
PVI	Paravisual Indicator

Q

Abbreviation	Term
QFE	Field Elevation Atmosphere Pressure
QFU	Runway Heading
QNH	Sea Level Atmosphere Pressure



GENERAL ABBREVIATIONS

A330 AIRPLANE FLIGHT MANUAL

 \mathbf{R}

Abbreviation	Term
RA	Radio Altitude
	Resolution Advisory
RAAC	Regulaciones Argentinas de Aviación Civil
RAIM	Receiver Autonomous Integrity Monitoring
RAT	Ram Air Turbine
RBS	Radio Beacon System
RF	Radial to Fix
RLD	Required Landing Distance
RMP	Radio Management Panel
RNAV	Area Navigation
RNP	Required Navigation Performance
RPM	Revolution Per Minute
RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minima

<u>s</u>

Abbreviation	Term
SAAAR	Special Aircrew and Aircraft Authorization Required
SAT	Static Air Temperature
SATCOM	Satellite Communication
SB	Service Bulletin
SD	System Display
SDF	Simplified Directional Facility
SEC	Flight Control Secondary Computer
SIL	Service Information Letter
SRS	Speed Reference System
STBY	Standby
SWY	Stopway

I

Abbreviation	Term
T.COR	Temperature Corrected
TA	Traffic Advisory
TAS	True Airspeed
TAT	Total Air Temperature
TAWS	Terrain Awareness and Warning System
TCAS	Traffic Alert and Collision Avoidance System
TDU	Temporary Documentary Unit
TGL	Temporary Guidance Leaflet

Continued on the following page



GENERAL ABBREVIATIONS

Continued from the previous page

Abbreviation	Term
TO	Takeoff
TOD	Takeoff Distance
TODA	Takeoff Distance Available
TOGA	Takeoff Go-Around
TOR	Takeoff Run
TORA	Takeoff Run Available
TPIS	Tire Pressure Indicating System
TR	Temporary Revision

U

Abbreviation	Term
USSR	Union of Soviet Socialist Republics

<u>v</u>

Abbreviation	Term
V/DEV	Vertical Deviation
V1	Takeoff Decision Speed
V2	Takeoff Safety Speed
VA	Maximum Design Maneuvering Speed
VALPHAMAX	Speed at Alpha-Max
VAPP	Final Approach Speed
VC	Design Cruise Speed
VFE	Maximum Flaps Extended Speed
VFR	Visual Flight Rules
VHF	Very High Frequency
VLE	Maximum Landing Gear Extended Speed
VLO	Maximum Landing Gear Operating Speed
VLOF	Liftoff Speed
VLS	Lowest Selectable Speed
VMC	Visual Meteorological Conditions
VMCL	Minimum Control Speed during Approach and Landing
VMIN 1G	Minimum Operating Speed under 1g Load Factor
VMIN	Minimum Operating Speed
VMO	Maximum Operating Speed
VNAV	Vertical Navigation
VOR	VHF Omnidirectional Range
VR	Rotation Speed
VREF	Landing Reference Speed
VS1G	Stall Speed under 1g Load Factor
VSA	Visual Separation on Approach
VSW	Stall Warning Speed



GENERAL ABBREVIATIONS

A330 AIRPLANE FLIGHT MANUAL

W

Abbreviation	Term
WBM	Weight and Balance Manual
WGS	World Geodetic System
WV	Weight Variant

Z

Abbreviation	Term
ZFCG	Zero Fuel Center of Gravity
ZFW	Zero Fuel Weight



GENERAL ABBREVIATIONS

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 TPA A330-243F FLEET
 GEN-ABB P 10/10

 AFM
 28 FEB 17



GENERAL UNITS

CORRESPONDENCE BETWEEN UNITS

Ident.: GEN-UNIT-00005886.0001001 / 26 NOV 09

APPROVED

Criteria: A330

METRIC TO US

	METRIC	US
	1 mm	0.0394 in
LENGTH	1 m	3.281 ft
LENGTH	1 m	1.094 yd
	1 km	0.540 NM
SPEED	1 m/s	3.281 ft/s
SPEED	1 km/h	0.540 kt
	1 g	0.0353 oz
WEIGHT	1 kg	2.204623 lb
	1 t	2 204.623 lb
FORCE	1 N	0.2248 lb
ONOL	1 daN	2.248 lb
PRESSURE	1 bar	14.505 PSI
PHE330HE	1 mbar	0.0145 PSI
VOLUME	11	0.2642 US Gal
VOLONIE	1 m³	264.2 US Gal
MOMENTUM	1 daN.m	88.50 lb.in
TEMPERATURE	$t (^{\circ}F) = t (^{\circ}C) \times 1.8 + 32$	

US TO METRIC

	US	METRIC
	1 in	25.4 mm
LENGTH	1 ft	0.3048 m
LENGTH	1 yd	0.914 m
	1 NM	1.852 km
SPEED	1 ft/s	0.3048 m/s
SPEED	1 kt	1.852 km/h
	1 oz	28.35 g
WEIGHT	1 lb	0.45359 kg
	1 lb	0.0004536 t
FORCE	1 lb	4.448 N
FONCE	1 lb	0.4448 daN
PRESSURE	1 PSI	0.0689 bar
FRESSURE	1 PSI	68.947 mbar
VOLUME	1 US Gal	3.785
VOLUME	1 US Gal	0.003785 m ³

Continued on the following page



GENERAL UNITS

A330 AIRPLANE FLIGHT MANUAL

Continued from the previous page

	US	METRIC
MOMENTUM	1 lb.in	0.0113 daN.m
TEMPERATURE	$t(^{\circ}C) = \frac{5}{9} \{$	$t (^{\circ}F) - 32$



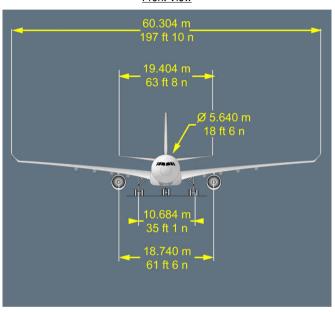
GENERAL 3-VIEW DRAWING

3-VIEW DRAWING

Ident.: GEN-VIEW-00005209.0004001 / 28 NOV 16 APPROVED

Criteria: 330-200F

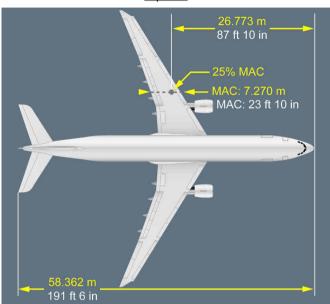
Front View



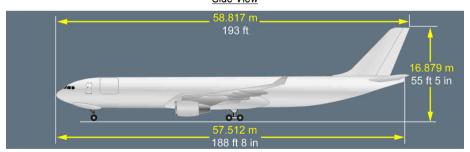


GENERAL 3-VIEW DRAWING

Top View



Side View



	WING		
Reference Area	363.1 m ²	3 908 ft ² 54 in ²	
Root Chord	10.553 m	34 ft 7 in	
MAC (LA)	7.270 m	23 ft 10 in	
Aspect Ratio	9.26		



GENERAL 3-VIEW DRAWING

	HORIZONTAL TAIL	
Reference Area	71.45 m²	769 ft ² 12 in ²
MAC (LH)	3.932 m	12 ft 11 in
Aspect Ratio	5.27	
Distance from 25 % LA to 25 % LH	26.854 m	88 ft 1 in

		AL TAIL
Reference Area	51.4 m ²	553 ft ² 38 in ²
MAC (LV)	6.268 m	20 ft 7 in
Aspect Ratio	1.509	
Distance from 25 % LA to 25 % LV	25.524 m	83 ft 9 in



GENERAL 3-VIEW DRAWING

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 TPA A330-243F FLEET
 GEN-VIEW P 4/4

 AFM
 08 DEC 16

LIMITATIONS



AD 2014-0267-E





EASA AD No.: 2014-0267-E

EASA

EMERGENCY AIRWORTHINESS DIRECTIVE

AD No.: 2014-0267-E

Date: 09 December 2014

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Design Approval Holder's Name: AIRBUS		Type/Model designation(s): A330 and A340 aeroplanes	
TCDS Number:	EASA.A.004 and EASA.A.015		
Foreign AD:	Not applicable		
Supersedure:	edure: None		
ATA	Airplane Flight Manual – Undue Activation of Alpha Protection – Emergency Procedure		
Manufacturer(s):	Airbus (formerly Airbus Industrie)		
Applicability:	Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN). Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.		
Reason:	An occurrence was reported where an Airbus A321 aeroplane encountered a blockage of two Angle Of Attack (AOA) probes during climb, leading to activation of the Alpha Protection (Alpha Prot) while the Mach number increased. The flight crew managed to regain full control and the flight landed uneventfully. When Alpha Prot is activated due to blocked AOA probes, the flight control laws order a continuous nose down pitch rate that, in a worst case scenario, cannot be stopped with backward sidestick inputs, even in the full backward position. If the Mach number increases during a nose down order, the AOA value of the Alpha Prot will continue to decrease. As a result, the flight control laws will continue to order a nose down pitch rate, even if the speed is above minimum selectable speed, known as VLS. This condition, if not corrected, could result in loss of control of the aeroplane.		
	As the same systems are installed on A330 and A340 aeroplanes, to address this unsafe condition, Airbus have developed a specific Aircraft Flight Manual (AFM) procedures, which has been published in AFM Temporary Revision (TR		

EASA AD No.: 2014-0267-E

	N° 528 for A330 aeroplanes and AFM TR N° 529 for A340 aeroplanes, as applicable to aeroplane type and model.		
	For the reasons described above, this AD requires amendment of the applicable AFM.		
	This is considered to be an interim action and further AD action may follow.		
Effective Date:	11 December 2014		
Required Action(s)	Required as indicated, unless accomplished previously:		
and Compliance Time(s):	(1) Before next flight after the effective date of this AD, amend the applicable AFM by inserting a copy of Airbus AFM A330 TR 528 "Abnormal V alpha Prot", issue 1 or AFM A340 TR 529 "Abnormal V alpha Prot", issue 1, as applicable to aeroplane type and model.		
	Alternatively, amending the applicable AFM can be accomplished by inserting of a copy of Appendix 1 – AFM A330 Procedure of this AD or Appendix 2 – AFM A340 Procedure of this AD, as applicable to aeroplane type and model, into the Section Emergency Procedures.		
	(2) Concurrent with the AFM amendment as required by paragraph (1) of this AD, inform all flight crews and, thereafter, operate the aeroplane accordingly.		
Ref. Publications:	Airbus AFM A330 TR 528 issue 1, EASA approved 05 December 2014.		
	Airbus AFM A340 TR 529 issue 1, EASA approved 05 December 2014.		
	The use of later approved revisions of these documents are acceptable for compliance with the requirements of this AD.		
Remarks:	If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.		
	The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process.		
	 Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 		
	For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAL; E-mail: airworthiness.A330-A340@airbus.com .		

EASA AD No.: 2014-0267-E

Appendix 1 – AFM A330 Procedure

ABNORMAL V ALPHA PROT

Ident: TDU / EMER-34-00015960.0001001 / 05 DEC 14

EASA APPROVED

Criteria: A330 Impacted DU: NONE Belongs to TR528 Issue 1

> If the Alpha Prot strip (black and amber) completely and permanently hides the VLS strip (amber) in a stabilized wings-level flight path (without an increase in the load factor):

Keep on one ADR.

Turn off two ADRs.

In case of dispatch with one ADR inoperative, switch only one ADR to OFF.

CAUTION RISK OF ERRONEOUS DISPLAY OF THE VSW STRIP (RED AND BLACK)
AND RISK OF UNDUE STALL WARNING

Do not increase speed.

Consider using the Flight Path Vector (FPV).

Recover affected DU by using associated DMC switching.

When at or above safety altitude, level off.

At any time, with a speed above VLS, if the aircraft goes to a continuous nose down
pitch rate that cannot be stopped with backward sidestick inputs, immediately:

Keep on one ADR.

Turn off two ADRs.

EASA AD No.: 2014-0267-E

Appendix 2 – AFM A340 Procedure

ABNORMAL V ALPHA PROT

Ident.: TDU / EMER-34-00015962.0001001 / 05 DEC 14

EASA APPROVED

Criteria: A340 Impacted DU: NONE Belongs to TR529 Issue 1

> If the Alpha Prot strip (black and amber) completely and permanently hides the VLS strip (amber) in a stabilized wings-level flight path (without an increase in the load factor):
> Keep on one ADR.

Turn off two ADRs.

In case of dispatch with one ADR inoperative, switch only one ADR to OFF.

CAUTION RISK OF ERRONEOUS DISPLAY OF THE VSW STRIP (RED AND BLACK)
AND RISK OF UNDUE STALL WARNING

Do not increase speed.

Consider using the Flight Path Vector (FPV).

Recover affected DU by using associated DMC switching.

When at or above safety altitude, level off.

 At any time, with a speed above VLS, if the aircraft goes to a continuous nose down pitch rate that cannot be stopped with backward sidestick inputs, immediately:

Keep on one ADR.

Turn off two ADRs.

AD 2014-25-52 EMERGENCY







EMERGENCY AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/

DATE: December 10, 2014

AD #: 2014-25-52

Emergency Airworthiness Directive (AD) 2014-25-52 is sent to owners and operators of Airbus Model A330-200 Freighter, -200, and -300 series airplanes and Model A340-200, -300, -500, and -600 series airplanes.

Background

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued Emergency Airworthiness Directive 2014-0267-E, dated December 9, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition on all Airbus Model A330-200 Freighter, -200, and -300 series airplanes and Model A340-200, -300, -500, and -600 series airplanes. The MCAI states:

An occurrence was reported where an Airbus A321 aeroplane encountered a blockage of two Angle of Attack (AoA) probes during climb, leading to activation of the Alpha Protection (Alpha Prot) while the Mach number increased. The flightcrew managed to regain full control and the flight landed uneventfully.

When Alpha Prot is activated due to blocked AoA probes, the flight control laws order a continuous nose down pitch rate that, in a worst case scenario, cannot be stopped with backward sidestick inputs, even in the full backward position. If the Mach number increases during a nose down order, the AoA value of the Alpha Prot will continue to decrease. As a result, the flight control laws will continue to order a nose down pitch rate, even if the speed is above minimum selectable speed, known as VLS.

This condition, if not corrected, could result in loss of control of the aeroplane.

As the same systems are installed on A330 and A340 airplanes, to address this unsafe condition, Airbus *** [has] developed a specific Aircraft Flight Manual (AFM) procedure, which has been published in AFM Temporary Revision (TR) No. 528 for A330 aeroplanes and AFM TR No. 529 for A340 aeroplanes, as applicable to aeroplane type and model.

For the reasons described above, this AD requires amendment of the applicable AFM [to advise the flightcrew of emergency procedures for abnormal Alpha Prot].

This is considered to be an interim action and further [EASA] AD action may follow.

FAA's Determination and AD Requirements

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Presentation of the Actual AD

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

2014-25-52 Airbus: Directorate Identifier 2014-NM-229-AD.

(a) Effective Date

This Emergency AD is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes, certificated in any category, identified in paragraphs (c)(1) through (c)(6) of this AD.

- (1) All Model A330-223F and -243F airplanes.
- (2) All Model A330-201, -202, -203, -223, and -243 airplanes.
- (3) All Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.
- (4) All Model A340-211, -212, and -213 airplanes.
- (5) All Model A340-311, -312, and -313 airplanes.
- (6) All Model A340-541 and A340-642 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 34, Navigation.

(e) Unsafe Condition

This AD was prompted by a report of Angle of Attack (AoA) probes jamming on an inservice Airbus Model A321 airplane. Jamming of the two AoA probes during climb is attributed to water freezing under the AoA vane slinger, and led to activation of the Alpha Protection (Alpha Prot) while the Mach number increased, which resulted in an airplane pitch down per design. We are issuing this AD to ensure the flightcrew has procedures to counteract the pitch down order due to abnormal activation of the Alpha Prot. An abnormal Alpha Prot, if not corrected, could result in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Revision of Airplane Flight Manual (AFM)

Within 2 days after receipt of this AD, revise the AFM to incorporate procedures to address undue activation of Alpha Prot by inserting the text specified in figure 1 to paragraph (g) of this AD into the Emergency Procedures section of the applicable AFM, to advise the flightcrew of emergency procedures for abnormal Alpha Prot. This may be accomplished by inserting a copy of this AD into the AFM. When a statement identical to the text specified in figure 1 to paragraph (g) of this AD is included in the general revisions of the AFM, the general revisions may be inserted in the AFM, and the text specified in figure 1 to paragraph (g) of this AD may be removed.

Figure 1 to paragraph (g) of this AD – AFM Procedure

 If the Alpha Prot strip (black and amber) completely and permanently hides the VLS strip (amber) in a stabilized wings-level flight path (without an increase in the load factor):

Keep on one ADR.

Turn off two ADRs.

In case of dispatch with one ADR inoperative, switch only one ADR to OFF.

CAUTION RISK OF ERRONEOUS DISPLAY OF THE VSW STRIP (RED AND BLACK) AND RISK OF UNDUE STALL WARNING

Do not increase speed.

Consider using the Flight Path Vector (FPV).

Recover affected DU by using associated DMC switching.

When at or above safety altitude, level off.

At any time, with a speed above VLS, if the aircraft goes to a continuous nose down
pitch rate that cannot be stopped with backward sidestick inputs, immediately:
Keep on one ADR.

Turn off two ADRs.

(h) Special Flight Permits

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

(i) Other FAA Provisions

- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(j) Related Information

- (1) For further information about this AD, contact: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.
- (2) For service information referenced in this AD, contact Airbus SAS, Airworthiness Office EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA.

Issued in Renton, Washington, on December 10, 2014.

Original signed by:
Jeffrey E. Duven,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

AD 2014-0281





EASA AD No.: 2014-0281

EASA

AIRWORTHINESS DIRECTIVE

AD No.: 2014-0281

Date: 22 December 2014

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EU 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EU 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Design Approva AIRBUS	l Holder's Name:	Type/Model designation(s): A330 aeroplanes	
TCDS Number:	EASA.A.004		
Foreign AD:	Not applicable		
Supersedure:	persedure: This AD supersedes EASA AD 2014-0273 dated 17 December 2014.		
ATA 24	Electrical Power – Alternating Current Emergency Generation – Operational Procedure		
Manufacturer(s):	Airbus (formerly Airbus Industrie)		
Applicability:	Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers.		
Reason:	The Constant Speed Motor/Generator (CSM/G), as installed on Airbus A330 aeroplanes, is qualified for an overload condition of 9.5kVA for 30 minutes. This duration is sufficient to perform safe landing and a GO-AROUND. However, electrical load analysis revealed that the hydraulic power might not be sufficient to supply the CSM/G during slat/flap extension, when only one engine is running.		
	This condition, if not corrected, and in conjunction with the loss of main electrical system, could lead to the scenario, where the crew is not clearly warned that the electrical system has switched on the battery and thus has a limited duration that would allow a safe landing.		
	Manual (AFM) Temporary Re electrical emergency configured require the pilot to deploy the Landing Recovery to ON postavoid CSM/G shedding under	safe condition, Airbus issued an Aircraft Flight evision (TR) on A330 aeroplane to update the tration "ELEC EMER CONFIG" procedure to e ram air turbine manually before setting the sition to provide sufficient hydraulic power and er worst-case operational conditions. AD 2014-0273 to require amendment of the AFM	

EASA AD No.: 2014-0281

	by inco	rnorating the applicable Airbus T	P		
	by incorporating the applicable Airbus TR.				
	After that AD was issued, EASA became aware that the reference to Airbus modification (mod) 47930 was insufficient to define which AFM TR is applicable to which aeroplane (configuration), as this mod can be embodied in service with Airbus Service Bulletin (SB) A330-28-3067.				
	For the reason described above, this AD retains the requirements of EASA AD 2014-0273, which is superseded, and corrects the information included in Table 1.				
Effective Date:	05 January 2015				
Required Action(s)					
and Compliance Time(s):	(1) Within 15 days after the effective date of this AD, amend the emergency procedures section of Airbus A330 AFM to incorporate the updated "ELEC - EMER CONFIG" procedure by inserting the AFM TR as defined in Table 1 of this AD, depending on aeroplane configuration.				
	Table 1				
		Aeroplane configuration	AFM TR		
		A330 Pre-mod 47930; A330 Pre-SB A330-28-3067.	TR 427 issue 1		
		A330 Post-mod 47930; A330 Post-SB A330-28-3067.	TR 428 issue 1		
	Amending the applicable AFM to incorporate a later revision which includes the AFM TR as required by this AD, is acceptable to comply with the requirements of paragraph (1) of this AD.				
	(2) Concurrent with the AFM amendment as required by paragraph (1) of AD, inform all flight crews and, thereafter, operate the aeroplane accordingly.				
Ref. Publications:	Airbus A330 AFM TR 427 Issue 1 EASA approved on 14 October 2014,				
	Airbus	A330 AFM TR 428 Issue 1 EASA	approved on 14 October 2014,		
	Airbus A330 SB A330-28-3067 Original issue dated 23 March 2001, or Revision 1 dated 16 July 2001.				
The use of later approved revisions of these documents is acceptable compliance with the requirements of this AD.					
Remarks:	tantiated, EASA can approve for this AD.				
	 Based on the required actions and the compliance time, EASA had decided to issue a Final AD with Request for Comments, postpon public consultation process until after publication. 				
	 Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 				
	chnical content of the requirements in AS – Airworthiness Office – EAL. airbus.com.				

AD 2015-02-17





[Federal Register Volume 80, Number 19 (Thursday, January 29, 2015)]

[Rules and Regulations]

[Pages 4762-4764]

From the Federal Register Online via the Government Printing Office [www.gpo.gov]

[FR Doc No: 2015-01178]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0078; Directorate Identifier 2014-NM-235-AD; Amendment 39-18084; AD 2015-02-17]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Airbus Model A330-200, A330-200 Freighter, and A330-300 series airplanes. This AD requires revising the electrical emergency configuration procedure in the Emergency Procedures section of the airplane flight manual (AFM) to include procedures for deploying the ram air turbine manually to provide sufficient hydraulic power and avoid constant speed motor/generator (CSM/G) shedding. This AD was prompted by an electrical load analysis that revealed that hydraulic power might not be sufficient to supply the CSM/G during slat/flap extension when only one engine is running. We are issuing this AD to prevent such a condition which, in conjunction with the loss of the main electrical system, could lead to the scenario where the flightcrew is not clearly warned that the electrical system has switched on the battery and thus has a limited duration that would allow a safe landing.

DATES: This AD becomes effective February 13, 2015.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 13, 2015.

We must receive comments on this AD by March 16, 2015.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

• Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Airbus SAS, Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0078; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014-0281, dated December 22, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition on all Airbus Model A330-200, A330-200 Freighter, and A330-300 series airplanes. The MCAI states:

The Constant Speed Motor/Generator (CSM/G), as installed on Airbus A330 aeroplanes, is qualified for an overload condition of 9.5kVA [kilovolt-ampere] for 30 minutes. This duration is sufficient to perform safe landing and a GO-AROUND. However, electrical load analysis revealed that the hydraulic power might not be sufficient to supply the CSM/G during slat/flap extension when only one engine is running.

This condition, if not corrected, and in conjunction with the loss of main electrical system, could lead to the scenario where the crew is not clearly warned that the electrical system has switched on the battery and thus has a limited duration that would allow a safe landing.

To address this potential unsafe condition, Airbus issued an Aircraft Flight Manual (AFM) Temporary Revision (TR) on A330 aeroplane to update the electrical emergency configuration "ELEC EMER CONFIG" procedure to require the pilot to deploy the ram air turbine manually before setting the Landing Recovery to ON position to provide sufficient hydraulic power and avoid CSM/G shedding under worst-case operational conditions.

Consequently, EASA issued AD 2014-0273 (http://ad.easa.europa.eu/blob/easa_ad_2014_0273_superseded.pdf/AD_2014-0273_1) to require amendment of the AFM by incorporating the applicable Airbus TR.

After that [EASA] AD was issued, EASA became aware that the reference to Airbus modification (mod) 47930 was insufficient to define which AFM TR is applicable to which aeroplane (configuration), as this mod can be embodied in service with Airbus Service Bulletin (SB) A330-28-3067.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2014-0273, which is superseded, and corrects the information included in Table 1.

You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0078.

Related Service Information

Airbus has issued A330/A340 Airplane Flight Manual (AFM) Temporary Revision (TR) TR427, UPDATE OF ELEC–EMER CONFIG PROCEDURE, Issue 1.0, dated November 7, 2014 (for airplanes in Airbus pre-modification 47930 configuration or pre-Airbus Service Bulletin A330-28-3067 configuration); and A330/A340 AFM TR TR428, UPDATE OF ELEC–EMER CONFIG PROCEDURE, Issue 1.0, dated November 7, 2014 (for airplanes in Airbus post-modification 47930 configuration or post-Airbus Service Bulletin A330-28-3067 configuration). This service information describes updated electrical emergency configuration procedures in the AFM. You can find this information at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0078.

FAA's Determination and Requirements of This AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because hydraulic power might not be sufficient to supply the CSM/G during slat/flap extension when only one engine is running. This condition, in conjunction with the loss of the main electrical system, could lead to the scenario where the flightcrew is not clearly warned that the electrical system has switched on the battery and thus has a limited duration that would allow a safe landing. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES

section. Include "Docket No. FAA-2015-0078; Directorate Identifier 2014-NM-235-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

We estimate that this AD affects 91 airplanes of U.S. registry.

We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$7,735, or \$85 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39-AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

2015-02-17 Airbus: Amendment 39-18084. Docket No. FAA-2015-0078; Directorate Identifier 2014-NM-235-AD.

(a) Effective Date

This AD becomes effective February 13, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category, all manufacturer serial numbers.

- (1) Airbus Model A330-201, -202, -203, -223, -223F, -243, and -243F airplanes.
- (2) Airbus Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 24, Electrical Power.

(e) Reason

This AD was prompted by an electrical load analysis that revealed that hydraulic power might not be sufficient to supply the constant speed motor/generator (CSM/G) during slat/flap extension when only one engine is running. We are issuing this AD to prevent such a condition which, in conjunction with the loss of the main electrical system, could lead to the scenario where the flightcrew is not clearly warned that the electrical system has switched on the battery and thus has a limited duration that would allow a safe landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Revise Airplane Flight Manual (AFM)

Within 15 days after the effective date of this AD, revise the Emergency Procedures section of the Airbus A330 AFM to include the information in the applicable Airbus temporary revision (TR) specified in paragraph (g)(1) or (g)(2) of this AD. This may be done by inserting a copy of the applicable TR specified in paragraph (g)(1) or (g)(2) of this AD into the AFM. Operate the airplane according to the procedures in the applicable TR. When the information in the applicable TR has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, provided the relevant information in the general revision is identical to that in the TR, and the TR may be removed.

- (1) For airplanes in Airbus pre-modification 47930 configuration and pre-Airbus Service Bulletin A330-28-3067 configuration: Airbus A330/A340 AFM TR TR427, UPDATE OF ELEC–EMER CONFIG PROCEDURE, Issue 1.0, dated November 7, 2014.
- (2) For airplanes in Airbus post-modification 47930 configuration or post-Airbus Service Bulletin A330-28-3067 configuration: Airbus A330/A340 AFM TR TR428, UPDATE OF ELEC–EMER CONFIG PROCEDURE, Issue 1.0, dated November 7, 2014.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(i) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0281, dated December 22, 2014, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0078.

(j) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
- (i) Airbus A330/A340 Airplane Flight Manual (AFM) Temporary Revision TR427, UPDATE OF ELEC–EMER CONFIG PROCEDURE, Issue 1.0, dated November 7, 2014.
- (ii) Airbus A330/A340 AFM Temporary Revision TR428, UPDATE OF ELEC–EMER CONFIG PROCEDURE, Issue 1.0, dated November 7, 2014.
- (3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com.
- (4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on January 9, 2015. Jeffrey E. Duven, Manager, Transport Airplane Directorate, Aircraft Certification Service.



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TPA A330-243F FLEET AFM



LIMITATIONS GENERAL

INTRODUCTION

Ident.: LIM-GEN-00005442.0001001 / 26 NOV 09 APPROVED

Criteria: A330

This aircraft must be operated in compliance with the limitations given in this chapter. When operating in accordance with an approved appendix or supplement to this AFM, these limitations apply, unless amended by such appendix or supplement.

KIND OF OPERATIONS

Ident.: LIM-GEN-00005446.0002001 / 16 APR 10 APPROVED

Criteria: 330-200F

The aircraft is certified in the public transport category (freight) for day and night operations, in the following conditions, when the appropriate equipment and instruments required by the airworthiness and operating regulations are approved, installed and in an operable condition:

- VFR and IFR
- Extended overwater flight
- Flight in icing conditions.

MINIMUM FLIGHT CREW

Ident.: LIM-GEN-00005447.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Minimum flight crew: 2 pilots.

MAXIMUM OPERATING ALTITUDE

Ident : LIM-GEN-00005448,0002001 / 26 NOV 09 APPROVED

Criteria: (A330 and 52536)

Slats and flaps retracted: 41 450 ft.

This is the maximum altitude at which it is possible to maintain cabin pressure altitude below 8 000 ft. Slats and/or flaps extended: 20 000 ft.

MANEUVER LIMIT LOAD FACTORS

Ident.: LIM-GEN-00005449.0001001 / 25 JUL 14 APPROVED

Criteria: A330

Slats and flaps retracted:-1 g to +2.5 g.

Slats and/or flaps extended:0 g to +2.0 g.



A330

LIMITATIONS GENERAL

ICING CONDITIONS DEFINITION

Ident.: LIM-GEN-00005140.0001001 / 26 NOV 09 Criteria: A330 APPROVED

lcing conditions exist when OAT on the ground and for takeoff, or TAT in flight is 10 °C or below and visible moisture in any form is present (such as clouds, fog with visibility of one mile or less, rain, snow, sleet or ice crystals).

Icing conditions also exist when the OAT on the ground and for takeoff is 10 °C or below when operating on ramps, taxiways, or runways where surface snow, ice, standing water or slush may be ingested by the engines or freeze on engines, nacelles or engine sensor probes.

CARRIAGE OF OCCUPANTS IN COURIER AREA

Ident.: LIM-GEN-00009979.0001002 / 23 MAR 11

APPROVED

Criteria: 330-200F Specific: FAA

A maximum of twelve supernumeraries may occupy the courier area located aft of the flight-deck compartment. The total occupancy of the airplane is limited to sixteen persons, including the flight crew (two on-duty flightcrew members, and up to fourteen off-duty flightcrew members, observers or supernumeraries).



LIMITATIONS GENERAL

- The operator must determine that each supernumerary is physically capable and trained to accomplish the necessary emergency procedures.
- When authorized by the certificate holder, the following persons, but no others, may be carried aboard:
 - 1. A crewmember
 - 2. A company employee
 - 3. An FAA air carrier inspector, a Department of Defense commercial air carrier evaluator or, an authorized representative of the National Transportation Safety Board, who is performing official duties
 - 4. A person necessary for:
 - · The safety of the flight
 - · The safe handling of animals
 - · The safe handling of hazardous materials
 - The security of valuable or confidential cargo
 - The preservation of fragile or perishable cargo
 - Experiments on, or testing of, cargo containers or cargo handling devices;
 - The operation of special equipment for loading or unloading cargo; and
 - The loading or unloading of outsize cargo.
 - 5. A person described in the above paragraph 4 when travelling to or from his assignment
 - 6. A person performing duty as an honor guard accompanying a shipment made by or under the authority of the United States
 - 7. A military courier, military route supervisor, military cargo contract coordinator, or a flight crew member of another military cargo contract air carrier or commercial operator, carried by a military cargo contract air carrier or commercial operator in operations under a military cargo contract, if that carriage is specifically authorized by the appropriate armed forces.
- Prior to each flight, a flight crew member must brief the supernumeraries on the following:
 - The use of exits, including instructions to inspect the ground to determine whether a safe evacuation can be achieved before using an assist means
 - · Location and use of emergency equipment
 - The lavatory visual decompression-alerting system and what supernumerary actions are required
 - . The aural and visual turbulence-alerting system and the requirement that persons must return to their seats
 - The fire or smoke visual-alerting system, and what supernumerary actions are required.



LIMITATIONS GENERAL

A330 AIRPLANE FLIGHT MANUAL

If a cockpit door is installed, at least one occupant must be briefed by a flight crew member on the means of cockpit door opening in the event of a flight crew incapacitation.



LIMITATIONS WEIGHTS AND LOADING

A330 AIRPLANE FLIGHT MANUAL

WEIGHT LIMITATIONS

Weight Variant : WV 02 - Dynamic Payload			
Maximum Taxi Weight		233 900 kg	515 661 lb
Maximum Takeoff Weight (MTOW)		233 000 kg	513 676 lb
Maximum Landing Weight (MLW)		187 000 kg	412 264 lb
Maximum Zero Fuel Weight (MZFW)		178 000 kg 173 000 kg	392 422 lb 381 399 lb
Minimum Weight for takeoff		116 000 kg	255 737 lb
Minimum Weight for flight and landing	Aircraft CG<25 % Aircraft CG≥25 %	109 000 kg 116 000 kg	240 304 lb 255 737 lb

Note:

- 1. Refer to LIM-WGHT Center of Gravity Envelope.
- 2. The maximum weight limits also depend on the center of gravity and may be lower than the values given in the above table.

CENTER OF GRAVITY ENVELOPE

Ident.: LIM-WGHT-00005141.0157001 / 25 JUL 14
Criteria: ((330-223F and 200989) or (330-243F and 200989))

For Mean Aerodynamic Chord (MAC) and datum, see 3-View Drawing. Refer to GEN-VIEW 3-View Drawing.

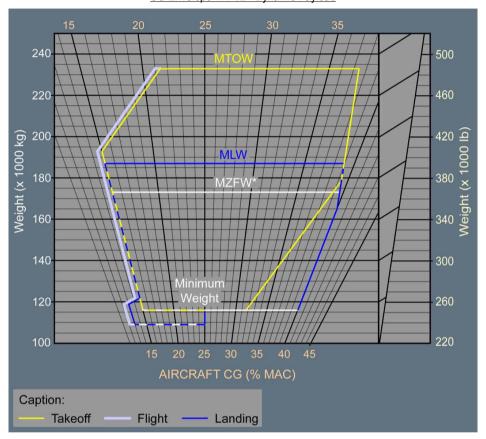
Takeoff and landing CG limits are given for landing gear down configuration.

Flight CG limits are given for landing gear up configuration.



LIMITATIONS WEIGHTS AND LOADING

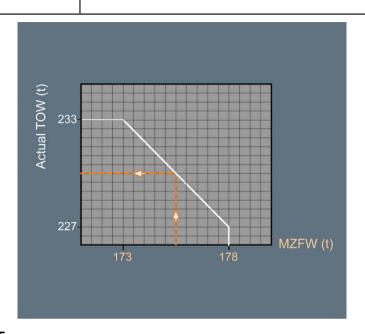
CG Envelope WV 02 - Dynamic Payload



(*) Maximum Zero Fuel Weight (MZFW) can be increased provided Actual Takeoff Weight is decreased as shown in the following graph.



LIMITATIONS WEIGHTS AND LOADING



EXAMPLE

- Data:
 - MZFW = 175.5 t
- Results:
 - Actual TOW = 230 t



LIMITATIONS WEIGHTS AND LOADING

PERFORMANCE LIMITATIONS

Ident.: LIM-WGHT-00005683.0001001 / 26 NOV 09 Criteria: A330

APPROVED

Maximum Takeoff Weight (MTOW) and Maximum Landing Weight (MLW) may be reduced by performance requirements of PERFORMANCE and/or SUPPLEMENTARY PERFORMANCE chapters of this AFM related to:

- Climb performance (first and second segment, final takeoff, en route, approach and landing)
- Available runway length (takeoff and landing)
- Obstacle clearance (takeoff and en route)
- Brake energy limit (observe brake temperature warning (300 °C))
- Tire speed.

LOADING

Ident.: LIM-WGHT-00005684.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The aircraft must be loaded in accordance with the loading instructions given in the Weight and Balance Manual (WBM) chapter 1-10.

The maximum FCMC rearward CG target has been established assuming a possible margin for loading operational procedure inaccuracies of 2 % MAC at Zero Fuel Weight (ZFW) in the value of Zero Fuel Center of Gravity (ZFCG) inserted in the MCDU before flight. This value is defined with landing gear down.



LIMITATIONS **AIRSPEEDS**

AIRPLANE FLIGHT MANUAL

VMO/MMO

Ident.: LIM-SPD-00006064.0001001 / 26 NOV 09 APPROVED

Criteria: A330

MAXIMUM OPERATING LIMIT SPEED (VMO/MMO)

VMO 330 kt IAS MMO M 0.86

This limit must not be intentionally exceeded in any flight regime.

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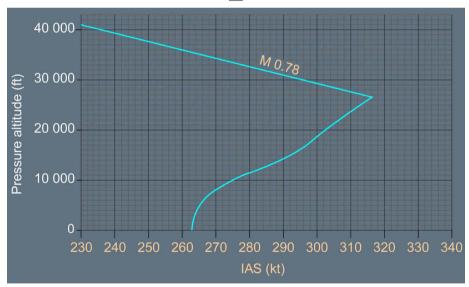
Ident.: LIM-SPD-00008345.0001001 / 16 APR 10 APPROVED

Criteria: (330-200 or 330-200F)

MAXIMUM DESIGN MANEUVERING SPEED (VA)

This limitation only applies in alternate or direct flight control laws. Note:

V٨



If alternate or direct law is active:

- Full ailerons and rudder application should be confined to speeds below VA
- Maneuvers involving angle of attack near stall should be confined to speeds below VA.



LIMITATIONS AIRSPEEDS

A330
AIRPLANE FLIGHT MANUAL

CAUTION

Rapid and large alternating control inputs, especially in combination with large changes in pitch, roll, or yaw (e.g. large sideslip angles) may result in structural failures at any speed, even below VA.

VFE

Ident.: LIM-SPD-00005224.0001001 / 26 NOV 09

APPROVED

Criteria: A330

MAXIMUM SLATS/FLAPS EXTENDED SPEEDS OR OPERATING SPEEDS (VFE)

Flight Phase	Flaps Lever Position	VFE
Intermediate approach	1	240 kt IAS
Takeoff 1+F	1	215 kt IAS
Approach and takeoff	2	196 kt IAS
Approach, takeoff and landing	3	186 kt IAS
Landing	FULL	180 kt IAS

VLO/MLO AND VLE/MLE

Ident.: LIM-SPD-00005241.0001001 / 26 NOV 09

APPROVED

Criteria: A330

MAXIMUM SPEED WITH LANDING GEAR OPERATING (EXTENSION AND RETRACTION, VLO/MLO)

VLO/MLO = 250 kt IAS / M 0.55

MAXIMUM SPEED WITH LANDING GEAR LOCKED DOWN (VLE/MLE)

VLE/MLE = 250 kt IAS / M 0.55

MAXIMUM SPEED FOR GRAVITY EXTENSION OF THE LANDING GEAR (VLO/VLE)

VLO/VLE = 200 kt IAS



LIMITATIONS OPERATIONAL PARAMETERS

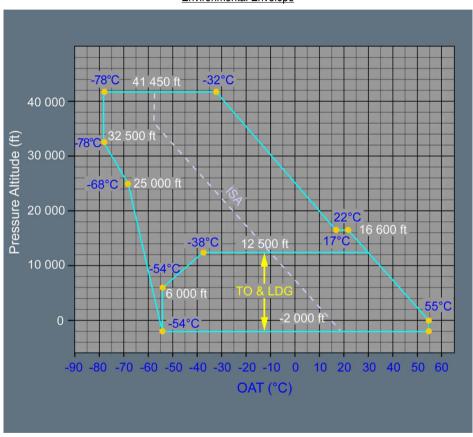
A330 AIRPLANE FLIGHT MANUAL

ENVIRONMENTAL ENVELOPE

Ident.: LIM-OPS-00005456.0003001 / 28 FEB 11

APPROVED
Criteria: ((330-301 or 330-321 or 330-322 or 330-323 or 330-341 or 330-342 or 330-343 or 330-200 or 330-200F) and 52536)

Environmental Envelope



Minimum TAT: -53 °C.

CROSSWIND

Ident.: LIM-OPS-00005967.0001001 / 16 APR 10

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

Engines operations are limited in high crosswind.



LIMITATIONS OPERATIONAL PARAMETERS

APPROVED

Refer to LIM-70 Crosswind.

TAILWIND

Ident.: LIM-OPS-00005458.0001001 / 26 NOV 09

Criteria: A330

Maximum tailwind for takeoff and landing: 10 kt.

RUNWAY SLOPE

Ident.: LIM-OPS-00005460.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Maximum mean runway slope: ±2 %.



LIMITATIONS TOWING AND TAXIING

MANEUVERS ON GROUND

Ident.: LIM-09-00005491.0002001 / 16 APR 10

APPROVED

Criteria: ((330-302 or 330-303 or 330-323 or 330-342 or 330-343 or 330-200 or 330-200F) and (43029 and 47701))

During towing: ±65 ° of nosewheel travel must not be exceeded.

Note: Mechanical stop is designed at ±95 ° of nosewheel travel.

TOWBARLESS OPERATIONS

Ident.: TDU / LIM-09-00017235,0001001 / 13 OCT 15

APPROVED

Criteria: A330

Impacted DU: 00005493 Towbarless Operations

Belongs to TR687 Issue 1

Towbarless operations on nose landing gear (towing and pushback) are approved:

- For aircraft fitted with an active oversteer warning system or
- Provided the towbarless towing operations are performed in compliance with appropriate
 operational requirements, using towbarless towing vehicles that are qualified and operated to
 preclude damage to the aircraft nosewheel steering system, or which provide a reliable and
 unmistakable warning when damage to the steering system may have occurred.

Towbarless towing vehicles that are specifically accepted for the Airbus A330 aircraft are listed in Airbus WISE In-Service Information ISI 09.11.00001.

TOWBARLESS OPERATIONS

Ident.: LIM-09-00005493.0001001 / 28 FEB 11

APPROVED

Criteria: A330

Impacted by TDU: 00017235 Towbarless Operations

Towbarless operations on nose landing gear (towing and pushback) are approved:

- For aircraft fitted with an active oversteer warning system or
- Provided the towbarless towing operations are performed in compliance with appropriate
 operational requirements, using towbarless towing vehicles that are qualified and operated to
 preclude damage to the aircraft nosewheel steering system, or which provide a reliable and
 unmistakable warning when damage to the steering system may have occurred.

Towbarless towing vehicles that are specifically accepted for the Airbus A330 aircraft are listed in Airbus Service Information Letter SIL 09-002.



LIMITATIONS TOWING AND TAXIING

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 TPA A330-243F FLEET
 LIM-09 P 2/2

 AFM
 06 OCT 16



LIMITATIONS AIR COND / PRESS / VENT

A330 AIRPLANE FLIGHT MANUAL

CABIN PRESSURIZATION

Ident.: LIM-21-00005486.0002001 / 16 APR 10

APPROVED

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-342 or 330-343 or 330-200 or 330-200F) and 48980)

Safety relief valve setting: 8.85 PSI (610 hPa).

Maximum negative differential pressure: -0.73 PSI (-50 hPa).

Note: The ram air inlet must only be opened when the cabin differential pressure is less than

+1 PSI (69 hPa)



LIMITATIONS AIR COND / PRESS / VENT

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 TPA A330-243F FLEET
 LIM-21 P 2/2

 AFM
 18 SEP 12



LIMITATIONS **AUTO FLIGHT SYSTEM**

FLIGHT MANAGEMENT SYSTEM

GENERAL

Ident.: LIM-22-FMS-00008415.0002001 / 19 JUN 13 **APPROVED**

Criteria: (A330 and (44308 or 44339 or 46572 or 46893))

The FMGES lateral and vertical navigation has been certified for after takeoff, en route and terminal area operations and for instrument approach procedures (except ILS, LOC, LOC-BC, LDA, SDF and GLS) and missed approach procedures.

Approval of the FMGES is based on the assumption that the navigation database has been validated for intended use. The airworthiness approval does not account for database accuracy or compatibility.

Obstacle clearance and adherence to airspace constraints remains a flight crew responsibility. Fuel, time predictions/performance information is provided for advisory purpose only. For instrument procedures not coded in the WGS -84 coordinate system, the GPS must be deselected, unless the shift between the local coordinate system and the WGS-84 is found acceptable for the intended operation.

Note:

- The assessment of this shift can be done:
 - In flight, monitoring the navaid raw data in non RNAV procedures
 - On ground, performing a GPS survey of the procedure waypoints.
- 2. RNAV (GNSS) approach procedures require WGS-84 coordinates and GPS PRIMARY.

AIRWORTHINESS STANDARD COMPLIANCE

Ident.: LIM-22-FMS-00008416.0006001 / 25 JUL 14 **APPROVED**

Criteria: (A330 and ((48765 or 48766 or 57320 or 57910) and (44308 or 44339 or 46572 or 46893)))

The FMGES has been demonstrated to comply with applicable airworthiness requirements, including FAA AC 20-130A, for a navigation system integrating multiple navigation sensors, when operating with aircraft position based on:

- IRS position and GPS update, or
- IRS position and radio navaid update, or
- IRS position only.

The FMGES also complies with the airworthiness part of:

- EASA AMC 20-4 (JAA TGL 2 REV 1) for Basic RNAV
- EASA AMC 20-27 for RNP APPROACH (RNP APCH) operations with or without APV BARO-VNAV operations.



LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT MANAGEMENT SYSTEM

- FAA AC 90-105 for:
 - RNP1 operations in Terminal area with or without RF lea
 - RNP APCH operations with or without APV BARO-VNAV Operations in final approach segment
 - RNP APCH operations with or without RF leg capability in the initial, the intermediate and the missed approach segments.

Note: 1. RNP APCH without APV BARO-VNAV operation corresponds to RNAV (GNSS) approach with LNAV Minimum.

- 2. RNP APCH with APV BARO-VNAV operation corresponds to RNAV (GNSS) approach with LNAV/VNAV Minimum.
- JAA TGL 10 for Precision RNAV (compliance with paragraph 8.2 has not been demonstrated)
- FAA Advisory Circular 90-100A for terminal and en route RNAV operations
- FAA Advisory Circular 20-129 for baro VNAV
- FAA Order 8400.33 for RNP 4 in oceanic and remote area.
- FAA Order 8400.12A for BNP 10 in oceanic and remote area.

RNP 10 oceanic/remote area operations are approved:

- · with GPS PRIMARY
- without GPS PRIMARY (GPS deselected or inoperative), provided time limitations in IRS only navigation, acceptable to the operational authorities, are established.

<u>Note:</u> Compliance with the applicable airworthiness requirements does not constitute an operational approval.

Such authorization must be obtained by the operator from the appropriate authorities.

NAVIGATION PERFORMANCE

Ident.: LIM-22-FMS-00008417.0010001 / 19 JUN 13

Criteria: (A330 and 200624)

With GPS PRIMARY:

The FMGES is certified in accordance with the performance requirements of MASPS ED -75/DO -236 for RNP operations.

The RNP accuracy with GPS PRIMARY has been demonstrated to be:

	With AP ON in NAV	With AP OFF and FD ON in NAV	With AP OFF and FD OFF	
En route	1 NM	1 NM	1.1 NM	
In terminal area	0.5 NM	0.51 NM	0.51 NM	
In approach	0.3 NM	0.3 NM	Not authorized	



LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT MANAGEMENT SYSTEM

For RNP AR (SAAAR or equivalent):

The aircraft is capable of conducting RNP AR /SAAAR operations to a minimum RNP accuracy value of 0.3 when operated in accordance with the recommendations provided in the Airbus Airworthiness Compliance Document (ACD) reference G34D09030292 issue 2 or higher, Flight Crew Operating Manual (FCOM) and bulletins.

RNP AR 0.3 has been demonstrated with AP ON in normal and non normal conditions, based on the operational assumptions of the ACD for the following modes:

- Departure in NAV mode
- Initial approach in NAV or APP NAV modes
- Final approach in FINAL APP mode
- Missed approach in NAV mode.

Note: For navigation performance and recommendations regarding RNP AR 0.3 operations with AP OFF / FD ON, see ACD.

The aircraft is compliant with the aircraft qualification requirements of FAA AC 90-101 appendix 2.

Without GPS PRIMARY:

The FMGES is certified in accordance with the accuracy requirements and assumptions of MASPS ED -75/DO -236 for RNP operations provided the appropriate RNP value is checked or entered on the MCDU and HIGH accuracy is displayed.

Without GPS PRIMARY (GPS deselected or inoperative) the navigation accuracy is a function of ground radio navaid infrastructure or elapsed time since last radio update.

USE OF NAV MODE

Ident.: LIM-22-FMS-00008428.0002001 / 19 JUN 13
Criteria: (A330 and (44308 or 44339 or 46572 or 46893))

NAV mode may be used:

- After takeoff provided:
 - · GPS PRIMARY is available, or
 - · FMGES takeoff updating has been checked.
- In terminal area provided:
 - · GPS PRIMARY is available, or
 - HIGH accuracy is displayed and the appropriate RNP is checked or entered on the MCDU, or
 - FMS navigation is cross-checked with navaid raw data.

NAV, or NAV and APP NAV and FINAL APP mode may be used for VOR, VOR /DME, NDB, NDB /DME or RNAV (GNSS) approach but not for ILS, LOC, LOC-BC, LDA, SDF final approach.



LIMITATIONS AUTO FLIGHT SYSTEM

FLIGHT MANAGEMENT SYSTEM

APPROACHES

Ident.: LIM-22-FMS-00008429.0006001 / 19 JUN 13

APPROVED

Criteria: (A330 and ((44308 or 44339 or 46572 or 46893) and (47457 or 47462 or 48765 or 48766 or 54096)))

VOR, VOR /DME, NDB or NDB /DME approach procedures may be performed, in NAV, or NAV and APP NAV and FINAL APP mode, provided AP or FD is used and:

- GPS PRIMARY is available. In this case: the reference navaid may be unserviceable, or the airborne radio equipment may be inoperative, or not installed, provided an operational approval is obtained.
- GPS PRIMARY is not available. In this case: the reference navaid and the corresponding airborne equipment are serviceable, tuned and monitored during the approach.

RNAV (GNSS) approaches may be performed, in NAV, or NAV and APP NAV and FINAL APP mode, provided GPS PRIMARY is available and with AP or FD engaged.

RNAV (GNSS) approaches with LNAV /VNAV Minimum must be performed in FINAL APP mode.



LIMITATIONS AUTO FLIGHT SYSTEM

FLIGHT GUIDANCE SYSTEM

AIRWORTHINESS STANDARD COMPLIANCE

Ident.: LIM-22-FGS-00008719.0001002 / 18 NOV 13

APPROVED Criteria: A330

Specific: FAA

The FMGES with the associated equipment has been found to meet the airworthiness requirement and performance criteria of:

- AC 25.1329 for automatic flight system
- AC 20.57 for autoland
- AC 120-29 for Category II
- AC 120-28 C appendix 1 for CAT III including roll out

Note: Compliance with the standards noted above does not constitute an approval to conduct category II or III operations. Such authorization must be obtained by the operator from the appropriate authorities.

AUTOLAND DATABASES WITH HONEYWELL ADIRU

Ident.: TDU / LIM-22-FGS-00009353,0007001 / 03 NOV 15

APPROVED

Criteria: (A330 and (200064 or 202164 or 202791 or 203869 or 203870 or 55346 or 56497 or 56609 or 56720 or 58415))

Impacted DU: NONE Belongs to TR677 Issue 1

The below table provides for each concerned airport, the dates when the following limitations begin:

- Autoland is not allowed
- Rollout is not allowed.

CAT II approaches without Autoland are still allowed.

Airport Code	Airport Location	Month/Year
PAFA	FAIRBANKS INTL AK USA	September 2016
PANC	ANCHORAGE INTL AK USA	June 2018

This TR is applicable until end of 2020. From 2021, without a revision of this TR, Autoland Note: and Rollout will not be allowed on any airport.

The above limitations do not apply if three new ADIRU with updated magnetic variation tables are installed and Operators ensure previous standards are not installed.

The following Honeywell ADIRU standards will cancel the limitations of this Temporary Revision:

- ADIRU 4 MCU P/N HG2030AE24 installed by modification 203206
- ADIRU 4 MCU P/N HG2030AE44 installed by modification 203871
- ADIRU 4 MCU P/N HG2030B03 L.4.3 installed by modification 203712
- Or any later approved standard.



LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT GUIDANCE SYSTEM

AUTOLAND

Ident.: LIM-22-FGS-00008419.0006001 / 19 JUN 13

APPROVED

Criteria: (330-200F and (57545 or 57547))

Autoland has been demonstrated:

- with CAT II and CAT III ILS beam, with ILS slope angle inside a range from -2.5 ° to -3.25 °.

- for airport altitude up to 9 200 ft.

Performance of ROLL OUT mode has been demonstrated on dry and wet runways.

Minimum aircraft weight: 116 000 kg (255 737 lb).

Autoland must not be used with an aircraft CG forward of 15 % MAC.

One autopilot at least must be engaged in APPR mode and CAT 2 or CAT 3 SINGLE or CAT 3 DUAL capability must be displayed on FMA.

MINIMUM HEIGHT FOR USE OF THE AUTOPILOT

Ident.: LIM-22-FGS-00008423.0001001 / 26 NOV 09

APPROVED

Criteria: A330

At takeoff : 100 ft AGL and at least 5 s after lift-off.

In non precision straight-in approach : MDA /MDH (or DA for LNAV /VNAV approach).

In circling approach : MDA /MDH -100 ft.

In ILS approach if CAT 2 or CAT 3 : 160 ft AGL.

capability is not displayed on FMA

In ILS approach when CAT 2 or CAT 3: Refer to LIM-22-FGS CAT II / CAT III Operations

capability is displayed on FMA

After a manual go-around : 100 ft AGL. In all other flight phases : 500 ft AGL.

The use of AP and FD in OPEN DES and DES mode is not permitted if FCU altitude set below MDA

/MDH or 500 ft AGL whichever is higher.

CAT II / CAT III OPERATIONS

Ident.: LIM-22-FGS-00008425.0001001 / 26 NOV 09 APPROVED

Criteria: A330

CATEGORY II AUTOMATIC APPROACH WITHOUT AUTOMATIC LANDING

Minimum decision height: 100 ft.

One autopilot at least must be engaged in APPR mode and CAT 2 or CAT 3 SINGLE or CAT 3

DUAL capability must be displayed on FMA. Minimum height for AP disconnection: 80 ft.



LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT GUIDANCE SYSTEM

CATEGORY II AUTOMATIC APPROACH WITH AUTOMATIC LANDING

Minimum decision height: 100 ft.

One autopilot at least must be engaged in APPR mode and CAT 2 or CAT 3 SINGLE, or CAT 3 DUAL capability must be displayed on FMA.

CATEGORY III FAIL PASSIVE (SINGLE) AUTOMATIC APPROACH AND AUTOMATIC LANDING

Minimum decision height: 50 ft.

One autopilot at least must be engaged in APPR mode and CAT 3 SINGLE or CAT 3 DUAL capability must be displayed on FMA.

CATEGORY III FAIL OPERATIONAL (DUAL) AUTOMATIC APPROACH AND AUTOMATIC LANDING

Alert height: 200 ft.

CAT III with DH:

The 2 autopilots must be engaged in APPR mode and CAT 3 DUAL capability must be displayed on FMA.

CAT III without DH:

The 2 autopilots must be engaged in APPR mode and CAT 3 DUAL capability must be displayed on FMA.

Minimum Runway Visual Range (RVR): 75 m.

MAXIMUM WIND CONDITIONS FOR CAT II OR CAT III AUTOMATIC APPROACH OR **AUTOMATIC LANDING AND AUTOMATIC ROLL OUT**

Headwind 35 kt. Tailwind 10 kt. Crosswind 20 kt.

AFM ← E 05 NOV 15



LIMITATIONS AUTO FLIGHT SYSTEM

FLIGHT GUIDANCE SYSTEM

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TPA A330-243F FLEET LIM-22-FGS P 4/4
AFM 05 NOV 15



LIMITATIONS COMMUNICATIONS

APPROVED

APPROVED

SATCOM VOICE SYSTEM

Ident.: TDU / LIM-23-00010328.0003001 / 23 MAR 15

Criteria: ((330-200 or 330-200F or 330-300) and 200593)

Impacted DU: NONE

Belongs to TR477 Issue 1 The SATCOM Voice system has been demonstrated to comply with airworthiness requirements

contained in FAA AC 20-150A for the use as a supplement to HF and VHF communications systems for Air Traffic Services Communications (ATSC).

Note:

Compliance with the applicable airworthiness requirement does not constitute an operational approval. Such authorization must be obtained by the operator from the appropriate authorities.

SATCOM VOICE SYSTEM

Ident.: LIM-23-00014205.0001001 / 19 JUN 13

Criteria: (A330 and 200593)

The SATCOM Voice system has been demonstrated to comply with airworthiness requirements contained in FAA AC 20-150 for the use as a supplement to HF and VHF communications systems for Air Traffic Services Communications (ATSC).

Note: Compliance with the applicable airworthiness requirement does not constitute an operational approval. Such authorization must be obtained by the operator from the appropriate authorities.



LIMITATIONS COMMUNICATIONS

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TPA A330-243F FLEET LIM-23 P 2/2
AFM 18 AUG 15



LIMITATIONS

FUEL AND ADDITIVE SPECIFICATIONS

Ident.: LIM-28-00005472.0003001 / 19 JUN 13

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

The fuel system has been certified with:

- JET A, JET A1, JP5, JP8, N° 3 JET, RT and TS-1
- JET B and JP4 provided the trim tank is empty and isolated throughout the flight.

Note: 1. See Rolls Royce Operating Instruction Appendix latest issue.

2. See Airbus Consumable Material List (CML) Part 1 / S01-Fuels at the latest issue for approved fuel specifications.

USABLE FUEL

Ident.: LIM-28-00005474.0003001 / 26 NOV 09

Criteria: ((330-301 and 51806) or (330-200F and 58623))

Fuel loading varies with specific fuel gravity without any fuel weight limitation.

Tanks	Fuel Quantity		
2 Inner Tanks	84 000 I	22 192 US Gal	
2 Outer Tanks	7 300 I	1 928 US Gal	
1 Trim Tank	6 230 I	1 646 US Gal	
TOTAL	97 530 I	25 766 US Gal	

	Fuel Specific Gravity			
Tanks	0.80 kg/l	6.676 lb/US Gal		
	Fuel Weight			
2 Inner Tanks	67 200 kg	148 154 lb		
2 Outer Tanks	5 840 kg	12 871 lb		
1 Trim Tank	4 984 kg	10 989 lb		
TOTAL	78 024 kg	172 014 lb		

Note: When the quantity indications reach "zero" the remaining fuel cannot safely be used.

FUEL IMBALANCE

Note: For asymmetrically loaded cargo, refer to Weight and Balance Manual.

The following tables give the maximum allowed wing fuel imbalance at takeoff, in flight and at landing, in either inner or outer tanks.



LIMITATIONS

FUEL

A330 AIRPLANE FLIGHT MANUAL

INNER TANKS (OUTER BALANCED)

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	2 900 kg (6 400 lb)
17 000 kg (37 480 lb)	4 800 kg (10 580 lb)
7 500 kg (16 530 lb)	7 500 kg (16 530 lb)

With linear variation between these values (No limitation below 7 500 kg/16 530 lb)

OUTER TANKS (INNER BALANCED)

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	1 480 kg (3 260 lb)
2 400 kg (5 290 lb)	1 580 kg (3 480 lb)
1 730 kg (3 810 lb)	1 730 kg (3 810 lb)

With linear variation between these values (No limitation below 1 730 kg/3 810 lb)

FUEL TEMPERATURE LIMITS

Ident.: LIM-28-00005480.0003001 / 28 FEB 11
Criteria: (330-243 or 330-243 F or 330-341 or 330-342 or 330-343)

MINIMUM

Fuel temperature must not be less than the highest of:

- Fuel freezing point in any tank or
- -44 °C in inner tanks when operating below 30 000 ft or
- -54 °C in inner tanks when operating at or above 30 000 ft.

MAXIMUM

JET A, JET A1, JP5, JP8, N $^{\circ}$ 3 JET, RT and TS-1: +55 $^{\circ}$ C. JP4 and JET B: +49 $^{\circ}$ C.



LIMITATIONS HYDRAULIC

HYDRAULIC FLUID

Ident.: LIM-29-00005489.0001001 / 26 NOV 09 APPROVED

Criteria: A330

FLUID SPECIFICATIONS

Refer to NSA 307-110.



LIMITATIONS HYDRAULIC

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TPA A330-243F FLEET LIM-29 P 2/2
AFM 18 SEP 12



LIMITATIONS LANDING GEAR

TIRE SPEED

Ident.: LIM-32-00010874.0001001 / 02 JUL 10 APPROVED

Criteria: A330

Maximum tire speed: 204 kt (ground speed).



LIMITATIONS LANDING GEAR

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 TPA A330-243F FLEET
 LIM-32 P 2/2

 AFM
 18 SEP 12



LIMITATIONS NAVIGATION

INERTIAL REFERENCE SYSTEM (IRS)

Ident.: TDU / LIM-34-00014738.0002001 / 16 JUL 15

APPROVED

Criteria: (A330 and (203206 or 51096 or 51144))
Impacted DU: 00005500 Inertial Reference System (IRS)

Belongs to TR311 Issue 2

The IRS are compliant with the position accuracy criteria of AC 25-4 and FAR 121 Appendix G for a flight time up to 24 h (i.e. in excess of the aircraft range).

The ground alignment of the IRS has been demonstrated to be acceptable between 82 $^{\circ}$ North and 82 $^{\circ}$ South.

■ If all ADIRUs have the same magnetic variation table:

In MAGNETIC reference, flights using the NAV mode are prohibited:

- North of 73 ° North, between 90 ° West and 120 ° West (magnetic polar region), and
- North of 82 ° North, and
- South of 60 ° South.

When flying at latitudes beyond these limits, TRUE reference must be selected.

■ If one ADIRU has a different magnetic variation table:

Flights using the NAV mode are prohibited:

- North of 60 ° North, between 30 ° West and 160 ° West, and
- North of 75 ° North, and
- South of 55 ° South.

INERTIAL REFERENCE SYSTEM (IRS)

Ident.: LIM-34-00005500.0002001 / 26 NOV 09

Criteria: (A330 and (51096 or 51144 or 55346)) Impacted by TDU: 00014738 Inertial Reference System (IRS) <u>APPROVED</u>

The IRS has been demonstrated to comply with the position accuracy criteria of AC 25-4 and FAR 121 Appendix G for flight time up to 24 h (i.e. in excess of the aircraft range).

Ground alignment of the IRS is possible up to 82 ° of latitude.

In the NAV mode the IR will not provide valid magnetic heading:

- North of 82 ° North
- North of 73 ° North between 90 ° and 120 ° West (magnetic polar region)
- South of 60 ° South.

When flying at latitudes beyond these limits, TRUE reference must be selected.



LIMITATIONS NAVIGATION

REDUCED VERTICAL SEPARATION MINIMUM (RVSM)

Ident.: LIM-34-00005496.0001001 / 26 NOV 09

APPROVED

Criteria: (A330 and 43537)

Aircraft have been certified capable to participate in RVSM operations according to JAA TGL 6 and FAA 91-RVSM requirements.

Note:

Compliance with the standards noted above does not constitute an operational approval. Such authorization must be obtained by the operator from the appropriate authorities.

MODE S - EHS ENHANCED SURVEILLANCE

Ident.: LIM-34-00005504.0001001 / 26 NOV 09

APPROVED

Criteria: (A330 and 54227)

The transponder mode S Enhanced Surveillance (EHS) has been demonstrated to comply with airworthiness requirements contained in ICAO Doc 7030/4 for enhanced surveillance in designated European airspace.

<u>Note:</u> No credit should be taken from extended squitter functionality until it has been granted airworthiness and/or operational approval as applicable.



LIMITATIONS INFORMATION SYSTEMS

A330
AIRPLANE FLIGHT MANUAL

FANS - ATC DATALINK APPLICATION SYSTEM

Ident.: LIM-46-00005509.0006001 / 19 JUN 13

Criteria: (A330 and (200859 and 200860 and 52426))

The ATC datalink communications system and its applications comply with airworthiness requirements contained in ED -100A/DO -258A and in FAA AC 20-140 for:

- Controller Pilot Datalink Communication (CPDLC)
- Automatic Dependent Surveillance-Contract (ADS-C) or CPDLC position reporting in a non ADS-C environment.

The ARINC 623 applications comply with airworthiness requirements contained in ED -85A, in ED -89A and in ED-106A:

- Departure Clearance (DCL) complying with ED -85A, requested by AMC 20-09
- Oceanic Clearance (OCL) complying with ED-106A
- D-ATIS complying with ED -89A, requested by AMC 20-10.

This approval is based on assumptions and requirements contained in FANS A+ Airworthiness Approval Summary document reference 00F460P0211/C02 for:

- The Air Traffic Control (ATC) environment and procedures
- The end to end system interoperability, safety and performance.

Note: 1. Voice communication must be available as a backup to datalink communication.

- 2. The datalink function is not available when there is no VHF /HF /SATCOM coverage. HF datalink is used as a supplementary mode of operation.
- 3. Compliance with the above does not constitute an operational approval. Such authorization must be obtained by the operator from the appropriate authorities.



LIMITATIONS INFORMATION SYSTEMS

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 TPA A330-243F FLEET
 LIM-46 P 2/2

 AFM
 22 JAN 14



LIMITATIONS AUXILIARY POWER UNIT

AUXILIARY POWER UNIT (APU)

Ident.: LIM-49-00005485.0001001 / 26 NOV 09

Criteria: A330

One Garrett GTCP 331-350 C.

APU PARAMETERS

Maximum EGT: 650 °C (Maximum for start: 1 250 °C).

Maximum rotor speed: 107 %.

OIL SPECIFICATIONS

See GARRETT maintenance manual.



LIMITATIONS AUXILIARY POWER UNIT

Intentionally left blank

TPA A330-243F FLEET LIM-49 P 2/2
AFM 18 SEP 12



LIMITATIONS **POWER PLANT**

MAIN ENGINES

Ident.: LIM-70-00005464.0009001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-343)

Two Rolls Royce Trent 772B.

ENGINE PARAMETERS

Ident : LIM-70-00005465-0003001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

Operating Condition		Time Limit ENG Indicated	Maximum Rotor Speed			
Operating	Operating Condition		EGT Limit	N1	N2	N3
	Starting		700 °C			
Star			850 °C			
			(1)			
Maximum (Continuous	None	850 °C			
Takeoff and Go-around	Normal	5 min	920 °C	99.0 %	103.3 %	100.0 %
	One	10 min				
	ENG Out		147			

- (1) For airstart only.
- (2) 920 °C or greater than 900 °C for more than 20 s.

Power management tables in EPR, given in PERFORMANCE chapter of the AFM, limit Note: RPM as a function of ambient conditions and air bleed

CROSSWIND

Ident.: LIM-70-00005461.0001001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

Engine maximum crosswind for takeoff: 32 kt (gust included).

REVERSE THRUST

Ident.: LIM-70-00005466.0001001 / 26 NOV 09

APPROVED

Criteria: A330

In flight, intentional selection of reverse thrust is prohibited.

On ground, backing the aircraft with use of reverse thrust is not permitted.



LIMITATIONS POWER PLANT

OIL

Ident.: LIM-70-00005467.0003001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

SPECIFICATION

Rolls Royce Operating Instruction Appendix latest issue.

MINIMUM PRESSURE

25 PSI.

MAXIMUM TEMPERATURE

190 °C

REDUCED THRUST TAKEOFF

Ident.: LIM-70-00005468.0007001 / 16 APR 10

APPROVED

Criteria: ((330-243 or 330-243F or 330-343) and 55212)

Takeoff at reduced thrust is allowed only if the aircraft meets all performance requirements at the takeoff weight, with the operating engines at the thrust available for the flex temperature. Takeoff at reduced thrust is allowed with any inoperative item affecting the performance only if the associated performance shortfall has been applied to meet the above requirements.

Note: Allowed inoperative items may be identified through DISPATCH WITH INOPERATIVE ITEMS chapter of the AFM (Refer to APP-INOP General) or through MMEL.

Takeoff at reduced thrust is not allowed on contaminated runways.

The flex temperature must not be:

- Higher than ISA + 60
- Lower than the flat rating temperature or actual OAT.

Takeoff at reduced thrust is not allowed unless the operator establishes a means to verify the availability of takeoff thrust, to ensure that engine deterioration does not exceed authorized limits.

OPERATIONS IN ICING CONDITIONS

Ident.: LIM-70-00005469.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The engine anti-ice must be ON during all ground and flight operations when icing conditions exist or are anticipated, except during climb and cruise when the temperature is below -40 °C SAT. The engine anti-ice must be ON prior to and during descent in icing conditions, including temperatures below -40 °C SAT.



LIMITATIONS POWER PLANT

Note: Do not rely on airframe visual icing cues to turn engine anti-ice on. Use the temperature and visual moisture criteria specified in the icing conditions definition (Refer to LIM-GEN lcing Conditions Definition).

Delaying the use of engine anti-ice until buildup is visible from the cockpit may result in severe engine damage and/or flameout.



LIMITATIONS POWER PLANT

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AFM 18 SEP 12







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EMERGENCY PROCEDURES PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason			
EMER-PLP-TOC AIR COND / PRESS / VENT		1	Documentation update: Deletion of the "00016685 CAB PR - EXCESS CAB ALT" table of content entry.			
			Documentation update: Deletion of the "00016685.0002001 CAB PR - EXCESS CAB ALT" documentary unit.			
	Ī	Ī	TR incorporation			
EMER-PLP-TOC FIRE / SMOKE		2	Documentation update: Deletion of the "00020055 SMOKE - LWR STOWAGE SMOKE" table of content entry.			
			Documentation update: Deletion of the "00020055.0001001 SMOKE - LWR STOWAGE SMOKE" documentary unit.			
	Ī		Incorporation of TR			
EMER-PLP-TOC HYDRAULIC		3	Documentation update: Deletion of the "00009789 HYD - G+Y SYS LO PR" table of content entry.			
			Documentation update: Deletion of the "00009789.0006001 HYD - G+Y SYS LO PR" documentary unit.			
	Ī	Ī	TR incorporation			
EMER-PLP-TOC LANDING GEAR		4	Documentation update: Deletion of the "00016533 L/G - GEAR NOT DOWNLOCKED" table of content entry.			
			Documentation update: Deletion of the "00016533.0001001 L/G - GEAR NOT DOWNLOCKED" documentary unit.			
	İ		TR incorporation			
EMER-PLP-TOC POWER PLANT		5	Documentation update: Deletion of the "00016969 ALL ENGINES FAILURE" table of content entry.			
			Documentation update: Deletion of the "00016969.0003001 ALL ENGINES FAILURE" documentary unit.			
	Ī		TR incorporation			
EMER-PLP-TOC MISCELLANEOUS		6	Documentation update: Deletion of the "00016964 DITCHING" table of content entry.			
			Documentation update: Deletion of the "00016965 FORCED LANDING" table of content entry.			
			Documentation update: Deletion of the "00016964.0005001 DITCHING" documentary unit.			
			Documentation update: Deletion of the "00016965.0005001 FORCED LANDING" documentary unit.			
			TR incorporation			
EMER-21 CAB PR - EXCESS CAB ALT	А	1	Documentation update: Addition of "CAB PR - EXCESS CAB ALT" documentary unit			
EMER-26 REMOVAL OF SMOKE/FUMES	J	1	The abbreviation "PNF" is replaced by "PM" (Pilot Monitoring). No other technical change.			
EMER-29 HYD - G+Y SYS LO PR	С	1	Documentation update: Addition of "HYD - G+Y SYS LO PR" documentary unit			



EMERGENCY PROCEDURES PRELIMINARY PAGES

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Continued from the previous page

Localization	Тос	ID	Reason		
Title	Index				
EMER-32	А	1	Documentation update: Addition of "L/G - GEAR NOT		
L/G - GEAR NOT DOWNLOCKED			DOWNLOCKED" documentary unit		
EMER-70	А	1	Documentation update: Addition of "ENG - ALL ENGINES		
ENG - ALL ENGINES FAILURE			FAILURE" documentary unit		
EMER-90	В	1	Documentation update: Addition of "DITCHING" documentary unit		
DITCHING					
EMER-90	С	2	Documentation update: Addition of "FORCED LANDING"		
FORCED LANDING			documentary unit		



EMERGENCY PROCEDURES GENERAL

INTRODUCTION

Ident.: EMER-GEN-00005704.0001001 / 19 JUN 13 APPROVED

Criteria: A330

The procedures contained in this chapter have been established and are recommended by the aircraft manufacturer for application in the event of a serious failure.

The following important remarks apply:

- 1. It is assumed that, in general, all failures are indicated by the operation of specific system warning and/or by direct observation.
- 2. The actions recommended may result in the loss of certain systems not associated with the failure.
- 3. For a definition of LAND ASAP, Refer to GEN-DEF LAND ASAP Definition.

When actions depend on a condition, a black dot (•) or a black square (**III**) identifies this condition. The black square is used when there is a choice between one or more conditions and only one is applicable.

These procedures are approved by the Airworthiness Authorities as acceptable procedures for operation of the aircraft. This approval does not prevent the operator from developing equivalent procedures, provided these procedures are approved by appropriate operational authorities. In case of discrepancy between procedures displayed on the ECAM and procedures stated in this AFM, the AFM procedures always have precedence.

Unless otherwise specified in the procedures, the minimum speed to be used for approach and landing is the VLS corresponding to the configuration requested by the procedure.

Note: VLS, when mentioned in a procedure, is the one corresponding to the configuration requested by the procedure (e.g. if the procedure requests to use FLAPS 2, take VLS of CONF 2).

LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE

Ident : TDU / EMER-GEN-00014413.0002001 / 11 DEC 14 APPROVED

Criteria: A330 Impacted DU: NONE Belongs to TR457 Issue 1

RUNWAY CONDITION DETERMINATION

Landing distance determination must not only be based on Estimated Surface Friction (Mu) or Pilot Reports of Braking Action (PiRep) or similar qualitative information.

The flight crew shall obtain the runway condition or/and the depth and type of runway contaminant to make the basic assessment of actual condition.

Landing distance determination must not consider a better Braking Action than the one related to the runway condition.



EMERGENCY PROCEDURES GENERAL

A330AIRPLANE FLIGHT MANUAL

Runway Condition	Max Reported Braking Action		
Dry	6 - DRY		
Wet	5 - GOOD		
Compacted Snow	4 - GOOD to MEDIUM		
More than 3 mm of Dry or Wet Snow	3 - MEDIUM		
More than 3 mm of Standing Water or Slush	2 - MEDIUM to POOR		
lce	1 - POOR		

LANDING DISTANCE DETERMINATION

The landing distance to be applied in case of failure is the Operational Landing Distance (OLD). The OLD can be determined by selecting the failure case in the IN-FLIGHT FAILURE field of the AFM_OCTO interface, using the database given in the PERFORMANCE chapter of this manual (*Refer to PERF-OCTO Performance Database*), combined with the LLRC02.fail file using the AFM_OCTO approved FM module at revision 30 or higher.

LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE

Ident.: EMER-GEN-00014576.0001001 / 19 JUN 13 APPROVED
Criteria: A330

RUNWAY CONDITION DETERMINATION

Landing distance determination must not only be based on Estimated Surface Friction (Mu) or Pilot Reports of Braking Action (PiRep) or similar qualitative information.

The flight crew shall obtain the runway condition or/and the depth and type of runway contaminant to make the basic assessment of actual condition.

Landing distance determination must not consider a better Braking Action than the one related to the runway condition.

Runway Condition	Max Reported Braking Action			
Dry	6 - DRY			
Wet	5 - GOOD			
Compacted Snow	4 - GOOD to MEDIUM			
More than 3 mm of Dry or Wet Snow	3 - MEDIUM			
More than 3 mm of Standing Water or Slush	2 - MEDIUM to POOR			
Ice	1 - POOR			

LANDING DISTANCE DETERMINATION

The landing distance to be applied in case of failure is the Operational Landing Distance (OLD). The OLD can be determined by selecting the failure case in the IN-FLIGHT FAILURE field of the



EMERGENCY PROCEDURES GENERAL

A330
AIRPLANE FLIGHT MANUAL

AFM_OCTO interface, using the database given in the PERFORMANCE chapter of this manual (*Refer to PERF-OCTO Performance Database*), combined with:

- the LLRB01.fail file using the AFM_OCTO approved FM module at revision 28.
- the LLRC01.fail file using the AFM OCTO approved FM module at revision 30 or higher.

FIRE/SMOKE

Ident.: EMER-GEN-00005705.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Whenever fire is encountered on the aircraft, landing at the nearest suitable airport is recommended. After conducting any fire suppression/smoke evacuation procedure, even though smoke has dissipated, if it has not or cannot be visibly verified that the fire has been put out, immediately land at the nearest suitable airport.

The flight crew should always go to 100 % oxygen whenever a hand held fire extinguisher is to be discharged in the cockpit or when required because of smoke accumulation.



EMERGENCY PROCEDURES GENERAL

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EMERGENCY PROCEDURES AIR COND / PRESS / VENT

CAB PR - EXCESS CAB ALT

Ident.: EMER-21-00005759.0004001 / 19 JUN 13

APPROVED

Criteria: 330-200F

If above FL 100:

Use crew oxygen masks.

Initiate a descent.

Maximum flight level is the higher one of: FL 100 or MEA-MORA.

If above FL 160:

Apply emergency descent procedure. Refer to EMER-90 EMER DESCENT.

If cabin altitude above 14 000 ft:

Manually confirm courier area occupants oxygen masks on.

CAB PR - EXCESS CAB ALT

ldent.: EMER-21-00005759.0007001 / 05 JAN 17

APPROVED

Criteria: (330-200F and 204449)

If above FL 100:

Use crew oxygen masks.

Notify the cabin.

Initiate a descent.

Maximum flight level is the higher one of: FL 100 or MEA-MORA

If above FL 160:

Apply emergency descent procedure. Refer to EMER-90 EMER DESCENT.

• If cabin altitude above 14 000 ft:

Manually confirm courier area occupants oxygen masks on.

CAB PR - EXCESS RESIDUAL PR

Ident.: EMER-21-00008430.0002001 / 16 APR 10

Criteria: 330-200F

<u>APPROVED</u>

Turn off both packs.

Alert courier area occupants.



EMERGENCY PROCEDURES AIR COND / PRESS / VENT

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 TPA A330-243F FLEET
 EMER-21 P 2/2

 AFM
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EMERGENCY PROCEDURES ELECTRICAL POWER

ELEC - EMER CONFIG

Ident.: EMER-24-00005218.0002001 / 20 DEC 16

APPROVED

Criteria: (A330 and 47930)

LAND ASAP

Manually confirm emergency electrical power on if EMER GEN not automatically coupled. Turn off then on all generators one after the other.

If no generator reset successful:

Set BUS TIE to OFF.

Attempt a further all generators reset (one after the other).

• If still unsuccessful:

Note:

- 1. The cockpit door locking system (CDLS) is inoperative.
- 2. For communications, only VHF 1 and ATC 1 are available.
- 3. If EMER GEN is supplied by RAT, ATC 1 is not available.
- 4. Flight controls are in alternate law. Refer to ABN-27 F/CTL ALTN LAW (PROT LOST)

Set ventilation extract to OVRD.

Do not use speed brakes.

Note: If fuel imbalance, turn off fuel L PUMP 2.

Just before slats extension:

Set manually RAT to ON.

Minimum RAT speed: 140 kt

Set LAND RECOVERY to ON.

Note: Engines are fed by gravity.

For approach and landing:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Use FLAPS 3.

Note: Slats and flaps extend slowly.

Use manual pitch trim.

Apply necessary landing performance corrections.

Note: 1. Half spoilers are inoperative.



EMERGENCY PROCEDURES ELECTRICAL POWER

Continued from the previous page ELEC - EMER CONFIG

2. Nosewheel steering is inoperative.



A330 AIRPLANE FLIGHT MANUAL



ENG FIRE (IN FLIGHT)

Ident.: EMER-26-00005711.0001001 / 26 NOV 09

APPROVED

Criteria: A330

LAND ASAP

Shut down affected engine.

Push relevant FIRE pushbutton.

Turn off affected side engine bleed (if not automatically done).

Turn off APU bleed (if left side affected only).

Close crossbleed valve.

Discharge AGENT 1 after 10 s.

Notify ATC.

• If fire not extinguished after 30 s:

Discharge AGENT 2.

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.



A330AIRPLANE FLIGHT MANUAL

ENG FIRE (ON GROUND)

Ident.: EMER-26-00005712.0005001 / 16 APR 10

APPROVED

Criteria: 330-200F

Set all thrust levers to idle

When aircraft stopped :

Set parking brake to ON.

Notify ATC.

Alert courier area occupants.

Shut down affected engine.

Push relevant FIRE pushbutton.

Discharge all fire agents of the affected engine.

If MAN CAB PR has been used:

Check cabin differential pressure at zero before opening the doors.

Shut down other engine.

Push other engine FIRE pushbutton.

■ If evacuation required :

Initiate evacuation.

Shut down APU.

Turn off all batteries.

If evacuation not required :

Notify courier area occupants to remain seated.

APU FIRE

Ident.: EMER-26-00005713.0001001 / 26 NOV 09

APPROVED

Criteria: A330

LAND ASAP

Press APU FIRE pushbutton.

Discharge agent after 10 s.

Shut down APU



A330AIRPLANE FLIGHT MANUAL

SMOKE - LD FWD, LD AFT OR BULK SMOKE

Ident.: EMER-26-00014238.0001001 / 19 JUN 13 APPROVED

Criteria: (330-200F and 200590)

LAND ASAP

Turn off affected cargo compartment isolation valves (as installed).

If affected cargo door(s) closed:

Discharge affected cargo compartment agent.

Turn off cabin fans.

On ground:

Disembark courier area occupants before opening the cargo doors.

SMOKE - MD SMOKE

Ident.: EMER-26-00014239.0001001 / 19 JUN 13 APPROVED

Criteria: (330-200F and 200590)

Refer to EMER-26 SMOKE/FUMES/AVNCS/MD SMOKE.

SMOKE - AVNCS VENT SMOKE

Ident.: EMER-26-00005716.0002001 / 25 JUL 14 APPROVED

Criteria: (330-200F and 200590)

Refer to EMER-26 SMOKE/FUMES/AVNCS/MD SMOKE.

SMOKE - LAVATORY SMOKE

|dent.: EMER-26-00008422.0002001 / 16 APR 10 | APPROVED

Criteria: 330-200F

Turn off galley and lavatory fans.

Establish communication between cockpit and courier area.



A330 AIRPLANE FLIGHT MANUAL

SMOKE - STOWAGE SMOKE

Ident.: EMER-26-00010225.0001001 / 16 APR 10

APPROVED

Criteria: 330-200F

Turn off cabin fans, galley, and lavatory fans.

Close stowage doors.

Establish communication between cockpit and courier area.



A330
AIRPLANE FLIGHT MANUAL

SMOKE/FUMES/AVNCS/MD SMOKE

Ident.: EMER-26-00014240.0001001 / 19 JUN 13

<u>APPROVED</u>

Criteria: (330-200F and 200590)

LAND ASAP

Use crew oxygen masks, if required.

Turn off cabin fans, galley, and lavatory fans.

Establish communication between cockpit and courier area.

Ensure that doors between main deck cargo compartment and courier area compartment are closed.

Turn on cabin signs.

Try to identify and isolate faulty equipment.

If smoke source not immediately isolated:

Initiate a diversion.

Initiate a descent to FL 200 or MEA-MORA, whichever is higher.

At any time of the procedure, if smoke/fumes becomes the greatest threat:

Consider applying the removal of smoke/fumes procedure and setting Electrical Emergency Configuration. Refer to EMER-26 REMOVAL OF SMOKE/FUMES.

Note:

To set Electrical Emergency Configuration, set EMER ELEC PWR to MAN ON then, when EMER GEN is available, turn off GEN 1, GEN 2, and APU GEN.

Apply the Electrical Emergency Configuration procedure without performing generator reset. Refer to EMER-24 ELEC - EMER CONFIG.

3 min or 2 000 ft before landing, set ATT HDG switching to F/O ON 3 and restore normal electrical supply for landing: turn on all generators.

When aircraft is stopped, turn off all generators.

At any time of the procedure, if situation becomes unmanageable:

Consider landing immediately.

- If main deck cargo smoke:
 - If pack 2 not faulty:

Turn off pack 1.

■ If pack 2 faulty:

Turn off pack 2.

Set ventilation extract to AUTO.

Turn off all cargo isolation valves (as installed).

Continued on the following page

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EMERGENCY PROCEDURES FIRE / SMOKE

Continued from the previous page SMOKE/FUMES/AVNCS/MD SMOKE

Notify courier area occupants.

Turn on emergency exit lights.

Turn off COMMERCIAL.

Use crew oxygen masks.

Provide courier area occupants with oxygen masks.

Use manual pressurization mode.

Set cabin altitude to 20 000 ft.

Notify ATC.

Initiate a descent to FL 200 or MEA whichever is higher.

• If remaining oxygen pressure close to minimum:

Consider descending to FL 140 or MEA whichever is higher.

Consider turning off the oxygen supply in courier area.

Consider applying the removal of smoke/fumes procedure. Refer to EMER-26 REMOVAL OF SMOKE/FUMES

• If air conditioning smoke suspected:

Turn off APU bleed.

Set ventilation extract to AUTO.

Turn off all cargo compartment isolation valves (as installed).

Turn off pack 1.

If smoke continues:

Turn on pack 1.

Turn off pack 2.

If smoke still continues.

Turn on pack 2.

Turn off pack 1.

Consider applying the removal of smoke/fumes procedure. Refer to EMER-26 REMOVAL OF SMOKE/FUMES

If courier area equipment smoke suspected:

If smoke continues:

Set ventilation extract to OVRD.

Turn on emergency exit lights.



EMERGENCY PROCEDURES FIRE / SMOKE

Continued from the previous page SMOKE/FUMES/AVNCS/MD SMOKE

Turn off COMMERCIAL.

Check smoke dissipation.

If smoke still continues:

Set ventilation extract to AUTO

Consider applying the removal of smoke/fumes procedure. Refer to EMER-26 REMOVAL OF SMOKE/FUMES

If smoke source cannot be determined and still continues or avionics/electrical smoke suspected:

Set ventilation extract to OVRD

Isolate AC BUS channels side by side and check smoke dissipation.

If smoke continues:

Recover normal AC BUS configuration.

Consider applying the removal of smoke/fumes procedure and setting Electrical Emergency Configuration. Refer to EMER-26 REMOVAL OF SMOKE/FUMES.

Note: To set Electrical Emergency Configuration, set EMER ELEC PWR to MAN ON then. when EMER GEN is available, turn off GEN 1, GEN 2, and APU GEN.

Apply the Electrical Emergency Configuration procedure without performing generator reset. Refer to EMER-24 ELEC - EMER CONFIG.

3 min or 2 000 ft before landing, set ATT HDG switching to F/O ON 3 and restore normal electrical supply for landing: turn on all generators.

When aircraft is stopped, turn off all generators.

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EMERGENCY PROCEDURES FIRE / SMOKE

REMOVAL OF SMOKE/FUMES

Ident.: EMER-26-00005219.0003001 / 28 FEB 17

APPROVED

Criteria: (330-200F and 200590)

Turn on emergency exit lights.

Notify courier area occupants.

Manually confirm courier area occupants oxygen masks on.

Use manual pressurization mode.

Set cabin altitude to 20 000 ft.

Notify ATC.

Initiate a descent to the higher one of: FL 200 or MEA -MORA.

While descending, continue applying the appropriate steps of the smoke/fumes/avncs/md smoke procedure. *Refer to EMER-26 SMOKE/FUMES/AVNCS/MD SMOKE*.

When at FL 200 or MEA-MORA:

Turn off pack 1.

Manually confirm pack 2 on.

Use manual pressurization mode.

Maintain the cabin vertical speed switch in the UP position.

• If smoke persists and PM cockpit window opening required:

Respect maximum speed 230 kt.

Open cockpit door (if installed).

Put headsets on.

Open PM cockpit window.

When window open:

Continue applying the appropriate steps of the smoke/fumes/avncs/md smoke procedure. Refer to EMER-26 SMOKE/FUMES/AVNCS/MD SMOKE.

If remaining flight time more than 30 min:

Monitor remaining oxygen pressure.

Consider a descent to the higher one of: FL 100 or MEA-MORA.

CAUTION Due to the increased noise level, pay particular attention to visual warnings.



EMERGENCY PROCEDURES FLIGHT CONTROLS

A330 AIRPLANE FLIGHT MANUAL

F/CTL - FLAP LVR NOT ZERO

Ident.: EMER-27-00005757.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Set flaps lever to 0.

F/CTL - L+R ELEV FAULT

Ident.: EMER-27-00005758.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Note: 1. Pitch mechanical back up.

2. Roll is in direct law.

Do not use speed brakes.

Maximum speed: 305 kt /M 0.80

Use manual pitch trim. Maneuver with care

If CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

If trim tank pump is not available, do not perform manual forward fuel transfer while Note:

speed is at or below 270 kt or while in climb.

Turn off GPWS flap mode. Use FLAPS 2 for landing.

Approach speed = VLS + 10 kt

Apply necessary landing performance corrections.



EMERGENCY PROCEDURES FLIGHT CONTROLS

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EMERGENCY PROCEDURES FUEL

A330 AIRPLANE FLIGHT MANUAL

FUEL - EXCESS AFT CG

Ident.: EMER-28-00005756.0001001 / 26 NOV 09 Criteria: A330

APPROVED

Manually perform a forward fuel transfer from the trim tank.

• If trim tank pump failed :

Keep aircraft pitch attitude below 3°.



EMERGENCY PROCEDURES

FUEL

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 TPA A330-243F FLEET
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A330

EMERGENCY PROCEDURES HYDRAULIC

A330
AIRPLANE FLIGHT MANUAL

HYD - G+B SYS LO PR

Ident.: EMER-29-00005726.0001001 / 19 JUN 13

APPROVED

Criteria: A330

LAND ASAP

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Consider manual RAT use.

Minimum RAT speed: 140 kt.

Turn off associated hydraulic pumps (electrical and engine).

Do not use speed brakes.

Maneuver with care.

For approach and landing:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

If hydraulic not recovered:

■ If slats position below 2:

Turn off GPWS flap mode.

Use FLAPS 2 for landing.

Note: Flaps extend slowly.

If slats position below 1:

Approach speed = VREF + 30 kt

Apply necessary landing performance corrections.

■ If slats position at or above 1:

Approach speed = VREF + 25 kt

Apply necessary landing performance corrections.

■ If slats position at or above 2:

Use FLAPS 3 for landing.

Note: Flaps extend slowly.

Approach speed = VREF + 15 kt

Apply necessary landing performance corrections.

Note: 1. Slats are inoperative.

- Antiskid is inoperative. Refer to ABN-32 BRAKES ANTI SKID FAULT or A/SKID N/WS
 OFF.
- 3. Brakes are on BLUE ACCU. Only 7 full brakes applications are available.



EMERGENCY PROCEDURES HYDRAULIC

Continued from the previous page HYD - G+B SYS LO PR

4. Most spoilers and one elevator are inoperative.

HYD - B+Y SYS LO PR

Ident.: EMER-29-00005727.0001001 / 19 JUN 13 Criteria: A330 <u>APPROVED</u>

LAND ASAP

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Turn off associated hydraulic pumps (electrical and engine).

Maneuver with care.

If trim locked above 8 ° UP:

Maximum speed: 180 kt.

For approach and landing:

Turn off GPWS flap mode.

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Use FLAPS 2 for landing.

Note: Slats and flaps extend slowly.

Approach speed = VREF + 20 kt.

Apply necessary landing performance corrections.

Note: 1. Most spoilers are inoperative.

2. Stabilizer control is inoperative. Refer to ABN-27 F/CTL - STAB CTL FAULT.



EMERGENCY PROCEDURES HYDRAULIC

AIRPLANE FLIGHT MANUAL

HYD - G+Y SYS LO PR

APPROVED

LAND ASAP

Criteria: A330

Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST). Note:

Consider manual RAT use.

Minimum RAT speed: 140 kt.

Ident.: EMER-29-00005728.0001001 / 19 JUN 13

Turn off associated hydraulic pumps (electrical and engine).

Use rudder for turn coordination.

Do not use speed brakes.

Maneuver with care

For approach and landing:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

If hydraulic not recovered:

■ If flaps position below 3:

Turn off GPWS flap mode.

Use FLAPS 2 for landing.

Note: Slats extend slowly.

■ If flaps position below 1 + F:

Approach speed = VREF + 30 kt

Apply necessary landing performance corrections.

■ If flaps position at or above 1 +F and below 2:

Approach speed = VREF + 20 kt

Apply necessary landing performance corrections.

■ If flaps position at or above 2:

Approach speed = VREF + 20 kt

Apply necessary landing performance corrections.

■ If flaps position at 3:

Use FLAPS 3 for landing.

Note: Slats extend slowly.

Approach speed = VREF + 15 kt



EMERGENCY PROCEDURES HYDRAULIC

Continued from the previous page HYD - G+Y SYS LO PR

Apply necessary landing performance corrections.

■ If flaps position above 3:

Use FLAPS FULL for landing.

Note: Slats extend slowly.

Approach speed = VREF + 10 kt

Apply necessary landing performance corrections.

Note: 1. Flaps are inoperative.

2. Most spoilers and one elevator are inoperative.



EMERGENCY PROCEDURES HYDRAULIC

A330 AIRPLANE FLIGHT MANUAL

HYD - G+Y SYS LO PR

Ident.: EMER-29-00005728.0004001 / 05 JAN 17

APPROVED

Criteria: (A330 and 204449)

LAND ASAP

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Consider manual RAT use.

Minimum RAT speed: 140 kt

Turn off associated hydraulic pumps (electrical and engine).

Use rudder for turn coordination

Do not use speed brakes.

Maneuver with care.

For approach and landing:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

If hydraulic not recovered:

■ If flaps position below 3:

Turn off GPWS flap mode.

Use FLAPS 2 for landing.

Note: Slats extend slowly.

■ If flaps position below 1 + F:

Approach speed = VREF + 30 kt

Apply necessary landing performance corrections.

■ If flaps position at or above 1 +F and below 2:

Approach speed = VREF + 20 kt

Apply necessary landing performance corrections.

■ If flaps position at or above 2:

Approach speed = VREF + 20 kt

Apply necessary landing performance corrections.

■ If flaps position at 3:

Use FLAPS 3 for landing.

Note: Slats extend slowly.

Approach speed = VREF + 15 kt



EMERGENCY PROCEDURES HYDRAULIC

Continued from the previous page HYD - G+Y SYS LO PR

Apply necessary landing performance corrections.

■ If flaps position above 3:

• If flaps position below full:

Turn off GPWS flap mode.

Use FLAPS FULL for landing.

Note: Slats extend slowly.

Approach speed = VREF + 10 kt

Apply necessary landing performance corrections.

Note: 1. Flaps are inoperative.

2. Most spoilers and one elevator are inoperative.

3. Nosewheel steering is inoperative.



EMERGENCY PROCEDURES LANDING GEAR

A330 AIRPLANE FLIGHT MANUAL

L/G - GEAR NOT DOWNLOCKED

Ident.: EMER-32-00005725.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Recycle landing gear.

If unsuccessful:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

If warning persists after 40 s :

Reset the landing gear gravity extension switch.

Pull up landing gear lever.

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

L/G - GEAR NOT DOWNLOCKED

Ident.: EMER-32-00005725.0002001 / 05 JAN 17

APPROVED

Criteria: (A330 and 204449)

Recycle landing gear.

If unsuccessful:

Wait 120 s

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

If warning persists after 40 s :

Reset the landing gear gravity extension switch.

Pull up landing gear lever.

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.



EMERGENCY PROCEDURES LANDING GEAR

LOSS OF BRAKING

Ident.: EMER-32-00009839.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If autobrake selected:

Take over brake control with brake pedals.

• If no braking available:

Apply maximum reverse thrust.

Release brake pedals.

Turn off antiskid.

Press brake pedals.

Apply maximum brake pressure 1 000 PSI.

• If still no braking:

Use short and successive applications of the parking brake.



EMERGENCY PROCEDURES NAVIGATION

A330 AIRPLANE FLIGHT MANUAL

ABNORMAL V ALPHA PROT

Ident.: TDU / EMER-34-00015960.0001001 / 08 MAY 15

APPROVED

Criteria: A330 Impacted DU: NONE Belongs to TR528 Issue 2

> When the Mach increases, if the Alpha Prot strip (black and amber) continuously increases and exceeds Green Dot (GD) speed in a stabilized wings-level flight path (without an increase in the load factor):

Keep on one ADR.

Turn off two ADRs.

In case of dispatch with one ADR inoperative, switch only one ADR to OFF.

CAUTION RISK OF ERRONEOUS DISPLAY OF THE VSW STRIP (RED AND BLACK)
AND RISK OF UNDUE STALL WARNING

Do not increase speed.

Consider using the Flight Path Vector (FPV).

Recover affected DU by using associated DMC switching.

When at or above safety altitude, level off.

At any time, with a speed above VLS, if the aircraft goes to a continuous nose down
pitch rate that cannot be stopped with backward sidestick inputs, immediately:
Keep on one ADR.

Turn off two ADRs.



EMERGENCY PROCEDURES NAVIGATION

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TPA A330-243F FLEET EMER-34 P 2/2
AFM 16 JUN 15



EMERGENCY PROCEDURES POWER PLANT

A330 AIRPLANE FLIGHT MANUAL

ENG - ALL ENGINES FAILURE

Ident.: EMER-70-00020344.0004001 / 05 JAN 17

APPROVED

Criteria: (330-200F and 204449)

LAND ASAP

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Manually confirm RAT on.

Manually confirm emergency electrical power on.

Optimum relight speed: 300 kt / M 0.82

Start APU when below FL 250

Set all thrust levers to idle.

Gliding distance in no wind condition: 2 NM / 1 000 ft

Gliding distance may be adjusted by use of speed brakes.

Initiate the diversion.

Note: For communication, only VHF 1 is available.

Notify ATC.

Notify courier area occupants.

Turn on cabin signs.

Use crew oxygen masks above FL 100.

Check fuel quantity.

■ If engine relight can be attempted:

Set ENG START selector to IGN START.

At or below FL 300:

Set all engine master levers to OFF during 30 s then ON.

Try regularly engines relight.

If APU available and windmill not successful below FL 200:

Set all engine master levers to OFF.

Optimum speed: green dot.

Turn off wing anti-ice.

Turn on APU bleed.

Re-attempt engine relight (only 1 at a time).

Try regularly engines relight.



EMERGENCY PROCEDURES POWER PLANT

Continued from the previous page ENG - ALL ENGINES FAILURE

■ If engine relight cannot be attempted:

Optimum speed: green dot.

Turn off wing anti-ice.

Turn on APU bleed.

When below 10 000 ft AGL:

Prepare courier area and cockpit.

Turn on RAM AIR.

Set barometric reference (if available).

Turn off COMMERCIAL.

Turn on Emergency Locator Transmitter (ELT) (if installed), when conditions permit.

Use rudder with care.

For approach and landing:

Minimum RAT speed: 140 kt

Turn off TAWS - GPWS.

Use FLAPS 2 for landing.

For slats extension: Set LAND RECOVERY to ON.

Note: 1. Slats extend slowly.

- 2. At slats extension, electrical power is supplied by batteries only.
- 3. Most spoilers are inoperative.

■ If ditching anticipated:

Keep landing gear up.

Approach speed:

Weight (t)	120 t	140 t	160 t	180 t	200 t	220 t	240 t
Weight (klb)	265 klb	310 klb	355 klb	400 klb	440 klb	485 klb	530 klb
VAPP	150 kt	150 kt	153 kt	160 kt	167 kt	173 kt	180 kt

At 2 000 ft AGL:

Notify courier area occupants for ditching.

Set DITCHING pushbutton to ON.

At 500 ft AGL:

Order brace for impact.



EMERGENCY PROCEDURES POWER PLANT

Continued from the previous page ENG - ALL ENGINES FAILURE

Note: Touchdown should be made at 11 ° pitch attitude with minimum aircraft vertical speed.

At touchdown:

Confirm all engine master levers to OFF.

Shut down the APU.

• After ditching:

Notify ATC with VHF 1.

Push all FIRE pushbuttons (engines and APU).

Discharge all fire agents (engines and APU).

Initiate evacuation.

Turn off all batteries.

■ If forced landing anticipated:

Approach speed:

Weight (t)	120 t	140 t	160 t	180 t	200 t	220 t	240 t
Weight (klb)	265 klb	310 klb	355 klb	400 klb	440 klb	485 klb	530 klb
VAPP	150 kt	150 kt	153 kt	160 kt	167 kt	173 kt	180 kt

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Arm ground spoilers.

Apply maximum brake pressure 1 000 PSI.

At 2 000 ft AGL :

Notify courier area occupants for landing.

At 500 ft AGL :

Order brace for impact.

At touchdown :

Confirm all engine master levers to OFF.

Shut down the APU.

Note: Antiskid is inoperative.

When aircraft stopped :

Set parking brake to ON.

Notify ATC with VHF 1.

Push all FIRE pushbuttons (engines and APU).



EMERGENCY PROCEDURES POWER PLANT

Continued from the previous page ENG - ALL ENGINES FAILURE

Discharge all fire agents (engines and APU).

■ If evacuation required :

Initiate evacuation.

Turn off all batteries.

■ If evacuation not required :

Notify courier area occupants to remain seated.



EMERGENCY PROCEDURES POWER PLANT

ENG - ALL ENG FLAME OUT

Ident.: EMER-70-00005706.0002001 / 16 APR 10

APPROVED

Criteria: 330-200F

LAND ASAP

Note: 1. Flic

1. Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

2. Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

Manually confirm RAT on.

Set ENG START selector to IGN START.

Set all thrust levers to idle.

Determine landing strategy.

Manually confirm emergency electrical power on if EMER GEN not automatically coupled.

Note: For communications, only VHF 1 is available.

Notify ATC.

■ If there is fuel remaining on board:

Attempt engines relight with optimum relight speed 300 kt /M 0.82.

Refer to ABN-70 ENG RELIGHT IN FLIGHT.

If no engine relight after 30 s:

Set both engine master levers to OFF during 30 s then ON.

If engine relight unsuccessful:

Use crew oxygen masks above FL 100.

Start APU when below FL 250.

Then, when below FL 200, turn off wing anti-ice and re-attempt engines relight (one at a time) using APU bleed.

If engine relight still unsuccessful:

Optimum speed: green dot.

Prepare courier area and cockpit.

Turn on cabin signs.

Turn off COMMERCIAL.

Use rudder with care.

Turn on RAM AIR when below FL 150.

■ If no fuel on board:

Optimum speed: 230 kt then green dot.

Continued on the following page

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EMERGENCY PROCEDURES POWER PLANT

Continued from the previous page ENG - ALL ENG FLAME OUT

Use crew oxygen masks above FL 100.

Prepare courier area and cockpit.

Turn on cabin signs.

Turn off COMMERCIAL.

Use rudder with care.

Turn on RAM AIR when below FL 150.

For approach and landing:

Minimum RAT speed: 140 kt. Use FLAPS 1 for landing.

For slats extension: Set LAND RECOVERY to ON.

Note: 1. Slats extend slowly.

2. At slats extension, electrical power is supplied by batteries only.

Approach speed: 170 kt.

If forced landing anticipated:

Apply forced landing procedure. Refer to EMER-90 FORCED LANDING.

If ditching anticipated:

Apply ditching procedure. Refer to EMER-90 DITCHING.

Note:

- 1. Antiskid is inoperative. Refer to ABN-32 BRAKES ANTI SKID FAULT or A/SKID N/WS OFF
- 2. Most spoilers are inoperative.

ENG - N1 (N2) (N3) OVERLIMIT

Ident.: EMER-70-00005707.0003001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

If N1 (N2) (N3) rotor speed is above red line:

Move affected engine thrust lever to reduce N1 (N2) (N3) below limit.

If overlimit persists after thrust lever back to idle position:

Shut down affected engine.



EMERGENCY PROCEDURES POWER PLANT

A330 AIRPLANE FLIGHT MANUAL

ENG - TURBINE OVHT

Ident.: EMER-70-00005708.0001001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

Set affected engine thrust lever to idle.

If warning persists :

Shut down affected engine.

ENG - OIL LO PR

Ident.: EMER-70-00005710.0002001 / 02 JUL 10

APPROVED

Criteria: (A330 and 58751)

Set affected engine thrust lever to idle.

If warning persists:

Shut down affected engine.



EMERGENCY PROCEDURES POWER PLANT

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 TPA A330-243F FLEET
 EMER-70 P 8/8

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A330
AIRPLANE FLIGHT MANUAL

EMER DESCENT

Ident.: EMER-90-00005222.0002001 / 20 DEC 16

APPROVED

Criteria: 330-200F

Use crew oxygen masks.

Turn on cabin signs.

Initiate an emergency descent.

Set all thrust levers to idle (if autothrust is not active).

Extend full speed brakes.

Descend at maximum appropriate speed to the higher one of: FL 100 or MEA -MORA.

CAUTION

If structural damage suspected, reduce speed as appropriate and maneuver with care.

Set ENG START selector to IGN START.

Notify ATC of the nature of the emergency.

Notify the courier area occupants of emergency descent.

Consider squawk 7700 on ATC transponder.

Maximum flight level is the higher one of: FL 100 or MEA -MORA.

If cabin altitude above 14 000 ft:

Manually confirm courier area occupants oxygen masks on.



EMERGENCY PROCEDURES MISCELLANEOUS

DITCHING

Ident.: EMER-90-00005215.0005001 / 19 JUN 13

APPROVED

Criteria: 330-200F

Notify ATC and courier area occupants of the nature of emergency or use transponder (if available) as required.

Prepare cockpit and courier area.

Turn off TAWS -GPWS.

Turn on cabin signs.

Turn on emergency exit lights.

Turn off COMMERCIAL.

Set landing elevation to sea level.

• If time and conditions permit:

Turn on Emergency Locator Transmitter (ELT) (if installed).

For approach:

Keep landing gear up.

Use maximum available slats/flaps.

Note: In case of all engine failure, set LAND RECOVERY to ON and use FLAPS 1.

At 2 000 ft AGL:

Check CAB PR MODE SEL is in AUTO position.

Turn off all bleeds (engines and APU).

Notify courier area occupants for ditching.

Set ditching to ON.

Note: Touchdown should be made at 11 ° pitch attitude with minimum aircraft vertical speed.

At 500 ft AGL:

Order brace for impact.

At touchdown:

Set both engine master levers to OFF.

Shut down APU.

After ditching:

Notify ATC with VHF 1.

Push all FIRE pushbuttons (engines and APU).

Discharge all fire agents (engines and APU).



EMERGENCY PROCEDURES MISCELLANEOUS

Continued from the previous page DITCHING

Initiate evacuation.

Turn off all batteries.

Check ELT is emitting (if installed).



EMERGENCY PROCEDURES MISCELLANEOUS

DITCHING

Ident.: EMER-90-00005215.0008001 / 05 JAN 17

APPROVED

Criteria: (330-200F and 204449)

Notify ATC and courier area occupants of the nature of emergency or use transponder (if available) as required.

Prepare cockpit and courier area.

Turn off TAWS -GPWS.

Turn on cabin signs.

Turn on emergency exit lights.

Turn off COMMERCIAL.

Set landing elevation to sea level.

Turn on Emergency Locator Transmitter (ELT) (if installed), when conditions permit.

For approach:

Keep landing gear up.

Use maximum available slats/flaps.

At 2 000 ft AGL:

Check CAB PR MODE SEL is in AUTO position.

Turn off all bleeds (engines and APU).

Notify courier area occupants for ditching.

Set DITCHING pushbutton to ON.

Note: Touchdown should be made at 11 ° pitch attitude with minimum aircraft vertical speed.

At 500 ft AGL:

Order brace for impact.

At touchdown:

Set both engine master levers to OFF.

Shut down the APU.

After ditching:

Notify ATC with VHF 1.

Push all FIRE pushbuttons (engines and APU).

Discharge all fire agents (engines and APU).

Initiate evacuation.

Turn off all batteries.



AIRPLANE FLIGHT MANUAL

FORCED LANDING

Ident.: EMER-90-00005213.0005001 / 19 JUN 13

APPROVED

Criteria: 330-200F

Notify ATC and courier area occupants of the nature of emergency or use transponder (if available) as required.

Prepare cockpit and courier area.

Turn off TAWS - GPWS.

Turn on cabin signs.

Turn on emergency exit lights.

Turn off COMMERCIAL.

Manually set the landing elevation.

If time and conditions permit:

Turn on Emergency Locator Transmitter (ELT) (if installed).

For approach :

Turn on RAM AIR.

Extend landing gear.

In case of all engine failure, set LAND RECOVERY to ON and extend landing gear by Note:

gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Use maximum available slats/flaps.

In case of all engine failure, use FLAPS 1. Note:

Arm ground spoilers.

Apply maximum brake pressure 1 000 PSI.

At 2 000 ft AGL:

Notify courier area occupants for landing.

At 500 ft AGL :

Order brace for impact.

At touchdown :

Set both engine master levers to OFF.

Shut down APU.

After landing :

When aircraft stopped :

Set parking brake to ON.

Continued on the following page

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A330
AIRPLANE FLIGHT MANUAL

Continued from the previous page FORCED LANDING

Notify ATC with VHF 1.

Push all FIRE pushbuttons (engines and APU).

Discharge all fire agents (engines and APU).

■ If evacuation required :

Initiate evacuation.

Turn off all batteries.

■ If evacuation not required :

Notify courier area occupants to remain seated.

Check ELT is emitting (if installed).



AIRPLANE FLIGHT MANUAL

FORCED LANDING

2 Ident.: EMER-90-00005213.0008001 / 05 JAN 17

APPROVED

Criteria: (330-200F and 204449)

Notify ATC and courier area occupants of the nature of emergency or use transponder (if available) as required.

Prepare cockpit and courier area.

Turn off TAWS - GPWS.

Turn on cabin signs.

Turn on emergency exit lights.

Turn off COMMERCIAL.

Manually set the landing elevation.

Turn on Emergency Locator Transmitter (ELT) (if installed), when conditions permit.

For approach :

Turn on RAM AIR.

Extend landing gear.

Use maximum available slats/flaps.

Arm ground spoilers.

Apply maximum brake pressure 1 000 PSI.

At 2 000 ft AGL :

Notify courier area occupants for landing.

At 500 ft AGL :

Order brace for impact.

At touchdown :

Set both engine master levers to OFF.

Shut down the APU.

After landing :

When aircraft stopped :

Set parking brake to ON.

Notify ATC with VHF 1.

Push all FIRE pushbuttons (engines and APU).

Discharge all fire agents (engines and APU).



EMERGENCY PROCEDURES MISCELLANEOUS

Continued from the previous page FORCED LANDING

■ If evacuation required :

Initiate evacuation.

Turn off all batteries.

If evacuation not required :

Notify courier area occupants to remain seated.

EMERGENCY EVACUATION

Ident.: EMER-90-00005796.0004001 / 16 APR 10

APPROVED

Criteria: 330-200F

When aircraft stopped:

Set parking brake to ON.

Notify ATC with VHF 1.

Alert courier area occupants.

• If MAN CAB PR has been used:

Check cabin differential pressure at zero before opening the doors.

Set both engine master levers to OFF.

Push all FIRE pushbuttons (engines and APU).

Discharge all fire agents (engines and APU) as required.

■ If evacuation required:

Initiate evacuation.

Turn off all batteries.

■ If evacuation not required:

Notify courier area occupants to remain seated.



A330
AIRPLANE FLIGHT MANUAL

STALL RECOVERY

Ident.: EMER-90-00013149.0001001 / 28 FEB 11

<u>APPROVED</u>

Criteria: A330

Apply nose down pitch control. Use lateral control to level wings.

When out of stall:

Smoothly increase thrust as needed.

Check that speed brakes are retracted.

Smoothly recover the flight path.

• If in clean configuration and below 20 000 ft:

Select FLAPS 1.



EMERGENCY PROCEDURES MISCELLANEOUS

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Localization	Toc	ID	Reason
Title	Index	"	i icason
ABN-PLP-TOC	indox	1	Documentation update: Deletion of the "00016756 AIR - PACK 1 +
AIR COND / PRESS / VENT			2 FAULT" table of content entry.
		İ	Documentation update: Deletion of the "00016757 VENT - OVBD
			VALVE FAULT" table of content entry.
	İ	İ	Documentation update: Deletion of the "00016756.0001001 AIR -
			PACK 1 + 2 FAULT" documentary unit.
			Documentation update: Deletion of the "00016757.0001001
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ABN-PLP-TOC ELECTRICAL POWER		2	Documentation update: Deletion of the "00017002 ELEC - AC BUS 1 FAULT" table of content entry.
ELECTRICAL POWER			Documentation update: Deletion of the "00017003 ELEC - AC
			BUS 2 FAULT" table of content entry.
			Documentation update: Deletion of the "00011169 ELEC - DC
			BUS 1+2 FAULT" table of content entry.
			Documentation update: Deletion of the "00017002.0001001
			ELEC - AC BUS 1 FAULT" documentary unit.
		İ	Documentation update: Deletion of the "00017003.0001001
			ELEC - AC BUS 2 FAULT" documentary unit.
			Documentation update: Deletion of the "00011169.0010001
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ABN-PLP-TOC FLIGHT CONTROLS		3	Documentation update: Deletion of the "00017098 F/CTL - FLAPS LOCKED" table of content entry.
		İ	Documentation update: Deletion of the "00016758 F/CTL - ELEV REDUND LOST" table of content entry.
			Documentation update: Deletion of the "00017098.0001001
			F/CTL - FLAPS LOCKED" documentary unit.
			Documentation update: Deletion of the "00016758.0001001
			F/CTL - ELEV REDUND LOST" documentary unit.
	Ī		TR incorporation
ABN-PLP-TOC	1	4	Documentation update: Deletion of the "00016541 FUEL CTR TK
FUEL			XFR FAULT" table of content entry.
			Documentation update: Deletion of the "00016693 FUEL - L (R)
			WING PUMPS LO PR" table of content entry.
			Documentation update: Deletion of the "00016694 FUEL - L+R
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			Documentation update: Deletion of the "00016541.0001001 FUEL
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dex	ID	Reason Documentation update: Deletion of the "00016693.0001001 FUEL - L (R) WING PUMPS LO PR" documentary unit. Documentation update: Deletion of the "00016694.0002001 FUEL - L+R WING TK LO LVL" documentary unit. TR incorporation Incorporation of TR
		- L (R) WING PUMPS LO PR" documentary unit. Documentation update: Deletion of the "00016694.0002001 FUEL - L+R WING TK LO LVL" documentary unit. TR incorporation
		- L (R) WING PUMPS LO PR" documentary unit. Documentation update: Deletion of the "00016694.0002001 FUEL - L+R WING TK LO LVL" documentary unit. TR incorporation
	_	Documentation update: Deletion of the "00016694.0002001 FUEL - L+R WING TK LO LVL" documentary unit. TR incorporation
	_	- L+R WING TK LO LVL" documentary unit. TR incorporation
<u> </u>	_	TR incorporation
	_	
\dashv	_	
		Documentation update: Deletion of the "00017009 NAV - IR 1 (2)
	J	(3) FAULT" table of content entry.
		Documentation update: Deletion of the "00017010 NAV - IR 1+2
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ŀ		Documentation update: Deletion of the "00017009.0001001 NAV -
		IR 1 (2) (3) FAULT" documentary unit.
ł		Documentation update: Deletion of the "00017010.0001001 NAV -
		IR 1+2 (2+3) (1+3) FAULT" documentary unit.
ł		TR incorporation
	6	Documentation update: Deletion of the "00016652 AIR - ENG
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l		Documentation update: Deletion of the "00016766 AIR - ENG 1+2
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ł		Documentation update: Deletion of the "00016653 AIR - L (R)
		WING LEAK" table of content entry.
ł		Documentation update: Deletion of the "00016654 AIR - ENG
		BLEED LEAK" table of content entry.
ł		Documentation update: Deletion of the "00016655 AIR - APU
		BLEED LEAK" table of content entry.
		Documentation update: Deletion of the "00016652.0001001 AIR -
		ENG BLEED FAULT" documentary unit.
i		Documentation update: Deletion of the "00016766.0001001 AIR -
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i		Documentation update: Deletion of the "00016653.0001001 AIR -
		L (R) WING LEAK" documentary unit.
ł		Documentation update: Deletion of the "00016654.0001001 AIR -
		ENG BLEED LEAK" documentary unit.
		Documentation update: Deletion of the "00016655.0001001 AIR -
		APU BLEED LEAK" documentary unit.
		TR incorporation
\dashv	7	Documentation update: Deletion of the "00016759 DOOR - FWD
	1	CABIN" table of content entry.
		TR incorporation
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Localization Title	Toc Index	ID	Reason
			Documentation update: Deletion of the "00016760 DOOR - MAIN
			CARGO" table of content entry.
	1		Documentation update: Deletion of the "00016761 DOOR -
			LOWER CARGO (AFT or FWD)" table of content entry.
			Documentation update: Deletion of the "00016762 DOOR - AVIONIC or BULK CARGO" table of content entry.
			Documentation update: Deletion of the "00016759.0001001 DOOR - FWD CABIN" documentary unit.
			Documentation update: Deletion of the "00016760.0001001
			DOOR - MAIN CARGO" documentary unit.
	İ		Documentation update: Deletion of the "00016761.0001001
			DOOR - LOWER CARGO (AFT or FWD)" documentary unit.
			Documentation update: Deletion of the "00016762.0001001 DOOR - AVIONIC or BULK CARGO" documentary unit.
ABN-PLP-TOC		8	Documentation update: Deletion of the "00016767 TAIL STRIKE"
MISCELLANEOUS			table of content entry.
		İ	Documentation update: Deletion of the "00016767.0001001 TAIL
			STRIKE" documentary unit.
			TR incorporation
ABN-21	Α	1	Documentation update: Addition of "AIR - PACK 1 + 2 FAULT"
AIR - PACK 1 + 2 FAULT			documentary unit
ABN-21	В	2	Documentation update: Addition of "VENT - OVBD VALVE
VENT - OVBD VALVE FAULT			FAULT" documentary unit
ABN-24	А	1	Documentation update: Addition of "ELEC - AC BUS 1 FAULT"
ELEC - AC BUS 1 FAULT ABN-24	В	2	documentary unit Documentation update: Addition of "ELEC - AC BUS 2 FAULT"
ELEC - AC BUS 2 FAULT	В	2	documentary unit
ABN-27	В	1	Documentation update: Addition of "F/CTL - FLAPS LOCKED"
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ABN-27	Р	2	Documentation update: Addition of "F/CTL - ELEV REDUND
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ABN-28	А	1	Documentation update: Addition of "FUEL - CTR TK XFR FAULT"
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ABN-28 FUEL - L (R) WING PUMPS LO PR	G	2	Documentation update: Addition of "FUEL - L (R) WING PUMPS LO PR" documentary unit
ABN-28 FUEL - L+R WING TK LO LVL	L	3	Documentation update: Addition of "FUEL - L+R WING TK LO LVL" documentary unit
ABN-28 FUEL - FCMC 1+2 FAULT	М	4	Homogenization of the wording for the go-around.



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Localization Title	Toc Index	ID	Reason
ABN-34 NAV - IR 1 (2) (3) FAULT	С	1	Documentation update: Addition of "NAV - IR 1 (2) (3) FAULT" documentary unit
ABN-34 NAV - IR 1+2 (2+3) (1+3) FAULT	D	2	Documentation update: Addition of "NAV - IR 1+2 (2+3) (1+3) FAULT" documentary unit
ABN-34 NAV - ADR 1+2 FAULT	G	3	Homogenization of the wording for the go-around.
ABN-34 NAV - ADR 1+3 (2+3) FAULT	Н	4	Homogenization of the wording for the go-around.
ABN-34 NAV - ADR 1+3 (2+3) FAULT	Н	5	Documentation update: Addition of "NAV - ADR 1+3 (2+3) FAULT" documentary unit
ABN-34 NAV - ADR DISAGREE	I	6	Homogenization of the wording for the go-around.
ABN-36 AIR - ENG BLEED FAULT	А	1	Documentation update: Addition of "AIR - ENG BLEED FAULT" documentary unit
ABN-36 AIR - ENG 1+2 BLEED FAULT	В	2	Documentation update: Addition of "AIR - ENG 1+2 BLEED FAULT" documentary unit
ABN-36 AIR - L (R) WING LEAK	Е	3	Documentation update: Addition of "AIR - L (R) WING LEAK" documentary unit
ABN-36 AIR - ENG BLEED LEAK	F	4	Documentation update: Addition of "AIR - ENG BLEED LEAK" documentary unit
ABN-36 AIR - APU BLEED LEAK	G	5	Documentation update: Addition of "AIR - APU BLEED LEAK" documentary unit
ABN-52 DOOR - FWD CABIN	А	1	Documentation update: Addition of "DOOR - FWD CABIN" documentary unit
ABN-52 DOOR - MAIN CARGO	В	2	Documentation update: Addition of "DOOR - MAIN CARGO" documentary unit
ABN-52 DOOR - LOWER CARGO (AFT or FWD)	С	3	Documentation update: Addition of "DOOR - LOWER CARGO (AFT or FWD)" documentary unit
ABN-52 DOOR - AVIONIC or BULK CARGO	D	4	Documentation update: Addition of "DOOR - AVIONIC or BULK CARGO" documentary unit
ABN-70 ENG - SHUTDOWN	В	1	Homogenization of the wording for the go-around.
ABN-70 ENG - REV PRESSURIZED	D	2	Homogenization of the wording for the go-around.
ABN-70 ENG - THR LEVER FAULT	J	3	Homogenization of the wording for the go-around.
ABN-70 ENG - THR LEVER DISAGREE	K	4	Homogenization of the wording for the go-around.
ABN-90 TAIL STRIKE	А	1	Documentation update: Addition of "TAIL STRIKE" documentary unit

TPA A330-243F FLEET AFM

ABN-PLP-SOH P 4/4 28 FEB 17



ABNORMAL PROCEDURES GENERAL

INTRODUCTION

Ident.: ABN-GEN-00008347.0001001 / 19 JUN 13 APPROVED

Criteria: A330

The procedures contained in this chapter have been established and are recommended by the aircraft manufacturer.

The following important remarks apply:

- These procedures give information related to system and operational requirements and cover the
 actions to be followed in the case of failures that are not considered as emergency cases (these
 cases are covered in EMERGENCY PROCEDURES chapter).
- 2. Only particular operations that are considered useful to highlight are presented. The procedures that are considered to be "basic airmanship" are therefore not covered.
- 3. For a definition of LAND ASAP. Refer to GEN-DEF LAND ASAP Definition.

When actions depend on a condition, a black dot (•) or a black square (■) identifies this condition. The black square is used when there is a choice between one or more conditions and only one is applicable.

These procedures are approved by the Airworthiness Authorities as acceptable procedures for operation of the aircraft. This approval does not prevent the operator from developing equivalent procedures provided these procedures are approved by appropriate operational authorities. In case of discrepancy between procedures displayed on the ECAM and procedures stated in this AFM . the AFM procedures always have precedence.

Unless otherwise specified in the procedures, the minimum speed to be used for approach and landing is the VLS corresponding to the configuration requested by the procedure.

Note: VLS, when mentioned in a procedure, is the one corresponding to the configuration requested by the procedure (e.g. if the procedure requests to use FLAPS 2, take VLS of CONF 2).

LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE

Ident.: TDU / ABN-GEN-00014414.0002001 / 11 DEC 14 APPROVED

Criteria: A330 Impacted DU: NONE Belongs to TR457 Issue 1

RUNWAY CONDITION DETERMINATION

Landing distance determination must not only be based on Estimated Surface Friction (Mu) or Pilot Reports of Braking Action (PiRep) or similar qualitative information.

The flight crew shall obtain the runway condition or/and the depth and type of runway contaminant to make the basic assessment of actual condition.



ABNORMAL PROCEDURES GENERAL

A330 AIRPLANE FLIGHT MANUAL

Landing distance determination must not consider a better Braking Action than the one related to the runway condition.

Runway Condition	Max Reported Braking Action
Dry	6 - DRY
Wet	5 - GOOD
Compacted Snow	4 - GOOD to MEDIUM
More than 3 mm of Dry or Wet Snow	3 - MEDIUM
More than 3 mm of Standing Water or Slush	2 - MEDIUM to POOR
lce	1 - POOR

LANDING DISTANCE DETERMINATION

The landing distance to be applied in case of failure is the Operational Landing Distance (OLD). The OLD can be determined by selecting the failure case in the IN-FLIGHT FAILURE field of the AFM_OCTO interface, using the database given in the PERFORMANCE chapter of this manual (*Refer to PERF-OCTO Performance Database*), combined with the LLRC02.fail file using the AFM_OCTO approved FM module at revision 30 or higher.

LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE

Ident.: ABN-GEN-00014577.0001001 / 19 JUN 13 APPROVED
Criteria: A330

RUNWAY CONDITION DETERMINATION

Landing distance determination must not only be based on Estimated Surface Friction (Mu) or Pilot Reports of Braking Action (PiRep) or similar qualitative information.

The flight crew shall obtain the runway condition or/and the depth and type of runway contaminant to make the basic assessment of actual condition.

Landing distance determination must not consider a better Braking Action than the one related to the runway condition.

Runway Condition	Max Reported Braking Action
Dry	6 - DRY
Wet	5 - GOOD
Compacted Snow	4 - GOOD to MEDIUM
More than 3 mm of Dry or Wet Snow	3 - MEDIUM
More than 3 mm of Standing Water or Slush	2 - MEDIUM to POOR
Ice	1 - POOR

LANDING DISTANCE DETERMINATION

The landing distance to be applied in case of failure is the Operational Landing Distance (OLD). The OLD can be determined by selecting the failure case in the IN-FLIGHT FAILURE field of the



ABNORMAL PROCEDURES GENERAL

A330
AIRPLANE FLIGHT MANUAL

AFM_OCTO interface, using the database given in the PERFORMANCE chapter of this manual (*Refer to PERF-OCTO Performance Database*), combined with:

- the LLRB01.fail file using the AFM_OCTO approved FM module at revision 28.
- the LLRC01.fail file using the AFM_OCTO approved FM module at revision 30 or higher.



ABNORMAL PROCEDURES GENERAL

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 TPA A330-243F FLEET
 ABN-GEN P 4/4

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ABNORMAL PROCEDURES ONE ENGINE INOPERATIVE PROCEDURES

TAKEOFF

ENGINE FAILURE BEFORE V1 (REJECTED TAKEOFF)

Ident.: ABN-OEI-TO-00005371.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Immediately reduce all thrust levers to idle.

Monitor autobrake operation.

Take over brake control with brake pedals if necessary.

Note:

- 1. If autobrake is not used, maximum brakes must be applied simultaneously with reduction of thrust levers.
- 2. If the takeoff is rejected above 100 kt, it is recommended that maximum reverse thrust is selected.
- 3. It is mandatory to use the maximum reverse thrust when the performance takes benefit of the reverse thrust effect.



ABNORMAL PROCEDURES ONE ENGINE INOPERATIVE PROCEDURES

TAKEOFF

ENGINE FAILURE BETWEEN V1 AND V2

Ident.: ABN-OEI-TO-00005121.0001001 / 25 JUL 14

APPROVED

Criteria: (A330 or (330-243F or 330-301 or 330-341 or 330-342))

If the engine failure occurs before VR:

Use rudder conventionally to maintain runway centerline.

At VR:

Rotate the aircraft with a positive sidestick input to achieve a normal and continuous rotation rate to a pitch attitude of 12.5 $^{\circ}$.

Once airborne and with a positive rate of climb:

Retract landing gear.

SRS guidance should be followed when FD pitch order has established.

Maintain airspeed not below V2.

Use rudder to prevent yaw. Shortly after lift off, the β target will appear. Adjust rudder position to zero the β target. Control heading conventionally with bank, keeping the β target zeroed with the rudder.

At acceleration height:

Level off.

If aircraft in configuration 2 or 3:

Accelerate up to F speed and select configuration 1.

Accelerate up to S speed and select configuration 0.

At slats zero, β target will disappear: center the sideslip indication conventionally.

Accelerate up to green dot speed and start climbing at this speed.

Reduce thrust to maximum continuous (if already in the FLX/MCT detent, move thrust lever to CL and back to MCT).

<u>Note:</u> In the case of takeoff performed with reduced thrust, even if the one engine out takeoff performance is always met with reduced thrust, selection of full takeoff thrust may be done after engine failure.



ABNORMAL PROCEDURES ONE ENGINE INOPERATIVE PROCEDURES

TAKEOFF

ENGINE FAILURE DURING INITIAL CLIMB OUT

Ident.: ABN-OEI-TO-00005372.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Proceed as for takeoff with engine failure between V1 and V2 (*Refer to ABN-OEI-TO Engine Failure between V1 and V2*). However, if the failure occurs above V2 it is recommended to maintain the speed reached after recovery, or SRS commanded attitude. In any case, the speed must not be below V2.



ABNORMAL PROCEDURES ONE ENGINE INOPERATIVE PROCEDURES

TAKEOFF

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ABNORMAL PROCEDURES ONE ENGINE INOPERATIVE PROCEDURES

APPROACH AND LANDING

APPROACH AND LANDING

Ident.: ABN-OEI-LDG-00005374.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Set ENG START selector to IGN START.

Use FLAPS 3 for landing.

Minimum final approach and landing speed: 1.23 VS1G of the landing configuration.

Note: 1. Check ECAM F/CTL page to confirm good directional trim.

2. Automatic approach has been demonstrated with one engine inoperative in CONF 3.

MISSED APPROACH (FROM INTERMEDIATE APPROACH CONFIGURATION)

Ident.: ABN-OEI-LDG-00005375.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Set GO AROUND thrust.

Rotate the aircraft to achieve a positive rate of climb.

Establish the required pitch attitude as directed by SRS pitch command bar.

Maintain intermediate approach speed.

Use rudder to prevent yaw. Adjust rudder position to zero the β target. Control heading conventionally with bank, keeping β target zeroed with the rudder.

At acceleration height:

Level off.

• If aircraft in configuration 2 or 3:

Accelerate up to F speed and select configuration 1.

Accelerate up to S speed and select configuration 0.

At slats zero, β target will disappear: center the sideslip indication conventionally.

Accelerate up to green dot speed and start climbing at this speed.

Reduce thrust to maximum continuous



ABNORMAL PROCEDURES ONE ENGINE INOPERATIVE PROCEDURES

APPROACH AND LANDING

BALKED LANDING

Ident.: ABN-OEI-LDG-00005377.0001001 / 26 NOV 09 Criteria: A330

APPROVED

.....

Set GO AROUND thrust.

Rotate the aircraft to achieve a positive rate of climb.

Establish the required pitch attitude as directed by SRS pitch command bar.

Retract flaps one step.

Maintain final approach and landing speed.

When positive rate of climb established:

Retract landing gear.

If necessary maintain a speed above the required speed to comply with approach climb gradient. Refer to PERF-LDG Approach Climb and Landing Climb

Use rudder to prevent yaw. Adjust rudder position to zero the β target. Control heading conventionally with bank, keeping β target zeroed with the rudder.

At acceleration height:

Level off

• If aircraft in configuration 2 or 3:

Accelerate up to F speed and select configuration 1.

Accelerate up to S speed and select configuration 0.

At slats zero, β target will disappear: center the sideslip indication conventionally.

Accelerate up to green dot speed and start climbing at this speed.

Reduce thrust to maximum continuous.



ABNORMAL PROCEDURES AIR COND / PRESS / VENT

AIR - PACK 1 + 2 FAULT

Ident.: ABN-21-00005691.0001001 / 28 FEB 11

APPROVED

Criteria: A330

Turn off both packs.

Descend to the higher one of: FL 100 or MEA.

Note: If only one pack was overheated, recover the affected pack once overheat has disappeared.

When at FL 100 or MEA and cabin differential pressure below 1 PSI:

Turn on RAM AIR.

AIR - PACK 1 + 2 FAULT

Ident.: **ABN-21-00005691.0002001 / 09 JAN 17**Criteria: ((330-200 and 204817) or (A330 and 204449))

APPROVED

Turn off both packs.

Descend to the higher one of: FL 100 or MEA -MORA.

<u>Note:</u> If only one pack was overheated, recover the affected pack once overheat has disappeared.

When at FL 100 or MEA-MORA and cabin differential pressure below 1 PSI:

Turn on RAM AIR.

VENT - OVBD VALVE FAULT

Ident.: ABN-21-00005692.0001001 / 28 FEB 11

APPROVED

Criteria: A330

Set ventilation extract to OVRD.

If overboard valve still full open:

Maximum flight level is the higher one of: FL 100 or MEA.

Use manual pressurization mode.

Maintain the cabin vertical speed switch in the UP position.



ABNORMAL PROCEDURES AIR COND / PRESS / VENT

VENT - OVBD VALVE FAULT

2 Ident.: ABN-21-00005692.0002001 / 09 JAN 17

APPROVED

Criteria: ((330-200 and 204817) or (A330 and 204449))

Set ventilation extract to OVRD.

If overboard valve still full open:

Maximum flight level is the higher one of: FL 100 or MEA-MORA.

Use manual pressurization mode.

Maintain the cabin vertical speed switch in the UP position.

VENT - BLOWING FAULT

Ident.: ABN-21-00005693.0002001 / 26 NOV 09

APPROVED

Criteria: (A330 and 56729)

Set pack flow to HI.

Turn on cabin fans if no smoke alert requires to turn off cabin fans.

Decrease cockpit and cabin temperature.

If warning persists after 5 min:

Maximum flight time: 5 h.

CAB PR - SYS 1 + 2 FAULT

Ident.: ABN-21-00005137.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Use manual pressurization mode.

Monitor cabin altitude and cabin differential pressure are within limits.

During final approach, maintain the cabin vertical speed switch in the UP position.

Check cabin differential pressure at zero before opening doors.



ABNORMAL PROCEDURES AIR COND / PRESS / VENT

CAB PR - SAFETY VALVE OPEN

Ident.: ABN-21-00005694.0003001 / 26 NOV 09

APPROVED

Criteria: (A330 and (56551 or 56729))

■ If cabin differential pressure below 0 PSI:

Expect high cabin rate.

Reduce vertical speed.

■ If cabin differential pressure above 8.7 PSI:

Use manual pressurization mode.

Monitor cabin altitude and cabin differential pressure are within limits.

If unsuccessful:

Reduce aircraft altitude.

During final approach, maintain the cabin vertical speed switch in the UP position.



ABNORMAL PROCEDURES AIR COND / PRESS / VENT

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 TPA A330-243F FLEET
 ABN-21 P 4/4

 AFM
 28 FEB 17



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FM 1+2 FAULT

AUTO FLT - FM 1+2 FAULT

Ident.: ABN-22-AUTOFLT-00005414.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Set FM SOURCE to NORM.
Use RMP for navaid tuning.
Manually set the landing elevation.
Use MCDU back up navigation.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FM 1+2 FAULT

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ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC I ANDING

MULTIPLE FAILURES OR WARNINGS (CATII)

Ident.: ABN-22-CATII-00008350.0001001 / 26 NOV 09

APPROVED

Criteria: A330

In the case of multiple failures or warnings, the most limiting applies.

ALTITUDE LOSS WITH AUTOPILOT MALFUNCTION (CAT II)

Ident.: ABN-22-CATII-00009853.0001001 / 26 NOV 09

APPROVED

Criteria: A330

DEMONSTRATED ALTITUDE LOSS BELOW GLIDE SLOPE WITH AUTOPILOT MALFUNCTION:

In approach one AP engaged in APPR mode, with take over 1 s after failure recognition, the path is negligible.

FAILURE LEADING TO SLATS/FLAPS LESS THAN CONF 3 (CAT II)

Ident.: ABN-22-CATII-00008352.0001001 / 26 NOV 09

APPROVED

Criteria: A330

• If alert appears above 200 ft:

Revert to CAT I minima and disconnect the autopilot not later than 500 ft.

ANTISKID SYSTEM AND/OR NOSEWHEEL STEERING FAILURE (CAT II)

Ident.: ABN-22-CATII-00008353.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Disconnect the autopilot at touchdown or when the failure occurs during landing roll.



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

ALPHA FLOOR ACTIVATION (CAT II)

Ident.: ABN-22-CATII-00008354.0001001 / 26 NOV 09

APPROVED

■ If activation occurs above 1 000 ft:

Check speed.

Disengage autothrust mode (TOGA LK) and reengage autothrust.

■ If activation occurs below 1 000 ft:

Go around if visual references are not sufficient.

Note: Alpha floor protection is inhibited below 100 ft at landing.

ONE ENGINE FAILURE (CAT II)

Ident.: ABN-22-CATII-00008355.0001001 / 26 NOV 09 APPROVED

Criteria: A330

<u>Note:</u> Automatic approach, landing and rollout have been demonstrated in CONF 3 with one engine inoperative before initiating the approach.

■ If failure occurs above 1 000 ft:

Select CONF 3.

■ If failure occurs between 1 000 ft and DH:

Go around if unsufficient visual references.

■ If failure occurs below DH:



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

RED "RA" ON TWO PFDS (CAT II)

Ident.: ABN-22-CATII-00008356.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If warning appears above 1 000 ft:

Revert to basic modes minima (CAT I).

■ If warning appears between 1 000 ft and DH:

Go around if insufficient visual references.

■ If warning appears below DH:

Land if external visual references are sufficient.

Note: AP /FD is not available in APPR mode.

AMBER "CHECK ATT" ON TWO PFDS (CAT II)

Ident.: ABN-22-CATII-00008357.0001001 / 26 NOV 09

Criteria: A330

<u>APPROVED</u>

CAUTION Do not make any switching below 1 000 ft.

Note: Below 1 000 ft, perform a manual go-around using STBY horizon.

■ If alert appears above 1 000 ft:

Check aircraft attitude with standby horizon.

Use switching to recover valid data.

■ If alert disappears:

A CAT II is still possible.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and DH:

Go around if visual references are not sufficient using standby horizon.

■ If alert appears below DH:



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC I ANDING

RED "ATT" ON ONE PFD (CAT II)

Ident.: ABN-22-CATII-00008358.0001001 / 26 NOV 09

APPROVED

CAUTION

Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

■ If warning disappears:

A CAT II approach is still possible.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and DH:

Go around if insufficient visual references.

■ If warning appears below DH:

Land if external visual references are sufficient.

DIAGONAL LINE OR "INVALID DATA" ON ONE PFD AND ND (CAT II)

Ident.: ABN-22-CATII-00008359.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If alert appears above 1 000 ft:

Use switching to recover valid data.

■ If alert disappears:

A CAT II approach is still possible.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and DH:

Go around if insufficient visual references.

■ If alert appears below DH:



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

A330 AIRPLANE FLIGHT MANUAL

AMBER "CHECK HDG" ON TWO NDS AND TWO PFDS (CAT II)

Ident.: ABN-22-CATII-00008360.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If alert appears above 1 000 ft:

Check heading with standby compass.

Use switching to recover valid data.

If alert disappears:

A CAT II approach is still possible.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and DH:

Go around if insufficient visual references.

■ If alert appears below DH:



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

RED "HDG" ON ONE ND AND ONE PFD (CAT II)

Ident.: ABN-22-CATII-00008361.0001001 / 26 NOV 09

APPROVED

CAUTION Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

■ If warning disappears:

A CAT II approach is still possible.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and DH:

Go around if insufficient visual references.

■ If warning appears below DH:

Land if external visual references are sufficient.

RED "SPD" ON ONE PFD (CAT II)

Ident.: ABN-22-CATII-00008362.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

If warning disappears:

A CAT II approach is still possible.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and DH:

Go around if insufficient visual references.

■ If warning appears below DH:



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

"AP OFF" WARNINGS (CAT II)

Ident.: ABN-22-CATII-00008363.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If warning appears above 1 000 ft:

Try to reengage autopilot.

If unsuccessful:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and DH:

Go around if insufficient visual references.

■ If warning appears below DH:

Land manually if external visual references are sufficient.

LOSS OF "CAT II" (CAT II)

Ident.: ABN-22-CATII-00008351.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If CAT II not displayed on FMA above 1 000 ft:

Try to recover.

If no recovery:

Revert to CAT I minima.

■ If CAT II disappears on FMA between 1 000 ft and DH:

Go around if insufficient visual references.

■ If CAT II disappears on FMA below DH:

Land.



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

LOC OR G/S EXCESSIVE DEVIATION ON PFD (CAT II)

Ident.: ABN-22-CATII-00008364.0001001 / 26 NOV 09

APPROVED

■ If deviation appears above 200 ft:

Monitor ILS tracking.

■ If deviation appears between 200 ft and DH:

Go around if visual references are not sufficient.

■ If deviation appears below DH:

Land manually if external references are sufficient.

"AUTOLAND" LIGHT (CAT II)

Ident.: ABN-22-CATII-00008365.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If warning appears between 200 ft and DH:

Go around if insufficient visual references.

■ If warning appears below DH:

Land if external visual references are sufficient.

A/THR FAULT (CAT II)

Ident.: ABN-22-CATII-00008366.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If alert appears above 1 000 ft:

Change over autopilot and try to reengage autothrust.

If unsuccessful:

Control the thrust manually.

■ If alert appears between 1 000 ft and DH:

Control the thrust manually.

■ If alert appears below DH:



ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

NO "LAND" AT 350 FT (CAT II)

Ident.: ABN-22-CATII-00008367.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Go around or perform a manual landing if sufficient visual references.

INCORRECT SELECTED COURSE AT 350 FT > 5 DEG (CAT II)

Ident.: ABN-22-CATII-00008368.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Continue the landing and disconnect autopilot at 50 ft at the latest.

NO "FLARE" AT 30 FT (CAT II)

Ident.: ABN-22-CATII-00008369.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Disconnect autopilot and continue the landing manually.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

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TPA A330-243F FLEET AFM



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

MULTIPLE FAILURES OR WARNINGS (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008370.0001001 / 26 NOV 09

APPROVED

Criteria: A330

In the case of multiple failures or warnings, the most limiting applies.

FAILURE LEADING SLATS/FLAPS LESS THAN CONF 3 (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008371.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If failure appears above 200 ft:

Revert to CAT I minima.

Disconnect the autopilot not later than 500 ft.

NOSEWHEEL STEERING FAILURE (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008373.0001001 / 26 NOV 09 APPROVED

Criteria: A330

■ If failure occurs above 350 ft:

Revert to CAT III with DH 50 ft.

■ If failure occurs between 350 ft and 200 ft:

Go around if visual references are not sufficient

■ If failure occurs below 200 ft:

Continue the landing.

Note: A go-around must be performed if visual references are insufficient at 50 ft for a CAT

III single or at CAT II DH as appropriate.

Disconnect the autopilot at touchdown, or when the failure appears during landing roll.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

ANTISKID FAILURE (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008372.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If failure occurs above 350 ft:

Revert to CAT III Single minima.

■ If failure occurs between 350 ft and 200 ft:

Go around if visual references are not sufficient.

If failure occurs below 200 ft:

Continue the landing.

Note: A go-around must be performed if visual references are insufficient at 50 ft for a CAT III single or at CAT II DH as appropriate.

Disconnect autopilot at touchdown, or when the failure appears during landing roll.

ALPHA FLOOR ACTIVATION (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008374.0001001 / 26 NOV 09

<u>APPROVED</u>

Criteria: A330

If activation occurs above 1 000 ft:

Check speed.

Disengage autothrust mode (TOGA LK) and reengage autothrust.

■ If activation occurs below 1 000 ft:

Go around if visual references are not sufficient.

Note: Alpha floor protection is inhibited below 100 ft at landing.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

ONE ENGINE FAILURE (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008375.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Note: Automatic approach, landing and rollout have been demonstrated in CONF 3 with one engine inoperative before initiating the approach.

■ If failure occurs above 1 000 ft:

Select CONF 3.

Revert to CAT III SINGLE minima.

■ If failure occurs between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

■ If failure occurs below 200 ft:

Continue the landing.

Note: A go-around must be performed if visual references are insufficient at 50 ft for CAT III SINGLE or CAT III DH as appropriate.

AUTOCALLOUT RA FAILURE (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008376.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If failure occurs between 1 000 ft and 200 ft:

Go around if visual references are not sufficient

■ If failure occurs below 200 ft:

Continue the landing.

Note: A go-around must be performed if visual references are insufficient at 50 ft for CAT III SINGLE or CAT III DH as appropriate.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

RED "RA" FLAG (RADIO ALTIMETER) ON TWO PFDS (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008377.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Note: AP /FD is not available in APPR mode.

■ If warning appears above 1 000 ft:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and DH:

Go around if visual references are not sufficient.

■ If warning appears below DH:

Land if external visual references are sufficient.

AMBER "CHECK ATT" FLAG ON TWO PFDS (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008378.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If alert appears above 1 000 ft:

Check aircraft attitude with standby horizon.

Use switching to recover valid data.

■ If alert disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and one ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient using standby horizon.

■ If alert appears below 200 ft:



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

RED "ATT" FLAG ON ONE PFD (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008379.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

■ If warning disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and one ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

■ If warning appears below 200 ft:

Continue the landing.

Note: A go-around must be performed if visual references are insufficient at 50 ft for CAT III SINGLE or CAT III DH as appropriate.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

AMBER "CHECK HDG" ON TWO NDS AND ON TWO PFDS (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008380.0001001 / 26 NOV 09 Criteria: A330

APPROVED

CAUTION

Do not make any switching below 1 000 ft.

■ If alert appears above 1 000 ft:

Check heading with standby compass.

Use switching to recover valid data.

■ If alert disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

■ If alert appears below 200 ft:

Land if external visual references are sufficient.

Note: A go-around must be performed if visual references are insufficient at 50 ft for a CAT III SINGLE or a CAT II DH as appropriate.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

RED "HDG" FLAG ON ONE ND AND ONE PFD (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008383.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

If warning disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

■ If warning appears below 200 ft:

Continue the landing.

<u>Note:</u> A go-around must be performed if visual references are insufficient at 50 ft for CAT III SINGLE or CAT III DH as appropriate.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

RED "SPD" FLAG ON ONE PFD (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008384.0001001 / 26 NOV 09

APPROVED

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CAUTION Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

■ If warning disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 200 ft:

Go around if visual references if are not sufficient.

■ If warning appears below 200 ft:

Continue the landing.

<u>Note:</u> A go-around must be performed if visual references are insufficient at 50 ft for CAT III SINGLE or CAT III DH as appropriate.

"AP OFF" WARNINGS (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008385.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If warning appears above 1 000 ft:

Try to reengage autopilot.

If unsuccessful:

Revert to the available capability.

■ If warning appears between 1 000 ft and DH:

Go around if visual references are not sufficient.

■ If warning appears below DH:



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

CAPABILITY DECREASE (EXCEPT IF DUE TO A/THR LOSS) (CAT III DH).

Ident.: ABN-22-CATIIIDH-00008386.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If alert appears above 1 000 ft:

Try to recover.

If unsuccessful:

Revert to the available capability.

■ If alert appears between 1 000 ft and 200 ft:

Go around if insufficient visual references.

TOTAL LOSS OF A/THR ("CAT III" DECREASES TO "CAT II") (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008387.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If failure appears above 1 000 ft:

Disconnect AP 1 (or change over if only one autopilot is engaged) and try to reengage autothrust.

If recovery:

Continue to CAT III SINGLE minima.

■ If no recovery:

Continue to CAT II minima and control thrust manually.

■ If failure appears between 1 000 ft and 200 ft:

Continue to CAT II minima.

Control thrust manually.

■ If failure appears below 200 ft:

Continue the landing.

Control thrust manually.

Note: A go-around must be performed if visual references are insufficient at 50 ft for a CAT

III SINGLE or at CAT II DH as appropriate.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

LOC OR G/S EXCESSIVE DEVIATION ON PFD (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008388.0001001 / 26 NOV 09

APPROVED

■ If failure occurs above 200 ft:

Monitor ILS tracking.

■ If failure occurs between 200 ft and DH:

Go around if visual references are not sufficient.

If failure occurs below DH:

Land if external visual references are sufficient.

"AUTOLAND" LIGHT (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008389.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If warning appears between 200 ft and DH:

Go around if visual references are not sufficient.

■ If warning appears below DH:

Land if external visual references are sufficient.

NO "LAND" AT 350 FT (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008390.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Go around or perform a manual landing if visual references are sufficient.

INCORRECT SELECTED COURSE AT 350 FT > 5 DEG (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008391.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Revert to CAT II minima.

Disconnect autopilot at 50 ft at the latest.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

NO "FLARE" AT 30FT (CAT III DH)

Ident.: ABN-22-CATIIIDH-00008392.0001001 / 26 NOV 09

APPROVED

Criteria: A330

- If visual references are sufficient:
 - Disconnect autopilot and land manually.
- If visual references are insufficient:

Execute a go-around.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

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ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

MULTIPLE FAILURES OR WARNINGS (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008395.0001001 / 26 NOV 09

APPROVED

Criteria: A330

In the case of multiple failures or warnings, the most limiting applies.

FAILURE LEADING SLATS/FLAPS LESS THAN CONF 3 (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008393.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If alert appears above 200 ft:

Revert to CAT I minima.

Disconnect the autopilot not later than 500 ft.

NOSEWHEEL STEERING FAILURE (CAT III NO DH)

Ident.: ABN-22-CATIlinoDH-00008396.0001001 / 26 NOV 09

Criteria: A330

<u>APPROVED</u>

■ If failure occurs above 350 ft:

Revert to CAT III with DH 50 ft.

■ If failure occurs between 350 ft and 200 ft:

Go around if visual references are not sufficient.

■ If failure occurs below 200 ft:

Continue the landing.

Disconnect autopilot at touchdown, or when the failure appears during landing roll.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

ANTISKID FAILURE (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008397.0001001 / 26 NOV 09

APPROVED

■ If failure occurs above 350 ft:

Revert to CAT III single minima.

■ If failure occurs between 350 ft and 200 ft:

Go around if insufficient visual references.

■ If failure occurs below 200 ft:

Continue the landing.

Disconnect autopilot at touchdown, or when the failure appears during landing roll.

ALPHA FLOOR ACTIVATION (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008398.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If activation occurs above 1 000 ft:

Check speed.

Disengage autothrust mode (TOGA LK) and reengage autothrust.

■ If activation occurs below 1 000 ft:

Go around if visual references are not sufficient.

Note: Alpha floor protection is inhibited below 100 ft at landing.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

ONE ENGINE FAILURE (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008399.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If failure occurs above 1 000 ft:

Select CONF 3

Revert to CAT III SINGLE minima

■ If failure occurs between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

■ If failure occurs below 200 ft:

Continue the landing.

AUTOCALLOUT RA FAILURE (CAT III NO DH)

Ident - ABN-22-CATIIInoDH-00008400.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If failure occurs between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

If failure occurs below 200 ft:

Continue the landing.

RED "RA" (RADIO ALTIMETER) FLAG ON TWO PFDS (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008401.0001001 / 26 NOV 09 APPROVED

Criteria: A330

■ If warning appears above 1 000 ft:

Revert to basic modes minima (CAT I).

■ If warning appears below 1 000 ft:

Go around if visual references are not sufficient.

AP /FD is not available in APPR mode. Note:



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

AMBER "CHECK ATT" ON TWO PFDS (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008402.0001001 / 26 NOV 09 Criteria: A330 **APPROVED**

CAUTION

Do not make any switching below 1 000 ft.

Note: Below 1 000 ft, perform a manual go-around using STBY horizon.

■ If alert appears above 1 000 ft:

Check aircraft attitude with standby horizon.

Use switching to recover valid data.

■ If alert disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

■ If alert appears below 200 ft:

Continue the landing.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

RED "ATT" ON ONE PFD (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008403.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

■ If warning disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient using standby horizon.

■ If warning appears below 200 ft:

Continue the landing.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

AMBER "CHECK HDG" ON TWO NDS AND TWO PFDS (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008404.0001001 / 26 NOV 09 Criteria: A330 APPROVED

CAUTION Do not make any switching below 1 000 ft.

■ If alert appears above 1 000 ft:

Check heading with standby compass.

Use switching to recover valid data.

■ If alert disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient using standby compass.

■ If alert appears below 200 ft:

Continue the landing.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

RED "HDG" ON ONE ND AND ONE PFD (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008405.0001001 / 26 NOV 09

APPROVED

Criteria: A330

CAUTION Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

■ If warning disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient using standby compass.

■ If warning appears below 200 ft:

Continue the landing.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

RED "SPD" ON ONE PFD (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008406.0001001 / 26 NOV 09 Criteria: A330

APPROVED

CAUTION

Do not make any switching below 1 000 ft.

■ If warning appears above 1 000 ft:

Use switching to recover valid data.

■ If warning disappears:

A CAT III SINGLE is still possible.

In case of diagonal line or "INVALID DATA" on one PFD and ND due to DMC failure, a CAT III DUAL is still possible after DMC switching.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

■ If warning appears below 200 ft:

Continue the landing.

"AP OFF" WARNINGS (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008407.0001001 / 26 NOV 09

APPROVED

18 SEP 12

Criteria: A330

If warning appears above 1 000 ft:

Try to reengage autopilot.

If unsuccessful:

Revert to the available capability.

■ If warning appears below 1 000 ft:

Go around if visual references are not sufficient.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

CAPABILITY DECREASE (EXCEPT IF DUE TO A/THR LOSS) (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008408.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If alert appears above 1 000 ft:

Try to recover.

• if no recovery:

Revert to the available capability.

■ If alert appears between 1 000 ft and 200 ft:

Go around if visual references are not sufficient.

TOTAL LOSS OF A/THR ("CAT III" DECREASE TO "CAT II") (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008409.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If failure appears above 1 000 ft:

Disengage AP 1 (or change over if only one autopilot is engaged) and try to reengage autothrust.

If successful:

Continue to CAT III SINGLE minima.

If unsuccessful:

Continue to CAT II minima and control thrust manually.

■ If failure appears between 1 000 ft and 200 ft:

Continue to CAT II minima.

Control thrust manually.

■ If failure appears below 200 ft:

Continue the landing.

Control thrust manually.



ABNORMAL PROCEDURES **AUTO FLIGHT SYSTEM**

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

LOC OR G/S EXCESSIVE DEVIATION ON PFD (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008410.0001001 / 26 NOV 09 Criteria: A330

APPROVED

If failure occurs above 200 ft:

Monitor ILS tracking.

■ If failure occurs below 200 ft:

Go around if visual references are not sufficient.

"AUTOLAND" LIGHT (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008411.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If warning appears below 200 ft:

Go around if visual references are not sufficient.

NO "LAND" AT 350 FT (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008412.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Go around or perform a manual landing if visual references are sufficient.

INCORRECT SELECTED COURSE AT 350 FT >5 DEG (CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008413.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Revert to CAT II minima.

Disconnect autopilot at 50 ft at the latest.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

NO "FLARE" AT 30 FT(CAT III NO DH)

Ident.: ABN-22-CATIIInoDH-00008414.0001001 / 26 NOV 09

APPROVED

Criteria: A330

- If visual references are sufficient:
 - Disconnect autopilot and land manually.
- If visual references are insufficient:

Execute a go-around.



ABNORMAL PROCEDURES AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

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ABNORMAL PROCEDURES ELECTRICAL POWER

A330 AIRPLANE FLIGHT MANUAL

ELEC - AC BUS 1 FAULT

Ident.: ABN-24-00005681.0001001 / 26 NOV 09

Set ventilation extract to OVRD

APPROVED

Criteria: A330

Set pack flow to HI.

Criteria: (330-200F and 204449)

ELEC - AC BUS 1 FAULT

Ident.: ABN-24-00005681.0002001 / 05 JAN 17

APPROVED

Set ventilation extract to OVRD.

If right cab fan is inoperative:

Set pack flow to HI.

ELEC - AC BUS 2 FAULT

Ident.: ABN-24-00005682.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Set pack flow to HI.

ELEC - AC BUS 2 FAULT

2 Ident.: **ABN-24-00005682.0002001 / 05 JAN 17** Criteria: (330-200F and 204449) APPROVED

• If left cab fan is inoperative:

Set pack flow to HI.



ABNORMAL PROCEDURES ELECTRICAL POWER

A330AIRPLANE FLIGHT MANUAL

ELEC - AC ESS BUS FAULT

Ident.: ABN-24-00005685.0002001 / 26 NOV 09

Criteria: (A330 and ((47524 or 50616) and (51790 or 54786)))

APPROVED

Set AC ESS FFFD to ALTN

If unsuccessful:

Set CAPT EFIS DMC to 3.

Set AIR DATA switching to CAPT ON 3.

ELEC - DC BUS 2 FAULT

Ident.: ABN-24-00005686.0002001 / 19 JUN 13

APPROVED

Criteria: (A330 and 49632)

Note: The cockpit door locking system (CDLS) is inoperative.

Set AIR DATA switching to F/O ON 3. Set FM SOURCE to BOTH ON 1.

Keep SEC 2 on.

If dual PRIM failure:

Do not use speed brakes.

If trim tank not empty and CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

Note: Do not perform manual forward fuel transfer while speed is at or below 270 kt or while

in climb.

Apply necessary landing performance corrections.

Note: 1. Slats and flaps extend slowly.

2. Half spoilers are inoperative.



ABNORMAL PROCEDURES FLECTRICAL POWER

A330 AIRPLANE FLIGHT MANUAL

ELEC - DC BUS 1+2 FAULT

Ident.: ABN-24-00005687.0001001 / 19 JUN 13

Criteria: (330-300 or (330-200F and 58623))

APPROVED

- 1. For communications, only VHF 1 is available. Note:
 - 2. For navaid tuning, only RMP 1 is available.
 - 3. The cockpit door locking system (CDLS) is inoperative.

Open wing crossfeed valves.

Set FM SOURCE to BOTH ON 1.

Keep SEC 2 on.

Monitor fuel imbalance.

If trim tank not empty and CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

Note: Do not perform manual forward fuel transfer while speed is at or below 270 kt or while

in climb

Do not use speed brakes.

For approach and landing:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Apply necessary landing performance corrections.

1. Slats and flaps extend slowly. Note:

2. Half spoilers are inoperative.

ELEC - DC ESS BUS FAULT

Ident.: ABN-24-00005688.0002001 / 26 NOV 09

APPROVED

Criteria: (A330 and 49632)

Note: 1. Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

2. For communications, only VHF 2 or VHF 3, and ATC 2 are available.

Set ECAM DMC switching to 3.

Turn off GPWS.

Trim tank fuel is trapped, apply trim tank fuel unusable procedure. Refer to ABN-28 TRIM TANK **FUEL UNUSABLE**

Slats extend slowly. Note:



ABNORMAL PROCEDURES ELECTRICAL POWER

ELEC - DC ESS BUS SHED

Ident.: ABN-24-00005689.0003001 / 16 APR 10

APPROVED

Criteria: 330-200F

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

Set FM SOURCE to BOTH ON 2.

Turn off GPWS flap mode.

Note: Flaps extend slowly.



ABNORMAL PROCEDURES FLIGHT CONTROLS

A330
AIRPLANE FLIGHT MANUAL

F/CTL - FLAPS FAULT

Ident.: ABN-27-00005412.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Speed is limited to the VFE corresponding to the next more extended flaps configuration.

*Refer to I IM-SPD VFF**

When speed below VFE:

Recycle flaps lever.

If unsuccessful:

Apply flaps locked procedure. Refer to ABN-27 F/CTL - FLAPS LOCKED.

F/CTL - FLAPS LOCKED

Ident.: ABN-27-00005122.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Speed is limited to the VFE corresponding to the next more extended flaps configuration. Refer to LIM-SPD VFE.

■ If flaps position below 3:

Use FLAPS 2 for landing.

Turn off GPWS flap mode.

■ If flaps position at 3:

Use FLAPS 3 for landing.

■ If flaps position above 3:

Use FLAPS FULL for landing.

Apply necessary approach speed and landing performance corrections. Refer to ABN-27 Approach Speed Increment and Landing Distance Correction.



ABNORMAL PROCEDURES FLIGHT CONTROLS

F/CTL - FLAPS LOCKED

Ident.: ABN-27-00005122.0002001 / 05 JAN 17

APPROVED

Criteria: (A330 and 204449)

Speed is limited to the VFE corresponding to the next more extended flaps configuration.

Refer to LIM-SPD VFE.

■ If flaps position below 3:

Use FLAPS 2 for landing.

Turn off GPWS flap mode.

■ If flaps position at 3:

Use FLAPS 3 for landing.

- If flaps position above 3:
 - If flaps position below full:

Turn off GPWS flap mode.

Use FLAPS FULL for landing.

Apply necessary approach speed and landing performance corrections. Refer to ABN-27 Approach Speed Increment and Landing Distance Correction.

F/CTL - SLATS FAULT

Ident.: ABN-27-00005417.0001001 / 26 NOV 09

Criteria: A330

APPROVED

Speed is limited to the VFE corresponding to the next more extended slats configuration.

Refer to LIM-SPD VFE.

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When speed below VFE:

Recycle flaps lever.

If unsuccessful:

Apply slats locked procedure. Refer to ABN-27 F/CTL - SLATS LOCKED.



ABNORMAL PROCEDURES FLIGHT CONTROLS

A330 AIRPLANE FLIGHT MANUAL

F/CTL - SLATS LOCKED

Ident.: ABN-27-00005124.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Speed is limited to the VFE corresponding to the next more extended slats configuration.

*Refer to I IM-SPD VFF**

■ If slats position below 2:

Use FLAPS 2 for landing.

Turn off GPWS flap mode.

■ If slats position at or above 2:

Use FLAPS 3 for landing.

Apply necessary approach speed and landing performance corrections. Refer to ABN-27 Approach Speed Increment and Landing Distance Correction.

APPROACH SPEED INCREMENT AND LANDING DISTANCE CORRECTION

Ident.: ABN-27-00005123.0001001 / 19 JUN 13

APPROVED

Criteria: A330

APPROACH SPEED INCREMENT						
	Flaps at or above 0 and below 1 + F	Flaps at or above 1 + F and below 2	Flaps at or above 2 and below 3	Flaps at or above 3 and below FULL	Flaps FULL	
Slats at or above 0 and below 1	VREF + 50 (1)	VREF + 40	VREF + 30	VREF + 25	VREF + 25	
Slats at or above 1 and below 2	VREF + 30	VREF + 20	VREF + 15	VREF + 10	VREF + 10	
Slats at or above 2	VREF + 30	VREF + 15	VREF + 10	VREF + 5	VREF	

⁽¹⁾ At 300 ft reduce speed to obtain VREF + 45 at touchdown.

For the landing distance apply necessary landing performance corrections.



ABNORMAL PROCEDURES FLIGHT CONTROLS

A330AIRPLANE FLIGHT MANUAL

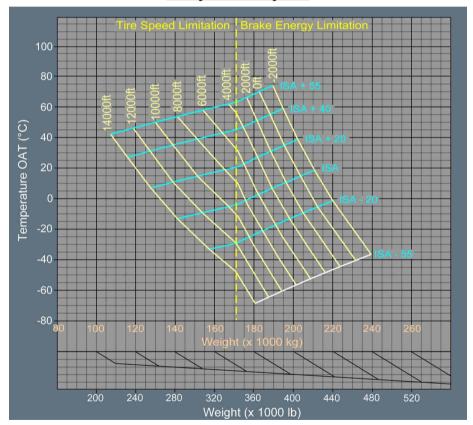
PERFORMANCE LIMITATION FOR LANDING IN CLEAN CONFIGURATION

Ident.: **ABN-27-00005418.0004001 / 02 JUL 10** Criteria: (330-200 or 330-200F) APPROVED

The following graph gives information on compatibility between weight, maximum tire speed, and maximum brake energy for landing in clean configuration.

Maximum tire speed: Refer to LIM-32 Tire Speed

Landing in Clean Configuration



Wind effect on determined weight:

- Headwind: Add 0.4 t (882 lb) per kt of headwind

Continued on the following page

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ABNORMAL PROCEDURES FLIGHT CONTROLS

Continued from the previous page Performance Limitation for Landing in Clean Configuration

- Tailwind: Substract 4 t (8 818 lb) per kt of tailwind

F/CTL - SPD BRK DISAGREE

Ident.: ABN-27-00005421.0001001 / 26 NOV 09 **APPROVED**

Criteria: A330

Retract and do not use speed brakes.

F/CTL RUDDER TRIM RUNAWAY

Ident.: ABN-27-00005422.0003001 / 16 APR 10 APPROVED

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and ((49193 or 54786) and (51802 or 51805 or 51806)))

Use lateral control to level wings.

Center the rudder and maintain it central

F/CTL RUDDER JAM

Ident.: ABN-27-00005423.0002001 / 19 JUN 13 **APPROVED**

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and (51802 or 51805 or 51806))

For approach and landing:

Avoid crosswind from the side where the rudder is deflected.

Use FLAPS 2 with ground spoilers armed for landing.

Turn off GPWS flap mode.

Stabilize speed and trajectory as soon as possible.

Approach speed = VLS + 10 kt.

Apply necessary landing performance corrections.

If one engine inoperative: Note:

Approach and go-around speed: 170 kt

Apply necessary landing performance corrections.

Use differential braking if necessary as soon as main gears are on ground.

Do not use asymmetric reverse thrust.

Below 100 kt, consider using nosewheel steering handle.



ABNORMAL PROCEDURES FLIGHT CONTROLS

F/CTL - RUD NORM CTL FAULT

Ident.: ABN-27-00008583.0002001 / 16 APR 10

APPROVED

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and ((51790 or 54786) and (51802 or 51805 or 51806)))

Use rudder for turn coordination.
Use rudder with care above 160 kt

F/CTL - RUDDER FAULT

Ident.: ABN-27-00008594.0002001 / 19 JUN 13

APPROVED

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and ((56551 or 56729) and (51802 or 51805 or 51806)))

Maximum crosswind for landing: 15 kt.

Turn off GPWS flap mode.

Note: If one engine inoperative, autopilot and autothrust have to be disconnected.

Use FLAPS 2 for landing.

Apply necessary landing performance corrections.

Note: If one engine inoperative, approach and go-around speed: 170 kt

Use differential braking if necessary as soon as main gears are on ground.

F/CTL RUD PEDAL FAULT

Ident.: ABN-27-00008595.0001001 / 16 APR 10

APPROVED

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and ((49193 or 51790 or 54786) and (51802 or 51806)))

Maximum crosswind for landing: 15 kt.

Use differential braking if necessary as soon as main gears are on ground.

F/CTL - SPLR FAULT

Ident.: ABN-27-00005127.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Apply necessary landing performance corrections.



ABNORMAL PROCEDURES FLIGHT CONTROLS

F/CTL - GND SPLR FAULT

Ident.: ABN-27-00005424.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Refer to ABN-27 F/CTL - SPLR FAULT.

F/CTL - L(R) ELEV FAULT

Ident.: ABN-27-00005425.0001001 / 19 JUN 13 APPROVED

Criteria: A330

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Do not use speed brakes.

Use FLAPS 2 for landing.

Turn off GPWS flap mode.

Approach speed = VLS + 10 kt

Apply necessary landing performance corrections.

F/CTL - ELEV REDUND LOST

Ident.: ABN-27-00005426.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Do not use speed brakes.

■ If ailerons preset upwards:

Maximum flight level: FL 350.

Maximum speed: M 0.80

If ailerons not preset:

Maximum flight level: FL 300.

Maximum speed: M 0.75

Manually perform a forward fuel transfer from the trim tank.

<u>Note:</u> If trim tank pump is not available, do not perform manual forward fuel transfer while speed

is at or below 270 kt or while in climb.



ABNORMAL PROCEDURES FLIGHT CONTROLS

F/CTL - ELEV REDUND LOST

2 Ident.: **ABN-27-00005426.0002001 / 09 JAN 17** Criteria: ((330-200 and 204817) or (A330 and 204449)) **APPROVED**

Do not use speed brakes.

■ If ailerons preset upwards:

Maximum flight level: FL 350. Maximum speed: M 0.80.

■ If ailerons not preset:

Maximum flight level is the higher one of: FL 300 or MORA.

Maximum speed: M 0.75.

Manually perform a forward fuel transfer from the trim tank.

Note: If trim tank pump is not available, do not perform manual forward fuel transfer while speed

is at or below 270 kt or while in climb.

F/CTL - FCDC 1+2 FAULT

Ident.: ABN-27-00005428.0002001 / 16 APR 10

APPROVED

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and ((49193 or 54786) and (51802 or 51805 or 51806)))

Do not use speed brakes above FL 200.

Monitor flight controls overhead panel.



ABNORMAL PROCEDURES FLIGHT CONTROLS

A330
AIRPLANE FLIGHT MANUAL

F/CTL - PRIM FAULT

Ident.: ABN-27-00005430.0001001 / 19 JUN 13 APPROVED

Criteria: A330

Turn off then on affected PRIM.

If reset not successful:

Turn off affected PRIM.

If dual PRIM failure:

Do not use speed brakes.

If CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

<u>Note:</u> If trim tank pump is not available, do not perform manual forward fuel transfer while speed is at or below 270 kt or while in climb.

● If PRIM 1+3 or PRIM 2+3 failure:

Apply necessary landing performance corrections.

Note: Half spoilers are inoperative.

• If triple PRIM failure:

Use FLAPS 3 for landing.

Apply necessary landing performance corrections.

Note: Most spoilers are inoperative.



ABNORMAL PROCEDURES FLIGHT CONTROLS

F/CTL - STAB CTL FAULT

Ident.: ABN-27-00005221.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST)

■ If manual pitch trim available:

Use manual pitch trim to maintain elevator at zero position (indication on ECAM F/CTL page).

■ If manual pitch trim not available:

If stabilizer jammed at more than 8 ° UP:

Maximum speed: 180 kt.

Minimize speed variations.

Pitch authority is reduced. Start the flare slightly earlier. More stick deflection may be needed to achieve the flare.

Use FLAPS 2 for landing.

Turn off GPWS flap mode.

Approach speed = VLS + 10 kt

Apply necessary landing performance corrections.

F/CTL - ALTN LAW (PROT LOST)

Ident.: **ABN-27-00005125.0001001 / 26 NOV 09** Criteria: A330 **APPROVED**

Maximum speed: 330 kt/M 0.82 Use FLAPS 3 for landing.



ABNORMAL PROCEDURES FLIGHT CONTROLS

A330 AIRPLANE FLIGHT MANUAL

F/CTL - DIRECT LAW (PROT LOST)

Ident.: ABN-27-00005126.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Do not use speed brakes.

Maximum speed: 330 kt/M 0.80
Use manual pitch trim.

Maneuver with care.

• If CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

<u>Note:</u> If trim tank pump is not available, do not perform manual forward fuel transfer while

speed is at or below 270 kt or while in climb.

Use FLAPS 3 for landing.



ABNORMAL PROCEDURES FLIGHT CONTROLS

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A330 AIRPLANE FLIGHT MANUAL

FUEL - CTR TK XFR FAULT

Ident.: ABN-28-00020386.0001001 / 09 JAN 17 APPROVED Criteria: ((330-200 and 204817) or (A330 and 204449))

Turn off center tank pumps.

If trim tank is not empty:

Manually perform a forward fuel transfer from the trim tank.

When trim tank is empty:

Interrupt manual transfer.

Turn on the center tank pumps to transfer fuel from the center tank to the inner tanks.

Turn off the center tank pumps when the center tank is empty.

FUEL - CELL NOT FULL

Ident.: ABN-28-00010060.0001001 / 02 JUL 10 APPROVED Criteria: (A330 and (200004 and 58751))

• If engine feedline not broken and if no fuel leak:

Open wing crossfeed valve.

 If one collector cell is depleting and the wing crossfeed valve is not fully open, or if both collector cells are depleting:

Avoid negative g load factor.

FUEL - FUEL LO TEMP

Ident.: ABN-28-00005388.0002001 / 26 NOV 09 **APPROVED** Criteria: (A330 and (55191 or 55982))

Check fuel freezing point.

Manually perform a fuel transfer of the affected tank(s).

Increase TAT if necessary.



FUEL

A330AIRPLANE FLIGHT MANUAL

FUEL - APU AFT PUMP FAULT

Ident.: ABN-28-00005390.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If APU required and trim tank not empty:

Maximum flight level: FL 250.

FUEL - ABNORM MAN FWD XFR

Ident.: ABN-28-00005391.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If speed below 270 kt or in climb:

Use automatic trim tank fuel transfer mode.

■ If speed at or above 270 kt and not in climb:

Manually perform a forward fuel transfer from the trim tank.

FUEL - WING X FEED FAULT

Ident.: ABN-28-00005392.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If wing crossfeed valve failed open:

Monitor fuel imbalance.

■ If wing crossfeed valve failed closed:

Apply fuel imbalance procedure. Refer to ABN-28 FUEL IMBALANCE.



A330
AIRPLANE FLIGHT MANUAL

FUEL - L (R) WING PUMPS LO PR

Ident.: ABN-28-00005393.0003001 / 02 JUL 10 APPROVED

Criteria: (A330 and (201430 or 58751))

If engine feedline broken:

Do not open wing crossfeed valve.

Apply fuel gravity feeding procedure. Refer to ABN-28 FUEL GRAVITY FEEDING.

Turn off affected pumps.

Note: The affected inner tank fuel is partly unusable.

If engine feedline not broken:

Open wing crossfeed valve.

Turn off affected pumps.

When L (R) tank fuel required:

Apply fuel gravity feeding procedure. Refer to ABN-28 FUEL GRAVITY FEEDING.

Note: The unusable fuel quantity of the affected inner tank is 2 t (4 409 lb).

FUEL - L (R) WING PUMPS LO PR

Ident.: ABN-28-00005393.0004001 / 25 JUL 14 APPROVED

Criteria: (A330 and 202363)

If engine feedline broken:

Do not open wing crossfeed valve.

Apply fuel gravity feeding procedure. Refer to ABN-28 FUEL GRAVITY FEEDING.

Turn off affected pumps.

Note: The affected inner tank fuel is partly unusable.

■ If engine feedline not broken:

Open wing crossfeed valve.

Turn off affected pumps.

Apply fuel gravity feeding procedure. Refer to ABN-28 FUEL GRAVITY FEEDING.

Note: The unusable fuel quantity of the affected inner tank is 2 t (4 409 lb).



FUEL

A330 AIRPLANE FLIGHT MANUAL

FUEL - L (R) WING PUMPS LO PR

2 Ident.: **ABN-28-00005393.0006001 / 05 JAN 17** Criteria: (A330 and 204449)

APPROVED

■ If engine feedline broken:

Do not open wing crossfeed valve.

Apply fuel gravity feeding procedure. Refer to ABN-28 FUEL GRAVITY FEEDING.

Turn off affected pumps.

Note: The affected inner tank fuel is partly unusable.

■ If engine feedline not broken:

If no fuel leak:

Open wing crossfeed valve.

Turn off affected pumps.

Apply fuel gravity feeding procedure. Refer to ABN-28 FUEL GRAVITY FEEDING.

Note: The unusable fuel quantity of the affected inner tank is 2 t (4 409 lb).



FUFI

AIRPLANE FLIGHT MANUAL

FUEL IMBALANCE

Ident.: ABN-28-00005132.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Compare FOB + FU with the FOB at departure.

If the difference is significant, or if FOB + FU decreases, suspect a fuel leak.

CAUTION Do not apply this procedure if a leak is suspected. Refer to ABN-28 FUEL LEAK.

Open wing crossfeed valve.

■ If wing crossfeed valve open:

Turn off all wing pumps (standby then normal) on the lighter side.

When fuel balanced:

Turn on all wing pumps (normal then standby).

Close wing crossfeed valve.

If wing crossfeed valve failed closed:

Manually perform a fuel transfer from the outer tanks.

Fly with a blank angle of 3 ° wing down on the lighter side and use rudder trim to get constant course and neutral stick.

FUEL GRAVITY FEEDING

Ident · ABN-28-00005133.0002001 / 16 APR 10 **APPROVED** Criteria: (330-243 or 330-243F)

Descend to gravity feed ceiling (if applicable).

Flight conditions at the time of gravity feeding	Gravity feed ceiling	
FUEL DEAERATED	20 000 ft	
(Flight time from takeoff greater than 30 min)		
FUEL NON DEAERATED	15 000 ft (*)	
(Flight time from takeoff lower than 30 min)	(*) 7 000 ft if JP4, JET B is used	

When reaching gravity feed ceiling:

Close wing crossfeed valve.

Set ENG START selector to IGN START.

Avoid negative g load factor.



ABNORMAL PROCEDURES

FUEL

FUEL - ENG FEEDLINE BURST

Ident.: **ABN-28-00009200.0001001 / 26 NOV 09** Criteria: (A330 and (56551 or 56729))

APPROVED

LAND ASAP

Do not open wing crossfeed valve.

Continue applying fuel gravity feeding procedure if not yet completed.

Confirm ENG START selector to IGN START.

Set affected thrust lever to idle.

Confirm affected pumps off.

If no engine relight after 30 s:

Set affected engine master lever to OFF.

At gravity feed ceiling:

Consider engine relight.

If engine relight unsuccessful:

Apply engine shutdown procedure. Refer to ABN-70 ENG - SHUTDOWN.

FUEL - L (R) WING TK LO LVL

Ident.: ABN-28-00015261.0005001 / 25 JUL 14

APPROVED

Criteria: ((330-300 and 200590) or (330-200F and (200590 and 58623)))

CAUTION Do not apply this procedure if a leak is suspected. *Refer to ABN-28 FUEL LEAK*.

Manually perform a fuel transfer from the outer and trim tanks.

- If fuel imbalance:
 - If engine feedline not broken on both sides:

Open the wing crossfeed valve.

 If engine feedline not broken on the opposite side and if both main fuel pumps are operative in the opposite tank:

Turn off the fuel pumps of the affected side.



A330 AIRPLANE FLIGHT MANUAL

FUEL - L+R WING TK LO LVL

Ident.: ABN-28-00005395.0003001 / 26 NOV 09

APPROVED

Criteria: ((330-300 and 56729) or (330-200F and (56729 and 58623)))

LAND ASAP

Manually perform a fuel transfer from the outer and trim tanks.

If engine feedline not broken:

Turn on all wing pumps.

Open wing crossfeed valve.

If one engine feedline broken:

Turn on opposite side pumps.

FUEL - L+R WING TK LO LVL

3 Ident.: ABN-28-00005395.0007001 / 20 FEB 17

APPROVED

Criteria: ((330-300 and 204449) or (330-200F and (58623 and 204449)))

LAND ASAP

Manually perform a fuel transfer from the outer and trim tanks.

If engine feedline not broken:

Turn on all wing pumps.

If no fuel leak:

Open wing crossfeed valve.

If one engine feedline broken:

Turn on opposite side pumps.



FUEL

A330
AIRPLANE FLIGHT MANUAL

FUEL - FCMC 1+2 FAULT

Ident.: **ABN-28-00005396.0001001 / 20 FEB 17** Criteria: (330-300 or (330-200F and 58623))

APPROVED

4 Reset both FCMCs

If successful:

Re-initialize weight and CG data.

■ If unsuccessful:

Determine Fuel on Board (FOB) from engine start fuel quantity minus Fuel Used (FU) quantity indication

If CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

Note: If trim tank pump is not available or not installed, do not perform manual forward fuel transfer while speed is at or below 270 kt or while in climb.

When FOB below 60 t (132 277 lb):

Manually perform a fuel transfer from the outer tanks.

When below FL 250 in descent:

Manually perform a forward fuel transfer from the trim tanks.

Note: If trim tank pump is not available or not installed, do not perform manual forward fuel transfer while speed is at or below 270 kt.

For go-around, set thrust levers to TOGA.

FUEL - OUTR TO INR FAULT

Ident.: **ABN-28-00005397.0001001 / 26 NOV 09**Criteria: (330-300 or (330-200F and 58623))

APPROVED

If any outer tank not empty:

Manually perform a fuel transfer from the outer tanks.

When both outer tanks empty:

Interrupt manual transfer.



A330 AIRPLANE FLIGHT MANUAL

FUEL - T TANK XFR FAULT

Ident.: ABN-28-00005398.0001001 / 26 NOV 09

Criteria: (330-300 or (330-200F and 58623))

Manually perform a forward fuel transfer from the trim tank.

<u>Note:</u> If trim tank pump is not available or not installed, do not perform manual forward fuel transfer while speed is at or below 270 kt or while in climb.

• If either aft transfer valve failed open:

Monitor fuel imbalance.

If trim tank fuel quantity not decreasing:

Interrupt manual transfer.

Note: Trim tank fuel is unusable.

When trim tank empty:

Interrupt manual transfer.

If trim tank fuel unusable:

Apply trim tank fuel unusable procedure. Refer to ABN-28 TRIM TANK FUEL UNUSABLE.

TRIM TANK FUEL UNUSABLE

Ident.: ABN-28-00005135.0001001 / 19 JUN 13

Criteria: (330-300 or (330-200F and 58623))

Manually perform a forward fuel transfer from the trim tank.

If trim tank fuel still unusable:

Manually perform a fuel transfer from the outer tanks.

- For landing:
 - If CG above certified limit 2 %:

Approach speed = VLS + 10 kt.

Apply necessary landing performance corrections.



FUEL

A330
AIRPLANE FLIGHT MANUAL

FUEL LEAK

Ident.: ABN-28-00005134.0004001 / 28 FEB 11

APPROVED

Criteria: (330-200F and 58623)

A fuel leak may be detected if:

- The sum of the FOB and the FU is significantly less than the FOB at engine start, or decreases, or
- An occupant observes fuel spray from engine/pylon or wing tip, or
- The total fuel quantity decreases at an abnormal rate, or
- A fuel imbalance develops, or
- The fuel quantity of a tank decreases too fast (leak from engine/pylon or a hole in a tank), or
- A tank overflows (due to a pipe rupture in a tank), or
- Fuel flow is excessive (leak from engine), or
- Fuel is smelt in the courier area or main deck cargo compartment.

If possible and if visibility permits, a visual check from the main deck cargo compartment may enable identification of the leak source.

When a leak is confirmed:

LAND ASAP

If leak from engine/pylon confirmed:

Shut down affected engine.

Note: If the leak stops, the wing crossfeed valve can now be selected open to re-balance the fuel quantity or to enable use of fuel from both wings. Do not restart the engine.

■ If leak from engine/pylon not confirmed or leak not located:

Keep wing crossfeed valve closed.

CAUTION

Do not open the wing crossfeed valve, even if requested by another ECAM procedure.

Set trim tank feed to ISOL.

Monitor inner tank fuel quantities and look for one tank depleting faster.

■ If one inner tank depletes faster than the other by at least 500 kg (1 102 lb) in less than 30 min:

Shut down affected engine and monitor the fuel leak.

■ If the leak stops:

Set trim tank feed to AUTO.

Continued on the following page



ABNORMAL PROCEDURES

FUEL

Continued from the previous page FUEL LEAK

Note: The wing crossfeed valve can now be selected open to re-balance the fuel quantity, or to enable use of fuel from both wings. Do not restart the

engine.

If the leak continues after engine shutdown:

Suspect leak from wing.

Consider restarting the engine and applying the fuel loss reduction procedure. Refer to ABN-28 FUEL LOSS REDUCTION PROCEDURE.

<u>Note:</u> The wing crossfeed valve can be selected open.

If both inner tanks deplete at a similar rate:

Note: The wing crossfeed valve can be selected open.

■ If fuel smell in the courier area or in the main deck cargo compartment: Shut down APU if running.

Keep trim tank feed at ISOL.

■ If no fuel smell in the courier area or in the main deck cargo compartment:

Consider applying the fuel loss reduction procedure. Refer to ABN-28 FUEL LOSS REDUCTION PROCEDURE.

For landing:

CAUTION Do not use reverse

FUEL LOSS REDUCTION PROCEDURE

Ident.: ABN-28-00005136.0001001 / 26 NOV 09

Criteria: (330-300 or (330-200F and 58623))

When required by the fuel leak procedure and if trim tank not empty:

Set trim tank feed to AUTO.

Set trim tank mode to FWD.

When the trim tank is empty:

Set trim tank mode back to AUTO.

Set trim tank feed back to ISOL.



ABNORMAL PROCEDURES FUEL

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 TPA A330-243F FLEET
 ABN-28 P 12/12

 AFM
 28 FEB 17



ABNORMAL PROCEDURES HYDRAULIC

A330
AIRPLANE FLIGHT MANUAL

HYD - G SYS LEAK

Ident.: ABN-29-00005690.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Monitor leak rate.

If level decreases:

Turn off green hydraulic and electric pumps.

HYD - RSVR LO AIR PR

Ident.: ABN-29-00005729.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If pressure fluctuates:

Turn off associated hydraulic and electric pumps.

If green hydraulic system affected:

Apply green hydraulic system low pressure procedure. Refer to ABN-29 HYD - G SYS LO PR.

If blue hydraulic system affected:

Apply blue hydraulic system low pressure procedure. *Refer to ABN-29 HYD - B SYS LO PR*.

If yellow hydraulic system affected:

Apply yellow hydraulic system low pressure procedure. Refer to ABN-29 HYD - Y SYS LO PR.

Note: System may be recovered at low altitude.



ABNORMAL PROCEDURES HYDRAULIC

A330AIRPLANE FLIGHT MANUAL

HYD - RSVR OVHT

Ident.: ABN-29-00005730.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Turn off associated hydraulic and electric pumps.

- If green hydraulic system affected:
 - Apply green hydraulic system low pressure procedure. Refer to ABN-29 HYD G SYS LO PR.
- If blue hydraulic system affected:
 - Apply blue hydraulic system low pressure procedure. Refer to ABN-29 HYD B SYS LO PR.
- If yellow hydraulic system affected:

Apply yellow hydraulic system low pressure procedure. Refer to ABN-29 HYD - Y SYS LO PR.

Note: System may be recovered if OVHT indication has disappeared.

HYD - RSVR LO LVL

Ident.: ABN-29-00005731.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Turn off associated hydraulic and electric pumps.

- If green hydraulic system affected:
 - Apply green hydraulic system low pressure procedure. Refer to ABN-29 HYD G SYS LO PR.
- If blue hydraulic system affected:
 - Apply blue hydraulic system low pressure procedure. Refer to ABN-29 HYD B SYS LO PR.
- If yellow hydraulic system affected:
 - Apply yellow hydraulic system low pressure procedure. Refer to ABN-29 HYD Y SYS LO PR.



ABNORMAL PROCEDURES HYDRAULIC

A330
AIRPLANE FLIGHT MANUAL

HYD - G SYS LO PR

Ident.: ABN-29-00005130.0001001 / 19 JUN 13 APPROVED

Criteria: A330

For approach and landing:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Apply necessary landing performance corrections.

Note: 1. Slats and flaps extend slowly.

2. Spoilers are partially inoperative.

HYD - B SYS LO PR

Ident.: ABN-29-00005118.0001001 / 19 JUN 13 APPROVED

Criteria: A330

If green system supplied by RAT:

LAND ASAP

Turn off antiskid. Refer to ABN-32 BRAKES - ANTI SKID FAULT or A/SKID N/WS OFF.

Apply necessary landing performance corrections.

Note: 1. Slats extend slowly.

2. Spoilers are partially inoperative.

HYD - Y SYS LO PR

ldent.: ABN-29-00005119.0001001 / 19 JUN 13 APPROVED

Criteria: A330

• If green system supplied by RAT:

LAND ASAP

Apply necessary landing performance corrections.

Note: 1. Flaps extend slowly.

2. Spoilers are partially inoperative.



ABNORMAL PROCEDURES HYDRAULIC

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 TPA A330-243F FLEET
 ABN-29 P 4/4

 AFM
 22 JAN 14



ABNORMAL PROCEDURES ICE AND RAIN PROTECTION

A330 AIRPLANE FLIGHT MANUAL

A.ICE - L INR (R INR) (L OUTR) (R OUTR) WING LO PR

Ident.: ABN-30-00005406.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Increase engine thrust.

Note: If unsuccessf

If unsuccessful, wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or

OFF.

A.ICE - WING VLVE NOT OPEN

Ident.: ABN-30-00005407.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

A.ICE - ENG VALVE CLOSED

Ident.: ABN-30-00005408.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Avoid icing conditions.



ABNORMAL PROCEDURES ICE AND BAIN PROTECTION

AJCE - WAI SYS FAULT OR OFF

Ident.: ABN-30-00005120.0002001 / 20 DEC 16

APPROVED

Criteria: (A330 and 58751)

Turn off wing anti-ice. Avoid icing conditions.

If severe ice accretion:

Minimum speed: VLS +10/G DOT.

For landing:

Apply necessary landing performance corrections.

Maneuver with care.

Note:

In case of severe ice accretion, with anti-ice failed, the AOA protections are still efficient. However, if full back stick is maintained several seconds, while at max AOA, a divergent roll oscillation may appear. Releasing slightly the stick will stop this oscillation.

A.ICE - L (R) (L INR) (R INR) (L OUTR) (R OUTR) WING OPEN

Ident.: ABN-30-00005409.0002001 / 19 JUN 13

<u>APPROVED</u>

Criteria: (A330 and 200590)

Turn off wing anti-ice.

Close crossbleed valve.

On ground:

Turn off affected side engine bleed.

If left wing affected :

Turn off APU bleed.

In flight:

Turn on affected side engine bleed (if not already done).

Set crossbleed to AUTO or OPEN, depending on bleed state.

Set wing anti-ice as required.



ABNORMAL PROCEDURES ICE AND BAIN PROTECTION

A.ICE - CAPT (F/O) (STBY) PITOT (AOA) (L STAT) (R STAT) HEAT FAULT

Ident.: ABN-30-00005410.0003001 / 26 NOV 09

APPROVED

Criteria: (A330 and (51790 or 54786))

Use AIR DATA switching as appropriate.

- If pitot heat fault and non-related ADRs faulty or off:
 - If icing conditions expected:

Apply unreliable airspeed procedure. Refer to ABN-34 UNRELIABLE AIRSPEED INDICATION.

A.ICE - CAPT (F/O) (STBY) PROBES HEAT FAULT

Ident.: ABN-30-00005411.0003001 / 26 NOV 09

APPROVED

Criteria: (A330 and (51790 or 54786))

Turn on probe and window heat.

If unsuccessful:

Use AIR DATA switching as appropriate.

- If non-related ADR faulty or off:
 - If icing conditions expected:

Apply unreliable airspeed procedure. Refer to ABN-34 UNRELIABLE AIRSPEED INDICATION.

DOUBLE AOA (STAT) (PITOT) HEAT FAULT

Ident : ABN-30-00005413.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If icing conditions cannot be avoided:

Turn off one of affected ADRs.



ABNORMAL PROCEDURES ICE AND BAIN PROTECTION

A.ICE - CAPT + F/O (CAPT + STBY) (F/O + STBY) PITOT HEAT FAULT

Ident.: ABN-30-00008717.0002001 / 26 NOV 09

APPROVED

Criteria: (A330 and (51790 or 54786))

• If all probes (STAT, AOA and PITOT) of one related channel affected:

Turn on probe and window heat.

- If unsuccessful:
 - If non-related ADR on and operative:

Turn off one of affected ADRs.

- If non-related ADR faulty or off:
 - If icing conditions expected:

Turn off one of affected ADRs.

Apply unreliable airspeed procedure. Refer to ABN-34 UNRELIABLE AIRSPEED INDICATION.

AJICE - ALL PITOT HEAT FAULT

Ident.: ABN-30-00008718.0002001 / 26 NOV 09

APPROVED

Criteria: (A330 and (51790 or 54786))

• If all probes (STAT, AOA and PITOT) of one related channel affected:

Turn on probe and window heat.

If unsuccessful:

Turn off one of appropriate affected ADRs.

If icing conditions expected:

Turn off another one of appropriate affected ADRs.

Apply unreliable airspeed procedure. Refer to ABN-34 UNRELIABLE AIRSPEED INDICATION.



INDICATING / RECORDING SYSTEM

ABNORMAL PROCEDURES

A330 AIRPLANE FLIGHT MANUAL

DISPLAY UNIT FAILURE

Ident.: TDU / ABN-31-00014121.0001001 / 01 MAR 13

Criteria: (A330 and 200024)

Impacted DU: 00005415 DISPLAY UNIT FAILURE

Belongs to TR306 Issue 1

APPROVED

Affected DU blank or display distorted or DU brightness reduces to the minimum:

Turn off then on affected DU

Note: The display will recover after 10 s.

If unsuccessful:

Turn off affected DU as required.

If ECAM DUs affected:

Use ECAM/ND SEL.

If EFIS DUs affected:

Use PFD/ND XFR.

"INVALID DISPLAY UNIT" message displayed:

Wait more than 40 s for automatic DU recovery.

If unsuccessful:

Turn off non-recovered DU as required.

"INVALID DATA" message on affected DU (not on all DUs):

Attempt to recover affected DU by using associated DMC switching.

If unsuccessful:

Turn off then on affected DU.

"INVALID DATA" message on all DUs:

Wait more than 40 s for automatic DUs recovery.

If one or more DUs not recovered:

Turn off non-recovered DUs for 40 s.

Turn on non-recovered DUs in sequence.

• If "INVALID DATA" message reappers on all DUs when turning a given DU on:

Re-apply the procedure.

Leave this specific DU permanently off.



ABNORMAL PROCEDURES INDICATING / RECORDING SYSTEM

Continued from the previous page DISPLAY UNIT FAILURE

• Inversion of EWD and SD displays:

Turn off then on ECAM upper display.

DISPLAY UNIT FAILURE

Ident.: ABN-31-00005415.0002001 / 26 NOV 09

APPROVED

Criteria: (A330 and (47524 or 50616))

Impacted by TDU: 00014121 DISPLAY UNIT FAILURE

• Affected DU blank or display distorted:

Turn off affected DU as required.

If ECAM DUs affected:

Use FCAM/ND SEL

If FFIS DUs affected:

Use PFD/ND XFR.

"INVALID DISPLAY UNIT" message displayed:

Wait more than 40 s for automatic DU recovery.

If unsuccessful:

Turn off non-recovered DU as required.

• "INVALID DATA" message on affected DU (not on all DUs):

Attempt to recover affected DU by using associated DMC switching.

If unsuccessful:

Turn off then on affected DU.

"INVALID DATA" message on all DUs:

Wait more than 40 s for automatic DUs recovery.

If one or more DUs not recovered:

Turn off non-recovered DUs for 40 s.

Turn on non-recovered DUs in sequence.

• If "INVALID DATA" message reappers on all DUs when turning a given DU on:

Re-apply the procedure.

Leave this specific DU permanently off.

• Inversion of EWD and SD displays:

Turn off then on ECAM upper display.



ABNORMAL PROCEDURES INDICATING / RECORDING SYSTEM

FWS - SDAC 1+2 FAULT

Ident.: ABN-31-00005416.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Monitor overhead panel.

Note: Only ECAM ENG, FUEL, F/CTL, WHEEL, PRESS, C/B pages are available.



ABNORMAL PROCEDURES INDICATING / RECORDING SYSTEM

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TPA A330-243F FLEET ABN-31 P 4/4
AFM 13 MAR 13



ABNORMAL PROCEDURES LANDING GEAR

A330AIRPLANE FLIGHT MANUAL

L/G GRAVITY EXTENSION

Ident.: ABN-32-00005129.0001001 / 19 JUN 13

Criteria: A330

Maximum speed: VLO /MLO.

Refer to LIM-SPD VLO/MLO and VLE/MLE.

Set the landing gear gravity extension switch to DOWN.

When the landing gear is downlocked, pull down the landing gear lever.

Confirm landing gear locked down.

Note: Nosewheel steering is inoperative.

BRAKES - ANTI SKID FAULT OR A/SKID N/WS OFF

Ident.: ABN-32-00005131.0001001 / 19 JUN 13 APPROVED

Criteria: A330

Apply maximum brake pressure 1 000 PSI.

Note: Nosewheel steering is inoperative.

Apply necessary landing performance corrections.

BRAKES - BRAKES HOT

Ident.: ABN-32-00005376.0002001 / 26 NOV 09

Criteria: (A330 and 49632)

On ground:

Turn on brake fans (if installed).

Note: For parking, prefer chocks.

Delay takeoff for cooling.

■ In flight after takeoff:

If performance permits, keep landing gear down for cooling.

Maximum speed: VLE/MLE.

Refer to LIM-SPD VLO/MLO and VLE/MLE.



ABNORMAL PROCEDURES I ANDING GEAR

BRAKES - BRAKES HOT

Ident.: ABN-32-00005376.0003001 / 25 JUL 14

APPROVED

Criteria: (A330 and 202363)

On ground:

Turn on brake fans (if installed).

Note: For parking, prefer chocks.

Delay takeoff for cooling.

In flight after takeoff:

Maximum speed: VLE/MLE.

Refer to LIM-SPD VLO/MLO and VLE/MLE.

If performance permits, keep landing gear down for cooling.

AUTOBRAKE

Ident.: ABN-32-00005378.0001001 / 26 NOV 09

APPROVED

Criteria: A330

In the case of malfunction, take over brake control with brake pedals. If green DECEL light (corresponding to the selected mode) fails to illuminate, disarm autobraking and proceed as circumstances dictate.

BRAKES - RELEASED

Ident.: ABN-32-00005379.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Apply necessary landing performance corrections.

L/G - LGCIU FAULT

Ident.: ABN-32-00005380.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If LGCIU 1 affected:

Turn off GPWS.



ABNORMAL PROCEDURES I ANDING GEAR

AIRPLANE FLIGHT MANUAL

L/G - LGCIU 1 + 2 FAULT

Ident.: ABN-32-00005381.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Turn off GPWS.

Try normal landing gear extension.

If unsuccessful:

Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

L/G - DOORS NOT CLOSED

Ident.: ABN-32-00005382.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Maximum speed: VLO /MLO.

Refer to LIM-SPD VLO/MLO and VLE/MLE.

When speed below VLO/MLO:

Recycle landing gear.

BRAKES - RESIDUAL BRAKING

Ident.: ABN-32-00008647.0001001 / 26 NOV 09

APPROVED

Criteria: (A330 and (51790 or 54786))

Keep antiskid on.

Press brake pedals several times.

If residual braking remains:

Select appropriate autobrake mode for landing.

If autobrake not available:

Apply pedal braking just after touchdown.



ABNORMAL PROCEDURES I ANDING GEAR

L/G - GEAR NOT UPLOCKED

Ident.: ABN-32-00005384.0001001 / 26 NOV 09

APPROVED

Criteria: A330

■ If landing gear doors not closed:

Maximum speed: VLO/MLO.

Refer to LIM-SPD VLO/MLO and VLE/MLE.

When speed below VLO/MLO:

Recycle landing gear.

If unsuccessful:

Pull down landing gear lever.

■ If landing gear doors closed and landing gear not downlocked:

Avoid excessive g load factor.

L/G - RETRACTION FAULT

Ident.: ABN-32-00005385.0001001 / 26 NOV 09 Criteria: A330 **APPROVED**

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Maximum speed: VLO /MLO.

Refer to LIM-SPD VLO/MLO and VLE/MLE.

When speed below VLO/MLO:

Recycle landing gear.

If unsuccessful:

Keep landing gear down.

L/G - GEAR UPLOCK FAULT

Ident.: ABN-32-00005386.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Maximum speed: VLO /MLO.

Refer to LIM-SPD VLO/MLO and VLE/MLE.

Keep landing gear down.



ABNORMAL PROCEDURES LANDING GEAR

A330 AIRPLANE FLIGHT MANUAL

L/G - L(R) LENGTHENING FAULT

Ident.: ABN-32-00005387.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Maximum speed: VLO /MLO.

Refer to LIM-SPD VLO/MLO and VLE/MLE.

Keep landing gear down.



ABNORMAL PROCEDURES LANDING GEAR

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 TPA A330-243F FLEET
 ABN-32 P 6/6

 AFM
 16 DEC 14



ABNORMAL PROCEDURES NAVIGATION

A330 AIRPLANE FLIGHT MANUAL

NAV - RA 1+2 FAULT

Ident.: ABN-34-00014755.0002001 / 25 JUL 14

APPROVED

Criteria: (A330 and 202363)

When landing gear down and autopilot off:

Use manual pitch trim.

Note: Flight controls are in flare law.

NAV - RA 1+2 (1) (2) FAULT

Ident.: ABN-34-00005399.0001001 / 26 NOV 09 APPROVED

Criteria: A330

If RA 1 inoperative:

Turn off GPWS

- If both RAs inoperative:
 - When landing gear down and autopilot off:

Use manual pitch trim.

Note: Flight controls are in flare law.

NAV - IR 1 (2) (3) FAULT

Ident.: ABN-34-00005400.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Use ATT HDG switching as appropriate.

■ If affected IR available in ATT mode:

Set affected IR mode to ATT.

■ If affected IR not available in ATT mode:

Turn off affected IR.



ABNORMAL PROCEDURES NAVIGATION

NAV - IR 1 (2) (3) FAULT

Ident.: ABN-34-00005400.0003001 / 05 JAN 17

APPROVED

Criteria: (A330 and 204449)

Use ATT HDG switching as appropriate.

■ If affected IR available in ATT mode:

Set affected IR mode to ATT.

■ If affected IR not available in ATT mode:

Turn off affected IR.

■ If IR 1 inoperative:

Set ATC/XPDR to SYS 2.

■ If IR 2 inoperative:

Set ATC/XPDR to SYS 1.

NAV - IR 1+2 (2+3) (1+3) FAULT

Ident.: ABN-34-00005401.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Use ATT HDG switching as appropriate.

■ If an affected IR available in ATT mode:

Set affected IR mode to ATT

■ If an affected IR not available in ATT mode:

Turn off affected IR.

Do not use speed brakes.

• If CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

<u>Note:</u> If trim tank pump is not available, do not perform manual forward fuel transfer while speed is at or below 270 kt or while in climb.



ABNORMAL PROCEDURES NAVIGATION

A330
AIRPLANE FLIGHT MANUAL

NAV - IR 1+2 (2+3) (1+3) FAULT

2 Ident.: ABN-34-00005401.0003001 / 05 JAN 17

APPROVED

Criteria: (A330 and 204449)

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Use ATT HDG switching as appropriate.

■ If an affected IR available in ATT mode:

Set affected IR mode to ATT.

■ If an affected IR not available in ATT mode:

Turn off affected IR.

■ If IR (1+3) inoperative:

Set ATC/XPDR to SYS 2.

■ If IR (2+3) inoperative:

Set ATC/XPDR to SYS 1.

Do not use speed brakes.

• If CG above 32 %:

Manually perform a forward fuel transfer from the trim tank.

Note: If trim tank pump is not available, do not perform manual forward fuel transfer while

speed is at or below 270 kt or while in climb.



ABNORMAL PROCEDURES NAVIGATION

NAV - IR DISAGREE

Ident.: ABN-34-00008668.0001001 / 26 NOV 09

APPROVED

Criteria: (A330 and (49193 or 55982))

Note: Flight controls are in direct law.

Use standby horizon to determine faulty IR.

■ If disagree confirmed:

Turn off faulty IR.

Turn off then on PRIM 3.

Turn off then on PRIM 2.

Turn off then on PRIM 1.

Note: Flight controls revert to alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT

LOST).

■ If disagree not confirmed:

Flight controls remain in direct law. Refer to ABN-27 F/CTL - DIRECT LAW (PROT LOST).

NAV - ADR 1 (2) (3) FAULT

Ident.: ABN-34-00005402.0002001 / 26 NOV 09

APPROVED

Criteria: (A330 and (51790 or 54786))

Use AIR DATA switching as appropriate.

Turn off affected ADR.

NAV - ADR 1+2 FAULT

Ident.: **ABN-34-00005403.0002001 / 20 FEB 17** Criteria: (A330 and (51790 or 54786))

APPROVED

ontena. (A000 and (01790 of 04700))

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Set AIR DATA switching to CAPT ON 3.

Turn off ADR 1 and ADR 2.

For go-around, set thrust levers to TOGA.



ABNORMAL PROCEDURES NAVIGATION

A330
AIRPLANE FLIGHT MANUAL

NAV - ADR 1+3 (2+3) FAULT

Ident.: ABN-34-00005404.0002001 / 20 FEB 17

APPROVED

Criteria: (A330 and (51790 or 54786))

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Set AIR DATA switching to NORM.

Turn off affected ADRs.

Use ATC SYS as appropriate.

For go-around, set thrust levers to TOGA.

NAV - ADR 1+3 (2+3) FAULT

5 Ident.: **ABN-34-00005404.0003001 / 05 JAN 17** Criteria: (A330 and 204449) **APPROVED**

Note: Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Set AIR DATA switching to NORM.

Turn off affected ADRs.

- If ADR (1+3) inoperative:
 - Set ATC/XPDR to SYS 2
- If ADR (2+3) inoperative:

Set ATC/XPDR to SYS 1

For go-around, set thrust levers to TOGA.

NAV - ADR DISAGREE

Ident.: ABN-34-00008712.0001001 / 20 FEB 17

APPROVED

Criteria: (A330 and (49193 or 54786))

<u>Note:</u> Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).

Use both PFD s and standby airspeed indicator to determine the faulty ADR.

Turn off faulty ADR.

For go-around, set thrust levers to TOGA.



ABNORMAL PROCEDURES NAVIGATION

UNRELIABLE AIRSPEED INDICATION

Ident.: ABN-34-00005138.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Note: Unreliable airspeed indication may be caused by a radome destruction or obstructed pitots. If the failure is due to radome destruction, the drag will be increased and therefore N1 must be increased by 3 % in cruise or 1.5 % in approach.

• If the safe conduct of the flight is impacted:

Disconnect autopilot.

Turn off flight directors.

Disconnect autothrust.

If below thrust reduction altitude:

Apply TOGA thrust.

Set pitch attitude to 15 °.

If above thrust reduction altitude:

Apply CLB thrust.

■ When below FL 100:

Set pitch attitude to 10 °.

■ When above FL 100:

Set pitch attitude to 5°.

Maintain flaps/slats in current configuration.

Check that speed brakes are retracted.

When airborne:

Retract landing gear.

Note: Respect stall warning.

When flight path stabilized:

Turn on probe and window heat.

Adjust pitch attitude and thrust regarding flight phase and aircraft configuration to obtain and maintain target speed.



ABNORMAL PROCEDURES PNEUMATIC

A330
AIRPLANE FLIGHT MANUAL

AIR - ENG BLEED FAULT

Ident.: ABN-36-00005117.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Turn off affected side engine bleed (if not automatically done). Open crossbleed valve.

■ If wing anti-ice off:

Set pack flow to low.

Set forward cargo cooling to OFF (if installed).

■ If wing anti-ice on or engine failure:

Turn off affected side pack.

AIR - ENG BLEED FAULT

Ident.: ABN-36-00005117.0002001 / 05 JAN 17 APPROVED

Criteria: (A330 and 204449)

Turn off then on affected side engine bleed.

If unsuccessful:

Turn off affected side engine bleed.

Open crossbleed valve.

■ If wing anti-ice off:

Set pack flow to low.

Set forward cargo cooling to OFF (if installed).

■ If wing anti-ice on or engine failure:

Turn off affected side pack.



ABNORMAL PROCEDURES PNEUMATIC

AIR - ENG 1+2 BLEED FAULT

Ident.: ABN-36-00015227.0001001 / 25 JUL 14 APPROVED

Criteria: (A330 and 202363)

NO LEAK

Set crossbleed valve to auto.

Turn off then on both engine bleeds.

• If no engine bleed reset successful:

Turn off both engine bleeds.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA

Start APU.

Turn off PACK 2 if PACK 1 is operative.

Turn off wing anti-ice.

Avoid icing conditions.

When at or below FL 220 and APU available:

Turn on APU bleed.

■ If APU bleed available:

Turn on PACK 2.

Turn on both engine bleeds.

Turn off APU bleed.

• If no engine bleed reset successful:

Turn on APU bleed.

Turn off PACK 2 if PACK 1 is operative.

Turn off both engine bleeds.

Maximum flight level: FL 220

■ If APU bleed not available:

Continue descent to the higher of: FL 100 or MEA

Turn off APU bleed.

When at or below FL 100 or MEA:

Turn on PACK 2.

Turn on both engine bleeds.



ABNORMAL PROCEDURES PNEUMATIC

Continued from the previous page AIR - ENG 1+2 BLEED FAULT

• If no engine bleed reset successful:

Turn off both engine bleeds.

Maximum flight level is the higher of: FL 100 or MEA

When cabin differential pressure below 1 PSI:

Turn on RAM AIR.

- If severe ice accretion:
 - If FLAPS 0:

Minimum speed: green dot

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt

• For landing:

Apply necessary landing performance corrections.

LEFT LEAK

Close crossbleed valve.

Turn off engine 1 bleed.

Turn off then on engine 2 bleed.

If engine 2 bleed reset unsuccessful:

Turn off engine 2 bleed.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA

Turn off wing anti-ice.

Avoid icing conditions.

When at or below FL 100 or MEA:

Turn on engine 2 bleed.

• If engine 2 bleed reset unsuccessful:

Turn off engine 2 bleed.

Maximum flight level is the higher of: FL 100 or MEA

• When cabin differential pressure below 1 PSI:

Turn on RAM AIR.



ABNORMAL PROCEDURES PNEUMATIC

A330AIRPLANE FLIGHT MANUAL

Continued from the previous page AIR - ENG 1+2 BLEED FAULT

If severe ice accretion:

■ If FLAPS 0:

Minimum speed: green dot

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt

For landing:

Apply necessary landing performance corrections.

RIGHT LEAK

Close crossbleed valve.

Turn off then on engine 1 bleed.

Turn off engine 2 bleed.

• If engine 1 bleed reset unsuccessful:

Turn off engine 1 bleed.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA

Start APU.

Turn off wing anti-ice.

Avoid icing conditions.

When at or below FL 220 and APU available:

Turn on APU bleed

■ If APU bleed available:

Turn on engine 1 bleed.

Turn off APU bleed.

If engine 1 bleed reset unsuccessful:

Turn on APU bleed.

Turn off engine 1 bleed.

Maximum flight level: FL 220

■ If APU bleed not available:

Continue descent to the higher of: FL 100 or MEA

Turn off APU bleed.



ABNORMAL PROCEDURES PNEUMATIC

Continued from the previous page AIR - ENG 1+2 BLEED FAULT

When at or below FL 100 or MEA:

Turn on engine 1 bleed.

If engine 1 bleed reset unsuccessful:

Turn off engine 1 bleed.

Maximum flight level is the higher of: FL 100 or MEA

When cabin differential pressure below 1 PSI:

Turn on RAM AIR

- If severe ice accretion:
 - If FLAPS 0:

Minimum speed: green dot

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt

• For landing:

Apply necessary landing performance corrections.

LEFT LEAK AND RIGHT LEAK

Close crossbleed valve.

Turn off both engine bleeds.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA

Turn off wing anti-ice.

Avoid icing conditions.

When at or below FL 100 or MEA and cabin differential pressure below 1 PSI:

Turn on RAM AIR.

- If severe ice accretion:
 - If FLAPS 0:

Minimum speed: green dot

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt

For landing:

Apply necessary landing performance corrections.



ABNORMAL PROCEDURES PNEUMATIC

AIR - ENG 1+2 BLEED FAULT

2 Ident.: ABN-36-00015227.0002001 / 09 JAN 17

APPROVED

Criteria: ((330-200 and 204817) or (A330 and 204449))

NO LEAK

Set crossbleed valve to auto.

Turn off then on both engine bleeds.

If no engine bleed reset successful:

Turn off both engine bleeds.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA-MORA.

Start APU.

Turn off PACK 2 if PACK 1 is operative.

Turn off wing anti-ice.

Avoid icing conditions.

When at or below FL 220 and APU available:

Turn on APU bleed.

If APU bleed available:

Turn on PACK 2.

Turn on both engine bleeds.

Turn off APU bleed.

• If no engine bleed reset successful:

Turn on APU bleed.

Turn off PACK 2 if PACK 1 is operative.

Turn off both engine bleeds.

Maximum flight level: FL 220.

If APU bleed not available:

Continue descent to the higher of: FL 100 or MEA-MORA.

Turn off APU bleed.

When at or below FL 100 or MEA-MORA:

Turn on PACK 2.

Turn on both engine bleeds.



ABNORMAL PROCEDURES PNEUMATIC

Continued from the previous page AIR - ENG 1+2 BLEED FAULT

If no engine bleed reset successful:

Turn off both engine bleeds.

Maximum flight level is the higher of: FL 100 or MEA-MORA.

When cabin differential pressure below 1 PSI:

Turn on RAM AIR.

- If severe ice accretion:
 - If FLAPS 0:

Minimum speed: green dot.

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt.

For landing:

Apply necessary landing performance corrections.

LEFT LEAK

Close crossbleed valve.

Turn off engine 1 bleed.

Turn off then on engine 2 bleed.

If engine 2 bleed reset unsuccessful:

Turn off engine 2 bleed.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA-MORA.

Turn off wing anti-ice.

Avoid icing conditions.

When at or below FL 100 or MEA-MORA:

Turn on engine 2 bleed.

• If engine 2 bleed reset unsuccessful:

Turn off engine 2 bleed.

Maximum flight level is the higher of: FL 100 or MEA-MORA.

When cabin differential pressure below 1 PSI:

Turn on RAM AIR.



ABNORMAL PROCEDURES PNEUMATIC

A330 AIRPLANE FLIGHT MANUAL

Continued from the previous page AIR - ENG 1+2 BLEED FAULT

If severe ice accretion:

■ If FLAPS 0:

Minimum speed: green dot.

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt.

• For landing:

Apply necessary landing performance corrections.

RIGHT LEAK

Close crossbleed valve.

Turn off then on engine 1 bleed.

Turn off engine 2 bleed.

If engine 1 bleed reset unsuccessful:

Turn off engine 1 bleed.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA-MORA.

Start APU.

Turn off wing anti-ice.

Avoid icing conditions.

When at or below FL 220 and APU available:

Turn on APU bleed

■ If APU bleed available:

Turn on engine 1 bleed.

Turn off APU bleed.

If engine 1 bleed reset unsuccessful:

Turn on APU bleed.

Turn off engine 1 bleed.

Maximum flight level: FL 220.

If APU bleed not available:

Continue descent to the higher of: FL 100 or MEA-MORA.

Turn off APU bleed.



ABNORMAL PROCEDURES PNEUMATIC

Continued from the previous page AIR - ENG 1+2 BLEED FAULT

When at or below FL 100 or MEA-MORA:

Turn on engine 1 bleed.

If engine 1 bleed reset unsuccessful:

Turn off engine 1 bleed.

Maximum flight level is the higher of: FL 100 or MEA-MORA.

When cabin differential pressure below 1 PSI:

Turn on RAM AIR

- If severe ice accretion:
 - If FLAPS 0:

Minimum speed: green dot.

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt.

For landing:

Apply necessary landing performance corrections.

LEFT LEAK AND RIGHT LEAK

Close crossbleed valve.

Turn off both engine bleeds.

Turn off APU bleed.

Initiate a descent to the higher of: FL 100 or MEA -MORA.

Turn off wing anti-ice.

Avoid icing conditions.

- When at or below FL 100 or MEA-MORA and cabin differential pressure below 1 PSI: Turn on RAM AIR.
- If severe ice accretion:
 - If FLAPS 0:

Minimum speed: green dot.

■ If FLAPS above 0:

Minimum speed: VLS + 10 kt.

For landing:

Apply necessary landing performance corrections.



ABNORMAL PROCEDURES PNEUMATIC

AIR - X BLEED FAULT

Ident.: ABN-36-00005695.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Use crossbleed valve manual control.

Note:

If crossbleed valve failed closed and one bleed inoperative, wing anti-ice is inoperative.

Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

AIR - BLEED LO TEMP

Ident.: ABN-36-00005696.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Increase affected engine thrust.

If unsuccessful:

If one bleed low temperature:

Turn off affected side engine bleed. Refer to ABN-36 AIR - ENG BLEED FAULT.

Note: If both bleeds low temperature, wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

AIR - L (R) WING LEAK

Ident.: ABN-36-00005697.0001001 / 26 NOV 09

Criteria: A330

APPROVED

Turn off affected side engine bleed (if not automatically done).

If left wing leak:

Turn off APU bleed (if not automatically done).

Close crossbleed valve (if not automatically done).

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.



ABNORMAL PROCEDURES PNEUMATIC

A330
AIRPLANE FLIGHT MANUAL

AIR - L (R) WING LEAK

3 Ident.: **ABN-36-00005697.0002001 / 05 JAN 17** Criteria: (A330 and 204449) **APPROVED**

Turn off affected side engine bleed.

If left wing leak:

Turn off APU bleed (if not automatically done).

Close crossbleed valve (if not automatically done).

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

AIR - ENG BLEED LEAK

Ident.: ABN-36-00005698.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Turn off affected side engine bleed (if not automatically done).

If engine 1 pylon leak:

Turn off APU bleed (if not automatically done).

Close crossbleed valve (if not automatically done).

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

AIR - ENG BLEED LEAK

4 Ident.: ABN-36-00005698.0002001 / 05 JAN 17

APPROVED

Criteria: (A330 and 204449)

Turn off affected side engine bleed.

If engine 1 pylon leak:

Turn off APU bleed (if not automatically done).

Close crossbleed valve (if not automatically done).

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.



ABNORMAL PROCEDURES PNEUMATIC

AIR - APU BLEED LEAK

Ident.: ABN-36-00005699.0001001 / 26 NOV 09

APPROVED

Criteria: (A330 and (51790 or 54786))

■ If APU leak fed by APU:

Turn off APU bleed (if not automatically done).

■ If APU leak fed by engine:

Turn off engine 1 bleed (if not automatically done).

Close crossbleed valve (if not automatically done).

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.

AIR - APU BLEED LEAK

5 Ident.: ABN-36-00005699.0002001 / 05 JAN 17

APPROVED

Criteria: (A330 and 204449)

■ If APU leak fed by APU:

Turn off APU bleed (if not automatically done).

■ If APU leak fed by engine:

Turn off engine 1 bleed.

Close crossbleed valve (if not automatically done).

Note: Wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.



ABNORMAL PROCEDURES DOORS

A330AIRPLANE FLIGHT MANUAL

DOOR - FWD CABIN

Ident.: ABN-52-00010453.0001001 / 28 FEB 11

APPROVED

Criteria: A330

If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA.

DOOR - FWD CABIN

Ident.: ABN-52-00010453.0002001 / 09 JAN 17

APPROVED

Criteria: ((330-200 and 204817) or (A330 and 204449))

If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA-MORA.

DOOR - MAIN CARGO

Ident.: ABN-52-00010451.0001001 / 28 FEB 11

<u>APPROVED</u>

Criteria: 330-200F

If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA.

DOOR - MAIN CARGO

2 Ident.: ABN-52-00010451.0002001 / 05 JAN 17

APPROVED

Criteria: (330-200F and 204449)

If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA-MORA

DOOR - LOWER CARGO (AFT OR FWD)

Ident.: ABN-52-00010450.0001001 / 28 FEB 11 APPROVED

Criteria: 330-200F

If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA.



ABNORMAL PROCEDURES DOORS

A330AIRPLANE FLIGHT MANUAL

DOOR - LOWER CARGO (AFT OR FWD)

3 Ident.: **ABN-52-00010450.0002001 / 05 JAN 17** Criteria: (330-200F and 204449) **APPROVED**

• If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA-MORA

DOOR - AVIONIC OR BULK CARGO

Ident.: ABN-52-00010449.0001001 / 28 FEB 11

APPROVED

Criteria: A330

• If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA.

DOOR - AVIONIC OR BULK CARGO

4 Ident.: **ABN-52-00010449.0002001 / 09 JAN 17** Criteria: ((330-200 and 204817) or (A330 and 204449)) **APPROVED**

If cabin vertical speed is abnormal:

Maximum flight level is the higher one of: FL 100 or MEA-MORA.



ABNORMAL PROCEDURES POWER PLANT

ENG-FAIL

Ident.: ABN-70-00005265.0006001 / 26 NOV 09

APPROVED

Criteria: (((330-243 or 330-341 or 330-342 or 330-343) and 49632) or ((330-243 or 330-243F or 330-341 or 330-342 or 330-343) and (56551 or

56729)))

■ If shaft failure:

Shut down affected engine.

Push relevant FIRE pushbutton and discharge AGENT 1 after 10 s.

Turn on both inner tank splits.

Check FQI to detect a possible leak.

If no evidence of a leak:

Turn off both inner tank splits.

If other failure:

Attempt an immediate engine relight setting ENG START selector to IGN START and affected engine thrust lever to idle.

If no engine relight after 30 s:

Shut down affected engine.

If engine damage:

Push relevant FIRE pushbutton and discharge AGENT 1 after 10 s.

Turn on both inner tank splits.

Check FQI to detect a possible leak.

If no evidence of a leak:

Turn off both inner tank splits.

■ If no engine damage:

Consider engine relight. Refer to ABN-70 ENG RELIGHT IN FLIGHT.



ABNORMAL PROCEDURES POWER PLANT

ENG - SHUTDOWN

Ident.: **ABN-70-00005267.0002001 / 20 FEB 17** Criteria: (A330 and (56551 or 56729))

APPROVED

LAND ASAP

Set ENG START selector to IGN START.

If engine feedline not broken:

Monitor fuel imbalance.

If no fuel leak:

Turn off both inner tank splits.

Apply engine bleed fault procedure. Refer to ABN-36 AIR - ENG BLEED FAULT.

• If engine 1 affected:

Apply blue hydraulic system low pressure procedure. Refer to ABN-29 HYD - B SYS LO PR.

If engine 2 affected:

Apply yellow hydraulic system low pressure procedure. Refer to ABN-29 HYD - Y SYS LO PR.

• If engine 1(2) feedline broken and L(R) tank fuel required:

Manually perform a fuel transfer from the outer tanks.

During straight flight legs:

Fly with a bank angle of 3° wing down on the engine operative/lighter side.

Maintain heading by using the rudder.

Use rudder trim as necessary.

When fuel transferred:

Interrupt manual transfer.

Return to normal wing level attitude.

Use rudder trim normally.

Use FLAPS 3 for landing.

Apply necessary landing performance corrections.

For go-around, set thrust levers to TOGA.



ABNORMAL PROCEDURES POWER PLANT

ENG - REV UNLOCKED

Ident.: ABN-70-00005368.0002001 / 19 JUN 13 APPROVED

Criteria: (A330 and 49632)

Set affected engine thrust lever to idle.

Maximum speed: 300 kt/M 0.82

Use FLAPS 3 for landing.

■ If buffet:

Reduce speed to 250 kt/M 0.70 and shut down affected engine.

Use FLAPS 2 for landing.

Turn off GPWS flap mode.

Approach speed = VLS + 15 kt

Apply necessary landing performance corrections.

If no buffet:

Use FLAPS 3 for landing.

ENG - REV PRESSURIZED

Ident.: ABN-70-00005359.0001001 / 20 FEB 17 APPROVED

Criteria: A330

For go-around, use TOGA thrust.
Set affected engine thrust lever to idle.

ENG - FADEC FAULT

ldent.: ABN-70-00005360.0001001 / 26 NOV 09 APPROVED

Criteria: A330

Confirm engine status using other ECAM system pages (ELEC, HYD, BLEED).

If abnormal engine operation:

Shut down affected engine.



ABNORMAL PROCEDURES POWER PLANT

ENG - FADEC OVHT

Ident.: ABN-70-00005361.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Confirm engine status using other ECAM system pages (ELEC, HYD, BLEED).

If abnormal engine operation:

Shut down affected engine.

ENG - EPR MODE FAULT

Ident.: ABN-70-00008553.0001001 / 19 JUN 13

APPROVED

Criteria: (330-223 or 330-223F or 330-243 or 330-243F or 330-321 or 330-322 or 330-323 or 330-341 or 330-342 or 330-343)

Turn on both engines N1 mode.

If degraded N1 mode active:

Align the affected engine N1 on the N1 engine in rated mode.

If ECAM caution recalled (EPR mode recoverable):

Turn off both engines N1 mode.

ENG - OIL HI TEMP

Ident.: ABN-70-00005362.0002001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

If oil temperature above limit:

Move affected engine thrust lever to reduce oil temperature below limit.

• If overlimit persists after throttle back to idle position:

Shut down affected engine.

ENG - EGT OVERLIMIT

Ident.: ABN-70-00005363.0001001 / 16 APR 10

APPROVED

Criteria: (330-201 or 330-202 or 330-203 or 330-243 or 330-243F or 330-301 or 330-302 or 330-303 or 330-341 or 330-342 or 330-343)

Move affected engine thrust lever to reduce EGT below limit.

• If overlimit persists for more than 5 s after throttle back to idle position:

Shut down affected engine.



ABNORMAL PROCEDURES POWER PLANT

A330 AIRPLANE FLIGHT MANUAL

ENG - THR LEVER FAULT

Ident.: ABN-70-00005364.0001001 / 20 FEB 17 APPROVED

Criteria: A330

3 LAND ASAP

Engage autothrust (if not already engaged).

At slats or landing gear extension, the engine is automatically set to idle.

Use FLAPS 3 for landing.

For go-around, set thrust levers to TOGA.

ENG - THR LEVER DISAGREE

Ident.: ABN-70-00005365.0002001 / 20 FEB 17 APPROVED

Criteria: (A330 and 49632)

4 LAND ASAP

Engage autothrust (if not already engaged).

At landing gear extension, the engine is automatically set to idle.

Use FLAPS 3 for landing.

For go-around, set thrust levers to TOGA.



ABNORMAL PROCEDURES POWER PLANT

ENG RELIGHT IN FLIGHT

Ident.: ABN-70-00005116.0002001 / 25 JUL 14 APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

Maximum flight level: FL 300

Set affected engine master lever to OFF.

Set affected engine thrust lever to idle.

Set ENG MODE selector to IGN START.

Open crossbleed valve if necessary.

Set engine master lever to ON.

<u>Note:</u> Engine light up should be achieved within 30 s after fuel flow increases.

When idle reached:

Set ENG MODE selector to NORM.

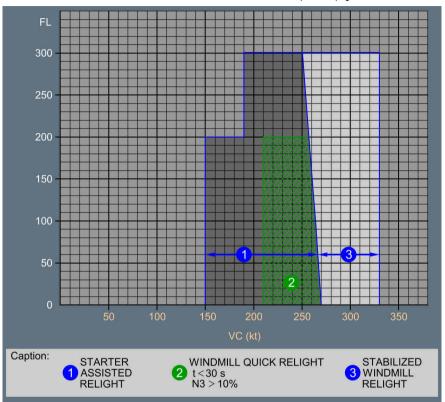
Continued on the following page



ABNORMAL PROCEDURES POWER PLANT

A330 AIRPLANE FLIGHT MANUAL

Continued from the previous page ENG RELIGHT IN FLIGHT





ABNORMAL PROCEDURES POWER PLANT

ENG - XWIND PROT FAULT

Ident.: ABN-70-00008560.0001001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

If the warning occurs on the ground (the automatic rolling takeoff logic is inoperative) then the takeoff thrust must be set slowly.

Note: The slow setting of the takeoff thrust may be achieved as follows:

- Release brakes.
- Apply 1.1 EPR on both engines.
- When thrust is stable, increase thrust progressively to get FLX/TOGA thrust at 60 kt ground speed to ensure symmetrical acceleration on both engines.

ENG - START VALVE FAULT (NOT CLOSED)

Ident.: ABN-70-00005369,0001001 / 26 NOV 09

APPROVED

Criteria: A330

• If engine 1 start valve not closed and APU available:

Turn off APU bleed.

• If opposite engine running or APU available on opposite wing:

Close crossbleed valve.

Turn off affected side engine bleed.

On ground:

Turn off affected engine manual start.

Set affected engine master lever to OFF.

Note: In flight, wing anti-ice is inoperative. Refer to ABN-30 A.ICE - WAI SYS FAULT or OFF.



ABNORMAL PROCEDURES POWER PLANT

A330 AIRPLANE FLIGHT MANUAL

ENG - START VALVE FAULT (NOT OPEN)

Ident.: ABN-70-00005370.0001001 / 26 NOV 09 APPROVED

Criteria: A330

If start valve stuck closed:

Attempt a windmill relight.

If windmill relight not successful:

Turn off affected engine manual start. Set affected engine master lever to OFF.

If no starter air pressure:

Open crossbleed valve.

Note: Do not open crossbleed valve if commanded closed because of a previous failure.

• If no other engine bleed available:

Turn on APU bleed

Attempt a windmill relight.

If windmill relight not successful:

Turn off affected engine manual start. Set affected engine master lever to OFF.

ENG - THRUST LIMITED

Ident.: ABN-70-00013096.0001001 / 28 FEB 11 APPROVED

Criteria: (((330-243 or 330-341 or 330-342 or 330-343) and 58751) or 330-243F)

If warning persists after 10 min:

Set affected engine thrust lever to idle.



ABNORMAL PROCEDURES POWER PLANT

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TPA A330-243F FLEET ABN-70 P 10/10
AFM 28 FEB 17



ABNORMAL PROCEDURES MISCELLANEOUS

A330
AIRPLANE FLIGHT MANUAL

TAIL STRIKE

Ident.: ABN-90-00009202.0001001 / 26 NOV 09

APPROVED

Criteria: A330

LAND ASAP

Maximum flight level: FL 100/MSA.

TAIL STRIKE

Ident.: ABN-90-00009202.0002001 / 09 JAN 17

APPROVED

Criteria: ((330-200 and 204817) or (A330 and 204449))

LAND ASAP

Maximum flight level is the higher one of: FL 100 or MEA -MORA.

OVERWEIGHT LANDING

Ident.: ABN-90-00005383.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If circumstances dictate, landing may be made at a weight corresponding to the maximum structural takeoff weight.

 If the overweight landing procedure follows a failure requesting to land in FLAPS 3 or below:

Use the requested FLAPS setting for landing.

For go-around:

Select FLAPS 1.

Otherwise :

■ If approach climb performance requirement is met in CONF 3:

Use FLAPS FULL for landing and select FLAPS 3 in case of go-around.

■ If approach climb performance requirement is not met in CONF 3:

Use FLAPS 3 for landing and select FLAPS 1 in case of go-around.

<u>Note:</u> 1. At this weight the maximum touchdown vertical speed should not exceed 360 ft/min.

- 2. Air conditioning should be turned off or supplied by APU.
- 3. Approach climb requirement must be checked.



ABNORMAL PROCEDURES MISCELLANEOUS

REJECTED TAKEOFF WITH ALL ENGINES OPERATIVE

Ident.: ABN-90-00005389.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Immediately reduce all thrust levers to idle.

Monitor autobrake operation.

Take over brake control with brake pedals if necessary.

Note:

- 1. If autobrake is not used, maximum brakes must be applied simultaneously with reduction of thrust levers.
- 2. If the takeoff is rejected above 100 kt, it is recommended that maximum reverse thrust is selected.
- 3. It is mandatory to use the maximum reverse thrust when the performance takes benefit of the reverse thrust effect.



ABNORMAL PROCEDURES MISCELLANEOUS

A330
AIRPLANE FLIGHT MANUAL

BOMB ON BOARD

Ident.: ABN-90-00005596.0004001 / 28 FEB 11 APPROVED

Criteria: 330-200F

FLIGHT CREW PROCEDURES

Establish communication between cockpit and courier area.

■ If landing and evacuation possible within 30 min:

Notify ATC / Company.

Land and initiate evacuation.

If not possible:

Level off.

Manually control the cabin pressure in order not to increase the cabin altitude.

Notify ATC / Company.

Descend the aircraft in order to reach aircraft altitude equal to the higher one of: cabin altitude + 2 500 ft or MEA.

Avoid sharp maneuvers.

Maximum cabin differential pressure: 1 PSI.

When aircraft altitude equal to cabin altitude + 2 500 ft or MEA:

Maintain cabin differential pressure at 1 PSI.

Turn off COMMERCIAL.

<u>Note:</u> Turn on emergency exit light before turning off COMMERCIAL.

If fuel permits:

Use at least FLAPS 1.

Extend landing gear.

For approach and landing:

Set cabin altitude mode to AUTO.

Reduce the differential pressure to zero.

■ If evacuation required:

Initiate evacuation.

Turn off all batteries.

If evacuation not required:

Notify courier area occupants.



ABNORMAL PROCEDURES MISCELLANEOUS

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TPA A330-243F FLEET ABN-90 P 4/4
AFM 28 FEB 17

NORMAL PROCEDURES





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NORMAL PROCEDURES PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
NORM-22-PA	В	1	The abbreviation "PNF" is replaced by "PM" (Pilot Monitoring). No
Required Equipment for CAT II and			other technical change.
CAT III Approach and Landing			-



NORMAL PROCEDURES PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

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NORMAL PROCEDURES GENERAL

APPROVED

A330
AIRPLANE FLIGHT MANUAL

INTRODUCTION

Ident.: NORM-GEN-00005798.0001001 / 28 FEB 11

Criteria: A330

The procedures contained in this chapter have been established and are recommended by the aircraft manufacturer.

Only particular operations which are considered useful to highlight are presented. The procedures which are considered to be "basic airmanship" are therefore not covered.

When actions depend on a condition, a black dot (•) or a black square (\blacksquare) identifies this condition. The black square is used when there is a choice between one or more conditions and only one is applicable.

These procedures are approved by the Airworthiness Authorities as acceptable procedures for a convenient use of the aircraft. This approval does not prevent the operator from developing equivalent procedures provided these procedures are approved by appropriate operational authorities.



NORMAL PROCEDURES GENERAL

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 TPA A330-243F FLEET
 NORM-GEN P 2/2

 AFM
 18 SEP 12



NORMAL PROCEDURES PREFLIGHT CHECKS

BATTERIES

Ident.: NORM-PFLT-00005799.0001001 / 26 NOV 09

APPROVED

Criteria: A330

If the batteries have been at rest for at least 6 h:

Check the batteries condition.

BATTERIES CONDITION CHECK:

While all batteries (1 + 2 + APU) are OFF, check batteries voltage is at least 25 V. Perform a charging cycle of about 20 min, if batteries voltage is below 25 V.

ECAM ALERTS

Ident.: NORM-PFLT-00005800.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Before each flight, recall all ECAM warnings by depressing RECALL pushbutton for at least 3 s and check warnings are compatible with MMEL.

COCKPIT DOOR

Ident.: NORM-PFLT-00005801.0002002 / 04 MAY 10

APPROVED

Criteria: 330-200F Specific: FAA

A test of the Cockpit Door Locking System (CDLS) must be made daily, if cockpit door is installed.



NORMAL PROCEDURES PREFLIGHT CHECKS

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 TPA A330-243F FLEET
 NORM-PFLT P 2/2

 AFM
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NORMAL PROCEDURES **TAKEOFE**

TAKEOFF PROCEDURE

Ident.: NORM-TO-00005804.0004001 / 19 JUN 13 APPROVED

Criteria: ((330-243 or 330-243F or 330-341 or 330-342 or 330-343) and 46874)

Set slats, flaps and horizontal stabilizer as required.

Perform flight controls checks using the pedals and each sidestick.

Arm ground spoilers and select maximum autobrake.

Set ENG START selector as required.

■ If crosswind at or below 20 kt and no tailwind:

Apply 1.1 EPR on both engines with brakes on.

Note: Brakes may be released so as to perform a rolling takeoff.

Then release brakes with stick half forward.

Apply thrust up to FLX/TOGA thrust whilst maintaining stick half forward up to 80 kt.

■ If crosswind above 20 kt or tailwind:

Release brakes with stick full forward.

Apply FLX/TOGA thrust whilst maintaining stick close to full forward up to 80 kt.

Then release stick progressively to reach neutral at 100 kt.

Note: Once throttle is set to FLX MCT gate, any change to FLEX TEMP setting will not be taken into account by FADEC for EPR TARGET computation.

Check takeoff EPR is set prior to reaching 80 kt.

At VR:

Rotate the aircraft with a positive sidestick input to achieve a normal and continuous rotation rate to the pitch attitude necessary to maintain an airspeed at or above V2 + 10 kt.

Once airborne and with a positive rate of climb:

Retract landing gear.

SRS guidance can be followed when FD pitch order has stabilized.

At safe height:

Perform acceleration and slats/flaps retraction.

Disarm ground spoilers.

Note: If takeoff is performed with packs off, pack 1 should be selected ON after thrust reduction to CLB.



NORMAL PROCEDURES TAKEOFF

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 TPA A330-243F FLEET
 NORM-TO P 2/2

 AFM
 22 JAN 14



A330
AIRPLANE FLIGHT MANUAL

BUFFET ONSET

Ident.: NORM-FLT-00005806.0001001 / 02 JUL 10

APPROVED

Criteria: A330

At any flight conditions it is possible to determine maneuvering margins before buffet onset occurs, by reference to the following graphs.

Example 1 (Weight in kg):

- Data:
 - M = 0.82
 - Flight Level = 350
 - CG = 40 %
 - Weight = 200 t
- · Results: Buffet onset at
 - M = 0.82 at 1.75 g
 - Low Speed (1 g): M = 0.58

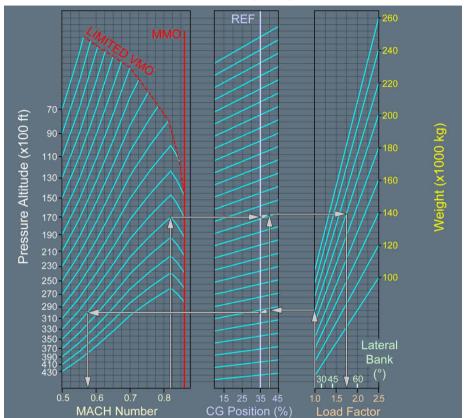
Example 2 (Weight in lb):

- Data:
 - M = 0.82
 - Flight Level = 350
 - CG = 40 %
 - Weight = 450 000 lb
- · Results: Buffet onset at
 - M = 0.82 at 1.70 g
 - Low Speed (1 g): M = 0.58



A330 AIRPLANE FLIGHT MANUAL

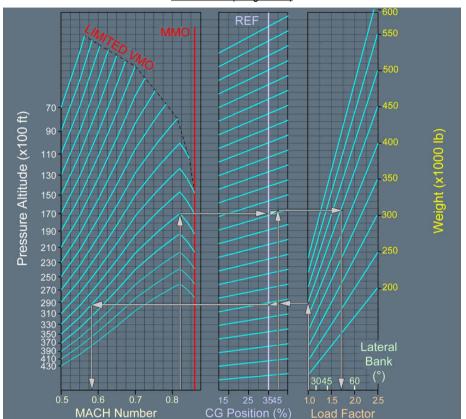
Buffet Onset (Weight in kg)





A330 AIRPLANE FLIGHT MANUAL

Buffet Onset (Weight in lb)



SEVERE TURBULENCE

Ident.: NORM-FLT-00005809.0002001 / 16 NOV 16 Criteria: (330-200 or 330-200F)

<u>APPROVED</u>

Ontena. (000-200 of 000-2001)

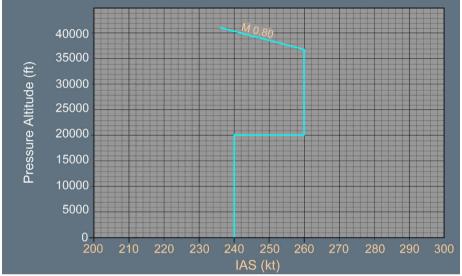
Turn on seat belts signs.

Disconnect autothrust.

Respect the following recommended speed:









NORMAL PROCEDURES APPROACH AND LANDING

NORMAL LANDING

Ident.: NORM-LDG-00005810.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The minimum final approach speed is 1.23 VS1G of the landing configuration.

Set engine ignition as required.

Note: The flare height s

The flare height should be increased for landing at high altitude airports particularly with high approach speeds or for approaches with increased glide slope or to uphill sloping runways.

BALKED LANDING (ALL ENGINES OPERATING)

Ident.: NORM-LDG-00005811.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Apply go-around thrust.

Rotate to achieve a positive rate of climb and establish the required pitch attitude as directed by SRS pitch command bar.

Retract the flaps one step and maintain the final approach speed.

When a positive rate of climb is established:

Retract landing gear.

REVERSE THRUST

Ident.: NORM-LDG-00005812.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Maximum reverse thrust may be applied down to 70 kt IAS.

AUTOBRAKE

Ident.: NORM-LDG-00005813.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Autobrake may be used provided the available landing distance is compatible with the performance of the associated selected automatic mode.

Its use does not relieve the pilot of the responsibility to achieve a safe stop within the available runway length, if necessary by taking over brake control with brake pedals.

Disengagement of automatic braking system may be done either by firm action on the brake pedals or by pressing the pushbutton of the armed mode.



NORMAL PROCEDURES APPROACH AND LANDING

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TPA A330-243F FLEET NORM-LDG P 2/2
AFM 18 SEP 12



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

DEMONSTRATED SYSTEM CONFIGURATION

AP /FD. SPEED MODES. AUTOTHRUST

Ident.: NORM-22-CONF-00008431.0001001 / 26 NOV 09

APPROVED

Criteria: A330

All AP /FD modes may be used with or without autothrust, except if specified.

Autothrust may be used with or without AP /FD, in selected or managed speed/Mach.

TAKEOFF

Ident.: NORM-22-CONF-00008432.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Autopilot engagement is approved with use of SRS + (HDG, TRK, RWY, RWY TRK or NAV) modes at or above 100 ft AGL and at least 5 s after liftoff.

Use of FD is approved in the same modes after the rotation.

CLIMB, CRUISE, DESCENT

Ident : NORM-22-CONF-00008433.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The use of AP or FD in the following modes is approved:

- Lateral modes: HDG, TRk, NAV
- Vertical modes: V/S, FPA, ALT*, ALT CRZ, ALT CSTR, OP CLB, OP DES, CLB, DES.

NON PRECISION APPROACH

Ident.: NORM-22-CONF-00008434.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The following modes are approved to be used with AP and/or FD:

- Lateral modes: LOC, LOC*, LOC-BC, LOC-BC*, HDG, TRK, NAV, APP NAV
- Vertical modes: ALT*, ALT, V/S, FPA, FINAL APP.

CAT LILS APPROACH

Ident : NORM-22-CONF-00008435.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The use of AP and/or FD with or without autothrust is approved in APPR modes (GS*, LOC*, GS, LOC. LAND).

Dual AP engagement is approved.



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

DEMONSTRATED SYSTEM CONFIGURATION

CAT II ILS APPROACH

Ident.: NORM-22-CONF-00008436.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The use of AP with or without FD with or without A/THR is approved in APPR modes (GS*, LOC*, GS, LOC, LAND).

Dual AP engagement is approved.

One engine may be inoperative.

Note: Compliance with CAT II approach criteria has been demonstrated with CAT II and CAT III performance quality ILS beam only.

CAT II/III ILS APPROACH AND AUTOMATIC LANDING

Ident.: NORM-22-CONF-00008437.0001001 / 26 NOV 09

APPROVED

Criteria: A330

The use of AP with or without FD, with autothrust for CAT III and with or without autothrust for CAT II is approved using APPR modes (GS*, LOC*, GS, LOC, LAND, FLARE, ROLL OUT) in CONF FULL and CONF 3.

Dual AP engagement is approved.

Note:

- 1. CAT III DUAL approach is not available with one engine inoperative.
- Compliance with CAT II and CAT III approach and landing criteria has been demonstrated with CAT II and CAT III performance quality ILS beam only.

GO-AROUND

Ident.: NORM-22-CONF-00008438.0001001 / 26 NOV 09

Ident.: NORM-22-CONF-00005821.0001001 / 26 NOV 09

20 ft

APPROVED

APPROVED

11 ft

Criteria: A330

The use of AP and/or FD is approved with use of SRS + (GA TRK, HDG, TRK or NAV) modes. Dual AP use is approved.

ALTITUDE LOSS AFTER AUTOMATIC GO-AROUND INITIATION

Criteria: A330				
Initiation Height (ft)	Height Loss (ft)			
60 ft to 100 ft	31 ft			
50 ft	26 ft			
40 ft	21 ft			
30 ft	16 ft			



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

DEMONSTRATED SYSTEM CONFIGURATION

MAXIMUM ENCOUNTERED WIND DURING FLIGHT TESTS (CAT II OR CAT III)

Ident.: NORM-22-CONF-00008272.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Maximum encountered wind during flight tests for CAT II or CAT III automatic approach or automatic landing and rollout:

Headwind: 37 ktTailwind: 13 ktCrosswind: 23 kt



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

DEMONSTRATED SYSTEM CONFIGURATION

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NORMAL PROCEDURES AUTO FLIGHT SYSTEM

NON PRECISION APPROACH

GENERAL

Ident.: NORM-22-NPA-00008439.0001001 / 19 JUN 13

APPROVED

Criteria: (330-200 or 330-300)

The final approach (FAF or FAP to runway or MAP), as extracted from the navigation database and inserted in the primary F-PLN including altitude constraints, must not be modified by the crew. Before starting the approach, the crew must check the lateral and vertical profile of the FMS approach against the published approach chart.

INSTRUMENT APPROACH USING NAV MODE OR FINAL APP MODE

Ident · NORM-22-NPA-00008445.0007001 / 19 JUN 13

APPROVED

Criteria: (A330 and ((44308 or 44339 or 46572 or 46893) and 200309))

■ For approach procedure with A/C in GPS PRIMARY

If GPS PRIMARY LOST indication appears on ND during the approach

Discontinue the approach unless:

- GPS PRIMARY is lost on only one FMGEC, the approach can be continued using AP /FD associated to the other FMGEC, or
- GPS is not required and navigation accuracy is confirmed against the radio navaid raw data
- If FM/GPS POS DISAGREE ECAM caution is triggered during the approach:

Discontinue the approach unless radio navaid raw data is available and indicates correct navigation to continue the approach using selected FMGES modes.

For RNAV(GNSS) approaches with LNAV/VNAV Minimum:

Between the FAP and the DA, discontinue the approach as soon as the deviation below the vertical path exceed 75 ft unless external visual references are sufficient.

■ For approach procedure without GPS PRIMARY

Before starting the approach, check FM position accuracy with radio navaid raw data.

If HIGH accuracy is lost during a VOR, VOR/DME, NDB or NDB/DME instrument approach procedure:

The approach can be continued in NAV mode if the navigation accuracy is confirmed against the radio navaid raw data.



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

NON PRECISION APPROACH

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TPA A330-243F FLEET AFM



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

PRECISION APPROACH

CAT II AND CAT III APPROACH AND/OR AUTOMATIC LANDING

Ident.: NORM-22-PA-00008441.0001001 / 28 FEB 11

APPROVED

Criteria: A330

Before the approach:

Select DH (or « NO » DH if applicable).

Note: For automatic landing in CAT I or better weather condition, select appropriate MDA.

During interception of final approach:

Arm APPR mode.

Check approach phase is active on MCDU PERF page.

Engage second autopilot if available.

Engage autothrust (not required for CAT II).

Note: Approach speed is VLS + wind correction (minimum wind correction: 5 kt maximum

wind correction:15 kt)

Check desired capability on PFD.

Note: If APPR is selected at high altitude, CAT 1 only will be displayed initially on FMA. The

valid capability will be displayed at lower altitude.

During final approach and landing:

At 350 ft RA, check "LAND" on PFD and ILS course on heading scale.

At 30 ft, check "FLARE" on PFD.

At 10 ft, reduce thrust levers to idle.

At touchdown, check "ROLL OUT" on PFD.

At the latest when leaving the runway, disconnect the autopilot.



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

PRECISION APPROACH

Note:

- 1. For CAT II automatic approach, the autopilot should be disconnected at or before 80 ft if manual landing is intended.
- For CAT III A automatic approach and landing, the autopilot may be disconnected at touchdown if external visual references are sufficient.
- 3. A callout (indicating that a flight parameter is exceeded) must be made if:
 - speed goes below VAPP -5 kt or above VAPP +10 kt
 - pitch attitude goes below 0 ° or above +10 ° nose up
 - bank angle goes above 7°
 - descent rate goes above 1 000 ft/min
 - excessive LOC or GLIDE deviation occurs.
- 4. For CAT II approach climb performance, refer to FCOM Go Around Performance chapter (Refer to FCOM/PER-GOA-GEN PROCEDURE).
- 5. Whenever the required landing distance for automatic landing is higher than the required landing distance for manual landing, corrections to be added to the required landing distance for manual landing (provided by the Performance Engineer's Programs/AFM_OCTO at the latest approved revision reported in the PERFORMANCE chapter of this AFM) are given in Automatic Landing Distance Increment chapter (Refer to PERF-LDG Autoland Landing Distance Increment). The required landing distance for automatic landing is calculated with the same braking conditions as for manual landing (i.e. full pilot braking at main landing gear touchdown) but with a lower multiplicative coefficient (1.15 instead of 1.66).

REQUIRED EQUIPMENT FOR CAT II AND CAT III APPROACH AND LANDING

Ident.: NORM-22-PA-00008444.0002001 / 28 FEB 17

Criteria: ((330-301 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200 or 330-200F) and (51802 or 51805 or 51806))

Required Equipment	CAT II	CAT III Single	CAT III Dual
AP	1 AP engaged	1 AP engaged	2 AP engaged
AP disconnect Pushbutton	2	2	2
Autothrust	0	1	1
ILS Receiver	2	2	2
Attitude Indication	N°1+N°2+STBY	N°1+N°2+STBY	N°1+N°2+STBY
PFD /ND Displays	2/1	2/2	2/2
Radio Altimeter	1 (But two displays)	2	2
Auto Callout Radio Altimeter	1(3)	1	1
DH Indication	1(1)	1(1)	1(1)
Flight Warning Computer	1	1	2
"AP OFF" Warning	1	1	2

Continued on the following page



NORMAL PROCEDURES **AUTO FLIGHT SYSTEM**

PRECISION APPROACH

Continued from the previous page

Required Equipment	CAT II	CAT III Single	CAT III Dual
"AUTOLAND" Light	1	1	1
Rain Repellent (if activated) or Windshield Wipers	1(2)	1(2)	1(2)
L or R Windshield Heat	1 ⁽²⁾	1 ⁽²⁾	1(2)
Nosewheel Steering	1(4)	1(4)	1
Antiskid	1(4)	1(4)	1
BSCU Channel	1(4)	1(4)	1
Beam Excessive Deviation	1(1)	2	2
FMA	1	2	2
"A/THR OFF" Caution	0	1	1
PRIM	1	1	(N°1+N°2) or (N°1+N°3)
SEC	1	1	2
ADR /IR	2/2	2/2	3/3
Hydraulic Circuit	2	2	3
FMGEC Electrical Supply Split	0	0	1
Rudder Trim	1	1	2

- (1) One unit required for the PM.
 - One unit required for PF.
 - Required only for autoland.
 - Required only for automatic rollout.

Note:

- 1. Compliance with CAT II approach and landing criteria has been demonstrated with CAT II and CAT III performance quality ILS beam only.
 - 2. Compliance with CAT III approach and landing criteria has been demonstrated with CAT II and CAT III performance quality ILS beam only.



NORMAL PROCEDURES AUTO FLIGHT SYSTEM

PRECISION APPROACH

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 TPA A330-243F FLEET
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NORMAL PROCEDURES COMMUNICATIONS

A330 AIRPLANE FLIGHT MANUAL

COMMUNICATIONS

Ident.: NORM-23-00005817.0001001 / 26 NOV 09

APPROVED

Criteria: A330

For aircraft fitted with ACARS , use only VHF 1 or VHF 2 for communications with ATC.



NORMAL PROCEDURES COMMUNICATIONS

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TPA A330-243F FLEET NORM-23 P 2/2
AFM 18 SEP 12



NORMAL PROCEDURES FUEL

A330
AIRPLANE FLIGHT MANUAL

FUEL SYSTEM

Ident.: NORM-28-00008270.0002001 / 16 APR 10 APPROVED

Criteria: (330-201 or 330-202 or 330-203 or 330-243 or 330-243F)

APU FEEDING

When using JET B/JP4 fuel:

APU feeding is possible up to 25 000 ft.

FUEL TRANSFER

When using JET B/JP4 fuel:

Fuel transfer from center tank to inner tanks with center tank pumps operative is possible up to $20\,000\,\mathrm{ft}.$



NORMAL PROCEDURES FUEL

A330 AIRPLANE FLIGHT MANUAL

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TPA A330-243F FLEET NORM-28 P 2/2
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NORMAL PROCEDURES ICE AND BAIN PROTECTION

OPERATIONS IN ICING CONDITIONS

Ident.: NORM-30-00005814.0001001 / 19 JUN 13

APPROVED

Criteria: A330

For icing conditions definition: Refer to LIM-GEN Icing Conditions Definition.

When icing conditions are encountered:

Turn on engine anti-ice.

Set wing anti-ice as required.

- If there is evidence of significant ice accretion and to take into account ice accretion on non heated structure:
 - If flaps position at 0:

Minimum speed: VLS + 15 kt.

■ If flaps position above 0:

Minimum speed: VLS + 5 kt.

CAUTION

- 1. Extended flight in icing conditions with slats extended should be avoided.
- 2. Apply performance adjustments according to note of Approach Climb and Landing Climb (Refer to PERF-LDG Approach Climb and Landing Climb).

GROUND ICE SHEDDING PROCEDURE

Ident.: NORM-30-00008271.0001001 / 19 JUN 13

APPROVED

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

When taxiing in icing conditions, in temperature lower than +1 °C (34 °F):

■ If there is no freezing fog:

Inform ATC.

Set the parking brake to ON or brake with pedals.

• If ground surface conditions and the environment permit, accelerate the engines to 50 % N1 for 10 s at least every hour of engine ground running time.

CAUTION If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE

■ If there is freezing fog:

Compute the cumulative taxi time (previous flight's taxi-in time plus current flight's taxi-out time, with the engines running).

■ If the cumulative taxi time is being longer than 45 min:

Perform the following actions within a cumulative taxi time of 45 min and at least every 45 min:



NORMAL PROCEDURES ICE AND BAIN PROTECTION

A330
AIRPLANE FLIGHT MANUAL

■ If -7 °C < OAT < 1 °C:

Inform ATC.

Set the parking brake to ON or brake with pedals.

 If ground surface conditions and the environment permit, accelerate the engines to 50 % N1 for 1 min.

CAUTION If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE

■ If -20 °C < OAT ≤ -7 °C:

Inform ATC

Set the parking brake to ON or brake with pedals.

 If ground surface conditions and the environment permit, accelerate the engines one after the other, each to 70 % N1 for 50 s.

CAUTION If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE

■ If OAT ≤ -20 °C, or surface conditions not permitting the application of previous procedures:

Delay takeoff and request maintenance action for manual engine de-icing.

■ If the cumulative taxi time is being 45 min or less:

Inform ATC.

Set the parking brake to ON or brake with pedals.

 If ground surface conditions and the environment permit, accelerate the engines to 50 % N1 for 10 s.

CAUTION If, during thrust increase, the aircraft starts to move, immediately retard the thrust levers to IDLE

RAIN REPELLENT (IF ACTIVATED)

Ident.: NORM-30-00005816.0001001 / 26 NOV 09 Criteria: A330 **APPROVED**

mona. 71000

Use rain repellent in the case of heavy rain only.



NORMAL PROCEDURES NAVIGATION

GROUND PROXIMITY WARNING SYSTEM (GPWS)

Ident.: NORM-34-00005818.0001001 / 26 NOV 09

APPROVED

Criteria: A330

When a warning occurs:

Pull up using full back stick.

Apply takeoff thrust and climb until the warning ceases.

Warnings may be considered cautionary during daylight VMC conditions provided the cause of the warning can be identified immediately.

When a caution occurs:

Adjust the flight path/configuration so that the alert ceases.

INERTIAL REFERENCE SYSTEM (IRS)

Ident.: NORM-34-00005819.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Ensure IRS alignment is complete and all IR are in the NAV mode before the aircraft is moved.

When an IR is in the ATT mode:

Magnetic heading will drift after initialization in a manner similar to a directional gyro and requires crew monitoring and periodic manual heading updates to ensure adequate accuracy.

INTEGRATED STANDBY INSTRUMENT SYSTEM (ISIS)

Ident.: NORM-34-00005820.0001001 / 26 NOV 09

APPROVED

Criteria: (A330 and 47244)

Whenever the Integrated Standby Instrument System (ISIS) is used as the primary means for indicating the basic parameters for aircraft piloting, do not use the Bugs pushbutton.

WINDSHEAR WARNING AND GUIDANCE SYSTEM

Ident : NORM-34-00005824.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Windshear detection is available below 1 300 ft at takeoff, approach and go-around.

In the case of warning, TOGA power application provides guidance in SRS mode, using FD or AP at takeoff.

If engaged AP may be used for go-around.

FD guidance may lead to speeds of VALPHAMAX.



NORMAL PROCEDURES NAVIGATION

The aircraft configuration should not be changed before end of windshear conditions.

TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS)

Ident.: NORM-34-00008285.0004001 / 19 JUN 13

Criteria: (A330 and (57609 or 58449))

GENERAL

TCAS Traffic Advisory (TA) and Resolution Advisory (RA) modes can be used without any restriction when operating within the certified limits of the aircraft flight envelope.

The TCAS complies with TCAS II change 7.1 Minimum Operational Performance Standards (DO -185B MOPS).

PROCEDURES

For normal TCAS operation, select:

- Transponder: ON or Auto
- ALT report: ONTCAS: TA/BA

Select TA for:

- Dispatch with landing gear down
- Engine failure
- Operation near closely spaced parallel runway (less than 1 200 ft).

Maneuvers must not be based solely on information presented on the traffic display. Compliance with a TCAS II RA is always required unless the pilot considers it unsafe to do so. Compliance with a RA is required even if there is a conflict between the RA and an Air Traffic Control (ATC) instruction to maneuver.

Go-around procedure must be performed when a RA "Climb" or "Increase Climb" is triggered on final approach.

CAUTION

Once an RA has been issued, safe separation could be compromised if current vertical speed is changed, except as necessary to comply with the RA. This is because TCAS II-to-TCAS II coordination may be in progress with the intruder aircraft, and any change in vertical speed that does not comply with the RA may negate the effectiveness of the other aircraft's compliance with the RA.

Note: Following a TCAS II "Clear of Conflict" advisory, the pilot should expeditiously return to the applicable ATC clearance unless otherwise directed by ATC.



NORMAL PROCEDURES NAVIGATION

A330 AIRPLANE FLIGHT MANUAL

REDUCED VERTICAL SEPARATION MINIMUM (RVSM)

Ident.: NORM-34-00005825.0001001 / 26 NOV 09

APPROVED

Criteria: (A330 and 43537)

The following table gives the minimum equipment/functions required to begin RVSM operation.

Required Equipment/Functions	Quantity
ADR	2
ATC Transponder	1
Flight Warning Computer (for ALTITUDE ALERT function)	1
Autopilot	1
PFD function (for altitude indication)	2
FCU (for altitude target selection and OP CLB/OP DES mode engagement)	1

Minimum Equipment/Functions Required to Begin RVSM Operation



NORMAL PROCEDURES NAVIGATION

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 TPA A330-243F FLEET
 NORM-34 P 4/4

 AFM
 22 JAN 14



NORMAL PROCEDURES AUXILIARY POWER UNIT

AUXILIARY POWER UNIT (APU)

Ident.: NORM-49-00005815.0002001 / 26 NOV 09

APPROVED

Criteria: (A330 and 52536)

STARTING IN FLIGHT

Use main electrical power supply up to 41 450 ft. In the case of APU TR not available use APU battery below 25 000 ft.

AIR BLEED EXTRACTION IN FLIGHT

Air bleed extraction in flight: up to 22 500 ft.

Note: Air bleed extraction for wing anti-ice is not permitted.

FLIGHT WITH APU REMOVED

Flight with APU removed is authorized in accordance with SIL 49-009 revision 7 (or higher).



NORMAL PROCEDURES AUXILIARY POWER UNIT

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TPA A330-243F FLEET NORM-49 P 2/2
AFM 18 SEP 12

PERFORMANCE





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PERFORMANCE PRELIMINARY PAGES

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PERFORMANCE GENERAL

INTRODUCTION

Ident.: PERF-GEN-00005827.0001001 / 26 NOV 09

APPROVED

Criteria: A330

In compliance with airworthiness regulations, an aircraft is cleared to take off from any airport if the weight allows it to achieve the takeoff, "en route", and landing performance included in this chapter.

Note: The performance and speeds of the lowest weight at which the Performance Engineer's Programs/AFM_OCTO approved FM module is able to give results can be considered as valid from this weight down to the certified minimum weight.

The considered atmosphere is the international standard atmosphere.

Performance are related to VS1G.

Wind speed is measured at the height of 10 m (32.8 ft).

The results provided by the Performance Engineer's Programs/AFM_OCTO approved FM module must be used in conjunction with the gross weight, operational and environmental limitations given in the LIMITATIONS chapter of this AFM.



A330

PERFORMANCE GENERAL

AIRCRAFT CONFIGURATION

Ident.: PERF-GEN-00005829.0001001 / 26 NOV 09 Criteria: A330

APPROVED

The performance has been established in the following configuration:

	Slats / Flaps	Engine Thrust	Remarks
Takeoff	1+F 2 3	Takeoff thrust	Ground spoilers armed. <u>Dry runway</u> Acceleration Stop Distance (ASD) made using only wheel brakes, brakes supplied by green hydraulic system, antiskid ON and ground spoilers. <u>Wet runway</u> Acceleration Stop Distance (ASD) made using only wheel brakes, brakes supplied by green hydraulic system, antiskid ON, ground spoilers and with or without thrust reversers.
En route	0	Maximum Continuous Thrust (MCT)	
Go-around	2 3	Go-around thrust taking Mach number into account	
Landing	3 FULL		Landing distances established with brake pedals depressed upon main landing gear touchdown, brakes supplied by green hydraulic system, antiskid ON and using ground spoilers.

Systems which may be ON or OFF:

- Air conditioning
- Wing anti-ice or engine anti-ice.

Note: For normal operation, use of thrust reversers is recommended.

MAXIMUM DEMONSTRATED CROSSWIND AT TAKEOFF AND LANDING

Ident.: **PERF-GEN-00005830.0004001 / 16 APR 10**Criteria: ((330-243 or 330-243F) and 51802)

APPROVED

- At takeoff: 45 kt (gust included).

Note: The demonstrated crosswind value at takeoff exceeds the maximum crosswind value allowed for Rolls-Royce engines at takeoff as defined in the LIMITATIONS chapter. Refer to LIM-70 Crosswind.

- At landing: 45 kt (gust included).



PERFORMANCE AIRSPEED AND ALTITUDE CALIBRATION

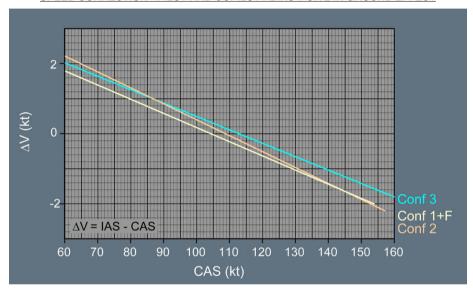
TAKEOFF

SPEED CORRECTIONS IN GROUND EFFECT

Ident.: **PERF-CAL-TO-00005832.0002001 / 16 APR 10**Criteria: (330-200 or 330-200F)

APPROVED

SPEED CORRECTION - PILOT AND COPILOT ADIRS 1 OR 2 IN GROUND EFFECT

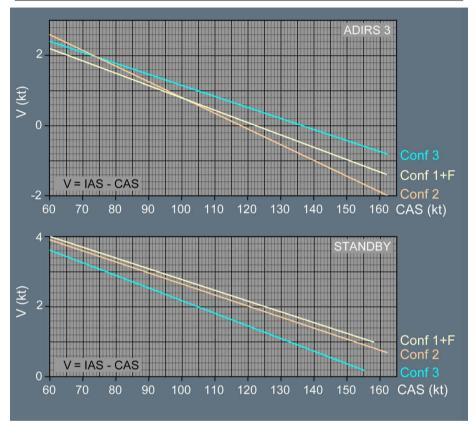




PERFORMANCE AIRSPEED AND ALTITUDE CALIBRATION

TAKEOFF

SPEED CORRECTION - ADIRS 3 OR STANDBY AIRSPEED INDICATOR IN GROUND EFFECT



SPEED CORRECTIONS OUT OF GROUND EFFECT

Ident.: PERF-CAL-TO-00008442.0001001 / 26 NOV 09 Criteria: A330 APPROVED

Negligible



PERFORMANCE AIRSPEED AND ALTITUDE CALIBRATION

TAKEOFF

ALTITUDE CORRECTIONS

Ident.: PERF-CAL-TO-00008443.0001001 / 26 NOV 09 Criteria: A330

APPROVED

Lower than ± 20 ft



PERFORMANCE AIRSPEED AND ALTITUDE CALIBRATION

TAKEOFF

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PERFORMANCE

AIRSPEED AND ALTITUDE CALIBRATION

CRUISE (CLEAN CONFIGURATION)

SPEED AND MACH CORRECTIONS

Ident.: PERF-CAL-CRU-00005836.0001001 / 26 NOV 09

APPROVED

Criteria: A330 Negligible

ALTITUDE CORRECTIONS

Ident.: PERF-CAL-CRU-00005837.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Lower than ± 20 ft



PERFORMANCE AIRSPEED AND ALTITUDE CALIBRATION

CRUISE (CLEAN CONFIGURATION)

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PERFORMANCE AIRSPEED AND ALTITUDE CALIBRATION

LANDING

SPEED CORRECTIONS

Ident.: PERF-CAL-LDG-00005839.0001001 / 26 NOV 09

APPROVED

Criteria: A330

ALTITUDE CORRECTIONS

Ident.: PERF-CAL-LDG-00005840.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Lower than 10 ft

Lower than ± 2 kt



PERFORMANCE AIRSPEED AND ALTITUDE CALIBRATION

LANDING

Intentionally left blank



PERFORMANCE TAKEOFF PERFORMANCE

A330
AIRPLANE FLIGHT MANUAL

SPEEDS DEFINITIONS

Ident.: PERF-TO-00005845.0001001 / 26 NOV 09

APPROVED

Criteria: A330

۷1

V1 is the highest speed at which the decision must be made:

- To continue the takeoff, or
- To stop the aircraft.

٧R

VR is the speed at which rotation is initiated to reach V2 before an altitude of 35 ft.

٧2

V2 is the takeoff safety speed reached before the altitude of 35 ft with one engine failed and providing not less than the minimum second segment gradient (2.4%).



PERFORMANCE TAKEOFF PERFORMANCE

DISTANCES DEFINITIONS

Ident.: PERF-TO-00005846.0001001 / 26 NOV 09 Criteria: A330

APPROVED

STOPWAY (SWY)

Extension to runway, adequate for deceleration of the aircraft in the case of aborted takeoff.

CLEARWAY (CWY)

Area beyond the runway which can be taken into account for TOD calculation.

TAKEOFF DISTANCE AVAILABLE (TODA)

Sum of the TOBA and the CWY available

TAKEOFF RUN AVAILABLE (TORA)

Length of runway available and suitable for the ground run of an aircraft taking off.

ACCELERATE-STOP DISTANCE AVAILABLE (ASDA)

Sum of the TORA and the SWY available.

TAKEOFF DISTANCE (TOD)

Distance covered from the brake release to a point at which the aircraft is at the 35 ft height (15 ft height on wet runway). The TOD must not exceed the TODA.

TAKEOFF RUN (TOR)

Distance covered from the brake release to a point at which the aircraft is half of the segment between the liftoff speed (VLOF) and 35 ft height (15 ft height on wet runway). The TOR must not exceed the TORA.

ACCELERATE-STOP DISTANCE (ASD)

Distance necessary to accelerate the aircraft to V1, reject the takeoff at V1 and come to a full stop. The ASD must not exceed the ASDA.



PERFORMANCE TAKEOFF PERFORMANCE

TAKEOFF PERFORMANCE

Ident.: PERF-TO-00005847.0001001 / 26 NOV 09

APPROVED

Criteria: A330

For takeoff performance determination on dry and wet runways, the Performance Engineer's Programs/AFM_OCTO approved FM module at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database*.

CAUTION

For takeoff performance on wet runways, the takeoff weight must be the lowest of the computed one on dry runways and the computed one on wet runways.

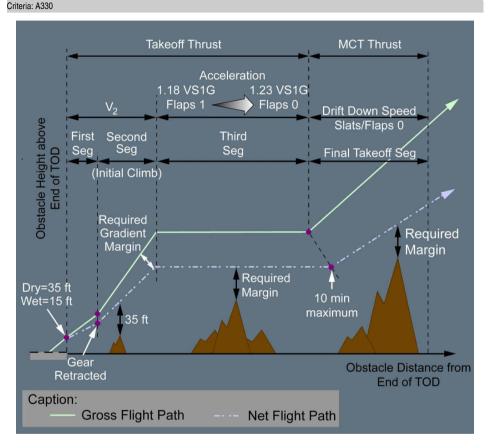


PERFORMANCE TAKEOFF PERFORMANCE

TAKEOFF FLIGHT PATH

Ident.: PERF-TO-00005848.0001001 / 02 JUL 10

APPROVED





PERFORMANCE IN-FLIGHT PERFORMANCE

IN-FLIGHT PERFORMANCE

Ident.: PERF-FLT-00008394.0001001 / 19 JUN 13

used. Refer to PERF-OCTO Performance Database.

Criteria: A330

APPROVED

For en route net flight path (single engine cruise) performance determination, the Performance Engineer's Programs/AFM OCTO approved FM module at the latest approved revision must be

<u>Note:</u> If severe icing conditions are encountered, ice accretion may build up on non-heated structure and therefore:

- The one engine inoperative net ceiling will be reduced by 2 500 ft.



PERFORMANCE IN-FLIGHT PERFORMANCE

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 TPA A330-243F FLEET
 PERF-FLT P 2/2

 AFM
 22 JAN 14



PERFORMANCE LANDING PERFORMANCE

APPROACH CLIMB AND LANDING CLIMB

Ident.: PERF-LDG-00005164.0001001 / 19 JUN 13 APPROVED

Criteria: A330

The approach climb speed is at least 1.23 VS1G of the approach configuration, approach speed up to 1.41 VS1G is permitted.

For approach and landing climb limiting weight determination, the Performance Engineer's Programs/AFM OCTO approved FM module at the latest approved revision must be used. Refer to PERF-OCTO Performance Database.

Note: When icing conditions are predicted during the flight and TAT is below 10 °C and there is evidence of significant ice accretion, to take into account ice accretion on the non-heated structure:

- Decrease the approach/landing climb limiting weight by 5 %
- The minimum approach speed is VLS + 5 kt
- For landing distance determination select ice accretion in the AFM OCTO input data interface

APPROACH AND LANDING SPEEDS DEFINITION

Ident · PERF-LDG-00005852.0001001 / 26 NOV 09 APPROVED

Criteria: A330

The final approach speed (landing speed) is the minimum recommended speed at 50 ft height for normal landing. It is equal to 1.23 VS1G of the landing configuration.

LANDING DISTANCE DEFINITIONS

Ident.: PERF-LDG-00005853.0001001 / 26 NOV 09 APPROVED

Criteria: A330

LANDING DISTANCE

The landing distance represents the distance from the 50 ft height point to complete stop on a smooth, dry, hard-surfaced runway. It is determined with brake pedals depressed at main landing gear touchdown, and assumes the use of ground spoilers and antiskid. In normal operation, the use of thrust reversers is recommended.

REQUIRED LANDING DISTANCE (RLD)

The Required Landing Distance (RLD) is the landing distance divided by 0.6 assuming the surface is dry.

Under wet runway conditions, the Required Landing Distance (RLD) is increased by 15 %.



PERFORMANCE LANDING PERFORMANCE

LANDING PERFORMANCE

Ident.: PERF-LDG-00005854.0001001 / 26 NOV 09 Criteria: A330

APPROVED

For landing distance determination, the Performance Engineer's Programs/AFM_OCTO approved FM module at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database.*

AUTOLAND LANDING DISTANCE INCREMENT

Ident.: PERF-LDG-00009381.0001001 / 02 JUL 10

APPROVED

Criteria: (330-243 or 330-243F)

The required landing distance in automatic landing is below the required landing distance calculated by the Performance Engineer's Programs/AFM_OCTO approved FM module at the latest approved revision (*Refer to PERF-OCTO Performance Database*). Therefore no increment on the required landing distance must be applied.



PERFORMANCE PERFORMANCE DATABASE

GENERAL

Ident.: TDU / PERF-OCTO-00019768.0001001 / 09 AUG 16

APPROVED

Criteria: A330 Impacted DU: NONE Belongs to TR732 Issue 1

> The aircraft performance database is provided in the Performance Engineer's Program (PEP)/AFM OCTO Approved FM module. The aircraft performance database provides the performance data applicable to an aircraft model, Refer to PERF-OCTO Performance Database.

The aircraft performance database must be combined with the following applicable data files:

- The in-flight failure data file for landing that provides the performance impact for landing in the case of an aircraft system failure, Refer to EMER-GEN Landing Distance Determination in case of In-Flight Failureand Refer to ABN-GEN Landing Distance Determination in case of In-Flight Failure.
- The MCDL performance penalties data file that provides the performance impact related to the MCDL items Refer to MCDL-GEN-PERF Performance Penalties Calculated with AFM OCTO Software.
- The complementary performance data file (CPDF) that provides the complementary performance data, Refer to PERF-OCTO Complementary Performance Data File.

Note: The three above-listed data files are applicable to an aircraft type.

PERFORMANCE DATABASE

Ident : PERF-OCTO-00005244.0049001 / 25 JUL 14

APPROVED

Criteria: 330-243F

Takeoff, final takeoff, en route net flight path (single engine cruise), go-around and landing performance are provided in the Performance Engineer's Programs/AFM OCTO approved FM module:

- At the revision 27.0 or higher using approved aircraft database reference **AB243G01**, or
- At the revision 27.0 or higher using approved aircraft database reference AB243G03.

Note: 1. Only the PC version of this program is approved.

2. For operations with Minimum Weight below 123 000 kg (271 169 lb) only the approved database reference AB243G03 must be used.

Launch PEP.



PERFORMANCE PERFORMANCE DATABASE

A330AIRPLANE FLIGHT MANUAL

COMPLEMENTARY PERFORMANCE DATA FILE

Ident.: TDU / PERF-OCTO-00019769.0001001 / 09 AUG 16

APPROVED

Criteria: A330 Impacted DU: NONE Belongs to TR732 Issue 1

In addition to the aircraft performance database, the Complementary Performance Data File (CPDF) provides complementary performance data. The CPDF is applicable to the A330 Family and contains:

- Approved data and
- Not approved data.

Note: Only the approved version of the CPDF database is referenced in the AFM.

The performance data listed in the table below (i.e. Performance Data Column) requires the approved Complementary Performance Data File (CPDF) to be used for aircraft operations.

Approved CPDF	Required version of PEP/AFM_OCTO FM module	Performance Data ⁽¹⁾
CP330A01	V34 or higher	- Computerized performance penalties in the case of ice accretion

(1) Only the performance data that is inserted between two successive CPDF files is listed. The most recent version of the CPDF combines all the listed Performance Data.



A330 AIRPLANE FLIGHT MANUAL

ENGINE MANAGEMENT TAKEOFF THRUST

Ident.: PERF-ENG-00005841.0007001 / 16 APR 10 Criteria: ((330-243 or 330-243F or 330-343) and 55212) APPROVED

ROLLS ROYCE TRENT 772B ENGINE MANAGEMENT - TAKEOFF M = 0.0

TRENT77	2B	TAKEOFF	EPH			NO AIR	REFER			MACH	=.000	
EPR CORR	ECTIONS	FOR AIR	BLEED									
AIR CONDITIO	ONING ON								ADO -0.00	OS TO EPR		
VACELLE AN	I ICE ON							READ AT OAT +0.9 (C)				
NACELLE ANI	WING AN	TI ICE ON							READ AT OF	AT +1.70 (C)		
OAT					PRESSU	RE ALTIT	UDE (FT)					
(C)	-2000.	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000	
-60.0	1.540	1,568	1.596	1.609	1.622	1,650	1.670	1.681	1,683	1,685	1.688	
8.0	1.540	1.568	1.596	1.609	1.622	1.650	1.670	1.681	1.683	1.685	1.688	
10.0	1.540	1,568	1.596	1.609	1.622	1.650	1.670	1.681	1,683	1.685	1.688	
12.0	1.540	1.568	1.596	1.609	1.622	1.650	1.570	1.681	1.683	1.885	1.688	
14.0	1.540	1.568	1.596	1.609	1.622	1.650	1.670	1.681	1.683	1.685	1.688	
_		10.000.00	70/2014	1,0000	2000			50.00000	100.00	9.555	1015757	
16.0 18.0	1.540	1.568	1.596	1.609	1.622	1.650	1.670	1.681	1.683	1.685	1.685	
20.0	1.540	1.568	1.596 1.596	1.609	1.822	1.650	1.670	1.681	1.683	1.582	1.681	
	1.540	1.568	86555	1.609	1.622	1.650	1.670	1.681	1.680	1.679	1.678	
22.0	1.540	1.568	1.596	1.609	1.622	1.650	1.670	1.677	1.676	1.675	1.675	
	1.540	1.588	1.596	1.609	1.622	1.650	1.670	1.673	1.672	1.670	1.672	
26.0	1.540	1.568	1.596	1.609	1.622	1.650	1.663	1.669	1.665	1.562	1.669	
28.0	1.540	1.568	1.596	1.609	1.622	1.650	1.656	1.659	1.652	1.655	1.659	
30.0	1.540	1.568	1.596	1.609	1.622	1.643	1.544	1.643	1.642	1.544	1.644	
32.0	1.540	1.568	1.596	1.609	1.622	1.630	1.628	1.628	1.629	1.629	1.629	
34.0	1.540	1.568	1.596	1.609	1.615	1,614	1.614	1.613	1.613	1.513	1.613	
36.0	1.540	1.568	1.596	1.602	1.500	1.600	1.599	1.598	1.597	1.597	1.598	
38.0	1.540	1.568	1.590	1.588	1.587	1.585	1.583	1.581	1.581	1.582	1.583	
40.0	1.540	1.561	1.576	1.575	1.570	1.568	1.567	1.565	1.565	1.566	1.569	
42.0	1.532	1.547	1.564	1.560	1.554	1.553	1.551	1.549	1.549	1.552	1.557	
44.0	1.517	1.535	1.549	1.543	1.538	1.537	1.535	1.533	1.535	1.540	1.544	
46.0	1.506	1.522	1.532	1.528	1.523	1.521	1.519	1.519	1.524	1.529	1.532	
48.0	1.495	1.508	1.518	1.513	1.508	1.506	1.506	1.507	1.512	1.517	1.520	
50.0	1.483	1.495	1.504	1.498	1.492	1.492	1.494	1.496	1.501	1.506	1.507	
52.0	1.473	1.483	1.489	1.483	1.479	1.481	1.483	1.484	1,489	1.494	1.495	
54.0	1.462	1.470	1.475	1.471	1.468	1.470	1.472	1.472	1.477	1.483	1.483	
56.0	1.451	1.457	1.462	1.460	1.458	1.459	1.460	1.461	1.466	1.471	1,476	
58.0	1.440	1.445	1.452	1.450	1.447	1.448	1.449	1,449	1,454	1.460	1.458	
60.0	1.430	1.437	1.442	1.439	1.436	1.437	1.438	1.437	1.443	1.448		
62.0	1.421	1.427	1.431	1,429	1.426	1,426	1.426	1.426	1,431	195000	l	
64.0	1.412	1.417	1.421	1.418	1.415	1.415	1.415	1.414	201505573		l	
66.0	1,403	1.408	1.411	1.408	1.404	1.404	1.404	2000000			l	
68.0	1,394	1.398	1.401	1.397	1,394	1.393					l	
70.0	1.385	1.388	1.390	1.387	1.383	1,000					l	
72.0	1.376	1.379	1.380	1.376	,						l	
74.0	1.367	1.369	1.370	1.070							l	
76.0	1.359	170,000									l	
78.0	1,359	1.360									l	
80.0	1.350	I		ı	I	ı			ı	1	l	



A330 AIRPLANE FLIGHT MANUAL

ROLLS ROYCE TRENT 772B ENGINE MANAGEMENT - TAKEOFF M = 0.0

TRENT772B	į.	TAKEOFF	EPR		NO AIR	BLEED MACH=.000					
EPR CORREC	TIONS FO	R AIR BLEE	D								
AIR CONDITIONI	NE ON						ADD -0.01	IO TO EPR			
NACELLE ANTI II	CE ON					READ AT OAT +1.20 (C)					
NACELLE AND W	NNG ANTI ICE	E ON				READ AT OAT +2.50 (C)					
OAT				DRESSI	JRE ALTITU						
OAT (C)	\$000.	9000.	10000.	11000.	12000.	13000.	14000.	15000.	16000		
-60.0	1,688	1,699	1,706	1,708	1.709	1.710	1.711	1,712	1.715		
-8.0	1.688	1.699	1.706	1.708	1.709	1.710	1.711	1.712	1.715		
-6.0	1,688	1,699	1.706	1,708	1.709	1.710	1.711	1.712	1.715		
-4.0	1.688	1.699	1.706	1.708	1.709	1.710		1.709	1.702		
-2.0	1.688	1.699	1.706	1.708	1.709	W-17 /	1.711	1.701	1.693		
		100000				1.710	1.708		_		
0.0	1.688	1.699	1.706	1.708	1.709	1.707	1.699	1.692	1.685		
2.0	1.688	1.699	1.706	1.708	1.706	1.699	1.691	1.684	1.678		
4.0	1.688	1.699	1.706	1.705	1.698	1.691	1.684	1.677	1.671		
6.0	1.688	1.699	1.704	1.697	1.691	1.683	1.676	1.670	1.664		
8.0	1.688	1.699	1.697	1.690	1.682	1.675	1.669	1.663	1.657		
10.0	1.688	1.698	1.690	1.682	1.674	1.667	1.661	1.655	1.648		
12.0	1.688	1.689	1.681	1.673	1.666	1.659	1.654	1.647	1.639		
14.0	1.688	1.683	1.672	1.664	1.658	1.651	1.644	1.638	1.630		
16.0	1.685	1.677	1.663	1.656	1.649	1.642	1.635	1.628	1.619		
18.0	1.681	1.671	1,654	1.647	1.639	1.632	1.625	1.617	1.607		
20.0	1.678	1.664	1.645	1.637	1.629	1.622	1.615	1.606	1.596		
22.0	1.675	1.658	1.634	1.626	1.618	1.611	1.604	1.595	1.585		
24.0	1.672	1.651	1.623	1.615	1.607	1.600	1.593	1,585	1.574		
26.0	1.669	1.641	1.611	1.603	1.596	1.589	1.582	1.574	1.563		
28.0	1.659	1.627	1.600	1.592	1.585	1.578	1.572	1.584	1.553		
30.0	1,644	1,614	1.588	1,581	1.574	1.567	1.562	1.553	1.542		
32.0	1.629	1.601	1.577	1.570	1,563	1.557	1.551	1.543	1,532		
34.0	1.613	1.588	1.565	1.559	1.553	1.547	1.541	1.533	1.521		
36.0	1.598	1.574	1.554	1.548	1.542	1.536	1.531	1.523	1.511		
38.0	1.583	1.562	1.544	1.537	1.532	1.528	1.521	1.512	1.501		
40.0	1.569	1.550	1.533	1.527	1.521	1.518	1.511	1.502	1.492		
42.0	1.557	1.539	1.522	1.516	1.521	1.506	1.501	1.492	1.492		
44.0	1.544	1.527	1.511	1.506	1.500	1,495	1.490	1.482	1.403		
46.0	1.532	1.515	1.501	1,495	1.490	1.485	1.480	7.402			
48.0	1.520	1.504	1,490	1.485	1.479	1,475	1.400	l			
50.0		into a agrant		11/00/2000	10000000			l			
52.0	1.507	1.492	1.479	1.474	1.469			l	l		
	1.495	1.481	1.468	1.463				l			
54.0	1.483	1.469	1.458					l			
56.0	1.470	1.458						l			
58.0	1.458	l						l	l		
60.0		I						l			
62.0		I						l .			
64.0											



A330 AIRPLANE FLIGHT MANUAL

ENGINE MANAGEMENT MAXIMUM CONTINUOUS THRUST

Ident.: PERF-ENG-00005842.0005001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-343)

ROLLS ROYCE TRENT 772B ENGINE MANAGEMENT - MAXIMUM CONTINUOUS - VC = 230 kt

TRENT77			COLUMN CHILDREN	INUOUS	EPR		AIR CON	ID ON (*)		VC	=230 K			
		AIR BLEE	D											
UR CONDITIO										9 TO EPR				
NACELLE AN									100000000000000000000000000000000000000	AT +1.20(C)				
NACELLE AN	TI-ICE AND 1	WING ANTHO	E ON						READ AT TO	AT +3.40(C)				
TAT		PRESSURE ALTITUDE (FT)												
(C)	-1000.	3000.	7000.	11000.	15000.	19000.	23000.	27000.	31000.	35000.	39000.			
-60.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.673	1.704	1.695			
-38.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.673	1.704	1.695			
-34.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.673	1.704	1.695			
-30.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.673	1.704	1.695			
-26.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.673	1.704	1.695			
-22.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.673	1.699	1.695			
-18.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.673	1.676	1.676			
-14.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.651	1.650	1.650	1.650			
-10.0	1.447	1.497	1.553	1.620	1.676	1.664	1.643	1.638	1.624	1.622	1.622			
-6.0	1.447	1.497	1.553	1.620	1.676	1.664	1.642	1.613	1.597	1.595	1.593			
-2.0	1.447	1.497	1.553	1.620	1.676	1.664	1.618	1.587	1.570	1.567	1.565			
2.0	1.447	1.497	1.553	1.620	1.676	1.653	1.593	1.561	1.543	1.539	1.537			
6.0	1.447	1.497	1.553	1.620	1.676	1.628	1.567	1.534	1,516	1.510	1.508			
10.0	1.447	1.497	1.553	1.620	1.854	1.603	1.541	1.508	1.489	1.482	1.479			
14.0	1.447	1.497	1.553	1.615	1.628	1.577	1.516	1.483	1.463					
18.0	1.447	1.497	1.553	1.589	1.602	1.552	1.491	1.457						
22.0	1.447	1.497	1.553	1.565	1.576	1.526	1.466							
26.0	1.447	1.497	1.535	1.540	1.550	1.501	11001120			l	ı			
30.0	1.447	1,497	1.512	1.515	1.523	1.476				l	l			
34.0	1.447	1.486	1.489	1.491	1.497									
38.0	1.447	1.465	1.466	1.468										
42.0	1.432	1.443	1.444	1.445						l	I			
46.0	1.412	1.422	1.423	II AGELANS						l	I			
52.0	1.381	1.392												
56.0	1.362	1.372												
60.0	1.343									l	I			
64.0	1.325									l	I			
68.0			l				l .			I	I			

One engine inoperative

One pack operative on remaining engine.



A330AIRPLANE FLIGHT MANUAL

ENGINE MANAGEMENT GO-AROUND THRUST

Ident.: **PERF-ENG-00005843.0005001 / 16 APR 10**Criteria: (330-243 or 330-243F or 330-343)

APPROVED

ROLLS ROYCE TRENT 772B ENGINE MANAGEMENT - GO-AROUND M = 0.225

TRENT77	2B	GO-ARO	JND EPR				AIR CO	ND ON		MAI	CH = .22		
CORRECTI	ONS FOR	AIR BLEE	D										
AIR CONDITIO	ONING OFF							-	ADD 0.00	8 TO EPR			
NACELLE AN	TI-ICE ON								READ AT TA	AT +0.90(C)			
NACELLE AN	TI-ICE AND	NING ANTHO	E ON						READ AT TA	AT +1.70(C)			
TAT	PRESSURE ALTITUDE (FT)												
(C)	-2000.	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.		
-60.0	1.540	1,567	1.595	1.609	1.623	1.651	1,671	1.684	1.587	1.690	1,693		
10.0	1.540	1.567	1.595	1.609	1.623	1.651	1.671	1.684	1.687	1.690	1.693		
12.0	1.540	1.567	1.595	1.609	1.623	1.651	1.671	1.684	1.587	1.690	1.693		
14.0	1,540	1.567	1.595	1.609	1.623	1.651	1.671	1.684	1.687	1.690	1.693		
16.0	1.540	1.567	1.595	1.609	1.623	1.651	1.671	1.684	1.587	1.690	1.693		
18.0	1,540	1.567	1.595	1.609	1.623	1.651	1.671	1.684	1.587	1.690	1.691		
20.0	1.540	1.567	1.595	1.609	1.623	1.651	1.671	1.684	1.687	1.688	1.687		
22.0	1.540	1.567	1.595	1.609	1.623	1.651	1.671	1.684	1.584	1.683	1.682		
24.0	1.540	1.567	1.595	1.609	1.623	1.651	1.671	1.691	1.679	1.678	1.677		
26.0	1.540	1.567	1.595	1.609	1.623	1.651	1.671	1.676	1.574	1.673	1.672		
28.0	1.540	1.567	1.595	1.609	1.623	1.651	1.569	1.670	1.669	1.665	1.667		
30.0	1.540	1.567	1.595	1.609	1.623	1.651	1.660	1.665	1.658	1.656	1.662		
32.0	1.540	1.567	1.595	1.609	1.623	1.650	1.651	1.650	1.646	1.648	1.647		
34.0	1.540	1.567	1.595	1.609	1.623	1.638	1.636	1.635	1.634	1.634	1.633		
36.0	1.540	1.567	1.595	1.609	1.623	1.623	1.622	1.620	1.619	1.619	1.618		
38.0	1.540	1.567	1.595	1.609	1.609	1.608	1.607	1.605	1.604	1.604	1.604		
40.0	1.540	1.567	1.595	1.596	1.595	1.594	1.593	1.590	1.589	1.589	1.589		
42.0	1.540	1.567	1.583	1.582	1.581	1.580	1.577	1.574	1.573	1.574	1.574		
44.0	1.540	1.555	1.569	1.589	1.567	1.564	1.561	1.558	1.558	1.559			
46.0	1.528	1.542	1.556	1.553	1.552	1.549	1.545	1.542	1.542				
48.0	1.515	1.529	1.538	1.537	1.536	1.533	1.529	1.526					
50.0	1.502	1.514	1.523	1.522	1.520	1.517	1.513				l		
52.0	1.490	1.501	1.508	1.507	1.505	1.501					l		
54.0	1.479	1.466	1.493	1.492	1.489						l		
56.0	1.467	1.475	1.479	1.476									
58.0	1.456	1.462	1.464										
60.0	1.445	1.449				l					l		
62.0	1.434										l		



A330 AIRPLANE FLIGHT MANUAL

ROLLS ROYCE TRENT 772B ENGINE MANAGEMENT - GO-AROUND M = 0.225

TRENT772B		GO-AROU	ND EPR		AIR CO	OND ON MACH=.225						
CORRECTION		BLEED										
AIR CONDITIONS								O TO EPA				
NACELLE ANTI-I						READ AT TAT +1.20(C)						
NACELLE ANTI-I	CE AND WING	ANTI-ICE ON				<u> </u>	READ AT T	AT +2.40(C)				
TAT	PRESSURE ALTITUDE (FT)											
(C)	8000.	9000.	10000.	11000.	12000.	13000.	14000.	15000.	16000.0			
-60.0	1.693	1.709	1.723	1,723	1.723	1.723	1.722	1.723	1.724			
-8.0	1.693	1.709	1.723	1.723	1.723	1.723	1.722	1.723	1.724			
-6.0	1.693	1.709	1.723	1.723	1.723	1.723	1.722	1.723	1.724			
-4.0	1.693	1,709	1.723	1,723	1.723	1.723	1.722	1.723	1.724			
-2.0	1.693	1.709	1.723	1.723	1.723	1.723	1.722	1.723	1.714			
0.0	1.693	1.709	1.723	1.723	1.723	1.723	1.722	1.713	1.704			
2.0	1.693	1.709	1.723	1.723	1.723	1.723	1.712	1.703	1.694			
4.0	1.693	1.709	1.723	1.723	1.723	1.713	1.703	1.693	1.683			
6.0	1.693	1.709	1.723	1.723	1.713	1.703	1.692	1.682	1.672			
8.0	1.693	1.709	1.723	1.713	1.703	1.693	1.682	1.671	1.661			
10.0	1.693	1.709	1.713	1.703	1.693	1.682	1.671	1,660	1.649			
12.0	1.693	1.709	1.703	1.693	1.682	1.671	1.660	1.649	1.638			
14.0	1.693	1.701	1.693	1.582	1.671	1.550	1.649	1.538	1.627			
16.0	1.693	1.692	1.682	1.671	1.660	1.649	1.638	1.627	1.616			
18.0	1.691	1.684	1.671	1.660	1.649	1.638	1.528	1.617	1.605			
20.0	1.687	1.677	1.660	1.649	1.638	1.527	1.617	1.605	1.593			
22.0	1.682	1.669	1.649	1.638	1.627	1.617	1.606	1.594	1.582			
24.0	1.677	1.661	1.638	1.627	1.616	1.605	1.594	1.583	1.570			
26.0	1.672	1.653	1.627	1.616	1.605	1.594	1.583	1.571	1.559			
28.0	1.667	1.645	1.616	1.605	1.594	1.583	1.572	1.560	1000, 200			
30.0	1.662	1.632	1.605	1.594	1.583	1.572	1.561					
32.0	1.647	1.619	1.593	1.582	1.571	1.560		I				
34.0	1.633	1.606	1.582	1.571	1.560		l	l				
36.0	1.618	1.593	1.571	1.560			l	l				
38.0	1.604	1.580	1.559									
40.0	1.589	1.567										
42.0	1.574	1		I		l	I	I				
44.0		l		l		l	l	l				
46.0				1			l .	l				



PERFORMANCE ENGINE MANAGEMENT

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APPENDICES AND SUPPLEMENTS





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AIRPLANE FLIGHT MANUAL

GENERAL

Ident.: APP-NOI-00005206.0002002 / 18 NOV 13

APPROVED

Criteria: (330-223 or 330-243 or 330-321 or 330-322 or 330-323 or 330-341 or 330-342 or 330-343 or 330-200F)

Specific: FAA

NOISE CHARACTERISTICS

No determination has been made by the FAA that the noise levels of this aircraft are or should be acceptable or unacceptable for operation at, into, or out of any airport.

NOISE LEVELS

Noise levels shown in this supplement comply with Part 36. Appendix B. Stage 4 maximum noise level requirements and were obtained by analysis of approved data from noise tests conducted under the provisions of Part 36, Amendment 36-26. The noise measurement and evaluation procedures used to obtain these noise levels are considered by the FAA to be equivalent to the Chapter 4 noise level required by the International Civil Aviation Organization (ICAO) in Annex 16, Volume I, Appendix 2, Amendment 7, effective March 21, 2002. Identification of the maximum takeoff and landing weights applicable to a particular aircraft is provided in the LIMITATIONS chapter of this AFM (Refer to LIM-WGHT Weight Limitations).

NOISE CERTIFICATION PROCEDURES

Compliance with EASA CS -36, JAR 36, 14 CFR (FAR) Part 36, and ICAO Annex 16 included the following procedures:

- An all-engine takeoff configuration 1 + F was used with a constant climb speed equal to the all-engine operating speed at 35 ft, which is at least V2 + 10 kt and not greater than V2 + 20 kt, with a thrust cutback procedure initiated prior to over-flight of the flyover noise control point, with APU off, air conditioning system off, mid center of gravity and landing gear retracted
- Landing approach on a 3 ° glide slope, at a speed of VREF + 10 kt, was used with APU on, air conditioning system on, forward center of gravity, landing gear extended and configuration FULL.



APPENDICES AND SUPPLEMENTS EXTERNAL NOISE

EXTERNAL NOISE

Ident.: APP-NOI-00008555.0037001 / 25 JUL 14

APPROVED

Criteria: 330-243F

CONFIGURATION

Engines: Rolls Royce Trent 772B – 71 100 lb ideal sea level static thrust. Nacelle treatment: Basic configuration including inlet and fan duct treatments.

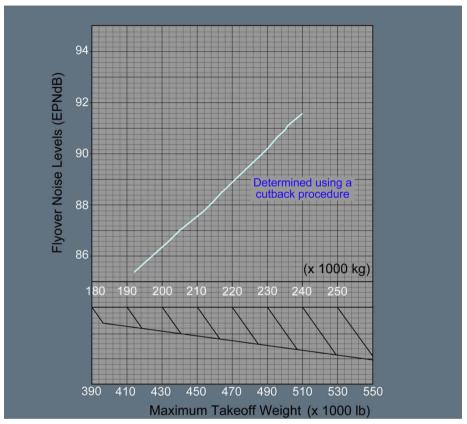
CERTIFICATED NOISE LEVELS

EASA CS -36, JAR 36, 14 CFR (FAR) Part 36 Stage 4, and ICAO Annex 16 Chapter 4 certificated noise levels are determined by entering the following graphs at the maximum weights defined in the LIMITATIONS chapter of this AFM (*Refer to LIM-WGHT Weight Limitations*).



A330 AIRPLANE FLIGHT MANUAL

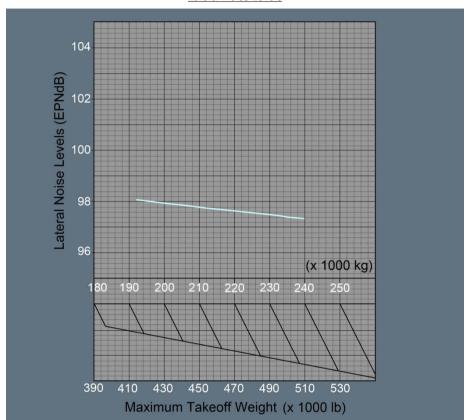
Flyover Noise Levels





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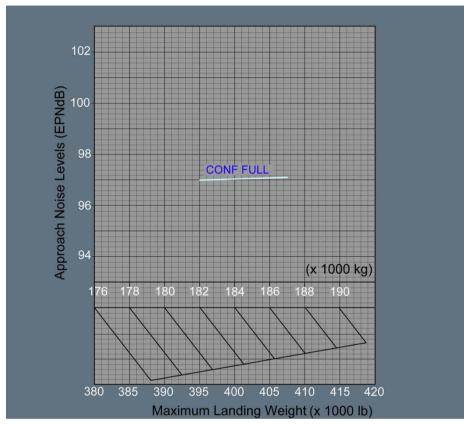
Lateral Noise Levels





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Approach Noise Levels





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APPENDICES AND SUPPLEMENTS DISPATCH WITH INOPERATIVE ITEMS

GENERAL

Ident.: APP-INOP-00005139.0001001 / 26 NOV 09

APPROVED

Criteria: A330

This supplement is applicable to dispatch the aircraft with inoperative items affecting the certified AFM performance.

The provision of performance data in this supplement does not constitute authorization to operate the aircraft with the specified items inoperative.

Unless amended in this supplement, all the chapters of this AFM remain applicable.

PERFORMANCE

Ident.: APP-INOP-00005537.0002001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

For takeoff, en route net flight path and landing performance determination, the Performance Engineer's Programs / AFM _OCTO approved FM module at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database.*

Select the relevant failure case in the SPECIAL CASES field of the input data for AFM performance calculation.

The following table summarizes all the permitted dispatch cases and gives the affected AFM performance:

	Dispatch Case	Affected Performance			
ATA 27	One or two pairs (surfaces 1 and 2) of spoilers inoperative in the retracted position	Accelerate Stop Distance (ASD) and decision speed limited by max brakes energy Landing distance			
AIAZI	Ground spoiler system inoperative	Accelerate Stop Distance (ASD) and decision speed limited by max brakes energy Landing distance			
ATA 32	One brake inoperative on one or both main landing gears	Accelerate Stop Distance (ASD) and decision speed limited by max brakes energy Landing distance			
ATA 32	One tachometer inoperative	Accelerate Stop Distance (ASD) and decision speed limited by max brakes energy Landing distance			
ATA 70	Ground idle system inoperative	Accelerate Stop Distance (ASD) Landing distance			



APPENDICES AND SUPPLEMENTS DISPATCH WITH INOPERATIVE ITEMS

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APPENDICES AND SUPPLEMENTS EXTENDED OPERATIONS (ETOPS)

GENERAL

Ident.: APP-ETOPS-00005538.0005002 / 18 NOV 13

APPROVED

Criteria: 330-200F Specific: FAA

This supplement is applicable to extended operations (ETOPS) as per FAA 14 CFR paragraph 121.161.

The type-design reliability and performance of this airplane-engine combination has been evaluated under 14 CFR 25.1535 and found suitable for 180 min extended operations (ETOPS) when the configuration, maintenance, and procedures standards contained in FAA approved Airbus ETOPS CMP document reference "LR2/FAA: 14 CFR 25.1535/CMP" at the latest applicable revision are

The actual maximum approved diversion time for this airplane may be less based on its most limiting system time capability.

This finding does not constitute operational approval to conduct ETOPS. Such authorization must be obtained by the operator from the appropriate authorities.

Unless amended in this supplement, all the chapters of this AFM remain applicable.

LIMITATIONS

Ident.: APP-ETOPS-00005539.0006002 / 18 NOV 13

APPROVED

Criteria: 330-200F Specific: FAA

Maximum diversion time at planning may not exceed 180 min at one engine cruising speed, under standard conditions and still air.

The time capability of the cargo fire suppression system is 260 min.

The time capability of all the other ETOPS significant systems exceeds 195 min.

PROCEDURES

Ident.: APP-ETOPS-00005541.0001002 / 26 NOV 09

APPROVED

Criteria: A330 Specific: FAA

The procedures given in the FAA approved Airbus ETOPS CMP document are applicable.

- In addition to diversion cases covered in EMERGENCY PROCEDURES and ABNORMAL PROCEDURES chapters of this AFM (LAND ASAP, LAND ASAP and fire procedures), diversion becomes mandatory during ETOPS in the case of:
 - Only one generator (either one IDG, APU GEN or CSM/G) remaining available following multiple failure. or
 - Only one main generator (either one IDG or APU GEN) remaining available and low level or low pressure or overheat on green hydraulic circuit.



APPENDICES AND SUPPLEMENTS EXTENDED OPERATIONS (ETOPS)

APPROVED

• In the case of failure of one engine or one IDG:

Start APU and use the APU electrical channel.

PERFORMANCE

Ident.: APP-ETOPS-00005542.0001001 / 19 JUN 13

Criteria: A330

For en route net flight path performance determination associated with the speed used for chosen diversion procedure, the Performance Engineer's Programs/AFM_OCTO approved FM module at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database*.

The following in-flight performance information are provided in the FCOM One engine inoperative chapter (*Refer to FCOM/PER-OEI-GEN-05 INTRODUCTION*):

- Deterioration of performance due to ice accretion on non-heated structure
- Fuel flow



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

GENERAL

GENERAL

Ident.: APP-N1-GEN-00005564.0001001 / 16 APR 10

APPROVED

Criteria: ((330-223 or 330-223F or 330-321 or 330-322 or 330-323 or 330-341 or 330-342) or ((330-243 or 330-243F or 330-343) and 46874))

This supplement is applicable to dispatch the aircraft with both FADEC in rated N1 mode. Unless amended in this supplement, all the chapters of this AFM remain applicable.



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

GENERAL

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 TPA A330-243F FLEET
 APP-N1-GEN P 2/2

 AFM
 18 SEP 12



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

LIMITATIONS

LIMITATIONS

Ident.: APP-N1-LIM-00005565.0001001 / 19 JUN 13

APPROVED

Criteria: ((330-223 or 330-223F or 330-321 or 330-322 or 330-323 or 330-341 or 330-342) or ((330-243 or 330-243F or 330-343) and 46874))

Reduced thrust takeoff is not allowed.

Dispatch in degraded N1 mode (unrated N1 mode) is not allowed.

Note: Autothrust is inoperative.



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

LIMITATIONS

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 TPA A330-243F FLEET
 APP-N1-LIM P 2/2

 AFM
 22 JAN 14



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

NORMAL PROCEDURES

TAKEOFF PROCEDURE

Ident.: APP-N1-NORM-00005566.0003001 / 16 APR 10

APPROVED

Criteria: ((330-243 or 330-243F or 330-341 or 330-342 or 330-343) and 46874)

Turn on both engines N1 mode.

Set slats, flaps and horizontal stabilizer as required.

Perform flight controls checks using the pedals and each sidestick.

Arm ground spoilers and select maximum autobrake.

■ If crosswind at or below 20 kt and no tailwind:

Release brakes with stick half forward.

Apply 50 % N1 on both engines.

When thrust is stable, increase thrust progressively to get TOGA thrust at 40 kt ground speed, whilst maintaining stick half forward up to 80 kt.

■ If crosswind above 20 kt or if tailwind:

Release brakes with stick full forward.

Apply 50 % N1 on both engines.

When thrust is stable, increase thrust progressively to get TOGA thrust at 40 kt ground speed, whilst maintaining stick close to full forward up to 80 kt.

Then release stick progressively to reach neutral at 100 kt.

Check takeoff N1 is set prior to reaching 80 kt.

At VR:

Rotate the aircraft with a positive sidestick input to achieve a normal and continuous rotation rate to the pitch attitude necessary to maintain an airspeed at or above V2 + 10 kt.

• Once airborne and with a positive rate of climb:

Retract landing gear.

SRS guidance can be followed when FD pitch order has stabilized.

Disarm ground spoilers.

At safe height:

Perform acceleration and slats/flaps retraction.

Note: If takeoff is performed with packs off, pack 1 should be selected ON after thrust reduction to CLB.



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

NORMAL PROCEDURES

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 TPA A330-243F FLEET
 APP-N1-NORM P 2/2

 AFM
 18 SEP 12



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

PERFORMANCE

PERFORMANCE

Ident.: APP-N1-PERF-00005567.0001001 / 16 APR 10

APPROVED

Criteria: ((330-223 or 330-223F or 330-321 or 330-322 or 330-323 or 330-341 or 330-342) or ((330-243 or 330-243F or 330-343) and 46874))

For takeoff, en route net flight path and landing performance determination, the Performance Engineer's Programs / AFM_OCTO approved FM module at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database*.

Select N1 mode in the SPECIAL CASES field of the input data for AFM performance calculation.



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

PERFORMANCE

ENGINE MANAGEMENT TAKEOFF THRUST

Ident.: APP-N1-PERF-00005568.0003001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-343)

APPROVED

ROLLS ROYCE TRENT 772B - TAKEOFF N1 (%) - RATED N1 MODE

TRENT77	2B	TAKE-OF	F N1				NO AIR	BLEED		MA	CH=.00	
ORRECTI	ONS FOR	AIR BLEE	D									
UR CONDITI	NING ON							ADD -0.4	00 TO N1			
ACELLE AN	TI-ICE ON					ADD -0.30 TO N1 ABOVE CORNER POINT TEMPERATURE						
NACELLE AN	TI-ICE AND 1	WING ANTI-IC	E ON			ADD -0.60 TO N1 ABOVE CORNER POINT TEMPERATURE						
OAT					PRESSU	RE ALTIT	UDE (FT)					
(C)	-2000.	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	\$000.	
-60.0	71.6	72.8	74.0	74.6	75.1	76.4	77.2	77.7	77.8	77.9	78.0	
-12.0	79.2	80.6	81.9	82.6	83.2	84.5	85.5	86.0	86.1	86.2	86.3	
-8.0	79.8	81.2	82.6	83.2	83.8	85.2	86.1	86.7	86.8	86.9	87.0	
-4.0	80.4	81.8	83.2	83.8	84.4	85.6	86.8	87.3	87.4	87.5	87.7	
0.0	81.0	82.4	83.8	84.4	85.1	86.4	87.4	88.0	88.1	88.2	88.3	
4.0	81.5	83.0	84.4	85.0	85.7	87.1	88.0	88.6	88.7	88.8	88.9	
B.0	82.2	83.6	85.0	85.7	86.3	87.7	88.7	89.2	89.4	89.5	89.6	
10.0	82.5	83.9	85.3	86.0	86.6	88.D	89.0	89.6	89.7	89.8	89.9	
12.0	82.8	84.2	85.6	86.3	86.9	88.3	89.3	89.9	90.0	90.1	90.2	
14.0	83.1	84.5	85.9	86.6	87.2	88.5	89.6	90.2	90.3	90.4	90.5	
16.0	83.4	84.8	85.2	86.9	87.5	88.9	89.9	90.5	90.6	90.7	90.7	
18.0	83.7	85.1	86.5	87.2	87.8	89.2	90.2	90.8	90.9	90.9	90.8	
20.0	83.9	85.4	86.8	87.5	88.1	89.6	90.6	91.1	91.1	91.0	91.0	
22.0	84.2	85.7	87.1	87.8	88.4	89.9	90.9	91.2	91.2	91.1	91.1	
24.0	84.5	86.0	67.4	88.1	88.7	90.2	91.2	91.3	91.3	91.2	91.3	
26.0	84.8	86.2	87.7	88.4	89.0	90.5	91.2	91.4	91.2	91.1	91.4	
28.0	85.1	86.5	88.0	88.7	89.3	90.B	91.1	91.2	90.9	91.0	91.2	
30.0	85.4	86.8	88.3	88.9	89.6	90.7	90.8	90.7	90.6	90.8	90.7	
32.0	85.6	87.1	88.6	89.2	89.9	90.3	90.3	90.2	90.3	90.3	90.3	
34.0	85.9	87.4	88.9	89.5	89.8	89.8	89.8	89.8	89.7	89.7	89.8	
36.0	86.2	87.7	89.1	89.5	89.4	89.4	89.3	89.2	89.2	89.2	89.2	
38.0	86.5	0.88	89.1	89.0	88.9	88.8	88.7	88.7	88.7	88.7	88.7	
40.0	86.8	87.9	88.7	88.6	88.4	88.3	88.2	88.1	88.1	88.1		
42.0	86.6	87.4	88.3	88.1	87.8	87.7	87.6	87.5	87.5			
44.0	86.1	87.0	87.8	87.5	87.2	87.2	87.1	86.9				
46.0	85.8	86.6	87.2	86.9	86.7	86.5	86.5					
48.0	85.4	86.1	86.7	86.4	86.1	86.0						
50.0	85.0	85.7	85.2	85.9	85.5					l		
52.0	84.6	85.2	85.6	85.3								
54.0	84.2	84.7	85.0									
56.0	83.9	84.2										
58.0	83.5											



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

A330 AIRPLANE FLIGHT MANUAL

PERFORMANCE

ROLLS ROYCE TRENT 772B - TAKEOFF N1 (%) - RATED N1 MODE

TRENT772	3	TAKE-OF	F N1		NO AL	IR BLEED MACH=.000							
CORRECTIO	NS FOR AIR	BLEED											
AIR CONDITION	ING ON						ADD -0.7	00 TO N1					
NACELLE ANTI-	ICE ON					ADD -0.40 TO N1 ABOVE CORNER POINT TEMPERATURE							
NACELLE ANTI-	CE AND WING	ANTI-ICE ON				ADO -0.70 T	O NI ABOVE CO	RNER POINT T	EMPERATURE				
OAT	PRESSURE ALTITUDE (FT)												
(C)	8000.	9000.	10000.	11000.	12000.	13000.	14000.	15000.	16000.				
-60.0	78.0	78.5	78.9	79.0	79.0	79.1	79.1	79.2	79.3				
-26.0	84.0	84.5	85.0	85.0	85.1	85.1	85.2	85.3	85.4				
-22.0	84.7	85.2	85.6	85.7	85.8	85.8	85.9	86.0	86.1				
-18.0	85.3	85.9	86.3	86.4	86.4	86.5	85.6	86.7	86.8				
-14.0	86.0	85.6	87.0	87.1	87.1	87.2	87.2	87.3	87.5				
-10.0	86.7	87.2	87.7	87.7	87.8	87.B	87.9	88.D	88.1				
-6.0	87.3	87.9	88.3	86.4	88.5	88.5	88.6	88.7	88.6				
-4.0	87.7	88.2	88.7	88.7	88.8	88.8	88.9	88.6	88.4				
-2.0	88.0	88.6	89.0	89.0	89.1	89.2	89.1	88.5	88.2				
0.0	88.3	88.9	89.3	89.4	89.4	89.3	88.9	88.5	88.2				
2.0	88.6	89.2	89.6	89.7	89.6	89.2	88.8	88.5	88.2				
4.0	88.9	89.5	90.0	89.9	89.5	89.1	88.7	88.4	88.1				
6.0	89.3	89.9	90.1	89.8	89.4	89.0	88.7	88.4	88.1				
8.0	89.6	90.2	90.0	89.7	89.3	89.0	68.6	88.3	88.0				
10.0	89.9	90.4	90.0	89.6	89.2	88.9	88.6	88.3	87.9				
12.0	90.2	90.3	89.9	89.5	89.1	88.8	88.5	88.2	87.8				
14.0	90.5	90.3	89.8	89.4	89.0	88.7	88.4	88.0	87.6				
16.0	90.7	90.3	89.6	89.2	88.9	88.5	88.2	87.8	87.3				
18.0	90.8	90.3	89.5	89.1	88.7	88.3	88.0	87.6	87.1				
20.0	91.0	90.3	89.3	88.9	88.5	88.1	87.7	87.3	86.8				
22.0	91.1	90.3	89.0	88.6	88.2	87.9	87.5	87.1	86.5				
24.0	91.3	90.2	88.8	86.4	88.0	87.6	87.2	86.8					
26.0	91.4	90.0	88.5	88.1	87.7	87.3	87.0	(5000)	l				
28.0	91.2	89.6	88.2	87.8	87.4	87.0			l				
30.0	90.7	89.2	87.9	87.5	87.1								
32.0	90.3	88.8	87.6	87.2									
34.0	89.8	88.4	87.2		l		I						
36.0	89.2	88.0	1000		l		I						
38.0	88.7		1		l		1						
40.0									I				

Note: The corner point temperatures for takeoff are:

- ISA +22 °C for altitudes below 2 000 ft
- ISA +15 °C for altitudes between 5 000 ft and 8 000 ft
- ISA +10 °C for altitudes above 10 000 ft.

Between these altitude values, the variation is linear.



Criteria: (330-243 or 330-243F or 330-343)

APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

PERFORMANCE

ENGINE MANAGEMENT MAXIMUM CONTINUOUS THRUST

Ident.: APP-N1-PERF-00005569.0003001 / 16 APR 10

APPROVED

ROLLS ROYCE TRENT 772B - MAXIMUM CONTINUOUS N1 (%) - RATED N1 MODE

TRENT77	72B MAXIMUM CONTINUOUS N1						AIR CON	D ON (*)		VC	=230 K
CORRECTI	ONS FOR	AIR BLEE	D								
AIR CONDITI	ONING OFF							ADD 0.8	50 TO N1		
NACELLE ANTI-ICE ON					A	DD -0.40 TO I	I ABOVE CO	ANER POINT	TEMPERATU	RE	
NACELLE AN	TI-ICE AND	WING ANTI-IO	E ON			A	DD -1.10 TO I	I ABOVE CO	ANER POINT	TEMPERATU	RE
TAT	PRESSURE ALTITUDE (FT)										
(C)	-1000.	3000.	7000.	11000.	15000.	19000.	23000.	27000.	31000.	35000.	39000.
-60.0	68.6	70.8	73.2	76.2	78.7	78.5	77.8	78.4	79.5	81.1	80.9
-46.0	70.8	73.1	75.6	78.6	81.3	81.0	80.3	80.9	B2.1	83.7	83.5
-42.0	71.4	73.7	76.2	79.3	82.0	81.7	81.0	B1.6	82.8	84.5	84.2
-38.0	72.0	74.4	76.9	80.0	82.7	82.5	81.7	B2.3	83.6	85.2	84.9
-34.0	72.6	75.0	77.5	80.7	83.4	83.2	82.4	83.0	84.3	85.9	85.7
-30.0	73.2	75.6	78.2	81.3	84.1	83.8	83.1	63.7	85.0	86.6	86.4
-26.0	73.8	76.2	78.8	82.0	84.8	84.5	83.8	84.4	85.7	87.3	87.1
-22.0	74.4	76.8	79.5	82.7	85.5	85.2	84.5	85.1	86.3	87.6	87.8
-18.0	75.0	77.5	80.1	83.3	86.1	85.9	85.1	85.7	87.0	87.4	87.6
-14.0	75.6	78.1	80.7	84.0	86.8	86.6	85.8	86.4	86.6	86.8	87.0
-10.0	76.2	78.7	81.3	84.6	87.5	87.2	86.5	86.5	86.0	86.2	86.3
-6.0	76.8	79.3	81.9	85.3	88.1	87.9	87.1	85.9	85.3	85.5	85.6
-2.0	77.3	79.9	82.6	85.9	88.8	88.5	86.5	85.3	84.6	84.8	84.9
2.0	77.9	80.4	83.2	86.5	89.5	88.6	85.9	84.6	83.9	84.0	84.1
6.0	78.5	B1.0	83.8	87.2	90.1	88.1	85.3	83.9	83.2	83.2	83.3
10.0	79.0	81.6	84.4	87.8	89.7	87.5	84.6	83.2	82.5	82.5	82.6
14.0	79.6	82.2	85.0	88.1	89.0	86.8	83.9	82.6	82.0		
18.0	80.1	62.7	85.5	87.5	88.4	86.1	83.3	82.1			l
22.0	80.7	B3.3	86.1	86.9	87.7	85.4	82.8				l
26.0	81.2	63.9	85.8	86.3	87.0	84.8					
30.0	81.8	84.4	85.3	85.6	86.2	84.1					
34.0	82.3	84.5	84.7	84.9	85.4						
38.0	82.9	83.9	84.1	84.4							
42.0	82.6	B3.3	83.5	83.8							
46.0	82.0	B2.8	83.0								
52.0	81.2	82.0	lime year								
56.0	80.6	81.5									
60.0	80.1										
64.0	79.7										
68.0	40.52731										l

* One engine inoperative

One pack operative on remaining engine.

Note: The corner point temperatures for maximum continuous are:

- ISA +15 °C for altitudes below 5 000 ft
- ISA +10 °C for altitudes above 10 000 ft.

Between both altitude values, the variation is linear.



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

PERFORMANCE

ENGINE MANAGEMENT GO-AROUND THRUST

Ident.: APP-N1-PERF-00005570.0003001 / 16 APR 10

APPROVED

Criteria: (330-243 or 330-243F or 330-343)

ROLLS ROYCE TRENT 772B - GO-AROUND N1 (%) - RATED N1 MODE

FRENT772B GO-AROUND N1							AIR CO	ND ON		MA	CH=.2
CORRECT	ONS FOR	AIR BLEE	D								
IR CONDITI									00 TO N1		
NACELLE ANTI-ICE ON					A	DO -0.30 TO I	NI ABOVE CO	RNER POINT	TEMPERATU	RE	
ACELLE AN	TI-ICE AND	WING ANTHO	E ON			A	DD -0.60 TO I	NI ABOVE CO	RNER POINT	TEMPERATU	RE
TAT	PRESSURE ALTITUDE (FT)										
(C)	-2000.	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000
-60.0	72.1	73.4	74.6	75.2	75.8	77.0	77.9	78.5	78.6	78.7	78.9
-12.0	79.9	81.2	82.5	83.2	83.9	85.3	86.2	86.8	87.0	87.2	87.3
-8.0	80.5	81.8	83.2	63.9	84.5	85.9	86.9	87.5	87.7	87.8	88.0
-4.0	81.1	82.4	83.8	84.5	85.2	86.6	87.5	88.2	88.3	88.5	88.5
0.0	81.7	83.0	84.4	85.1	85.8	87.2	88.2	88.8	89.0	89.1	89.3
4.0	82.3	83.7	85.0	85.7	86.4	87.8	88.8	89.5	89.6	89.8	90.0
8.0	82.9	84.3	85.6	86.4	87.1	88.5	89.5	90.1	90.3	90.4	90.5
10.0	83.2	84.6	85.9	86.7	87.4	88.8	89.8	90.4	90.6	90.8	90.9
12.0	83.4	84.9	86.3	87.0	87.7	89.1	90.1	90.7	90.9	91.1	91.2
14.0	83.7	85.1	86.6	87.3	88.0	89.4	90.4	91.1	91.2	91.4	91.6
16.0	84.0	85.4	86.9	87.6	88.3	89.7	90.7	91.4	91.5	91.7	91.9
18.0	84.3	85.7	87.2	87.9	88.6	90.0	91.1	91.7	91.9	92.0	92.1
20.0	84.6	86.0	87.5	88.2	88.9	90.3	91.4	92.0	92.2	92.2	92.2
22.0	84.9	86.3	87.8	88.5	89.2	90.6	91.7	92.3	92.4	92.3	92.2
24.0	85.2	86.6	88.D	88.8	89.5	90.9	92.0	92.5	92.4	92.3	92.3
26.0	85.5	86.9	88.3	89.1	89.8	91.3	92.3	92.5	92.5	92.4	92.3
28.0	85.8	87.2	88.6	89.4	90.1	91.6	92.5	92.6	92.5	92.3	92.4
30.0	86.0	87.5	88.9	89.7	90.4	91.9	92.3	92.6	92.2	92.1	92.5
32.0	86.3	87.8	89.2	90.0	90.7	92.1	92.2	92.1	91.9	92.0	92.0
34.0	86.6	88.1	89.5	90.3	91.0	91.8	91.7	91.6	91.6	91.5	91.5
36.0	86.9	88.3	89.6	90.5	91.3	91.3	91.2	91.1	91.1	91.1	91.0
38.0	87.2	88.6	90.1	90.8	90.8	90.8	90.7	90.6	90.6	90.5	90.6
40.0	87.5	88.9	90.4	90.4	90.4	90.3	90.3	90.1	90.0	90.1	90.1
42.0	87.7	89.2	90.0	90.0	89.9	89.9	89.7	89.5	89.5	89.5	89.6
44.0	88.0	88.8	89.6	89.6	89.5	89.3	89.1	89.0	89.0	89.0	1
46.0	87.7	88.4	89.2	69.0	88.9	88.8	88.6	88.4	88.4		
48.0	87.2	88.0	88.5	88.4	88.4	88.2	88.0	87.8	11.510		I
50.0	86.8	87.4	87.9	87.9	87.8	87.6	87.4				I
52.0	86.4	87.0	87.4	87.3	87.2	87.0	INECONI				I
54.0	86.0	86.5	86.9	86.7	86.6	V.EG(647)					
56.0	85.6	86.0	86.3	86.1							
58.0	85.2	85.5	85.7			l					I
60.0	84.8	85.0		l		l					I
62.0	84.4			l		l		l	l .	l	I



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

PERFORMANCE

ROLLS ROYCE TRENT 772B - GO-AROUND N1 (%) - RATED N1 MODE

TRENT772B		GO-AROU	ND N1		AIR C	COND ON MACH=.225				
CORRECTIO	NS FOR AIR	BLEED								
AIR CONDITION	ING OFF						ADD 0.7	00 TO N1		
NACELLE ANTI-ICE ON				ADD -0.40 T	O N1 ABOVE CO	ANER POINT TO	EMPERATURE			
NACELLE ANTI-	CE AND WING	ANTI-ICE ON				ADD -0.70 T	O N1 ABOVE CO	MNER POINT TO	EMPERATURE	
TAT										
(C)	8000.	9000.	10000.	11000.	12000.	13000.	14000.	15000.	16000.	
-60.0	78.9	79.6	80.3	90.3	80.3	80.2	80.2	80.2	80.3	
-26.0	84.9	85.7	86.4	96.4	86.4	86.4	86.4	86.4	86.4	
-22.0	85.6	86.4	87.1	87.1	87.1	87.1	87.1	87.1	87.1	
-18.0	86.3	87.1	87.8	87.8	87.8	87.8	87.8	87.8	87.8	
-14.0	87.0	87.8	88.5	B8.5	88.5	88.5	88.5	88.5	88.5	
-10.0	87.7	88.4	89.2	89.2	89.2	89.2	89.1	89.2	89.2	
-6.0	88.3	89.1	89.9	69.9	89.8	89.8	89.8	89.8	89.9	
-4.0	88.6	89.4	90.2	90.2	90.2	90.2	90.1	90.2	90.2	
-2.0	89.0	89.8	90.5	90.5	90.5	90.5	90.5	90.5	90.0	
0.0	89.3	90.1	90.9	90.9	90.8	90.8	90.8	90.3	89.8	
2.0	89.6	90.4	91.2	91.2	91.2	91.2	90.6	90.1	89.6	
4.0	90.0	90.7	91.5	91.5	91.5	91.0	90.4	89.9	89.4	
6.0	90.3	91.1	91.9	91.9	91.3	90.8	90.2	89.7	89.2	
8.0	90.6	91.4	92.2	91.6	91.1	90.6	90.0	89.5	88.9	
10.0	90.9	91.7	92.0	91.4	90.9	90.3	89.8	89.2	88.7	
12.0	91.2	92.1	91.8	91.2	90.7	90.1	89.5	89.0	88.4	
14.0	91.6	92.0	91.5	91.0	90.4	89.9	89.3	88.8	88.2	
16.0	91.9	91.8	91.3	90.7	90.2	89.6	89.1	88.5	87.9	
18.0	92.1	91.7	91.1	90.5	89.9	89.4	88.8	88.3	87.6	
20.0	92.2	91.7	90.8	90.2	89.7	89.1	88.6	0.88	87.4	
22.0	92.2	91.5	90.5	90.0	89.4	88.9	88.3	87.7	87.1	
24.0	92.3	91.4	90.3	89.7	89.2	88.6	88.0	87.4	86.8	
26.0	92.3	91.3	90.0	89.4	88.9	66.3	87.7	87.1	86.5	
28.0	92.4	91.2	89.7	89.2	88.6	88.0	87.4	86.8		
30.0	92.5	90.9	89.4	88.9	88.3	87.7	87.1			
32.0	92.0	90.5	89.1	88.6	88.0	87.4				
34.0	91.5	90.1	88.8	88.3	87.7	- 550 A VIII	I	I	l	
36.0	91.0	89.7	88.5	87.9	1950 570	I	I	I	l	
38.0	90.6	89.3	88.2		ı	l	I	I	l	
40.0	90.1	88.9								
42.0 44.0 46.0	89.6									

Note: The corner point temperatures for go-around are:

- ISA +22 °C for altitudes below 2 000 ft
- ISA +15 °C for altitudes between 5 000 ft and 8 000 ft
- ISA +10 °C for altitudes above 10 000 ft.

Between these altitude values, the variation is linear.



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

APPENDICES AND SUPPLEMENTS

APPENDICES AND SUPPLEMENTS

Ident.: APP-N1-APP-00005571.0001001 / 16 APR 10
Criteria: ((330-223 or 330-223F or 330-321 or 330-322 or 330-323 or 330-341 or 330-342) or ((330-243 or 330-243F or 330-343) and 46874))

The combination with the following supplement is not allowed:

- Derated Takeoff (if applicable).



APPENDICES AND SUPPLEMENTS DISPATCH WITH BOTH FADEC IN RATED N1 MODE

APPENDICES AND SUPPLEMENTS

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 TPA A330-243F FLEET
 APP-N1-APP P 2/2

 AFM
 18 SEP 12



APPENDICES AND SUPPLEMENTS TAWS - GPWS

A330
AIRPLANE FLIGHT MANUAL

GENERAL

Ident.: APP-TAWS-00005590.0001001 / 25 JUL 14 Criteria: (A330 and (46324 or 52992 or 53919 or 58449)) **APPROVED**

This supplement is applicable to aircraft fitted with the Terrain Awareness Warning System (TAWS) T2CAS, or with TAWS T3CAS, or with Enhanced Ground Proximity Warning System (EGPWS).

A list of areas where no terrain data are available along the scheduled route should be made available to the flight crew.

Approval of TAWS predictive functions of T2CAS or T3CAS, or of EGPWS enhanced function is based on the assumption that TAWS database (excluding Performance database) are compliant with DO-200A DPAL2.

Unless amended in this supplement, all the chapters of this AFM remain applicable.



APPENDICES AND SUPPLEMENTS TAWS - GPWS

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 TPA A330-243F FLEET
 APP-TAWS P 2/2

 AFM
 17 SEP 14

MASTER CONFIGURATION DEVIATION LIST





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MASTER CONFIGURATION DEVIATION LIST PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
MCDL-PLP-TOC		1	00F101AD001/C00: Deletion of MCDL item 51-01
STRUCTURE			Documentation update: Deletion of the "FP02580 Radome Conducting Strip" table of content entry.
			Documentation update: Deletion of the "00009050.0001001 Radome Conducting Strip" documentary unit.
			Documentation update: Deletion of the "00009051.0001001 Illustration Radome Conducting Strip" documentary unit.



MASTER CONFIGURATION DEVIATION LIST PRELIMINARY PAGES

SUMMARY OF HIGHLIGHTS

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MASTER CONFIGURATION DEVIATION LIST GENERAL

INTRODUCTION

INTRODUCTION

Ident.: TDU / MCDL-GEN-INTR-00017267.0001001 / 22 MAR 16

APPROVED

Criteria: A330

Impacted DU: 00008851 Introduction

Belongs to TR692 Issue 1

Operation of the aircraft without certain secondary airframe and engine parts is possible as indicated in this Master Configuration Deviation List (MCDL). Any part not included in this list must be considered as necessary.

It is important to repair the aircraft at the first airport where repairs or replacements may reasonably be made, since additional malfunctions may require the aircraft to be taken out of service. Letter (m) associated to an item indicates that maintenance action is necessary to permit flight with these parts missing. Refer to the related section of the Aircraft Maintenance Manual (AMM) for this information.

It is the Operator's responsibility to:

- Define the task sharing between the flight and maintenance crews
- Ensure that all maintenance procedures are performed.

When items require high-speed tape, the MCDL dispatch conditions are assessed considering that the tape is in the correct position and in good condition. The Operator must use an appropriate process to ensure that the dispatch conditions are satisfied. The Operator must define this process in accordance with its specific operations.

<u>Note:</u> Unless otherwise specified in the MCDL item or in the relevant AMM task, a visual inspection of the high-speed tape must be made at a regular interval that must not exceed 3 calendar days.

Note: 1. The sign "-" in "Quantity installed" column indicates that the quantity is variable.

- 2. The illustrations included in this MCDL are given only for information to facilitate location of missing items and must not be considered as approved data.
- 3. Items numbering is used for item identification only. As a consequence it may appear some gaps in the item numbering sequence of a given aircraft. In such a case, completeness of the MCDL may be checked by referring to the LEDU.

INTRODUCTION

Ident.: MCDL-GEN-INTR-00008851.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Impacted by TDU: 00017267 Introduction

Operation of the aircraft without certain secondary airframe and engine parts is possible as indicated in this Master Configuration Deviation List (MCDL). Any part not included in this list must be considered as necessary.



MASTER CONFIGURATION DEVIATION LIST GENERAL

INTRODUCTION

It is important to repair the aircraft at the first airport where repairs or replacements may reasonably be made, since additional malfunctions may require the aircraft to be taken out of service.

Letter (m) associated to an item indicates that some maintenance action is necessary to permit flight with these parts missing. Refer to the related section of the Aircraft Maintenance Manual (AMM) for this information.

When a maintenance action requires high speed tape application, it is necessary to check before each flight that the tape is still in position and in good condition.

Note:

- 1. The sign "-" in "Quantity installed" column indicates that the quantity is variable.
- 2. The illustrations included in this MCDL are given only for information to facilitate location of missing items and must not be considered as approved data.
- 3. Items numbering is used for item identification only. As a consequence it may appear some gaps in the item numbering sequence of a given aircraft. In such a case, completeness of the MCDL may be checked by referring to the LEDU.



MASTER CONFIGURATION DEVIATION LIST GENERAL

LIMITATIONS

A330 AIRPLANE FLIGHT MANUAL

Criteria: A330

LIMITATIONS

Ident.: MCDL-GEN-LIM-00008852.0001001 / 26 NOV 09

APPROVED

No more than one part of one system may be missing except if otherwise specified. Parts of different systems may be simultaneously missing, unless otherwise specified in this list.

When missing part introduces additional limitation(s), this limitation is indicated in the dispatch condition of the item of this list. This limitation comes in addition to the ones of the LIMITATIONS chapter of this AFM. This limitation must be clearly indicated by a placard on the pilot's instrument panel.

When an MCDL dispatch condition refers to the MMEL, the minimum number of equipment required for dispatch is the most limiting of the two documents.



MASTER CONFIGURATION DEVIATION LIST GENERAL

LIMITATIONS

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MASTER CONFIGURATION DEVIATION LIST GENERAL

PERFORMANCE

PERFORMANCE DETERMINATION METHOD

Ident.: MCDL-GEN-PERF-00008853.0001001 / 26 NOV 09

APPROVED

Criteria: A330

There are two approved ways of determining the performance impact of CDL items missing:

- Using MCDL chapter of the AFM, or
- Using AFM OCTO software.

The MCDL performance penalties associated to the missing items when published in this chapter are envelope penalties. More accurate penalties can be determined by using AFM_OCTO software. According to the operations, operators can select the most adequate method.

If no performance data are available in AFM_OCTO for a given item listed in this MCDL chapter, the penalties published in this MCDL chapter must be used.

PERFORMANCE PENALTIES PUBLISHED IN THE AIRPLANE FLIGHT MANUAL MCDL CHAPTER

Ident.: MCDL-GEN-PERF-00008854.0001001 / 26 NOV 09

APPROVED

Criteria: A330

Performance penalties are cumulative unless specific penalties for particular combinations of missing items are indicated.

These takeoff, en route and landing penalties apply to the most limiting corresponding weight.

If performance penalties are not indicated for removed items, no more than three of such items can be missing without taking further penalty. If more than three of such items are missing together, the following performance penalties are applicable per additional missing item:

- Takeoff and approach climb performance limiting weights are reduced by 50 kg (111 lb)
- En route performance limiting weight is reduced by 120 kg (265 lb) (i.e. corresponding to a 60 ft decrease of en route net ceiling).



MASTER CONFIGURATION DEVIATION LIST GENERAL

PERFORMANCE

PERFORMANCE PENALTIES CALCULATED WITH AFM OCTO SOFTWARE

Ident.: MCDL-GEN-PERF-00008855.0001001 / 19 JUN 13 Criteria: A330 APPROVED

The takeoff, approach climb and en route performance with MCDL items missing can be determined by selecting the missing items in the "CDL item..." menu of the AFM_OCTO interface, using the database given in PERFORMANCE chapter (*Refer to PERF-OCTO Performance Database*) of this AFM associated to:

- the CDL DATA file at issue 6.0 or higher, using AFM_OCTO approved FM module at the revision 26 or higher, or
- the CDLA330.cdl file at issue 1 or higher using AFM_OCTO approved FM module at the revision 31 or higher.

Items for which no performance penalty is indicated in this MCDL chapter are referenced as negligible items. Select the number of negligible items in the "CDL item..." menu to determine performance impact when four or more of such items are missing.

CAUTION

The most limiting performance between the one computed with items missing and the one computed without item missing must be used.



MASTER CONFIGURATION DEVIATION LIST AIR CONDITIONING

RAM AIR INI FT FI AP

21-01	Ram Air Inlet Flap
-------	--------------------

Ident.: MCDL-21-01-00009315.0001001 / 19 JUN 13 Criteria: A330 **APPROVED**

21-01	Quantity installed
RAM AIR INLET FLAP	2

(m) Refer to AMM Task 21-53-00-040-808

All may be missing.

Note: 1. May be combined with MCDL item 21-02 (Refer to 21-02 Ram Air Outlet Flap) on one pack only.

2. System performance in heating mode will be decreased.

Performance:

The following performance penalties are applicable per missing inlet flap:

- Takeoff and approach climb performance limiting weights are reduced by 343 kg (757 lb)
- En route performance limiting weight is reduced by 680 kg (1 500 lb)
- Fuel consumption is increased by 0.50 %.

When combined with MCDL item 21-02 (*Refer to 21-02 Ram Air Outlet Flap*) of the same pack, the following performance penalties are applicable per affected pack:

- Takeoff and approach climb performance limiting weights are reduced by 515 kg (1 136 lb)
- En route performance limiting weight is reduced by 1 020 kg (2 249 lb)
- Fuel consumption is increased by 0.72 %.

Refer to MCDL-21-01 Illustration Ram Air Inlet Flap



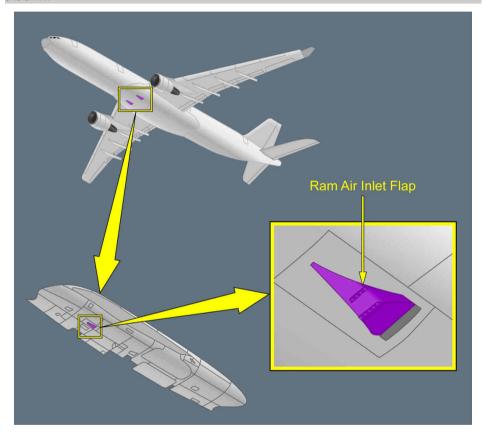
MASTER CONFIGURATION DEVIATION LIST AIR CONDITIONING

RAM AIR INLET FLAP

ILLUSTRATION RAM AIR INLET FLAP

Ident.: MCDL-21-01-00009316.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 21-01 Ram Air Inlet Flap.



MASTER CONFIGURATION DEVIATION LIST AIR CONDITIONING

A330
AIRPLANE FLIGHT MANUAL

RAM AIR OUTLET FLAP

21-02	Ram Air Outlet Flap
-------	---------------------

Ident.: MCDL-21-02-00009317.0001001 / 19 JUN 13 Criteria: A330

APPROVED

21-02	Quantity installed
RAM AIR OUTLET FLAP	2

(m) Refer to AMM Task 21-53-00-040-808

All may be missing.

Note: 1. May be combined with MCDL item 21-01 (Refer to 21-01 Ram Air Inlet Flap) on one pack only.

2. System performance in heating mode will be decreased.

Performance:

When combined with MCDL item 21-01 (*Refer to 21-01 Ram Air Inlet Flap*) of the same pack, the following performance penalties are applicable per affected pack:

- Takeoff and approach climb performance limiting weights are reduced by 515 kg (1 136 lb)
- En route performance limiting weight is reduced by 1 020 kg (2 249 lb)
- Fuel consumption is increased by 0.72 %.

Refer to MCDL-21-02 Illustration Ram Air Outlet Flap



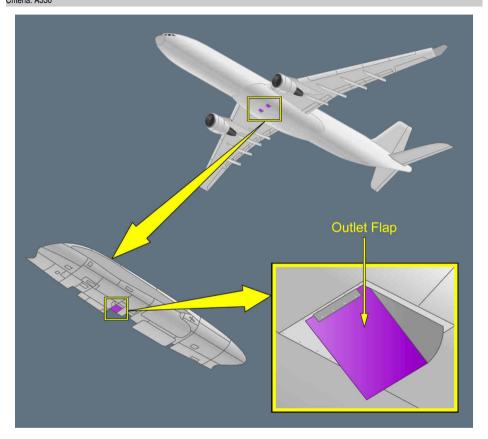
MASTER CONFIGURATION DEVIATION LIST AIR CONDITIONING

RAM AIR OUTLET FLAP

ILLUSTRATION RAM AIR OUTLET FLAP

Ident.: MCDL-21-02-00009318.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 21-02 Ram Air Outlet Flap.



MASTER CONFIGURATION DEVIATION LIST COMMUNICATIONS

STATIC DISCHARGER

A330 AIRPLANE FLIGHT MANUAL

23-01 Static Discharger

Ident.: TDU / MCDL-23-01-00016527.0001001 / 04 APR 16

APPROVED

Criteria: A330

Impacted DU: 00008858 Static Discharger

Belongs to TR608 Issue 2

23-01 Quantity installed STATIC DISCHARGER –

20 % of static dischargers may be missing or defective from each of the following areas:

- Right wing,
- Left wing,
- Vertical stabilizer (including rudder),
- Right horizontal stabilizer (including elevator),
- Left horizontal stabilizer (including elevator).

Note: 1. Refer to the Illustrated Part Catalog (IPC) for the exact number of static dischargers installed.

- If a static discharger is missing or defective on a flap track fairing, the VHF and HF sound quality may be slightly degraded.
- When combined with the case of dispatch with a winglet missing, 20 % of the remaining static dischargers of the affected wing are allowed to be missing or defective (Refer to 57-02 Winglet).

Refer to MCDL-23-01 Illustration Static Discharger

23-01	Static	Discharger
Idont - MCDL 22 01 000000E0 000	001 / 10 IUN 12	ADDDOVED

Criteria: A330

Impacted by TDU: 00016527 Static Discharger

23-01	Quantity installed
STATIC DISCHARGER	-

20 % of static dischargers may be missing or inoperative from each of the following areas:

- Right wing
- Left wing
- Vertical stabilizer (including rudder)
- Right horizontal stabilizer (including elevator)
- Left horizontal stabilizer (including elevator).

Continued on the following page



MASTER CONFIGURATION DEVIATION LIST COMMUNICATIONS

STATIC DISCHARGER

Continued from the previous page Static Discharger

Note:

- 1. If a static discharger is missing or damaged on a flap track fairing, the VHF and HF sound quality may be slightly degraded.
- 2. When combined with the case of dispatch with a winglet missing, 20 % of the remaining static dischargers of the affected wing are allowed to be missing or inoperative (Refer to 57-02 Winglet).

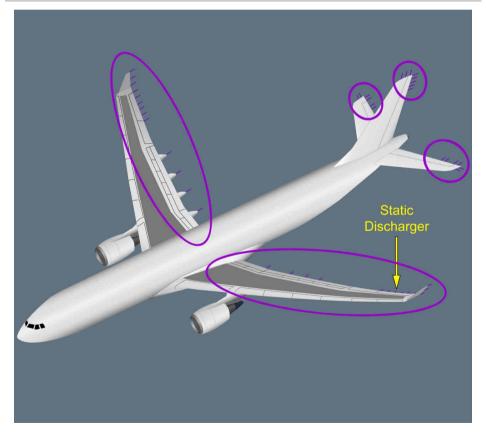
Refer to MCDL-23-01 Illustration Static Discharger

ILLUSTRATION STATIC DISCHARGER

Ident.: MCDL-23-01-00008859.0001001 / 26 NOV 09

FOR INFORMATION ONLY

Criteria: A330





MASTER CONFIGURATION DEVIATION LIST COMMUNICATIONS

STATIC DISCHARGER

For dispatch conditions: Refer to 23-01 Static Discharger.



MASTER CONFIGURATION DEVIATION LIST COMMUNICATIONS

STATIC DISCHARGER

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TPA A330-243F FLEET MCDL-23-01 P 4/4
AFM 19 JUL 16



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

A330 AIRPLANE FLIGHT MANUAL

SLAT TRACK CLOSING PLATE

27-02 Slat Track Closing Plate

Ident.: MCDL-27-02-00008862.0001001 / 26 NOV 09 Criteria: A330

APPROVED

27-02	Quantity installed
SLAT TRACK CLOSING PLATE	32

Two may be missing per wing.

Refer to MCDL-27-02 Illustration Slat Track Closing Plate



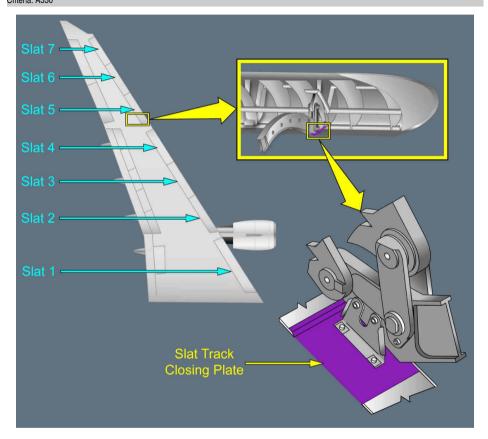
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

SLAT TRACK CLOSING PLATE

ILLUSTRATION SLAT TRACK CLOSING PLATE

Ident.: MCDL-27-02-00008863.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-02 Slat Track Closing Plate.



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

RUBBER SEAL UNDER SLATS

27-03 Rubber Seal under Slats

Ident.: MCDL-27-03-00008864.0001001 / 26 NOV 09 Criteria: A330

APPROVED

27-03	Quantity installed
RUBBER SEAL UNDER SLATS	-

One segment of 25 cm (10 in) of rubber seal or one full slat track rubber seal loop may be missing per slat.

Refer to MCDL-27-03 Illustration Rubber Seal under Slats



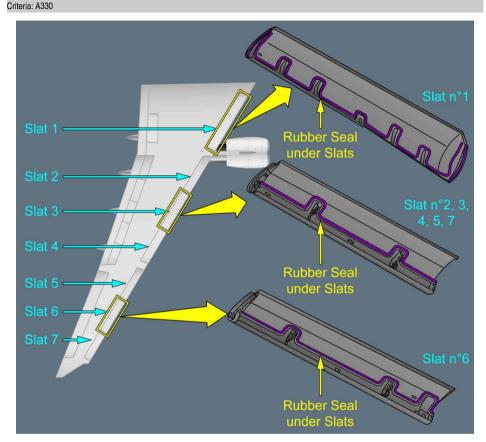
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

RUBBER SEAL UNDER SLATS

ILLUSTRATION RUBBER SEAL UNDER SLATS

Ident.: MCDL-27-03-00008865.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-03 Rubber Seal under Slats.



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

A330 AIRPLANE FLIGHT MANUAL

Criteria: A330

AILERON RUBBER SEAL

27-04	Aileron Rubber Seal
-------	---------------------

Ident.: MCDL-27-04-00008866.0001001 / 25 JUL 14

APPROVED

27-04 Quantity installed AILERON RUBBER SEAL 16

(m) Refer to AMM Task 27-14-41-040-802

Two may be missing on the same location (upper and lower surface) on each wing.

Refer to MCDL-27-04 Illustration Aileron Rubber Seal



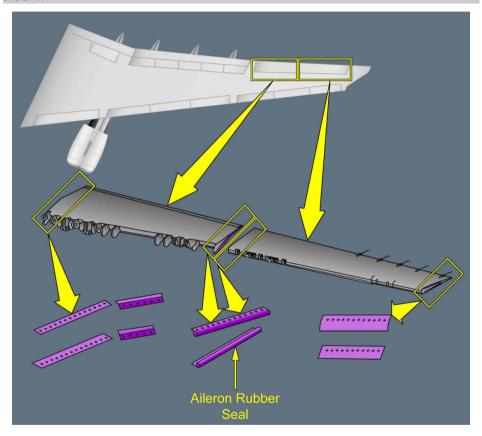
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

AILERON RUBBER SEAL

ILLUSTRATION AILERON RUBBER SEAL

Ident.: MCDL-27-04-00008867.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-04 Aileron Rubber Seal.



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

AILERON SERVO ACTUATOR FAIRING

27-05	Aileron Servo Actuator Fairing
-------	--------------------------------

Ident.: MCDL-27-05-00008868.0001001 / 26 NOV 09 Criteria: A330

<u>APPROVED</u>

27-05	Quantity installed
AILERON SERVO ACTUATOR FAIRING	8

One may be missing.

Performance:

The following performance penalty is applicable:

- En route performance limiting weight is reduced by 150 kg (331 lb).

Refer to MCDL-27-05 Illustration Aileron Servo Actuator Fairing



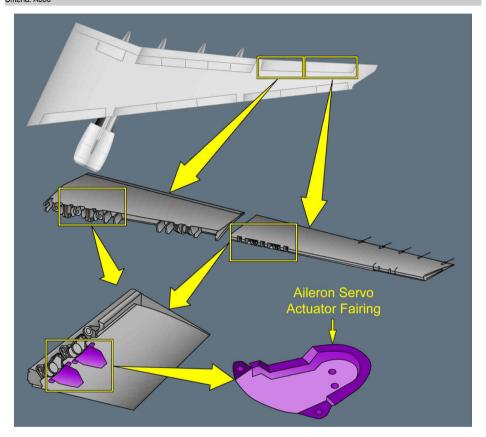
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

AILERON SERVO ACTUATOR FAIRING

ILLUSTRATION AILERON SERVO ACTUATOR FAIRING

Ident.: MCDL-27-05-00008869.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-05 Aileron Servo Actuator Fairing.



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

SLAT END BLADE SEAL

27-06	Slat End Blade Seal
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Ident.: MCDL-27-06-00008870.0001001 / 25 JUL 14 Criteria: A330 <u>APPROVED</u>

27-06	Quantity installed
SLAT END BLADE SEAL	8

Three may be missing per wing or partially missing provided any loose or flapping seal material is cut off.

Performance:

The following performance penalties are applicable:

- En route performance limiting weight is reduced by 170 kg (375 lb) per missing seal
- When two or more seals are missing, fuel consumption is increased by 0.13 % per missing seal.

Refer to MCDL-27-06 Illustration Slat End Blade Seal



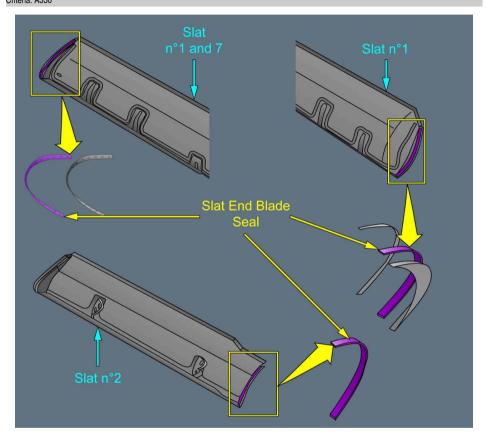
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

SLAT END BLADE SEAL

ILLUSTRATION SLAT END BLADE SEAL

Ident.: MCDL-27-06-00008871.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-06 Slat End Blade Seal.



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

FLAP BLADE SEAL AND TRIANGULAR CUSHION SEAL

27-07 Flap Blade Seal and Triangular Cushion Seal

Ident.: MCDL-27-07-00008873.0001001 / 26 NOV 09

<u>APPROVED</u>

Criteria: A330

27-07	Quantity installed
FLAP BLADE SEAL AND TRIANGULAR CUSHION SEAL	12

Three seals may be missing per wing.

Note: The cushion seals of the flap leading edge are not allowed missing.

Performance:

The following performance penalties are applicable per missing seal:

- En route performance limiting weight is reduced by 224 kg (494 lb)
- When two or more seals are missing, fuel consumption is increased by 0.17 %.

Refer to MCDL-27-07 Illustration Flap Blade Seal and Triangular Cushion Seal



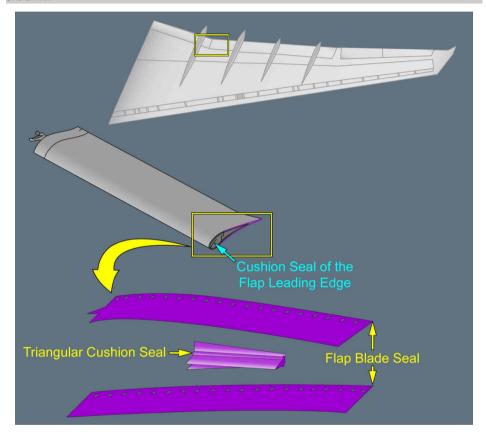
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

FLAP BLADE SEAL AND TRIANGULAR CUSHION SEAL

ILLUSTRATION FLAP BLADE SEAL AND TRIANGULAR CUSHION SEAL

Ident.: MCDL-27-07-00008875.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-07 Flap Blade Seal and Triangular Cushion Seal.



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

SLAT END FILLING

27-08	Slat End Filling
-------	------------------

Ident.: MCDL-27-08-00008877.0001001 / 19 JUN 13 Criteria: A330

APPROVED

27-08	Quantity installed
SLAT END FILLING	2

All may be missing.

Procedures:

Approach speed: VAPP + 5 kt Landing distance: multiply by 1.08

Performance:

The following performance penalties are applicable:

 When one filling is missing, takeoff performance limiting weight is reduced by 6 130 kg (13 515 lb)

Note: This performance penalty is not applicable if the flight crew can check V2 greater than 1.15 VS1G.

- When both fillings are missing:
 - Takeoff performance limiting weight is reduced by 10 540 kg (23 237 lb)
 - V2 and VR are increased by 1 kt.

Note: These performance penalties are not applicable if the flight crew can check V2 greater than 1.16 VS1G.

- En route performance limiting weight is reduced by 170 kg (375 lb) per missing filling
- When both fillings are missing, fuel consumption is increased by 0.26 %

Refer to MCDL-27-08 Illustration Slat End Filling



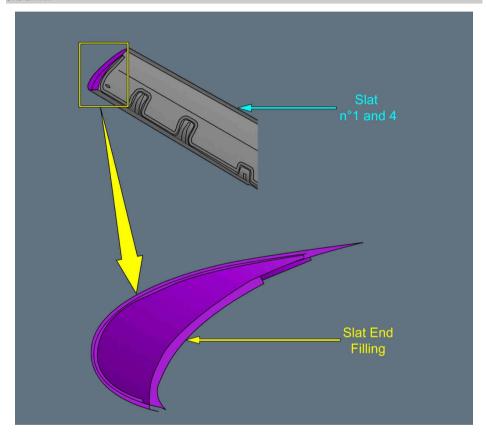
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

SLAT END FILLING

ILLUSTRATION SLAT END FILLING

Ident.: MCDL-27-08-00008878.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-08 Slat End Filling.



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

INNER AILERON SEAL (UPPER AND LOWER)

27-10	Inner Aileron Seal (Upper and Lower)
-------	--------------------------------------

Ident.: MCDL-27-10-00008880.0001001 / 26 NOV 09 Criteria: A330

APPROVED

27-10	Quantity installed
INNER AILERON SEAL (UPPER AND LOWER)	4

All may be missing.

Note: May be combined with MCDL item 27-11 (Refer to 27-11 Inner Aileron Large Seal).

Performance:

The following performance penalties are applicable:

- When two or more seals are missing, en route performance limiting weight is reduced by 68 kg (150 lb) per missing seal
- When all seals are missing, fuel consumption is increased by 0.2 %.

Refer to MCDL-27-10 Illustration Inner Aileron Seal (Upper and Lower)



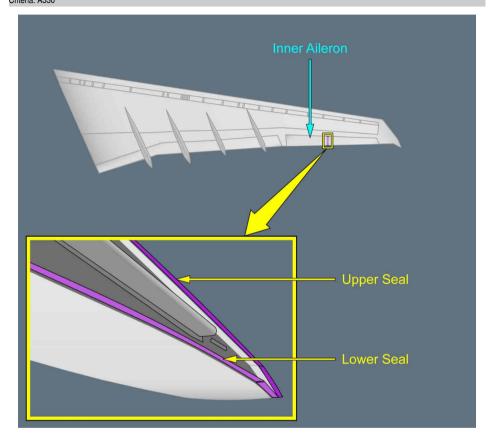
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

INNER AILERON SEAL (UPPER AND LOWER)

ILLUSTRATION INNER AILERON SEAL (UPPER AND LOWER)

Ident.: MCDL-27-10-00008881.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-10 Inner Aileron Seal (Upper and Lower).



MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

A330 AIRPLANE FLIGHT MANUAL

INNER All FRON LARGE SEAL

27-11 Inner Aileron Large Seal	
--------------------------------	--

Ident.: MCDL-27-11-00008882.0001001 / 19 JUN 13 Criteria: A330 **APPROVED**

27-11 INNER AILERON LARGE SEAL Quantity installed

(m) Refer to AMM Task 27-14-41-040-801

All may be missing.

<u>Note:</u> May be combined with MCDL item 27-10 (Refer to 27-10 Inner Aileron Seal (Upper and Lower)).

• Performance:

When both seals are missing, the following performance penalty is applicable:

- En route performance limiting weight is reduced by 136 kg (300 lb).

Refer to MCDL-27-11 Illustration Inner Aileron Large Seal



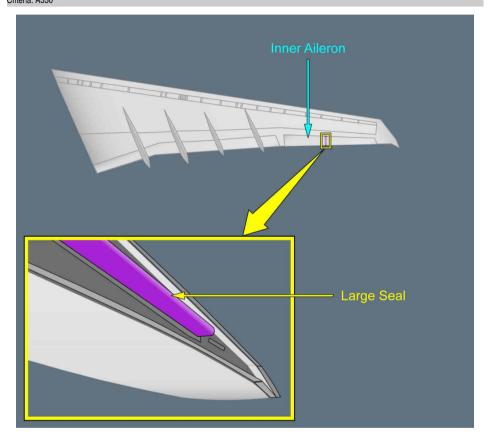
MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROLS

INNER AILERON LARGE SEAL

ILLUSTRATION INNER AILERON LARGE SEAL

Ident.: MCDL-27-11-00008883.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 27-11 Inner Aileron Large Seal.



MASTER CONFIGURATION DEVIATION LIST **FUEL SYSTEM**

AIRPLANE FLIGHT MANUAL

REFUEL/DEFUEL COUPLING CAP

28-01	Refuel/Defuel Coupling Cap
-------	----------------------------

Ident.: MCDL-28-01-00009002.0002001 / 19 JUN 13

APPROVED

Criteria: (A330 and 40176)

28-01	Quantity installed
REFUEL/DEFUEL COUPLING CAP	4

(m) Refer to AMM Task 28-25-00-040-811

All may be missing provided seal integrity of coupling is positively confirmed (i.e. no fuel leak reported).

Note:

- 1. If the coupling or O-ring is damaged and the cap cannot be fitted, dispatch is permitted in accordance with this MCDL item provided the cap is removed and coupling integrity is verified.
- 2. If only the lanyard is missing, the removal of the cap is not necessary.

Refer to MCDL-28-01 Illustration Refuel/Defuel Coupling Cap



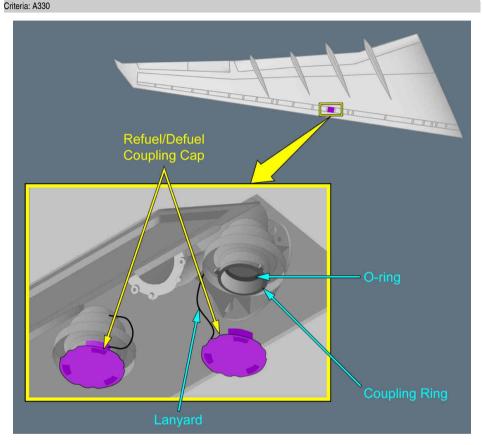
MASTER CONFIGURATION DEVIATION LIST FUEL SYSTEM

REFUEL/DEFUEL COUPLING CAP

ILLUSTRATION REFUEL/DEFUEL COUPLING CAP

Ident.: MCDL-28-01-00009003.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 28-01 Refuel/Defuel Coupling Cap.



MASTER CONFIGURATION DEVIATION LIST FUEL SYSTEM

A330 AIRPLANE FLIGHT MANUAL

REFUEL/DEFUEL CONTROL PANEL ACCESS DOOR ON BELLY FAIRING

28-02	Refuel/Defuel Control Panel Access Door on Belly Fairing
-------	--

Ident.: MCDL-28-02-00009004.0001001 / 19 JUN 13 Criteria: A330

APPROVED

28-02	Quantity installed
REFUEL/DEFUEL CONTROL PANEL ACCESS DOOR ON	1 1
BELLY FAIRING	

(m) Refer to AMM Task 52-42-00-040-801 May be missing provided hole is covered.

Refer to MCDL-28-02 Illustration Refuel/Defuel Control Panel Access Door on Belly Fairing



MASTER CONFIGURATION DEVIATION LIST FUEL SYSTEM

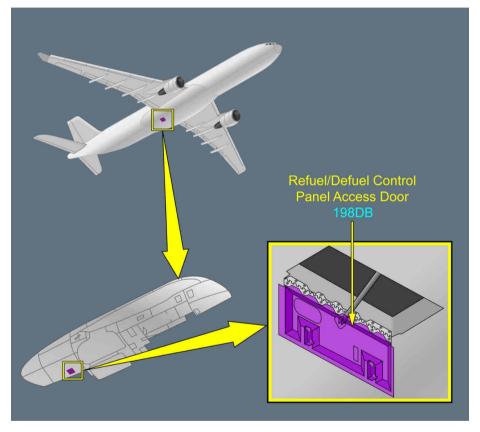
REFUEL/DEFUEL CONTROL PANEL ACCESS DOOR ON BELLY FAIRING

ILLUSTRATION REFUEL/DEFUEL CONTROL PANEL ACCESS DOOR ON BELLY FAIRING

Ident.: MCDL-28-02-00009005.0001001 / 26 NOV 09

Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 28-02 Refuel/Defuel Control Panel Access Door on Belly Fairing.



MASTER CONFIGURATION DEVIATION LIST **FUEL SYSTEM**

FUEL PUMP FAIRING

AIRPLANE FLIGHT MANUAL

28-04 **Fuel Pump Fairing**

Ident.: TDU / MCDL-28-04-00017268.0001001 / 22 MAR 16

APPROVED

Criteria: A330

Impacted DU: 00009011 Fuel Pump Fairing

Belongs to TR692 Issue 1

28-04	Quantity installed
FUEL PUMP FAIRING	4

(m) Refer to AMM Task 28-21-00-040-802

All may be missing provided that:

- The complete fairing (all sections) is removed
- The visible electrical installation is covered and a visual inspection is performed before each fliaht.
- Limitations:

Avoid forecasted thunderstorm condition.

Refer to MCDL-28-04 Illustration Fuel Pump Fairing

28-04	Fuel Pump Fairing	
Ident.: MCDL-28-04-00009011.000	1001 / 19 JUN 13	APPROVED

Criteria: A330 Impacted by TDU: 00017268 Fuel Pump Fairing

28-04	Quantity installed
FUEL PUMP FAIRING	4

(m) Refer to AMM Task 28-21-00-040-802

All may be missing provided:

- The complete fairing (all sections) is removed
- Aluminium high speed tape is applied on the visible electrical installation.

Limitations:

Avoid forecasted thunderstorm condition.

Refer to MCDL-28-04 Illustration Fuel Pump Fairing



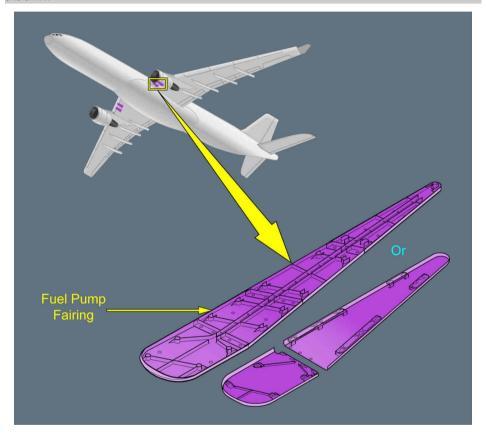
MASTER CONFIGURATION DEVIATION LIST FUEL SYSTEM

FUEL PUMP FAIRING

ILLUSTRATION FUEL PUMP FAIRING

Ident.: MCDL-28-04-00009012.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 28-04 Fuel Pump Fairing.



MASTER CONFIGURATION DEVIATION LIST HYDRAULIC

GROUND GREEN HYDRAULIC CONNECTION ACCESS DOOR

29-01	Ground Green Hydraulic Connection Access Door
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Ident.: MCDL-29-01-00009022.0001001 / 26 NOV 09 Criteria: A330

<u>APPROVED</u>

29-01	Quantity installed
GROUND GREEN HYDRAULIC CONNECTION ACCESS	1 1
DOOR	

May be missing.

• Performance:

The following performance penalty is applicable:

- Takeoff performance limiting weight is reduced by 51 kg (113 lb).

Refer to MCDL-29-01 Illustration Ground Green Hydraulic Connection Access Door



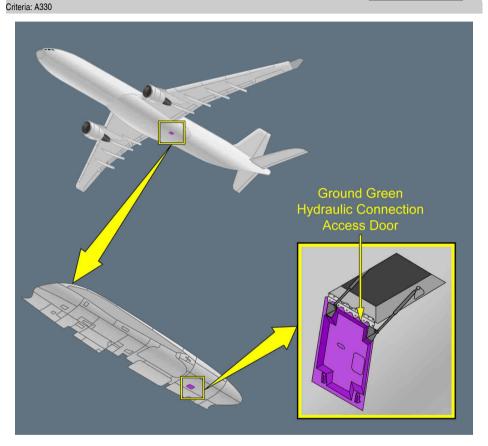
MASTER CONFIGURATION DEVIATION LIST HYDRAULIC

GROUND GREEN HYDRAULIC CONNECTION ACCESS DOOR

ILLUSTRATION GROUND GREEN HYDRAULIC CONNECTION ACCESS DOOR

Ident.: MCDL-29-01-00009023.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 29-01 Ground Green Hydraulic Connection Access Door.



MASTER CONFIGURATION DEVIATION LIST HYDRAULIC

GROUND BLUE HYDRAULIC CONNECTION ACCESS DOOR

29-02	Ground Blue Hydraulic Connection Access Door
-------	--

Ident.: MCDL-29-02-00009024.0001001 / 26 NOV 09

APPROVED

Criteria: A330

29-02	Quantity installed
GROUND BLUE HYDRAULIC CONNECTION ACCESS DOOR	1

May be missing.

Refer to MCDL-29-02 Illustration Ground Blue Hydraulic Connection Access Door



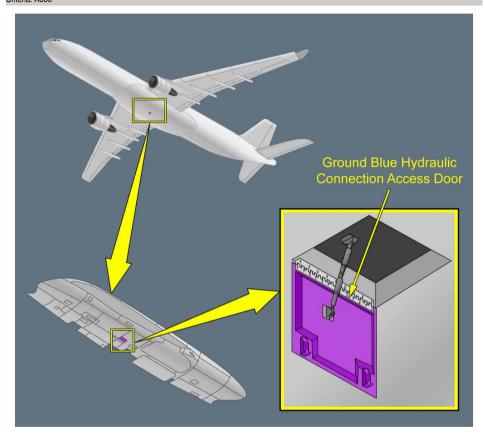
MASTER CONFIGURATION DEVIATION LIST HYDRAULIC

GROUND BLUE HYDRAULIC CONNECTION ACCESS DOOR

ILLUSTRATION GROUND BLUE HYDRAULIC CONNECTION ACCESS DOOR

Ident.: MCDL-29-02-00009025.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 29-02 Ground Blue Hydraulic Connection Access Door.



MASTER CONFIGURATION DEVIATION LIST HYDRAULIC

GROUND YELLOW HYDRAULIC CONNECTION ACCESS DOOR

29-03	Ground Yellow Hydraulic Connection Access Door
-------	--

Ident.: MCDL-29-03-00009026.0001001 / 26 NOV 09 Criteria: A330

APPROVED

29-03	Quantity installed
GROUND YELLOW HYDRAULIC CONNECTION ACCESS	1
DOOR	

May be missing.

Refer to MCDL-29-03 Illustration Ground Yellow Hydraulic Connection Access Door



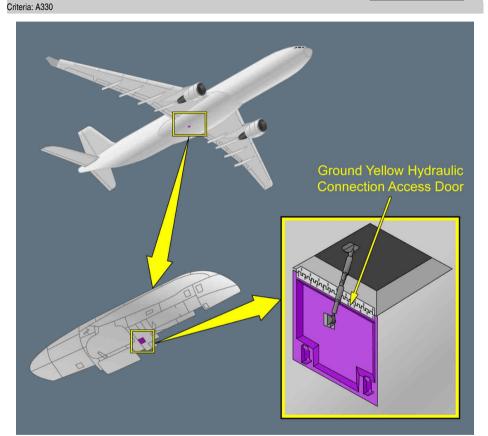
MASTER CONFIGURATION DEVIATION LIST HYDRAULIC

GROUND YELLOW HYDRAULIC CONNECTION ACCESS DOOR

ILLUSTRATION GROUND YELLOW HYDRAULIC CONNECTION ACCESS DOOR

Ident.: MCDL-29-03-00009027.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 29-03 Ground Yellow Hydraulic Connection Access Door.



MASTER CONFIGURATION DEVIATION LIST ICE AND RAIN PROTECTION

ICING INDICATOR

30-01	lcing Indicator
-------	-----------------

Ident.: MCDL-30-01-00009028.0001001 / 26 NOV 09 Criteria: A330

APPROVED

30-01	Quantity installed
ICING INDICATOR	1

May be missing.

- Procedures:
 - If icing conditions expected:

Turn on engine and wing anti-ice (Refer to LIM-70 Operations in Icing Conditions)

Refer to MCDL-30-01 Illustration Icing Indicator



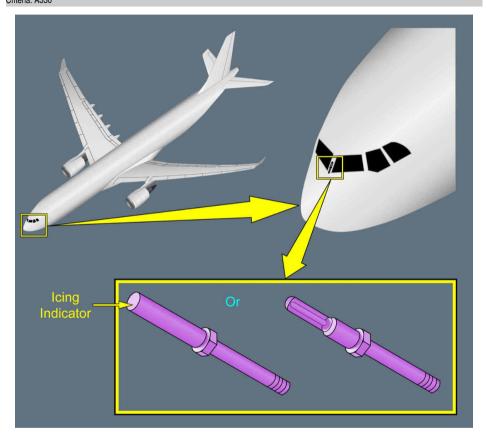
MASTER CONFIGURATION DEVIATION LIST ICE AND RAIN PROTECTION

ICING INDICATOR

ILLUSTRATION ICING INDICATOR

Ident.: MCDL-30-01-00009029.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 30-01 Icing Indicator.



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

CENTER LANDING GEAR DOOR GROUND OPENING ACCESS DOOR

32-01	Center Landing Gear Door Ground Opening Access Door
-------	---

Ident.: MCDL-32-01-00010871.0001001 / 02 JUL 10 Criteria: A330

APPROVED

32-01	Quantity installed
CENTER LANDING GEAR DOOR GROUND OPENING	1
ACCESS DOOR	

May be missing

Refer to MCDL-32-01 Illustration Center Landing Gear Door Ground Opening Access Door



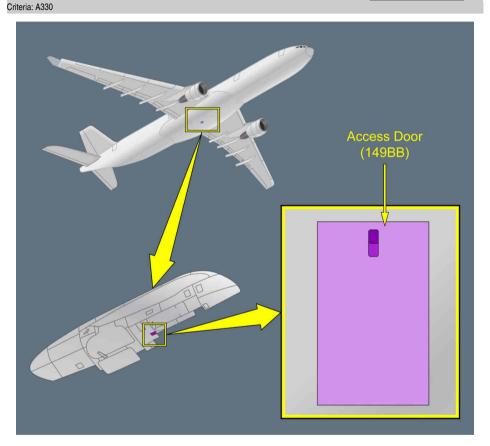
MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

CENTER LANDING GEAR DOOR GROUND OPENING ACCESS DOOR

ILLUSTRATION CENTER LANDING GEAR DOOR GROUND OPENING ACCESS DOOR

Ident.: MCDL-32-01-00010872.0001001 / 02 JUL 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 32-01 Center Landing Gear Door Ground Opening Access Door.



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

A330 AIRPLANE FLIGHT MANUAL

MAIN LANDING GEAR DOOR SEAL

32-02	Ma	in Landing Gear Door Seal	
Ident.: MCDL-32-02-00009441.000	1001 / 26 NOV 09		APPROVED

Ident.: MCDL-32-02-00009441.0001001 / 26 NOV 09 Criteria: A330

32-02	Quantity installed
MAIN LANDING GEAR DOOR SEAL	-

Up to 50 cm (19 in) may be missing per main landing gear door.

Refer to MCDL-32-02 Illustration Main Landing Gear Door Seal



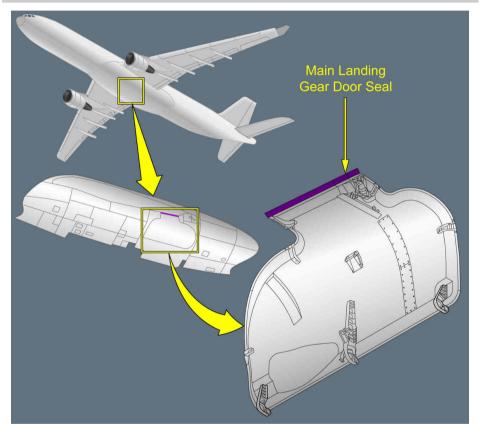
MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

MAIN LANDING GEAR DOOR SEAL

ILLUSTRATION MAIN LANDING GEAR DOOR SEAL

Ident.: MCDL-32-02-00009442.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 32-02 Main Landing Gear Door Seal.



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

MAIN LANDING GEAR LEG DOOR AND HINGED DOOR RUBBER SEAL

32-03	Main Landing Gear Leg Door and Hinged Door Rubber Seal
-------	--

Ident.: MCDL-32-03-00009030.0001001 / 26 NOV 09 Criteria: A330

<u>APPROVED</u>

32-03	Quantity installed
MAIN LANDING GEAR LEG DOOR AND HINGED DOOR	-
RUBBER SEAL	

Up to 50 cm (19 in) may be missing per main landing gear.

Performance:

The following performance penalties are applicable per affected landing gear:

- Takeoff and approach climb performance limiting weights are reduced by 62 kg (137 lb)
- En route performance limiting weight is reduced by 122 kg (269 lb).

Refer to MCDL-32-03 Illustration Main Landing Gear Leg Door and Hinged Door Rubber Seal



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

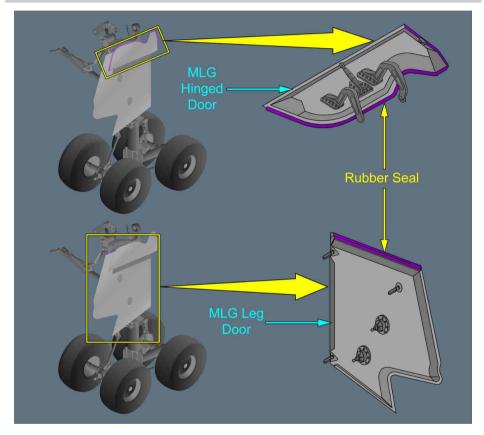
MAIN LANDING GEAR LEG DOOR AND HINGED DOOR RUBBER SEAL

ILLUSTRATION MAIN LANDING GEAR LEG DOOR AND HINGED DOOR RUBBER SEAL

Ident.: MCDL-32-03-00009031.0001001 / 26 NOV 09

Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 32-03 Main Landing Gear Leg Door and Hinged Door Rubber Seal.



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

A330 AIRPLANE FLIGHT MANUAL

NOSE FITTING TOWING

32-04 Nose Fitting Towing	
---------------------------	--

Ident.: MCDL-32-04-00009032.0001001 / 19 JUN 13 Criteria: A330 APPROVED

32-04 NOSE FITTING TOWING Quantity installed

_

(m) Refer to AMM Task 32-21-00-040-802 All may be missing.

Refer to MCDL-32-04 Illustration Nose Fitting Towing



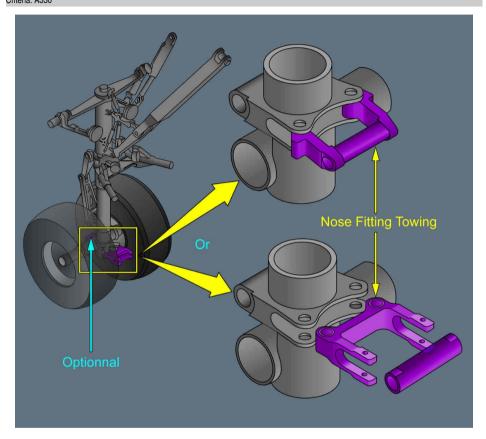
MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

NOSE FITTING TOWING

ILLUSTRATION NOSE FITTING TOWING

Ident.: MCDL-32-04-00009033.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 32-04 Nose Fitting Towing.



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

NOSE LANDING GEAR WHEEL HUBCAP

APPROVED

32-05	Nose Landing Gear Wheel Hubcap
-------	--------------------------------

Ident.: MCDL-32-05-00010862.0001001 / 19 JUN 13

Criteria: A330

32-05 Quantity installed NOSE LANDING GEAR WHEEL HUBCAP 2

(m) Refer to AMM Task 32-49-00-040-804

All may be missing for 5 flight cycles.

The wheel Tire Pressure Indication System (TPIS) sensor, if installed, must be considered as inoperative (*Refer to MMEL/MI-32-07 Tires Pressure Indication on the WHEEL SD page*).

Note: May be combined with item 32-06 (Main Landing Gear Wheel Hubcap) or item 32-07 (Main Landing Gear Debris Guard).

Refer to MCDL-32-05 Illustration Nose Landing Gear Wheel Hubcap



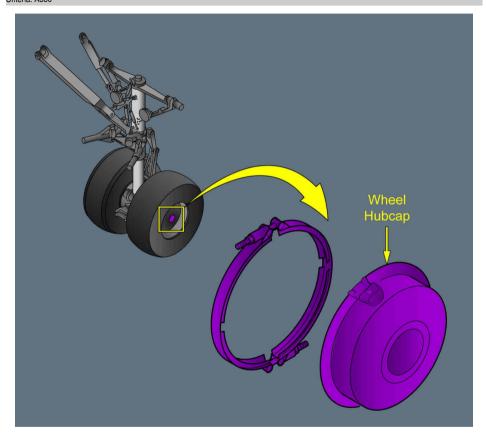
MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

NOSE LANDING GEAR WHEEL HUBCAP

ILLUSTRATION NOSE LANDING GEAR WHEEL HUBCAP

Ident.: MCDL-32-05-00010863.0001001 / 02 JUL 10 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 32-05 Nose Landing Gear Wheel Hubcap.



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

MAIN LANDING GEAR WHEEL HUBCAP

32-06	Main Landing Gear Wheel Hubcap
-------	--------------------------------

Ident.: MCDL-32-06-00010879.0001001 / 19 JUN 13

APPROVED

Criteria: A330

32-06	Quantity installed
MAIN LANDING GEAR WHEEL HUBCAP	8

(m) Refer to AMM Task 32-49-00-040-804

One may be missing for 5 flight cycles provided the associated tachometer is considered as inoperative (*Refer to MMEL/MI-32-42 Tachometer*).

The wheel Tire Pressure Indication System (TPIS) sensor, if installed, must be considered as inoperative (*Refer to MMEL/MI-32-07 Tires Pressure Indication on the WHEEL SD page*).

<u>Note:</u> May be combined with item 32-05 (Refer to 32-05 Nose Landing Gear Wheel Hubcap).

Performance:

Performance penalties for one tachometer inoperative are applicable (*Refer to APP-INOP Performance*).

Refer to MCDL-32-06 Illustration Main Landing Gear Wheel Hubcap



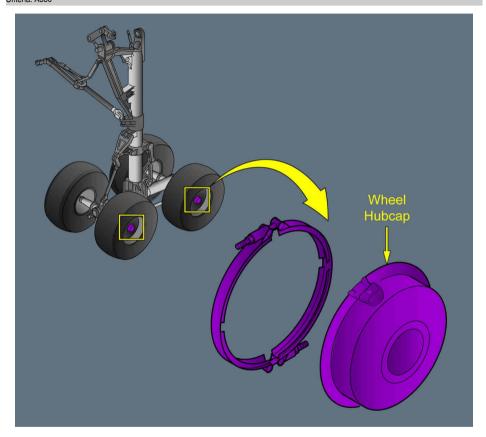
MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

MAIN LANDING GEAR WHEEL HUBCAP

ILLUSTRATION MAIN LANDING GEAR WHEEL HUBCAP

Ident.: MCDL-32-06-00010880.0001001 / 02 JUL 10 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 32-06 Main Landing Gear Wheel Hubcap.



MASTER CONFIGURATION DEVIATION LIST I ANDING GEAR

NOSE LANDING GEAR DOOR SEAL

APPROVED

32-08 Nose Landing Gear Door Seal

Ident.: TDU / MCDL-32-08-00016165.0001001 / 03 JUN 15

Criteria: A330

Impacted DU: NONE Belongs to TR597 Issue 1

32-08 Quantity installed NOSE LANDING GEAR DOOR SEAL 10

Up to 5 cm (2 in) may be missing on one or two nose landing gear door seal.

Or, one seal may be missing among:

- The forward door front seal (IPC-CSN 53-19-01-10-070)
- The forward door LH side seal (IPC-CSN 53-19-01-10-160)
- The forward door RH side seal (IPC-CSN 53-19-01-10-170)
- The aft door aft seals (IPC-CSN 53-19-01-11-260, IPC-CSN 53-19-01-11-390).

Or one pair of seals may be missing among:

- Forward door LH side seals (IPC-CSN 53-19-01-10-160), and forward door RH side seals (IPC-CSN 53-19-01-10-170).
- The two entire aft door aft seals (IPC-CSN 53-19-01-11-260, IPC-CSN 53-19-01-11-390).

Refer to MCDL-32-08 Illustration Nose Landing Gear Door Seal



MASTER CONFIGURATION DEVIATION LIST LANDING GEAR

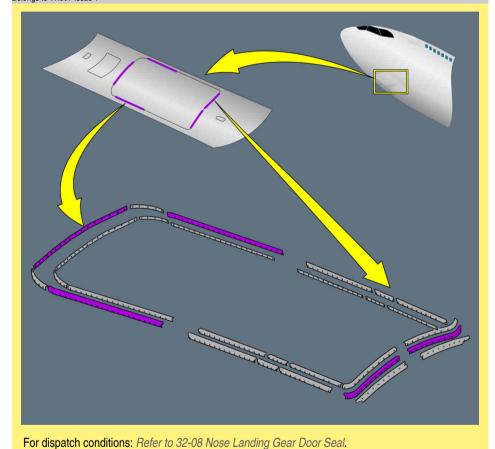
NOSE LANDING GEAR DOOR SEAL

ILLUSTRATION NOSE LANDING GEAR DOOR SEAL

Ident.: TDU / MCDL-32-08-00016166.0001001 / 03 JUN 15

Criteria: A330

Impacted DU: NONE Belongs to TR597 Issue 1 **APPROVED**





MASTER CONFIGURATION DEVIATION LIST LIGHTS

A330 AIRPLANE FLIGHT MANUAL

WING/LANDING LIGHT GLAZING

33-01	Wing/Landing Light Glazing
-------	----------------------------

Ident.: MCDL-33-01-00009035.0001001 / 19 JUN 13

APPROVED

Criteria: A330

33-01	Quantity installed
WING/LANDING LIGHT GLAZING	2

(m) Refer to AMM Task 57-41-00-040-802

All may be missing provided the hole is covered.

Note: The affected light must be considered inoperative (Refer to MMEL/MI-33-40 Landing light).

Refer to MCDL-33-01 Illustration Wing/Landing Light Glazing



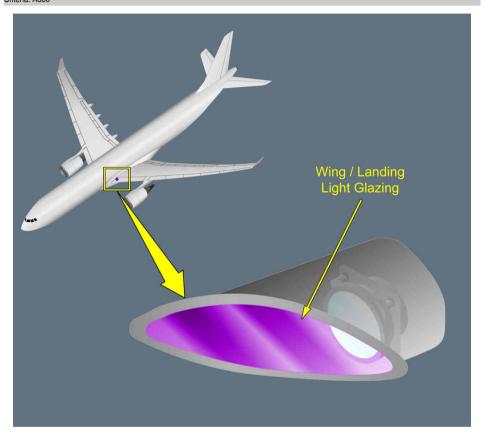
MASTER CONFIGURATION DEVIATION LIST LIGHTS

WING/LANDING LIGHT GLAZING

ILLUSTRATION WING/LANDING LIGHT GLAZING

Ident.: MCDL-33-01-00009036.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 33-01 Wing/Landing Light Glazing.



MASTER CONFIGURATION DEVIATION LIST LIGHTS

A330 AIRPLANE FLIGHT MANUAL

TAXI/TAKEOFF LIGHT

33-02	Taxi/Takeoff Light
-------	--------------------

Ident.: MCDL-33-02-00009037.0001001 / 19 JUN 13

APPROVED

Criteria: A330

33-02	Quantity installed
TAXI/TAKEOFF LIGHT	2

(m) Refer to AMM Task 33-46-00-040-801

All may be missing provided the affected light is deactivated (*Refer to MMEL/MI-33-40 Taxi* and *Takeoff light*).

Refer to MCDL-33-02 Illustration Taxi/Takeoff Light



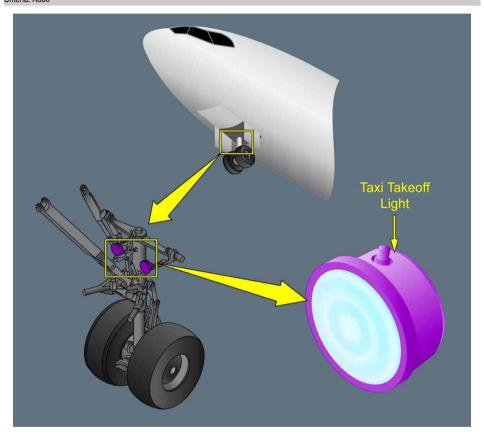
MASTER CONFIGURATION DEVIATION LIST LIGHTS

TAXI/TAKEOFF LIGHT

ILLUSTRATION TAXI/TAKEOFF LIGHT

Ident.: MCDL-33-02-00009038.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 33-02 Taxi/Takeoff Light.



MASTER CONFIGURATION DEVIATION LIST LIGHTS

A330 AIRPLANE FLIGHT MANUAL

RUNWAY TURNOFF LIGHT

33-03	Runway Turnoff Light
-------	----------------------

Ident.: MCDL-33-03-00009039.0001001 / 19 JUN 13 Criteria: A330 APPROVED

33-03	Quantity installed
RUNWAY TURNOFF LIGHT	2

(m) Refer to AMM Task 33-43-00-040-801

All may be missing provided the affected light is deactivated (*Refer to MMEL/MI-33-40 Runway Turnoff light*).

Refer to MCDL-33-03 Illustration Runway Turnoff Light



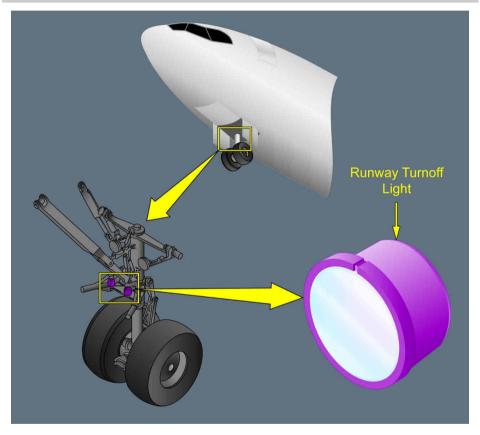
MASTER CONFIGURATION DEVIATION LIST LIGHTS

RUNWAY TURNOFF LIGHT

ILLUSTRATION RUNWAY TURNOFF LIGHT

Ident.: MCDL-33-03-00009040.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 33-03 Runway Turnoff Light.



MASTER CONFIGURATION DEVIATION LIST LIGHTS

AIRPLANE FLIGHT MANUAL

LOGOLIGHTLENS

33-04 **Logo Light Lens**

Ident.: TDU / MCDL-33-04-00017604.0001001 / 22 MAR 16

APPROVED

Criteria: A330

Impacted DU: 00009041 Logo Light Lens

Belongs to TR692 Issue 1

Quantity installed 33-04 **LOGO LIGHT LENS** 2

(m) Refer to AMM Task 33-47-00-040-801

All may be missing provided that the hole is covered.

If non-transparent high speed tape is used, the affected light must be deactivated (Refer to MMEL/MI-33-40 Logo light).

Refer to MCDL-33-04 Illustration Logo Light Lens

33-04	Logo Light Lens

Ident.: MCDL-33-04-00009041.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Impacted by TDU: 00017604 Logo Light Lens

33-04	Quantity installed
LOGO LIGHT LENS	2

(m) Refer to AMM Task 33-47-00-040-801

All may be missing provided hole is covered with high speed tape.

If non-transparent high speed tape is used, the affected light must be deactivated (Refer to MMEL/MI-33-40 Logo light).

Refer to MCDL-33-04 Illustration Logo Light Lens



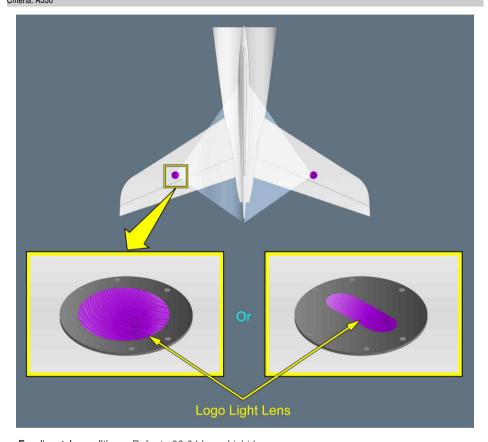
MASTER CONFIGURATION DEVIATION LIST LIGHTS

LOGO LIGHT LENS

ILLUSTRATION LOGO LIGHT LENS

Ident.: MCDL-33-04-00009042.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 33-04 Logo Light Lens.



MASTER CONFIGURATION DEVIATION LIST LIGHTS

REAR NAVIGATION/STROBE LIGHTS GLAZING

33-05 Rear Navigation/Strobe Lights Glazing	
---	--

Ident.: MCDL-33-05-00009043.0001001 / 28 FEB 11 Criteria: A330

APPROVED

33-05	Quantity installed
REAR NAVIGATION/STROBE LIGHTS GLAZING	1

May be missing for up to four flights provided a check is done before each flight to ensure that the strobe light and navigation lights are operative. If inoperative, refer to MMEL (*Refer to MMEL/MI-33-40 Navigation light*).

<u>Note:</u> APU operation on ground with tailwind could damage strobe light and navigation lights unit.

Refer to MCDL-33-05 Illustration Rear Navigation/Strobe Lights Glazing



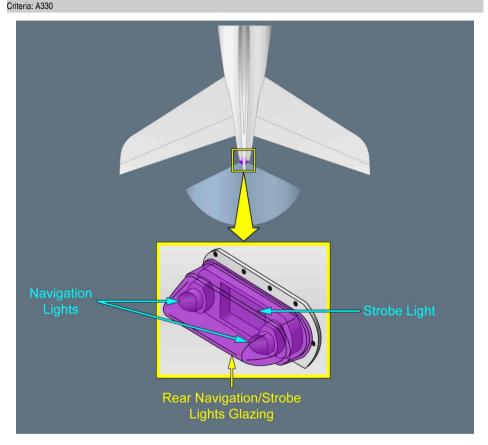
MASTER CONFIGURATION DEVIATION LIST LIGHTS

REAR NAVIGATION/STROBE LIGHTS GLAZING

ILLUSTRATION REAR NAVIGATION/STROBE LIGHTS GLAZING

Ident.: MCDL-33-05-00009044.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 33-05 Rear Navigation/Strobe Lights Glazing.



MASTER CONFIGURATION DEVIATION LIST LIGHTS

UPPER ANTI-COLLISION (BEACON) LIGHT COVER

33-06	Upper Anti-Collision (Beacon) Light Cover
-------	---

Ident.: MCDL-33-06-00009046.0001001 / 19 JUN 13 Criteria: A330

APPROVED

33-06	Quantity installed
UPPER ANTI-COLLISION (BEACON) LIGHT COVER	1 1

(m) Refer to AMM Task 33-48-11-040-801

May be missing provided the hole is covered and the affected light is deactivated (*Refer to MMEL/MI-33-40 Beacon light*).

Refer to MCDL-33-06 Illustration Upper Anti-Collision (Beacon) Light Cover



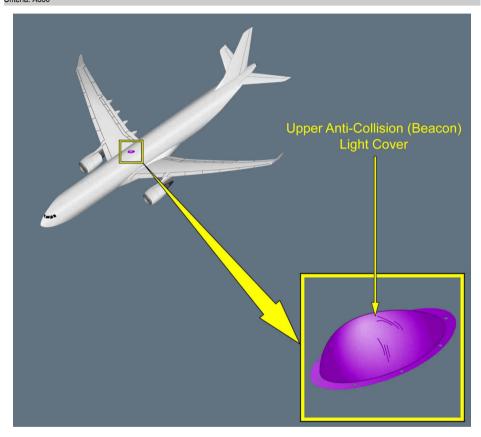
MASTER CONFIGURATION DEVIATION LIST LIGHTS

UPPER ANTI-COLLISION (BEACON) LIGHT COVER

ILLUSTRATION UPPER ANTI-COLLISION (BEACON) LIGHT COVER

Ident.: MCDL-33-06-00009047.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 33-06 Upper Anti-Collision (Beacon) Light Cover.



MASTER CONFIGURATION DEVIATION LIST LIGHTS

LOWER ANTI-COLLISION (BEACON) LIGHT COVER

33-07	Lower Anti-Collision (Beacon) Light Cover
-------	---

Ident.: MCDL-33-07-00009048.0001001 / 19 JUN 13 Criteria: A330

APPROVED

33-07 Quantity installed LOWER ANTI-COLLISION (BEACON) LIGHT COVER 1

(m) Refer to AMM Task 33-48-12-040-801

May be missing provided the hole is covered and the affected light is deactivated (*Refer to MMEL/MI-33-40 Beacon light*).

Refer to MCDL-33-07 Illustration Lower Anti-Collision (Beacon) Light Cover



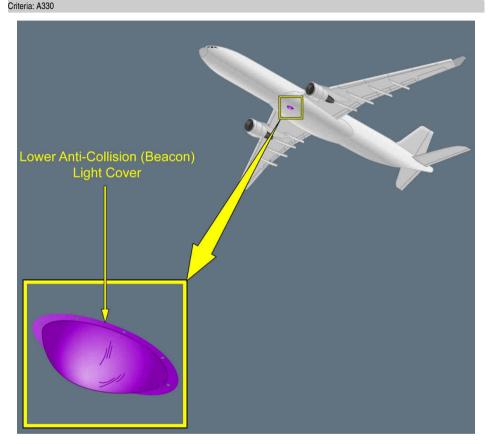
MASTER CONFIGURATION DEVIATION LIST LIGHTS

LOWER ANTI-COLLISION (BEACON) LIGHT COVER

ILLUSTRATION LOWER ANTI-COLLISION (BEACON) LIGHT COVER

Ident.: MCDL-33-07-00009049.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 33-07 Lower Anti-Collision (Beacon) Light Cover.



MASTER CONFIGURATION DEVIATION LIST STRUCTURE

PASSENGER DOOR SCUFF PLATE

51-02	Passenger Door Scuff Plate
-------	----------------------------

Ident.: MCDL-51-02-00009052.0002001 / 16 APR 10

APPROVED

Criteria: 330-200F

51-02	Quantity installed
PASSENGER DOOR SCUFF PLATE	2

All may be missing.

Refer to MCDL-51-02 Illustration Passenger Door Scuff Plate



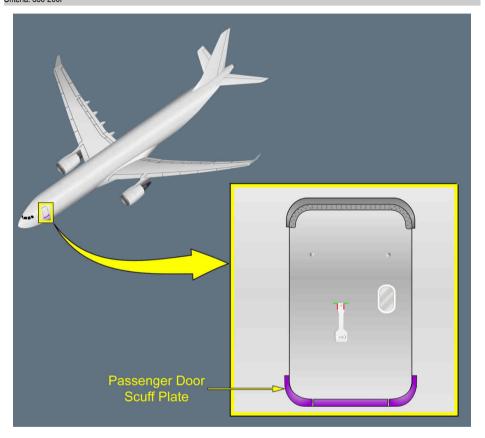
MASTER CONFIGURATION DEVIATION LIST STRUCTURE

PASSENGER DOOR SCUFF PLATE

ILLUSTRATION PASSENGER DOOR SCUFF PLATE

Ident.: MCDL-51-02-00009053.0002001 / 16 APR 10 Criteria: 330-200F

FOR INFORMATION ONLY



For dispatch conditions: Refer to 51-02 Passenger Door Scuff Plate.



MASTER CONFIGURATION DEVIATION LIST STRUCTURE

A330 AIRPLANE FLIGHT MANUAL

BULK DOOR SCUFF PLATE

51-03	Bulk Door Scuff Plate
-------	-----------------------

Ident.: MCDL-51-03-00009054.0001001 / 26 NOV 09 Criteria: A330 APPROVED

51-03	Quantity installed
BULK DOOR SCUFF PLATE	1 1

May be missing.

Refer to MCDL-51-03 Illustration Bulk Door Scuff Plate



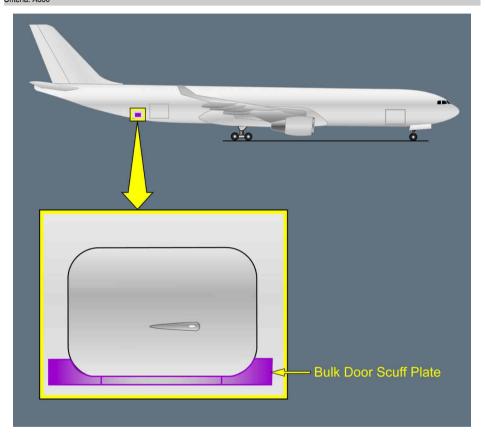
MASTER CONFIGURATION DEVIATION LIST STRUCTURE

BULK DOOR SCUFF PLATE

ILLUSTRATION BULK DOOR SCUFF PLATE

Ident.: MCDL-51-03-00009055.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 51-03 Bulk Door Scuff Plate.



MASTER CONFIGURATION DEVIATION LIST STRUCTURE

A330 AIRPLANE FLIGHT MANUAL

PASSENGER DOOR GUTTER

51-04 Passenger Door Gutter	
-----------------------------	--

Ident.: MCDL-51-04-00009056.0002001 / 16 APR 10 Criteria: 330-200F

APPROVED

51-04	Quantity installed
PASSENGER DOOR GUTTER	2

All may be missing.

Refer to MCDL-51-04 Illustration Passenger Door Gutter



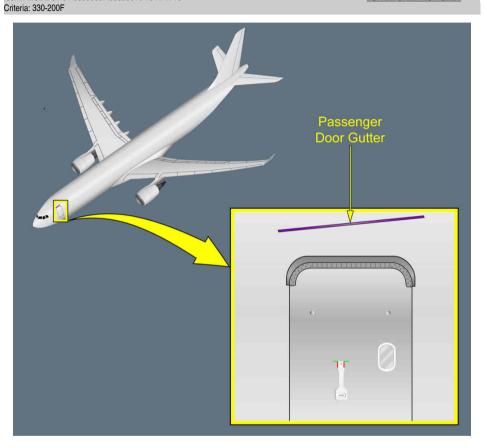
MASTER CONFIGURATION DEVIATION LIST STRUCTURE

PASSENGER DOOR GUTTER

ILLUSTRATION PASSENGER DOOR GUTTER

Ident.: MCDL-51-04-00009057.0002001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 51-04 Passenger Door Gutter



MASTER CONFIGURATION DEVIATION LIST DOORS

FORWARD CARGO LOADING OPERATION CONTROL PANEL DOOR

52-02	Forward Cargo Loading Operation Control Panel Door
-------	--

Ident.: MCDL-52-02-00009059.0001001 / 26 NOV 09 Criteria: A330 <u>APPROVED</u>

52-02	Quantity installed
FORWARD CARGO LOADING OPERATION CONTROL	1
PANEL DOOR	

May be missing.

Refer to MCDL-52-02 Illustration Forward Cargo Loading Operation Control Panel Door



MASTER CONFIGURATION DEVIATION LIST DOORS

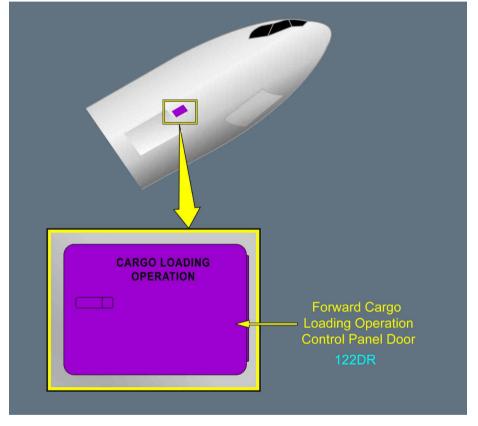
FORWARD CARGO LOADING OPERATION CONTROL PANEL DOOR

ILLUSTRATION FORWARD CARGO LOADING OPERATION CONTROL PANEL DOOR

Ident.: MCDL-52-02-00009060.0001001 / 26 NOV 09

FOR INFORMATION ONLY

Criteria: A330



For dispatch conditions: Refer to 52-02 Forward Cargo Loading Operation Control Panel Door.



MASTER CONFIGURATION DEVIATION LIST **DOORS**

AFT CARGO DOOR CONTROL PANEL ACCESS DOOR

52-03 Aft Cargo Door Control Panel Access Door
--

Ident.: MCDL-52-03-00009061.0001001 / 26 NOV 09

Criteria: A330

52-03	Quantity installed
AFT CARGO DOOR CONTROL PANEL ACCESS DOOR	1 1

APPROVED

May be missing.

Refer to MCDL-52-03 Illustration Aft Cargo Door Control Panel Access Door



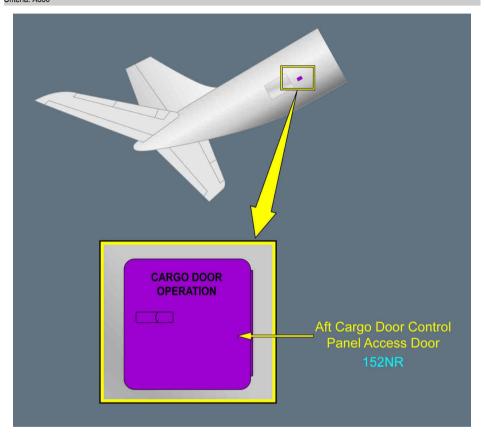
MASTER CONFIGURATION DEVIATION LIST DOORS

AFT CARGO DOOR CONTROL PANEL ACCESS DOOR

ILLUSTRATION AFT CARGO DOOR CONTROL PANEL ACCESS DOOR

Ident.: MCDL-52-03-00009062.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-03 Aft Cargo Door Control Panel Access Door.



MASTER CONFIGURATION DEVIATION LIST DOORS

AFT CARGO LOADING OPERATION CONTROL PANEL DOOR

52-04	Aft Cargo Loading Operation Control Panel Door
-------	--

Ident.: MCDL-52-04-00009063.0001001 / 26 NOV 09

Criteria: A330

APPROVED

52-04	Quantity installed
AFT CARGO LOADING OPERATION CONTROL PANEL	1
DOOR	

May be missing.

Refer to MCDL-52-04 Illustration Aft Cargo Loading Operation Control Panel Door



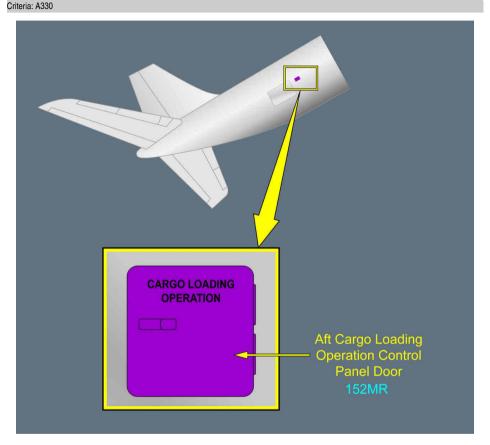
MASTER CONFIGURATION DEVIATION LIST DOORS

AFT CARGO LOADING OPERATION CONTROL PANEL DOOR

ILLUSTRATION AFT CARGO LOADING OPERATION CONTROL PANEL DOOR

Ident.: MCDL-52-04-00009064.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-04 Aft Cargo Loading Operation Control Panel Door.



MASTER CONFIGURATION DEVIATION LIST DOORS

A330 AIRPLANE FLIGHT MANUAL

POTABLE WATER SERVICE DOOR

52-07	Potable Water Service Door
-------	----------------------------

Ident.: MCDL-52-07-00009069.0002001 / 19 JUN 13 Criteria: 330-200F APPROVED

52-07

Quantity installed

POTABLE WATER SERVICE DOOR

1

(m) Refer to AMM Task 52-42-00-040-806 May be missing.

Performance:

The following performance penalty is applicable:

- Takeoff performance limiting weight is reduced by 52 kg (115 lb).

Refer to MCDL-52-07 Illustration Potable Water Service Door



MASTER CONFIGURATION DEVIATION LIST DOORS

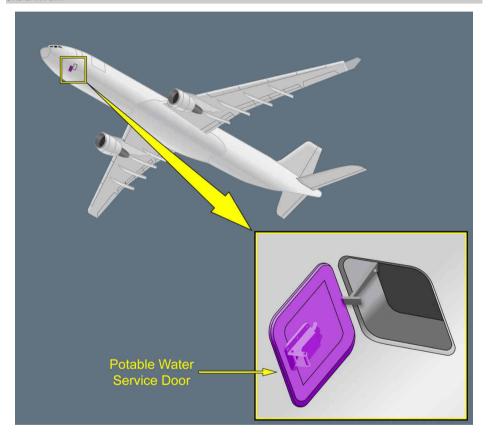
POTABLE WATER SERVICE DOOR

ILLUSTRATION POTABLE WATER SERVICE DOOR

Ident.: MCDL-52-07-00009070.0002001 / 19 JUN 13

Criteria: 330-200F

FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-07 Potable Water Service Door.



MASTER CONFIGURATION DEVIATION LIST DOORS

A330
AIRPLANE FLIGHT MANUAL

VACUUM TOILET SERVICE DOOR

52-08	Vacuum Toilet Service Door
-------	----------------------------

Ident.: MCDL-52-08-00009071.0002001 / 19 JUN 13

APPROVED

Criteria: 330-200F

52-08	Quantity installed
VACUUM TOILET SERVICE DOOR	1

(m) Refer to AMM Task 52-42-00-040-805

May be missing.

Note: The toilet system is inoperative on ground.

Performance:

The following performance penalties are applicable:

- Takeoff performance limiting weight is reduced by 70 kg (155 lb)
- En route performance limiting weight is reduced by 140 kg (309 lb).

Refer to MCDL-52-08 Illustration Vacuum Toilet Service Door



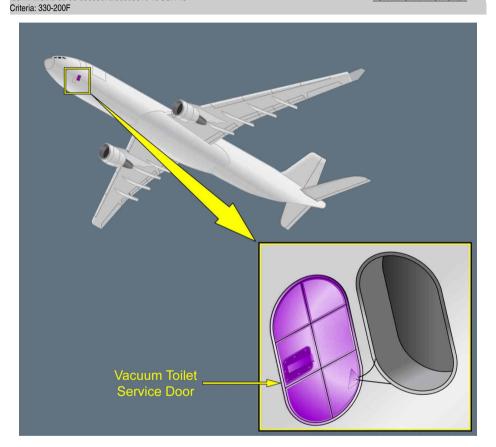
MASTER CONFIGURATION DEVIATION LIST DOORS

VACUUM TOILET SERVICE DOOR

ILLUSTRATION VACUUM TOILET SERVICE DOOR

Ident.: MCDL-52-08-00009072.0002001 / 19 JUN 13

FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-08 Vacuum Toilet Service Door.



MASTER CONFIGURATION DEVIATION LIST DOORS

FUEL CENTER TANK WATER DRAIN ACCESS DOOR

52-09 Fuel Center Tank Water Drain Access Door

Ident.: TDU / MCDL-52-09-00017605.0001001 / 22 MAR 16

APPROVED

Criteria: A330

Impacted DU: 00009073 Fuel Center Tank Water Drain Access Door

Belongs to TR692 Issue 1

52-09 Quantity installed FUEL CENTER TANK WATER DRAIN ACCESS DOOR 2

(m) Refer to AMM Task 52-42-00-040-803

Two may be missing provided that the hole is covered.

Refer to MCDL-52-09 Illustration Fuel Center Tank Water Drain Access Door

52-09	Fuel Center Tank Water Drain Access Door

Ident.: MCDL-52-09-00009073.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Impacted by TDU: 00017605 Fuel Center Tank Water Drain Access Door

52-09	Quantity installed
FUEL CENTER TANK WATER DRAIN ACCESS DOOR	2

(m) Refer to AMM Task 52-42-00-040-803

Two may be missing provided high speed tape is applied.

Refer to MCDL-52-09 Illustration Fuel Center Tank Water Drain Access Door



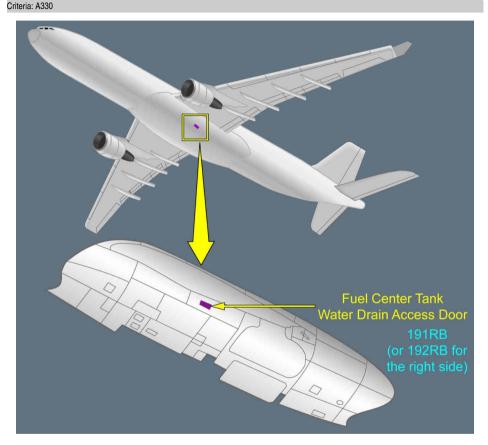
MASTER CONFIGURATION DEVIATION LIST DOORS

FUEL CENTER TANK WATER DRAIN ACCESS DOOR

ILLUSTRATION FUEL CENTER TANK WATER DRAIN ACCESS DOOR

Ident.: MCDL-52-09-00009074.0001001 / 26 NOV 09

FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-09 Fuel Center Tank Water Drain Access Door.



MASTER CONFIGURATION DEVIATION LIST DOORS

CARGO DOOR INDICATOR FLAG

52-10	Cargo Door Indicator Flag
-------	---------------------------

Ident.: MCDL-52-10-00009075.0001001 / 19 JUN 13

APPROVED

Criteria: A330

52-10	Quantity installed
CARGO DOOR INDICATOR FLAG	-

(m) Refer to AMM Task 52-30-00-040-804

Three may be missing on each door provided all associated latching hooks are checked latched before each flight.

Refer to MCDL-52-10 Illustration Cargo Door Indicator Flag



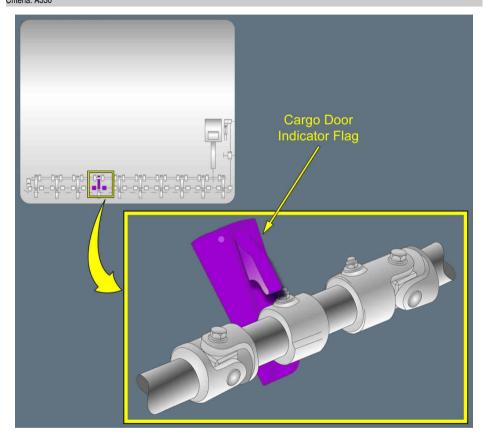
MASTER CONFIGURATION DEVIATION LIST DOORS

CARGO DOOR INDICATOR FLAG

ILLUSTRATION CARGO DOOR INDICATOR FLAG

Ident.: MCDL-52-10-00009076.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-10 Cargo Door Indicator Flag.



MASTER CONFIGURATION DEVIATION LIST DOORS

POTABLE WATER FORWARD DRAIN PANEL ACCESS DOOR

APPROVED

52-11	Potable Water Forward Drain Panel Access Door

Ident.: MCDL-52-11-00009077.0001001 / 26 NOV 09

Criteria: A330

52-11	Quantity installed
POTABLE WATER FORWARD DRAIN PANEL ACCESS	1 1
DOOR	

May be missing.

Refer to MCDL-52-11 Illustration Potable Water Forward Drain Panel Access Door

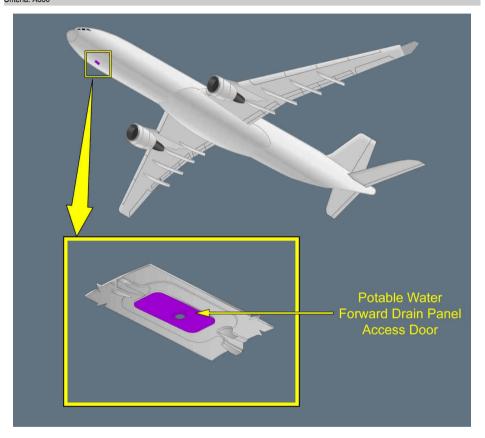


MASTER CONFIGURATION DEVIATION LIST DOORS

POTABLE WATER FORWARD DRAIN PANEL ACCESS DOOR

ILLUSTRATION POTABLE WATER FORWARD DRAIN PANEL ACCESS DOOR

Ident.: MCDL-52-11-00009078.0001001 / 26 NOV 09 Criteria: A330 **FOR INFORMATION ONLY**



For dispatch conditions: Refer to 52-11 Potable Water Forward Drain Panel Access Door.



MASTER CONFIGURATION DEVIATION LIST DOORS

FORWARD CARGO DOOR ACCESS COVER PANEL

52-12 Forward Cargo Door Access Cover Panel

Ident.: MCDL-52-12-00009079.0001001 / 26 NOV 09

APPROVED

Criteria: A330	

52-12	Quantity installed
FORWARD CARGO DOOR ACCESS COVER PANEL	2

All may be missing.

<u>Note:</u> 1. When the aft panel of the door is missing (821 BR), the forward panel (821 AR) may remain installed.

- 2. When the forward panel of the door is missing (821 AR), the aft panel (821 BR) must be removed before next flight.
- 3. All associated latching hooks must be checked latched and locked before each flight.

<u>Note:</u> May be combined with MCDL item 52-13 (Refer to 52-13 Aft Cargo Door Access Cover Panel).

Performance:

When the aft panel is missing, the following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 120 kg (265 lb)
- En route performance limiting weight is reduced by 238 kg (525 lb).

When the forward and aft panels are missing, the following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 196 kg (433 lb)
- En route performance limiting weight is reduced by 388 kg (856 lb)
- Fuel consumption is increased by 0.29 %.

Refer to MCDL-52-12 Illustration Forward Cargo Door Access Cover Panel

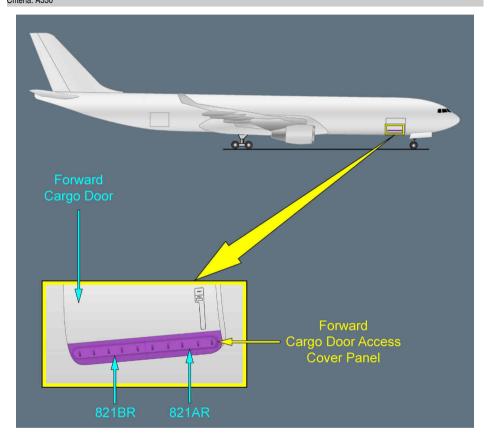


MASTER CONFIGURATION DEVIATION LIST DOORS

FORWARD CARGO DOOR ACCESS COVER PANEL

ILLUSTRATION FORWARD CARGO DOOR ACCESS COVER PANEL

Ident.: MCDL-52-12-00009080.0001001 / 28 JUN 16 Criteria: A330 FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-12 Forward Cargo Door Access Cover Panel.



MASTER CONFIGURATION DEVIATION LIST DOORS

AFT CARGO DOOR ACCESS COVER PANEL

52-13 Aft Cargo Door Access Cover Panel

Ident.: MCDL-52-13-00009081.0001001 / 26 NOV 09 Criteria: A330

<u>APPROVED</u>

52-13	Quantity installed
	Qualitity ilistalieu
AFT CARGO DOOR ACCESS COVER PANEL	1 2

All may be missing.

Note: 1. When the aft panel of the door is missing (822 BR), the forward panel (822 AR) may remain installed.

- 2. When the forward panel of the door is missing (822 AR), the aft panel (822 BR) must be removed before next flight.
- 3. All associated latching hooks must be checked latched and locked before each flight.

<u>Note:</u> May be combined with MCDL item 52-12 (Refer to 52-12 Forward Cargo Door Access Cover Panel).

Performance:

When the aft panel is missing, the following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 99 kg (219 lb)
- En route performance limiting weight is reduced by 198 kg (437 lb)

When the forward and aft panels are missing, the following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 147 kg (325 lb)
- En route performance limiting weight is reduced by 292 kg (644 lb)
- Fuel consumption is increased by 0.22 %.

Refer to MCDL-52-13 Illustration Aft Cargo Door Access Cover Panel

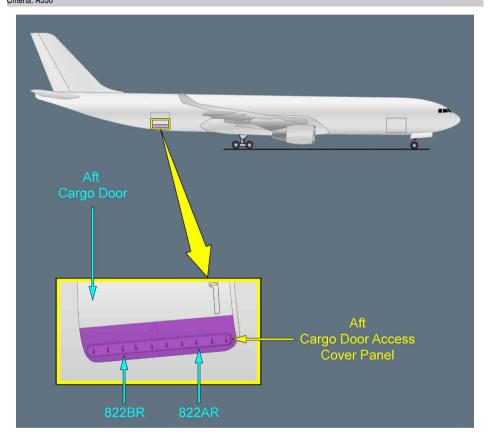


MASTER CONFIGURATION DEVIATION LIST DOORS

AFT CARGO DOOR ACCESS COVER PANEL

ILLUSTRATION AFT CARGO DOOR ACCESS COVER PANEL

Ident.: MCDL-52-13-00009082.0001001 / 28 JUN 16 Criteria: A330 FOR INFORMATION ONLY



For dispatch conditions: Refer to 52-13 Aft Cargo Door Access Cover Panel.



MASTER CONFIGURATION DEVIATION LIST DOORS

PASSENGER DOOR AND EMERGENCY EXITS UPPER COVER PLATE

52-14	Passenger Door and Emergency Exits Upper Cover Plate
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Ident.: MCDL-52-14-00009083.0002001 / 28 FEB 11 Criteria: 330-200F <u>APPROVED</u>

52-14	Quantity installed
PASSENGER DOOR AND EMERGENCY EXITS UPPER	2
COVER PLATE	

One may be missing or partially missing provided the affected door is declared inoperative (*Refer to MMEL/MI-52-10 Cabin Door*).

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 86 kg (190 lb)
- En route performance limiting weight is reduced by 170 kg (375 lb).

Refer to MCDL-52-14 Illustration Passenger Door and Emergency Exits Upper Cover Plate

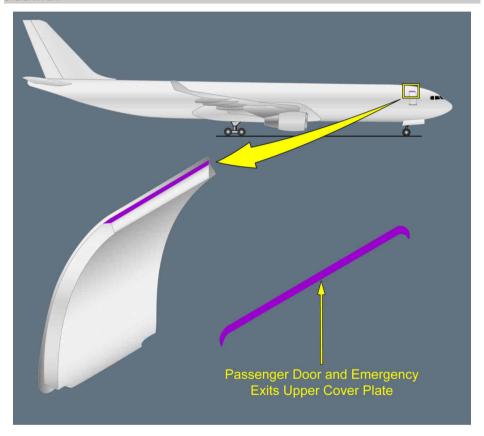


MASTER CONFIGURATION DEVIATION LIST DOORS

PASSENGER DOOR AND EMERGENCY EXITS UPPER COVER PLATE

ILLUSTRATION PASSENGER DOOR AND EMERGENCY EXITS UPPER COVER PLATE

Ident.: MCDL-52-14-00009084.0002001 / 12 SEP 11 Criteria: 330-200F **FOR INFORMATION ONLY**



For dispatch conditions: Refer to 52-14 Passenger Door and Emergency Exits Upper Cover Plate



MASTER CONFIGURATION DEVIATION LIST FUSELAGE

A330 AIRPLANE FLIGHT MANUAL

"DOG HOUSE" CLOSING PANEL

53-01	"Dog House" Closing Panel
-------	---------------------------

Ident.: MCDL-53-01-00009091.0001001 / 26 NOV 09 Criteria: A330 <u>APPROVED</u>

53-01 Quantity installed

One may be missing.

"DOG HOUSE" CLOSING PANEL

• Limitations:

VLO = 190 kt

VLE = 190 kt

Refer to MCDL-53-01 Illustration "Dog House" Closing Panel



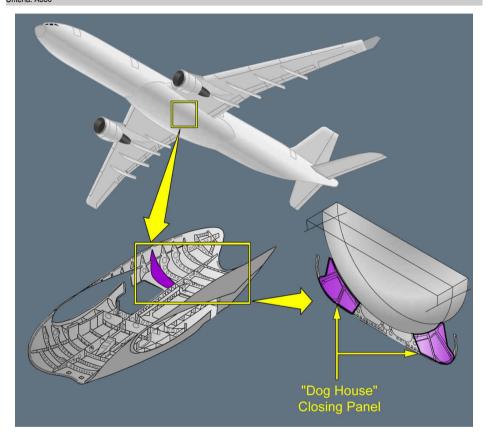
MASTER CONFIGURATION DEVIATION LIST FUSELAGE

"DOG HOUSE" CLOSING PANEL

ILLUSTRATION "DOG HOUSE" CLOSING PANEL

Ident.: MCDL-53-01-00009092.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 53-01 "Dog House" Closing Panel.



MASTER CONFIGURATION DEVIATION LIST FUSELAGE

A330 AIRPLANE FLIGHT MANUAL

53-02

BELLY FAIRING SLIDING PANEL

53-02	Belly Fairing Sliding Panel
-------	-----------------------------

Ident.: MCDL-53-02-00009094.0001001 / 26 NOV 09 Criteria: A330

APPROVED

BELLY FAIRING SLIDING PANEL

Quantity installed

All may be missing.

Note: The sliding panels may have one or two broken cables.

Performance:

The following performance penalties are applicable:

- En route performance limiting weight is reduced by 170 kg (375 lb) per missing panel
- If both panels are missing, fuel consumption is increased by 0.26 %.

Refer to MCDL-53-02 Illustration Belly Fairing Sliding Panel



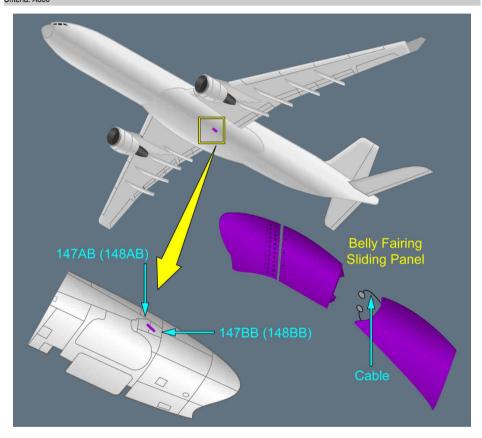
MASTER CONFIGURATION DEVIATION LIST FUSELAGE

BELLY FAIRING SLIDING PANEL

ILLUSTRATION BELLY FAIRING SLIDING PANEL

Ident.: MCDL-53-02-00009095.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 53-02 Belly Fairing Sliding Panel.



MASTER CONFIGURATION DEVIATION LIST FUSELAGE

A330 AIRPLANE FLIGHT MANUAL

FLAP VALVE ASSY

53-03	Flap Valve Assy	

Ident.: MCDL-53-03-00009097.0001001 / 28 FEB 11 Criteria: A330

APPROVED

53-03	Quantity installed
FLAP VALVE ASSY	2

One may be missing provided a visual inspection is performed daily to check the surrounding structure integrity.

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 69 kg (153 lb)
- En route performance limiting weight is reduced by 136 kg (300 lb).

Refer to MCDL-53-03 Illustration Flap Valve Assy



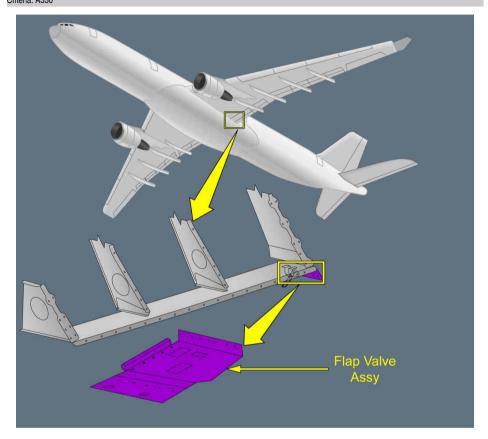
MASTER CONFIGURATION DEVIATION LIST FUSELAGE

FLAP VALVE ASSY

ILLUSTRATION FLAP VALVE ASSY

Ident.: MCDL-53-03-00009098.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 53-03 Flap Valve Assy.



MASTER CONFIGURATION DEVIATION LIST FUSELAGE

A330
AIRPLANE FLIGHT MANUAL

BELLY FAIRING SEAL

53-04	Belly Fairing Seal
-------	--------------------

Ident.: MCDL-53-04-00009099.0001001 / 26 NOV 09

APPROVED

Criteria: A330

53-04	Quantity installed
BELLY FAIRING SEAL	2

One may be missing for 5 flight cycles.

Refer to MCDL-53-04 Illustration Belly Fairing Seal



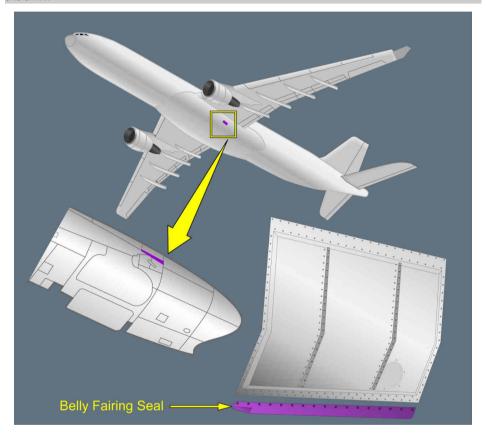
MASTER CONFIGURATION DEVIATION LIST FUSELAGE

BELLY FAIRING SEAL

ILLUSTRATION BELLY FAIRING SEAL

Ident.: MCDL-53-04-00009100.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 53-04 Belly Fairing Seal.



MASTER CONFIGURATION DEVIATION LIST NACELLE/PYLON

SPRING PLATE

APPROVED

A330
AIRPLANE FLIGHT MANUAL

54-03	Spring Plate
-------	--------------

Ident.: MCDL-54-03-00009111.0001001 / 16 APR 10

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

54-03	Quantity installed
SPRING PLATE	2

All may be missing.

Performance:

The following performance penalties are applicable per missing plate:

- Takeoff and approach climb performance limiting weights are reduced by 686 kg (1 513 lb)
- En route performance limiting weight is reduced by 272 kg (600 lb)
- Fuel consumption is increased by 0.20 %.

Refer to MCDL-54-03 Illustration Spring Plate

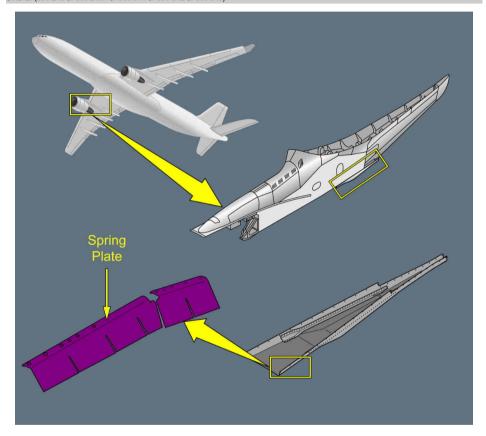


MASTER CONFIGURATION DEVIATION LIST NACELLE/PYLON

SPRING PLATE

ILLUSTRATION SPRING PLATE

Ident.: MCDL-54-03-00009112.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) FOR INFORMATION ONLY



For dispatch conditions: Refer to 54-03 Spring Plate.



MASTER CONFIGURATION DEVIATION LIST NACELLE/PYLON

A330
AIRPLANE FLIGHT MANUAL

PYLON ACCESS PANEL

· ·

Ident.: MCDL-54-04-00009113.0001001 / 26 NOV 09 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) **APPROVED**

54-04	Quantity installed
PYLON ACCESS PANEL	4

One may be missing per pylon.

Performance:

The following performance penalty is applicable per missing panel:

- En route performance limiting weight is reduced by 120 kg (265 lb).

Refer to MCDL-54-04 Illustration Pylon Access Panel



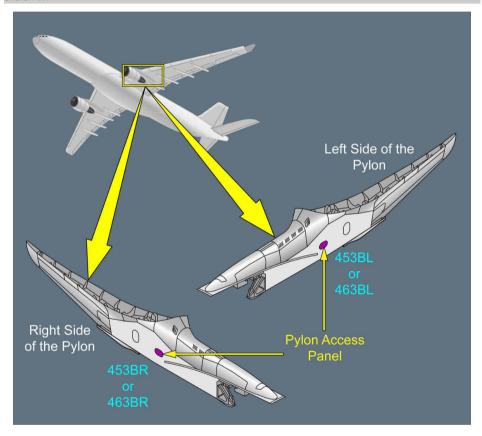
MASTER CONFIGURATION DEVIATION LIST NACELLE/PYLON

PYLON ACCESS PANEL

ILLUSTRATION PYLON ACCESS PANEL

Ident.: MCDL-54-04-00009114.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 54-04 Pylon Access Panel.



MASTER CONFIGURATION DEVIATION LIST STABILIZERS

SLIDELIP OF THE APRON FAIRING PARTS

APPROVED

55-01 Slidelip of the Apron Fairing Parts

Ident.: TDU / MCDL-55-01-00015919.0001001 / 25 MAR 15

Criteria: A330

Impacted DU: NONE Belongs to TR531 Issue 1

55-01 Quantity installed SLIDELIP OF THE APRON FAIRING PARTS –

(m) Refer to AMM Task 27-40-00-866-801

One may be missing on each part of the apron fairing (front, upper, or lower), provided that there is no contact between the carbon fibre of the apron fairing structure and the metallic protection on the fuselage.

Refer to MCDL-55-01 Illustration of Slidelip of the Apron Fairing Parts



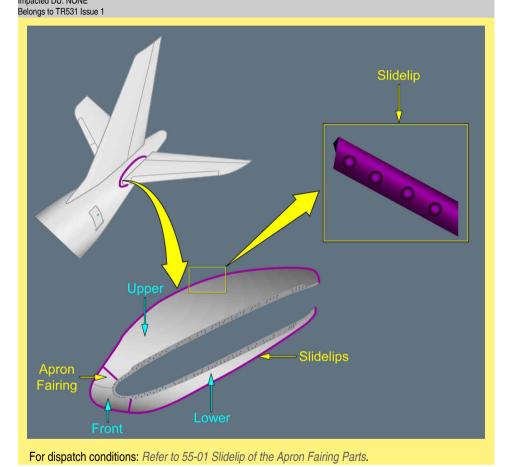
MASTER CONFIGURATION DEVIATION LIST STABILIZERS

SLIDELIP OF THE APRON FAIRING PARTS

ILLUSTRATION OF SLIDELIP OF THE APRON FAIRING PARTS

Ident.: TDU / MCDL-55-01-00015920.0001001 / 25 MAR 15

Criteria: A330 Impacted DU: NONE <u>APPROVED</u>





MASTER CONFIGURATION DEVIATION LIST

WINGS

A330
AIRPLANE FLIGHT MANUAL

UNDERWING PLUG FOR JACKING POINT

57-01	Underwing Plug for Jac	cking Point
MODI ET 04 00000445 000	4004 / 00 NOV 00	ADDDOVED

Ident.: MCDL-57-01-00009115.0001001 / 26 NOV 09 Criteria: A330 APPROVED

57-01	Quantity installed
UNDERWING PLUG FOR JACKING POINT	2

One may be missing.

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 51 kg (113 lb).

Refer to MCDL-57-01 Illustration Underwing Plug for Jacking Point



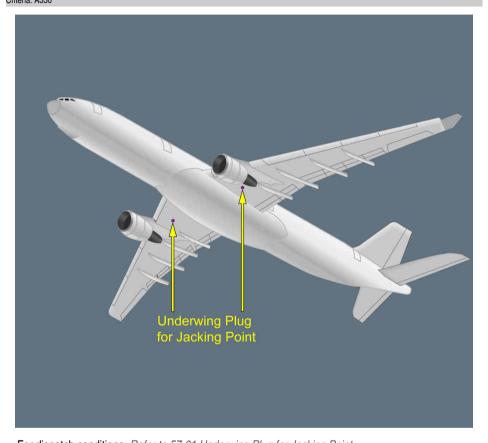
MASTER CONFIGURATION DEVIATION LIST WINGS

UNDERWING PLUG FOR JACKING POINT

ILLUSTRATION UNDERWING PLUG FOR JACKING POINT

Ident.: MCDL-57-01-00009116.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 57-01 Underwing Plug for Jacking Point.



MASTER CONFIGURATION DEVIATION LIST

WINGS

WINGLET

A330 AIRPLANE FLIGHT MANUAL

57-02	Winglet
	_

Ident.: MCDL-57-02-00009117.0002001 / 19 JUN 13

APPROVED

Criteria: (330-201 or 330-202 or 330-203 or 330-223 or 330-243 or 330-302 or 330-303 or 330-323 or 330-343 or 330-200F)

57-02	Quantity installed
WINGLET	2

(m) Refer to AMM Task 57-31-00-040-801

One may be missing provided the hole is covered.

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 17 150 kg (37 810 lb)
- En route performance limiting weight is reduced by 1 768 kg (3 898 lb)
- Fuel consumption is increased by 1.20 %.

Refer to MCDL-57-02 Illustration Winglet



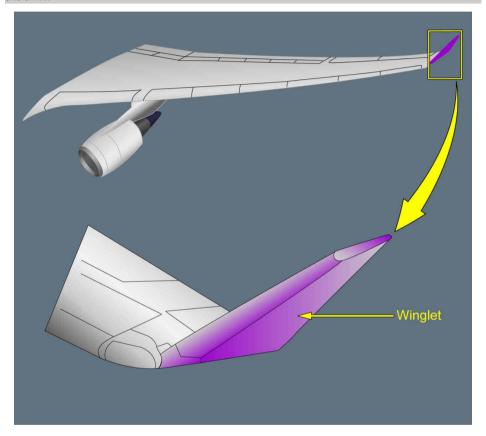
MASTER CONFIGURATION DEVIATION LIST WINGS

WINGLET

ILLUSTRATION WINGLET

Ident.: MCDL-57-02-00009118.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 57-02 Winglet.



MASTER CONFIGURATION DEVIATION LIST

WINGS

AIRPLANE FLIGHT MANUAL

FLAP TRACK FAIRING

57-04	Flap Tra	ack Fairing
Ident : MCDL E7 04 00000110 0001	001 / 05 14	ADDDOVED

Criteria: A330

APPROVED

a)

57-04	Quantity installed
FLAP TRACK FAIRING	8

(m) Refer to AMM Task 57-56-00-040-801

One may be partially (aft fairing only) or completely (aft and forward fairing) missing.

1. When the forward part of the fairing is missing, the aft part must be removed.

- 2. When the aft part of the fairing is missing, the forward part may remain installed.
- 3. The forward part of fairing 4 on the right wing must remain in place (RAT location).

Limitations:

Do not use jettison system (if installed) when fairing 4 is affected.

Procedures:

Approach speed: VAPP + 5 kt Landing distance: multiply by 1.08

Performance:

The following performance penalties are applicable:

- En route performance limiting weight is reduced by 5 240 kg (11 553 lb)
- Fuel consumption is increased by 3.42 %.

- or -

b)

57-04	Quantity installed
FLAP TRACK FAIRING	8

(m) Refer to AMM Task 57-56-00-040-801

One set of rear cover and tail cone may be missing on the same aft flap track fairing. Note: Rear cover and tail cone must not be missing separately.

Limitations:

Do not use jettison system (if installed) when fairing 4 is affected.

Continued on the following page



MASTER CONFIGURATION DEVIATION LIST wings

FLAP TRACK FAIRING

Continued from the previous page Flap Track Fairing

Performance:

The following performance penalties are applicable:

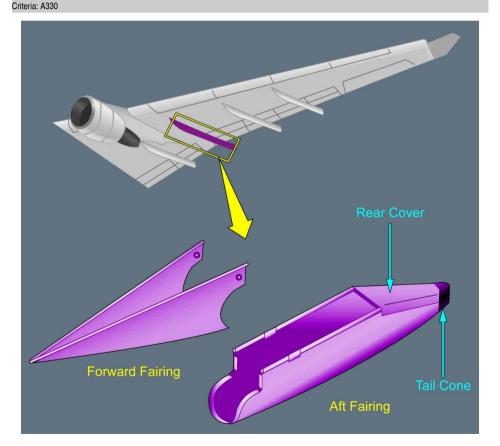
- En route performance limiting weight is reduced by 2 450 kg (5 402 lb)
- Fuel consumption is increased by 1.60 %.

Refer to MCDL-57-04 Illustration Flap Track Fairing

ILLUSTRATION FLAP TRACK FAIRING

Ident.: MCDL-57-04-00009120.0001001 / 26 NOV 09

FOR INFORMATION ONLY





MASTER CONFIGURATION DEVIATION LIST

WINGS

FLAP TRACK FAIRING

A330 AIRPLANE FLIGHT MANUAL

For dispatch conditions: Refer to 57-04 Flap Track Fairing.



MASTER CONFIGURATION DEVIATION LIST WINGS

FLAP TRACK FAIRING

Intentionally left blank

TPA A330-243F FLEET MCDL-57-04 P 4/4
AFM 17 SEP 14



MASTER CONFIGURATION DEVIATION LIST wings

A330 AIRPLANE FLIGHT MANUAL

INDICATOR FLAG

ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE INDICATOR FLAG

57-05 Access Panel to Slat Actuator Overtorque Indicator Flag

Ident.: TDU / MCDL-57-05-00017606.0001001 / 22 MAR 16

APPROVED

Criteria: A330

Impacted DU: 00009121 Access Panel to Slat Actuator Overtorque Indicator Flag

Belongs to TR692 Issue 1

a)

57-05 Quantity installed ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE 28

(m) Refer to AMM Task 57-41-00-040-801

If only inboard access panels are missing, all may be missing provided that the hole is covered.

- or -

b)

57-05 Quantity installed ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE 28 INDICATOR FLAG

(m) Refer to AMM Task 57-42-00-040-801

If outboard access panels are missing, two may be missing per wing provided that the hole is covered.

Note: If inboard access panels are combined with outboard access panels, two may be missing per wing and both maintenance tasks must be applied.

Refer to MCDL-57-05 Illustration Access Panel to Slat Actuator Overtorque Indicator Flag

57-05 Access Panel to Slat Actuator Overtorque Indicator Flag

Ident.: MCDL-57-05-00009121.0001001 / 25 JUL 14

Criteria: A330

Impacted by TDU: 00017606 Access Panel to Slat Actuator Overtorque Indicator Flag

a)

57-05	Quantity installed
ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE	28
INDICATOR FLAG	

(m) Refer to AMM Task 57-41-00-040-801

Continued on the following page

APPROVED



MASTER CONFIGURATION DEVIATION LIST wings

ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE INDICATOR FLAG

Continued from the previous page Access Panel to Slat Actuator Overtorque Indicator Flag If only inboard access panels are missing, all may be missing provided the hole is covered with high speed tape.

– or –

b)

57-05	Quantity installed
ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE	28
INDICATOR FLAG	

(m) Refer to AMM Task 57-42-00-040-801

If outboard access panels are missing, two may be missing per wing provided the hole is covered with high speed tape.

<u>Note:</u> If inboard access panels are combined with outboard access panels, two may be missing per wing and both maintenance tasks must be applied.

Refer to MCDL-57-05 Illustration Access Panel to Slat Actuator Overtorque Indicator Flag



MASTER CONFIGURATION DEVIATION LIST wings

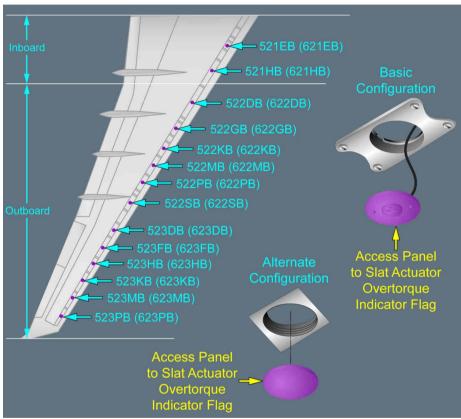
ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE INDICATOR FLAG

ILLUSTRATION ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE INDICATOR FLAG

Ident.: MCDL-57-05-00009122.0001001 / 02 JUL 10

FOR INFORMATION ONLY

Criteria: A330



For dispatch conditions: Refer to 57-05 Access Panel to Slat Actuator Overtorque Indicator Flag.



MASTER CONFIGURATION DEVIATION LIST WINGS

ACCESS PANEL TO SLAT ACTUATOR OVERTORQUE INDICATOR FLAG

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TPA A330-243F FLEET MCDL-57-05 P 4/4
AFM 13 APR 16



MASTER CONFIGURATION DEVIATION LIST

WINGS

AIRPLANE FLIGHT MANUAL

FLAP TRACK FAIRING COVER

57-07 Flap Track Fairing Cover

Ident.: TDU / MCDL-57-07-00017269.0001001 / 22 MAR 16 Criteria: A330

Impacted DU: 00009123 Flap Track Fairing Cover

Belongs to TR692 Issue 1

57-07

FLAP TRACK FAIRING COVER

Quantity installed 56

APPROVED

Two may be missing per flap track fairing provided that the hole is covered and a visual inspection is performed as specified in the AMM.

May be combined with any other item listed in MCDL-57 chapter.

Refer to MCDL-57-07 Illustration Flap Track Fairing Cover

(m) Refer to AMM Task 57-56-11-040-801

57-07	Flap Track Fairing Cover
-------	--------------------------

Ident.: MCDL-57-07-00009123.0001001 / 19 JUN 13

APPROVED

Criteria: A330

Impacted by TDU: 00017269 Flap Track Fairing Cover

57-07	Quantity installed
FLAP TRACK FAIRING COVER	56

(m) Refer to AMM Task 57-56-11-040-801

Two may be missing per flap track fairing provided the hole is covered with high speed tape. May be combined with any other item listed in MCDL-57 chapter.

Refer to MCDL-57-07 Illustration Flap Track Fairing Cover



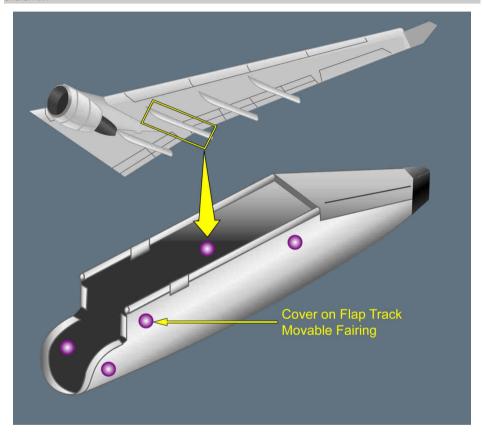
MASTER CONFIGURATION DEVIATION LIST WINGS

FLAP TRACK FAIRING COVER

ILLUSTRATION FLAP TRACK FAIRING COVER

Ident.: MCDL-57-07-00009124.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 57-07 Flap Track Fairing Cover.



MASTER CONFIGURATION DEVIATION LIST

WINGS

FLAP TO MOVABLE FLAP TRACK FAIRING SEAL

57-08	Flap to Movable Flap Track Fairing Seal
-------	---

Ident.: MCDL-57-08-00009125.0001001 / 26 NOV 09 Criteria: A330

APPROVED

57-08	Quantity installed
FLAP TO MOVABLE FLAP TRACK FAIRING SEAL	32

All may be missing.

Performance:

The following performance penalties are applicable:

- When three or more seals are missing, en route performance limiting weight is reduced by 40 kg (89 lb) per missing seal
- When 7 or more seals are missing, fuel consumption is increased by 0.03 % per missing seal.

Refer to MCDL-57-08 Illustration Flap to Movable Flap Track Fairing Seal



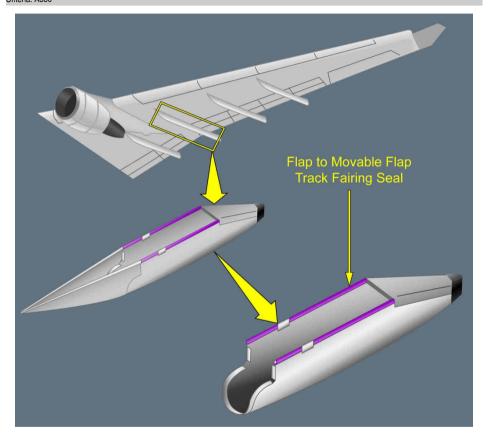
MASTER CONFIGURATION DEVIATION LIST WINGS

FLAP TO MOVABLE FLAP TRACK FAIRING SEAL

ILLUSTRATION FLAP TO MOVABLE FLAP TRACK FAIRING SEAL

Ident.: MCDL-57-08-00009126.0001001 / 26 NOV 09 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 57-08 Flap to Movable Flap Track Fairing Seal.



MASTER CONFIGURATION DEVIATION LIST wings

A330 AIRPLANE FLIGHT MANUAL

COVER ON FLAP TRACK FIXED FAIRING

57-09 Cover on Flap Track Fixed Fairing

Ident.: TDU / MCDL-57-09-00017270.0001001 / 22 MAR 16

Criteria: A330

Impacted DU: 00010877 Cover on Flap Track Fixed Fairing

Belongs to TR692 Issue 1

57-09 Quantity installed COVER ON FLAP TRACK FIXED FAIRING –

(m) Refer to AMM Task 57-56-11-040-802

Two may be missing per flap track fairing provided that the hole is covered and a visual inspection is performed as specified in the AMM.

Note: May be combined with any other item listed in MCDL-57 chapter.

Refer to MCDL-57-09 Illustration Cover on Flap Track Fixed Fairing

	57-09	Cover on Flap Track Fixed Fairing
--	-------	-----------------------------------

Ident.: MCDL-57-09-00010877.0001001 / 19 JUN 13

APPROVED

APPROVED

Criteria: A330

Impacted by TDU: 00017270 Cover on Flap Track Fixed Fairing

57-09	Quantity installed
COVER ON FLAP TRACK FIXED FAIRING	_

(m) Refer to AMM Task 57-56-11-040-802

Two may be missing per flap track fairing provided the hole is covered with high speed tape. *Note:* May be combined with any other item listed in MCDL-57 chapter.

Refer to MCDL-57-09 Illustration Cover on Flap Track Fixed Fairing



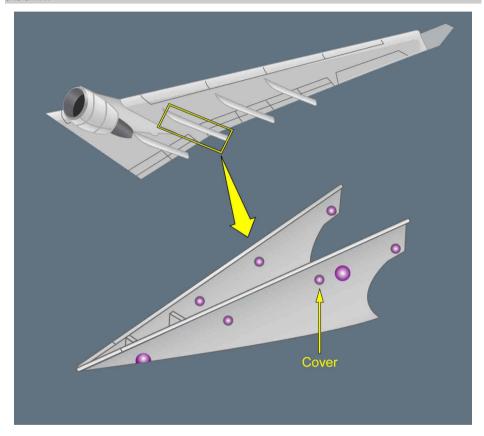
MASTER CONFIGURATION DEVIATION LIST WINGS

COVER ON FLAP TRACK FIXED FAIRING

ILLUSTRATION COVER ON FLAP TRACK FIXED FAIRING

Ident.: MCDL-57-09-00010878.0001001 / 02 JUL 10 Criteria: A330

FOR INFORMATION ONLY



For dispatch conditions: Refer to 57-09 Cover on Flap Track Fixed Fairing.



MASTER CONFIGURATION DEVIATION LIST POWER PLANT

FAN COWL DOOR HOIST POINT PLUG

71-05	Fan Cowl Door Hoist Point Plug
-------	--------------------------------

Ident.: MCDL-71-05-00009309.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

71-05	Quantity installed
FAN COWL DOOR HOIST POINT PLUG	8

All may be missing.

Refer to MCDL-71-05 Illustration Fan Cowl Door Hoist Point Plug



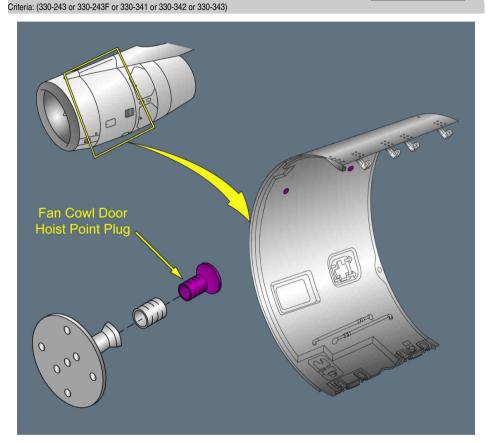
MASTER CONFIGURATION DEVIATION LIST POWER PLANT

FAN COWL DOOR HOIST POINT PLUG

ILLUSTRATION FAN COWL DOOR HOIST POINT PLUG

Ident.: MCDL-71-05-00009310.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 71-05 Fan Cowl Door Hoist Point Plug.



MASTER CONFIGURATION DEVIATION LIST POWER PLANT

FAN COWL DOOR HOLD OPEN ROD

71-06	Fan Cowl Door Hold Open Rod
-------	-----------------------------

Ident.: MCDL-71-06-00009311.0001001 / 19 JUN 13 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) **APPROVED**

71-06	Quantity installed
FAN COWL DOOR HOLD OPEN ROD	8

(m) Refer to AMM Task 71-13-00-040-801 All may be missing.

Refer to MCDL-71-06 Illustration Fan Cowl Door Hold Open Rod



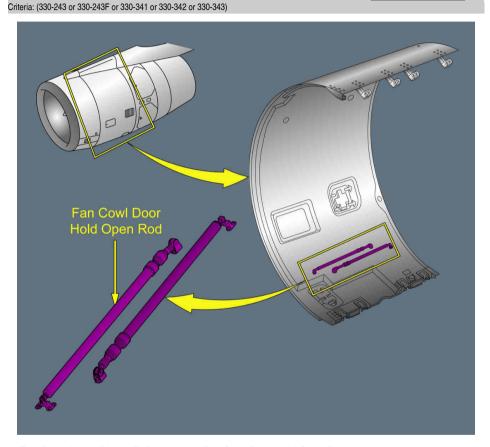
MASTER CONFIGURATION DEVIATION LIST POWER PLANT

FAN COWL DOOR HOLD OPEN ROD

ILLUSTRATION FAN COWL DOOR HOLD OPEN ROD

Ident.: MCDL-71-06-00009312.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 71-06 Fan Cowl Door Hold Open Rod.



MASTER CONFIGURATION DEVIATION LIST POWER PLANT

NACELLE HOIST POINT PLUG NOSE COWL

71-07	Nacelle Hoist Point Plug Nose Cowl
-------	------------------------------------

Ident.: MCDL-71-07-00009313.0001001 / 16 APR 10

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

APPROVED

71-07	Quantity installed
NACELLE HOIST POINT PLUG NOSE COWL	8

All may be missing.

Refer to MCDL-71-07 Illustration Nacelle Hoist Point Plug Nose Cowl



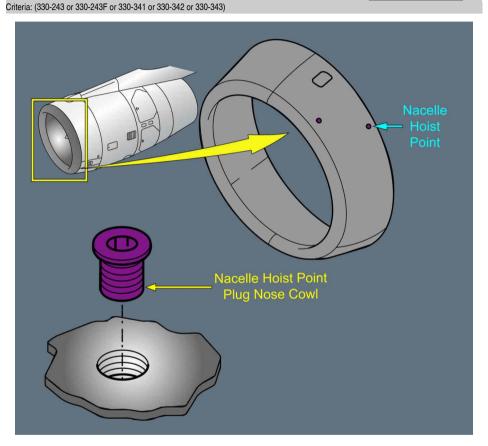
MASTER CONFIGURATION DEVIATION LIST POWER PLANT

NACELLE HOIST POINT PLUG NOSE COWL

ILLUSTRATION NACELLE HOIST POINT PLUG NOISE COWL

Ident.: MCDL-71-07-00009314.0001001 / 28 FEB 11

FOR INFORMATION ONLY



For dispatch conditions: Refer to 71-07 Nacelle Hoist Point Plug Nose Cowl.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER HOIST POINT PLUG

78-08	Thrust Reverser Hoist Point Plug
-------	----------------------------------

Ident.: MCDL-78-08-00009403.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

78-08	Quantity installed
THRUST REVERSER HOIST POINT PLUG	32

All may be missing.

Refer to MCDL-78-08 Illustration Thrust Reverser Hoist Point Plug



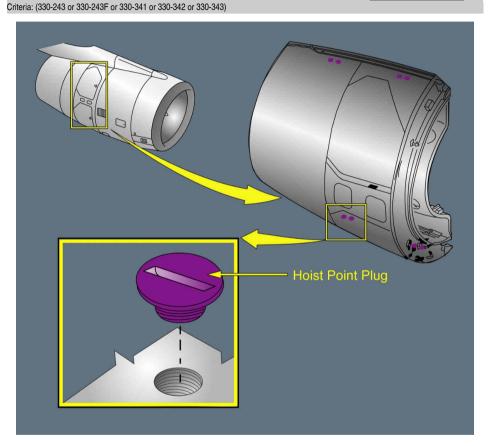
MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER HOIST POINT PLUG

ILLUSTRATION THRUST REVERSER HOIST POINT PLUG

Ident.: MCDL-78-08-00009404.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-08 Thrust Reverser Hoist Point Plug.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER CINCHING DEVICE

78-09	Thrust Reverser Cinching Device
-------	---------------------------------

Ident.: MCDL-78-09-00009405.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) **APPROVED**

78-09	Quantity installed	
THRUST REVERSER CINCHING DEVICE	2	

All may be missing.

Refer to MCDL-78-09 Illustration Thrust Reverser Cinching Device



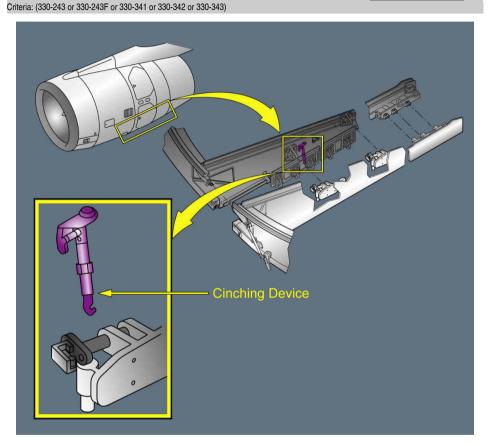
MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER CINCHING DEVICE

ILLUSTRATION THRUST REVERSER CINCHING DEVICE

Ident.: MCDL-78-09-00009406.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-09 Thrust Reverser Cinching Device.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER "C" DUCT ACTUATION SYSTEM

78-10	Thrust Reverser "C" Duct Actuation System
-------	---

Ident.: MCDL-78-10-00009407.0001001 / 19 JUN 13 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

78-10	Quantity installed
THRUST REVERSER "C" DUCT ACTUATION SYSTEM	4

(m) Refer to AMM Task 78-36-00-040-801 All may be missing.

Refer to MCDL-78-10 Illustration Thrust Reverser "C" Duct Actuation System



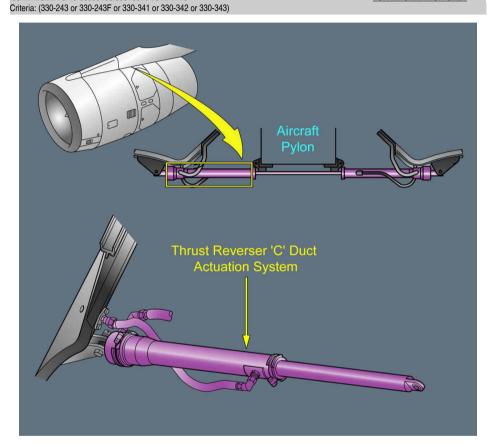
MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER "C" DUCT ACTUATION SYSTEM

ILLUSTRATION THRUST REVERSER "C" DUCT ACTUATION SYSTEM

Ident.: MCDL-78-10-00009408.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-10 Thrust Reverser "C" Duct Actuation System.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER FRONT AND REAR HOLD OPEN ROD

78-11	Thrust Reverser Front and Rear Hold Open Rod
-------	--

Ident.: MCDL-78-11-00009409.0001001 / 19 JUN 13 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

78-11	Quantity installed	
THRUST REVERSER FRONT AND RE	AR HOLD OPEN ROD 8	

(m) Refer to AMM Task 78-36-00-040-802 All may be missing.

Refer to MCDL-78-11 Illustration Thrust Reverser Front and Rear Hold Open Rod

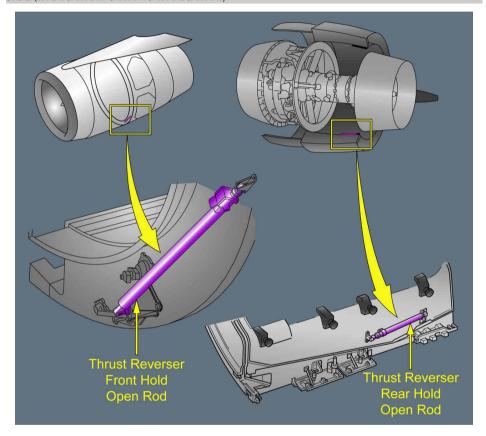


MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER FRONT AND REAR HOLD OPEN ROD

ILLUSTRATION THRUST REVERSER FRONT AND REAR HOLD OPEN ROD

Ident.: MCDL-78-11-00009410.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-11 Thrust Reverser Front and Rear Hold Open Rod.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER HINGE ACCESS COVER

78-12	Thrust Reverser Hinge Access Cover
-------	------------------------------------

Ident.: MCDL-78-12-00009411.0001001 / 19 JUN 13 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

78-12	Quantity installed
THRUST REVERSER HINGE ACCESS COVER	4

(m) Refer to AMM Task 78-32-00-040-805 All may be missing.

Performance:

The following performance penalties are applicable per missing cover:

- Takeoff and approach climb performance limiting weights are reduced by 256 kg (565 lb)
- En route performance limiting weight is reduced by 716 kg (1 579 lb)
- Fuel consumption is increased by 0.80 %.

Refer to MCDL-78-12 Illustration Thrust Reverser Hinge Access Cover

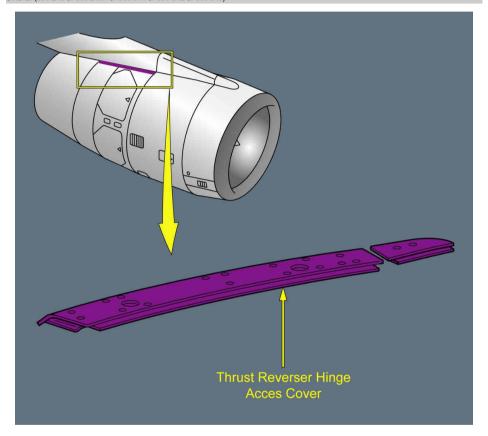


MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER HINGE ACCESS COVER

ILLUSTRATION THRUST REVERSER HINGE ACCESS COVER

Ident.: MCDL-78-12-00009412.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-12 Thrust Reverser Hinge Access Cover.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

A330
AIRPLANE FLIGHT MANUAL

THRUST REVERSER BAVETTE FAIRING

78-13	Thrust Reverser Bavette Fairing
-------	---------------------------------

Ident.: MCDL-78-13-00009413.0001001 / 19 JUN 13 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) **APPROVED**

78-13 Quantity installed THRUST REVERSER BAVETTE FAIRING 16

(m) Refer to AMM Task 78-32-00-040-802

Four may be missing.

<u>Note:</u> May be cumulated with MCDL items 78-16 (Refer to 78-16 Thrust Reverser Rectangular Movable Panel) or 78-17 (Refer to 78-17 Thrust Reverser Triangular Movable Panel).

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 181 kg (400 lb) per missing fairing
- En route performance limiting weight is reduced by 126 kg (278 lb) per missing fairing
- When three or more fairings are missing, fuel consumption is increased by 0.08 % per missing fairing.

Refer to MCDL-78-13 Illustration Thrust Reverser Bavette Fairing



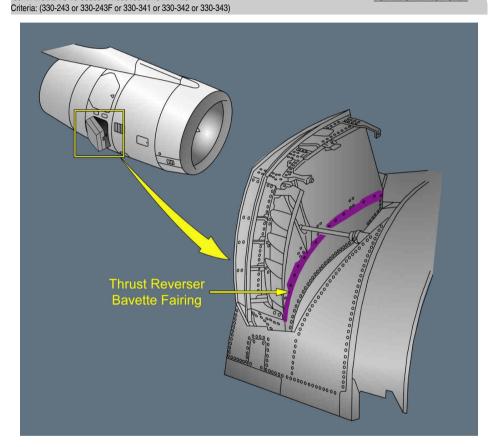
MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER BAVETTE FAIRING

ILLUSTRATION THRUST REVERSER BAVETTE FAIRING

Ident.: MCDL-78-13-00009414.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-13 Thrust Reverser Bavette Fairing.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER DOOR ACTUATOR PIT FAIRING

78-14	Thrust Reverser Door Actuator Pit Fairing
-------	---

Ident.: MCDL-78-14-00009415.0001001 / 19 JUN 13 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

78-14	Quantity installed
THRUST REVERSER DOOR ACTUATOR PIT FAIRING	8

(m) Refer to AMM Task 78-32-00-040-806 Four may be missing.

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 163 kg (360 lb) per missing fairing
- When two or more fairings are missing, en route performance limiting weight is reduced by 114 kg (252 lb) per missing fairing
- When three or more fairings are missing, fuel consumption is increased by 0.08 % per missing fairing.

Refer to MCDL-78-14 Illustration Thrust Reverser Door Actuator Pit Fairing



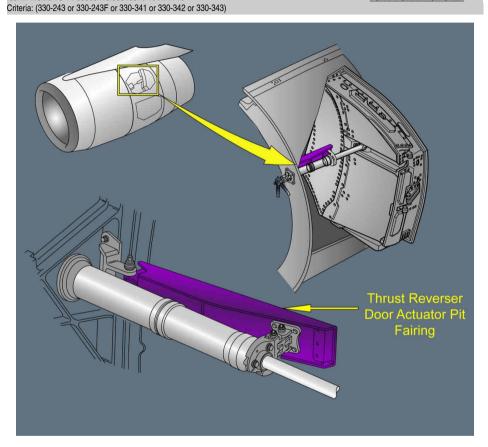
MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER DOOR ACTUATOR PIT FAIRING

ILLUSTRATION THRUST REVERSER DOOR ACTUATOR PIT FAIRING

Ident.: MCDL-78-14-00009416.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-14 Thrust Reverser Door Actuator Pit Fairing.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER PIVOT DOOR ACCESS PANEL

78-15	Thrust Reverser Pivot Door Access Panel
-------	---

Ident.: MCDL-78-15-00009417.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

78-15	Quantity installed
THRUST REVERSER PIVOT DOOR ACCESS PANEL	4

All may be missing.

Refer to MCDL-78-15 Illustration Thrust Reverser Pivot Door Access Panel



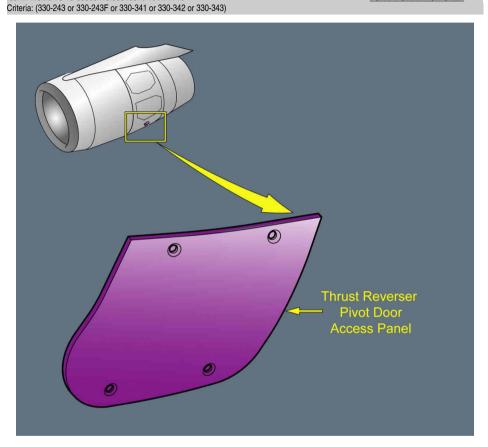
MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER PIVOT DOOR ACCESS PANEL

ILLUSTRATION THRUST REVERSER PIVOT DOOR ACCESS PANEL

Ident.: MCDL-78-15-00009418.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-15 Thrust Reverser Pivot Door Access Panel.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER RECTANGULAR MOVABLE PANEL

APPROVED

78-16 Thrust Reverser Rectangular Movable Panel

Ident.: MCDL-78-16-00009419.0001001 / 19 JUN 13

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

78-16 Quantity installed THRUST REVERSER RECTANGULAR MOVABLE PANEL 8

(m) Refer to AMM Task 78-32-00-040-803

One may be missing provided the associated bavette fairing is removed. *Refer to 78-13 Thrust Reverser Bavette Fairing*

<u>Note:</u> The performance penalties given in this item take into account that the movable panel and the bavette fairing are removed.

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 578 kg (1 275 lb)
- En route performance limiting weight is reduced by 402 kg (887 lb)
- Fuel consumption is increased by 0.28 %.

Refer to MCDL-78-16 Illustration Thrust Reverser Rectangular Movable Panel



MASTER CONFIGURATION DEVIATION LIST EXHAUST

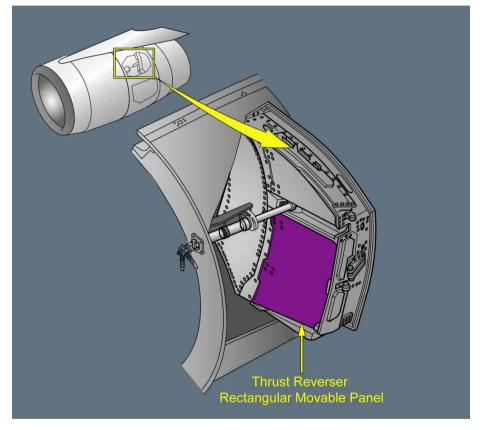
THRUST REVERSER RECTANGULAR MOVABLE PANEL

ILLUSTRATION THRUST REVERSER RECTANGULAR MOVABLE PANEL

Ident.: MCDL-78-16-00009420.0001001 / 16 APR 10

FOR INFORMATION ONLY

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)



For dispatch conditions: Refer to 78-16 Thrust Reverser Rectangular Movable Panel.



MASTER CONFIGURATION DEVIATION LIST **EXHAUST**

THRUST REVERSER TRIANGULAR MOVABLE PANEL

78-17 **Thrust Reverser Triangular Movable Panel** Ident.: MCDL-78-17-00009421.0001001 / 19 JUN 13

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

APPROVED

Quantity installed 78-17 THRUST REVERSER TRIANGULAR MOVABLE PANEL

(m) Refer to AMM Task 78-32-00-040-804

One may be missing provided the associated bavette fairing is removed. Refer to 78-13 Thrust Reverser Bavette Fairing

Note: The performance penalties given in this item take into account that the movable panel and the bavette fairing are removed.

Performance:

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 578 kg (1 275 lb)
- En route performance limiting weight is reduced by 402 kg (887 lb)
- Fuel consumption is increased by 0.28 %.

Refer to MCDL-78-17 Illustration Thrust Reverser Triangular Movable Panel



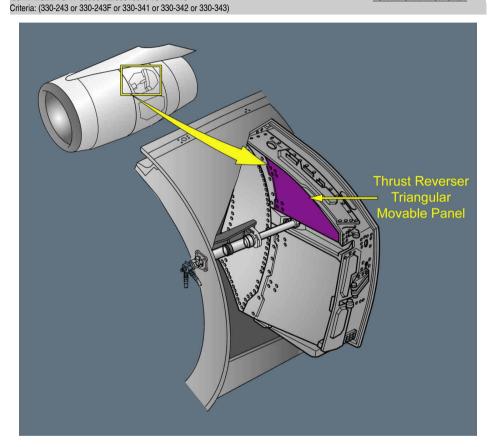
MASTER CONFIGURATION DEVIATION LIST EXHAUST

THRUST REVERSER TRIANGULAR MOVABLE PANEL

ILLUSTRATION THRUST REVERSER TRIANGULAR MOVABLE PANEL

Ident.: MCDL-78-17-00009422.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-17 Thrust Reverser Triangular Movable Panel.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

COMMON NOZZLE ASSEMBLY HOIST POINT PLUG

78-18	Common Nozzle Assembly Hoist Point Plug
-------	---

Ident.: MCDL-78-18-00009423.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) APPROVED

78-18	Quantity installed
COMMON NOZZLE ASSEMBLY HOIST POINT PLUG	16

All may be missing.

Refer to MCDL-78-18 Illustration Common Nozzle Assembly Hoist Point Plug



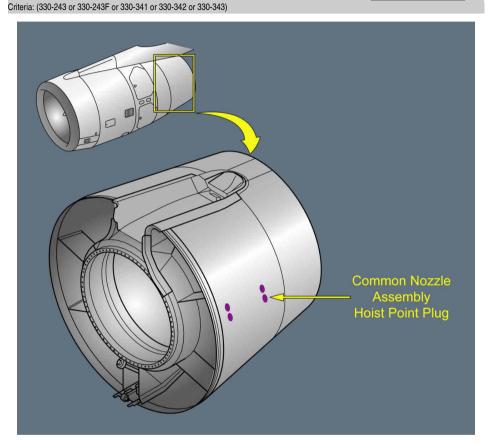
MASTER CONFIGURATION DEVIATION LIST EXHAUST

COMMON NOZZLE ASSEMBLY HOIST POINT PLUG

ILLUSTRATION COMMON NOZZLE ASSEMBLY HOIST POINT PLUG

Ident.: MCDL-78-18-00009424.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-18 Common Nozzle Assembly Hoist Point Plug.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

COMMON NOZZLE ASSEMBLY PYLON FAIRING TRAILING EDGE

78-19	Common Nozzle Assembly Pylon Fairing Trailing Edge
-------	--

Ident.: MCDL-78-19-00009425.0001001 / 19 JUN 13

Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343)

APPROVED

78-19	Quantity installed
COMMON NOZZLE ASSEMBLY PYLON FAIRING TRAILING	4
EDGE	

(m) Refer to AMM Task 78-11-00-040-801 All may be missing.

Refer to MCDL-78-19 Illustration Common Nozzle Assembly Pylon Fairing Trailing Edge



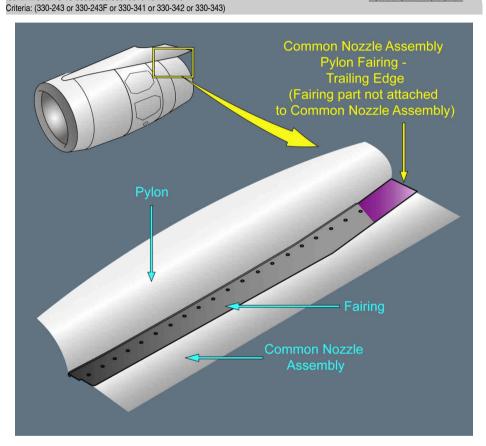
MASTER CONFIGURATION DEVIATION LIST EXHAUST

COMMON NOZZLE ASSEMBLY PYLON FAIRING TRAILING EDGE

ILLUSTRATION COMMON NOZZLE ASSEMBLY PYLON FAIRING TRAILING EDGE

Ident.: MCDL-78-19-00009426.0001001 / 16 APR 10

FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-19 Common Nozzle Assembly Pylon Fairing Trailing Edge.



MASTER CONFIGURATION DEVIATION LIST EXHAUST

A330
AIRPLANE FLIGHT MANUAL

LATCH NUMBER 4 ACCESS PANEL

78-20	Latch Number 4 Access Panel
-------	-----------------------------

Ident.: MCDL-78-20-00009427.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) **APPROVED**

78-20	Quantity installed
LATCH NUMBER 4 ACCESS PANEL	4

All may be missing.

Performance:

The following performance penalty is applicable:

- When three or more panels are missing, takeoff performance limiting weight is reduced by 22 kg (49 lb) per missing panel.

Refer to MCDL-78-20 Illustration Latch Number 4 Access Panel

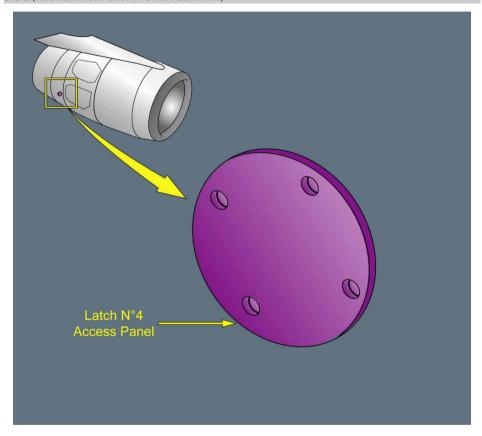


MASTER CONFIGURATION DEVIATION LIST EXHAUST

LATCH NUMBER 4 ACCESS PANEL

ILLUSTRATION LATCH NUMBER 4 ACCESS PANEL

Ident.: MCDL-78-20-00009428.0001001 / 16 APR 10 Criteria: (330-243 or 330-243F or 330-341 or 330-342 or 330-343) FOR INFORMATION ONLY



For dispatch conditions: Refer to 78-20 Latch Number 4 Access Panel.

SUPPLEMENTARY PERFORMANCE





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SPERF-CONT-LIM LIMITATIONS Limitations	
SPERF-CONT-PERF PERFORMANCE Aircraft Configuration	
Takeoff and Landing Performance	



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SUPPLEMENTARY PERFORMANCE CONTAMINATED RUNWAY

GENERAL

GENERAL

Ident.: SPERF-CONT-GEN-00005593.0001001 / 26 NOV 09

APPROVED

Criteria: A330

This chapter of the AFM gives the performance information for operations on contaminated runways and the conditions used for their establishment.

Any actual condition different from those listed in this chapter may lead to different performance. Refer to SPERF-CONT-PERF Aircraft Configuration.



SUPPLEMENTARY PERFORMANCE CONTAMINATED RUNWAY

GENERAL



SUPPLEMENTARY PERFORMANCE CONTAMINATED RUNWAY

LIMITATIONS

LIMITATIONS

Ident.: SPERF-CONT-LIM-00005594.0001001 / 26 NOV 09 Criteria: A330

APPROVED

Reduced thrust takeoff is not allowed on contaminated runways.

Takeoff on very low braking friction surface (icy runway) is not recommended.



SUPPLEMENTARY PERFORMANCE CONTAMINATED RUNWAY

LIMITATIONS



Criteria: A330

SUPPLEMENTARY PERFORMANCE CONTAMINATED RUNWAY

PERFORMANCE

AIRCRAFT CONFIGURATION

Ident.: SPERF-CONT-PERF-00005850.0001001 / 26 NOV 09

APPROVED

TAKEOFF ON CONTAMINATED RUNWAYS

The takeoff performance has been established for slats/flaps configurations 1, 2 and 3 on runways contaminated by:

- 1/4 in and 1/2 in of standing water
- 1/4 in and 1/2 in of slush
- Compact snow.

Ground spoilers are armed.

Accelerate Stop Distance (ASD) determination is made with or without thrust reversers and considering the use of ground spoilers and wheel brakes with anti-skid on.

LANDING DISTANCE ON VERY LOW BRAKING FRICTION SURFACE

Landing distance on very low braking friction surface as icy runway has been established for slats/flaps configurations 3 and FULL.

Ground spoilers are armed.

Landing distance determination is made with or without thrust reversers and considering the use of ground spoilers and wheel brakes with anti-skid on.

TAKEOFF AND LANDING PERFORMANCE

Ident.: SPERF-CONT-PERF-00005595.0001001 / 26 NOV 09 Criteria: A330

APPROVED

For takeoff and landing performance determination on contaminated runways, the Performance Engineer's Programs/AFM_OCTO approved FM module at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database.*



SUPPLEMENTARY PERFORMANCE CONTAMINATED RUNWAY

PERFORMANCE