



A320

MODEL : 320 - 232

FLIGHT MANUAL

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

APPROVED BY D.G.A.C.



Airbus Industrie
FLIGHT DIVISION
31707 Blagnac Cedex
FRANCE

Reference ; Airbus Industrie A1/ EV - C 10000

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AIRPLANE FLIGHT MANUAL

TRANSMITTAL LETTER

Issue date: 16 MAY 14

This is the AIRPLANE FLIGHT MANUAL at issue date 16 MAY 14 for the A320-232 and replacing last issue dated 11 APR 14



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FILING INSTRUCTIONS

Please incorporate this revision as follow:

Localization Subsection Title	Remove	Insert
		Rev. Date
PLP-LESS LIST OF EFFECTIVE SECTIONS/SUBSECTIONS	ALL	16 MAY 14
PLP-LEDU LIST OF EFFECTIVE DOCUMENTARY UNITS	ALL	16 MAY 14
PLP-LETR LIST OF EFFECTIVE TEMPORARY REVISIONS	ALL	16 MAY 14
APPRO-PLP-TOC TABLE OF CONTENTS	ALL	16 MAY 14
APPRO-PLP-SOH SUMMARY OF HIGHLIGHTS	ALL	16 MAY 14
APPRO-TR TEMPORARY REVISIONS	ALL	16 MAY 14
MCDL-PLP-TOC TABLE OF CONTENTS	ALL	16 MAY 14
MCDL-PLP-SOH SUMMARY OF HIGHLIGHTS	ALL	16 MAY 14
MCDL-52-01 Toilet Servicing and Drainage Door	ALL	16 MAY 14
MCDL-52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB	ALL	16 MAY 14
MCDL-52-03 Access Door to Potable Water Filling and Drainage	ALL	16 MAY 14
MCDL-52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB	ALL	16 MAY 14
MCDL-52-05 Access Door to Air Conditioning Ground Supply 191 CB	ALL	16 MAY 14
MCDL-52-20 Access Door to HP Air Ground Connector 191 DB	ALL	16 MAY 14



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ABN ABNORMAL PROCEDURES

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	APP-N1-LIM	LIMITATIONS	14 DEC 13
	APP-N1-NORM	NORMAL PROCEDURES	27 FEB 13
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	APP-TLWD	TAILWIND OPERATION	27 FEB 13
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	APP-NRWY	NARROW RUNWAY	27 FEB 13
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	MCDL-GEN-INTR	Introduction	14 DEC 13
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	MCDL-27-09	Inboard Aileron Edge to Wing Seal	27 FEB 13
	MCDL-27-10	Slat End Seal and Weather Seal	27 FEB 13
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	MCDL-32-03	Nose Wheel Hubcap	14 DEC 13
	MCDL-32-04	Nose Fitting Towing	14 DEC 13
	MCDL-33-01	Wing/Engine Scan light Cover 3LX, 4LX	14 DEC 13
	MCDL-33-02	Taxi Light Lamp 8LR	14 DEC 13
	MCDL-33-03	Rear Navigation Light Lens 15LA	14 DEC 13
	MCDL-33-04	Upper 7LV and Lower 6LV Anti-Collision (Beacon) Light Cover	14 DEC 13
	MCDL-33-05	Logo Light Lens (Cover) 3LY, 4LY	14 DEC 13
	MCDL-33-07	Landing Light Lens 7LB, 8LB	14 DEC 13
	MCDL-33-08	Turn OFF Light Lamp 3LC1, 3LC2	14 DEC 13
	MCDL-33-09	Takeoff Light Lamp 7LR	14 DEC 13
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	MCDL-51-01	Radome Conductive Strip	27 FEB 13
	MCDL-51-02	Passenger Door Scuff Plate	27 FEB 13
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	MCDL-51-04	Fairing Aft Safety Stay Point 311 AL	27 FEB 13
R	MCDL-52-01	Toilet Servicing and Drainage Door	16 MAY 14
R	MCDL-52-02	Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB	16 MAY 14
R	MCDL-52-03	Access Door to Potable Water Filling and Drainage	16 MAY 14
R	MCDL-52-04	Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB	16 MAY 14
R	MCDL-52-05	Access Door to Air Conditioning Ground Supply 191 CB	16 MAY 14
	MCDL-52-07	External Power Ground Connection Access Door Assy 121 AL	14 DEC 13
	MCDL-52-08	Access Door of Cargo Opening System 134 AR - 154 AR	27 FEB 13
	MCDL-52-09	Nose Landing Gear Main Door (713, 714)	14 DEC 13
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	MCDL-52-13	Main Landing Gear Door (733, 743) (flight with gear up)	14 DEC 13
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	MCDL-52-16	Main Landing Gear Door (734, 744) (Flight with gear down)	14 DEC 13
	MCDL-52-18	Main Landing Gear Door : Seal on Secondary Hinged Fairing	27 FEB 13
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	MCDL-53-01	Belly Fairing Vent Louver Vane	14 DEC 13
	MCDL-53-03	Root Fillet Fairing	14 DEC 13
	MCDL-54-01	Nacelle Strake	14 DEC 13
	MCDL-54-03	Pylon Pressure Relief Door 413(423) BL - 414(424) BR	14 DEC 13
	MCDL-54-04	Pylon Access Door 415(425) AL - 415(425) AR	27 FEB 13
	MCDL-54-05	Pylon Fairing Seal	27 FEB 13
	MCDL-54-06	Aerodynamic Seal	14 DEC 13
	MCDL-57-01	Wing Tip Fence	14 DEC 13
	MCDL-57-02	Belly Fairing Sliding Panel	27 FEB 13
	MCDL-57-03	Outboard Flaps Rubbing Strip	27 FEB 13
	MCDL-57-04	Inboard Flap Rubbing Strip	14 DEC 13
	MCDL-71-09	Fan Cowl Hold Open Rod	14 DEC 13
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	MCDL-78-03	Thrust Reverser Blocker Door	14 DEC 13
	MCDL-78-04	Lockout Pin	14 FEB 14
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	REG-CIS-LIM-23	COMMUNICATIONS	14 DEC 13
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	REG-CIS-LIM-49	AUXILIARY POWER UNIT	27 FEB 13
	REG-CIS-EMER	EMERGENCY PROCEDURES	14 DEC 13
	REG-CIS-ABN	ABNORMAL PROCEDURES	27 FEB 13
	REG-CIS-APP	APPENDICES AND SUPPLEMENTS	27 FEB 13

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



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LIST OF EFFECTIVE DOCUMENTARY UNITS

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	APPRO-HEAD		Heading Approval A320-232	00007334.0020001	28 SEP 93
	Criteria: 320-232 Applicable to: MSN 2649				
	APPRO-ENV		Approval Reference A320-232	00007012.0020001	02 DEC 13
	Criteria: 320-232 Applicable to: MSN 2649				
	APPRO-TR	x	TAWS Database Compliance Statement	00015062.0001001	22 JAN 14
	Criteria: (SA and (26526 or 28244 or 34637 or 39146)) Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	APPRO-TR	x	FMS - FAA AC 90-105 Compliance	00010498.0009001	22 JAN 14
	Criteria: (SA and ((31896 or 31897 or 32401 or 32402 or 32475 or 32929) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))) Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	APPRO-TR	x	Erroneous RA Height Indication	00009724.0001001	09 DEC 13
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	APPRO-TR	x	(TR 2.05.00/47) - Non Precision Approaches with OEI	00009667.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	APPRO-TR	x	(TR 8.02.00/03 Issue 3) - APU Limitations from CIS for Aircraft fitted with APU 131-9	00009693.0001001	23 NOV 09
	Criteria: ((320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233 or A319 or A321) and (25888 or 37987)) Specific to: CIS Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	APPRO-TR	x	Landing Distance Determination in case of In-Flight Failure	00013997.0003001	26 FEB 14
	Criteria: (A318 or A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	APPRO-TR	x	MCDL Performance database	00015362.0001001	18 FEB 14
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				

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N	APPRO-TR	x	Update of MCDL 52-02, 52-03, 52-04, -52-05	00015534.0001001	17 APR 14
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
N	APPRO-TR	x	Update of MCDL 52-01	00015536.0001001	17 APR 14
	Criteria: ((A319 or A320 or A321) and 20109) Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
N	APPRO-TR	x	Update of MCDL 52-20	00015540.0001001	17 APR 14
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	GEN-INTR		Introduction	00007010.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	GEN-DESC		Approved AFM Format	00015195.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	GEN-DESC		Customized AFM	00007013.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	GEN-DESC		Organization of the Manual	00007015.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	GEN-DESC		Documentary Unit (DU)	00007016.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	GEN-DESC		Identification Strip	00007017.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	GEN-DESC		AFM Revision	00007366.0001001	03 AUG 10
	Criteria: SA Applicable to: MSN 2649				
	GEN-DESC		Temporary Revision (TR)	00007018.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	GEN-DEF		Warning Definition	00007020.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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	GEN-DEF		Caution Definition	00007021.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	GEN-DEF		Note Definition	00006982.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	GEN-DEF		LAND ASAP Definition	00007322.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	GEN-ABB		Abbreviations	00006976.0001001	02 DEC 13
	Criteria: SA				
	Applicable to: MSN 2649				
	GEN-UNIT		Correspondence Between Units	00006979.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	GEN-VIEW		3-View Drawing	00006880.0002001	23 NOV 09
	Criteria: 320-200				
	Applicable to: MSN 2649				
	LIM-GEN		Introduction	00006957.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	LIM-GEN		Kind of Operations	00006958.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	LIM-GEN		Minimum Flight Crew	00006959.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	LIM-GEN		Maximum Operating Altitude	00006960.0002001	23 NOV 09
	Criteria: (SA and 30748)				
	Applicable to: MSN 2649				
	LIM-GEN		Maneuver Limit Load Factors	00006961.0001001	02 DEC 13
	Criteria: SA				
	Applicable to: MSN 2649				
	LIM-GEN		Icing Conditions Definition	00009165.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	LIM-WGHT		Weight Limitations	00006860.0044001	23 NOV 09
	Criteria: ((320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233) and 30479)				
	Applicable to: MSN 2649				

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	LIM-WGHT		Center of Gravity Envelope	00006861.0049001	23 NOV 09
	Criteria: ((320-212 or 320-232) and 30479) Applicable to: MSN 2649				
	LIM-WGHT		Performance Limitations	00006962.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-WGHT		Loading	00006963.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-WGHT		Landing Gear Limitation	00006964.0001001	23 NOV 09
	Criteria: ((320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233) and (23264 or 30479)) Applicable to: MSN 2649				
	LIM-SPD		VMO/MMO	00007065.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-SPD		VA	00007319.0002001	23 NOV 09
	Criteria: 320-200 Applicable to: MSN 2649				
	LIM-SPD		VFE	00006883.0004001	23 NOV 09
	Criteria: (320-231 or 320-232 or 320-233 or A318 or A319) Applicable to: MSN 2649				
	LIM-SPD		VLO and VLE/MLE	00007317.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-OPS		Environmental Envelope	00006919.0003001	23 NOV 09
	Criteria: ((320-214 or 320-232 or 320-233) and 30748) Applicable to: MSN 2649				
	LIM-OPS		Tailwind	00007309.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-OPS		Runway Slope	00007310.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-09		Maneuvers on Ground	00007357.0001001	23 NOV 09
	Criteria: (SA and SA) Applicable to: MSN 2649				
	LIM-09		Towbarless Operations	00007358.0001001	03 AUG 10
	Criteria: (SA and SA) Applicable to: MSN 2649				

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	LIM-21		Cabin Pressurization	00007261.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-22-FMS		General	00009567.0002001	23 NOV 09
	Criteria: ((A319 or A320 or A321) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635)) Applicable to: MSN 2649				
	LIM-22-FMS	x	Airworthiness Standards Compliance	00015234.0001001	22 JAN 14
	Criteria: (SA and ((31896 or 31897 or 32401 or 32402 or 32475 or 32929) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))) Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	LIM-22-FMS		Airworthiness Standards Compliance	00009568.0016001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and ((31896 or 31897) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))) Applicable to: MSN 2649				
	LIM-22-FMS		Navigation Performance	00009569.0003001	23 NOV 09
	Criteria: ((A319 or A320 or A321) and ((31896 or 31897 or 32475 or 32929) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))) Applicable to: MSN 2649				
	LIM-22-FMS		Use of NAV Mode	00009570.0003001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635)) Applicable to: MSN 2649				
	LIM-22-FMS	x	Non Precision Approaches with OEI	00009620.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	LIM-22-FMS		Approaches	00009571.0002001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635)) Applicable to: MSN 2649				
	LIM-22-FGS		Airworthiness Standards Compliance	00009235.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-22-FGS		Autoland	00009238.0004001	02 DEC 13
	Criteria: ((320-231 or 320-232 or 320-233) and 23893) Applicable to: MSN 2649				
	LIM-22-FGS		AUTOLAND with OEI	00015319.0001001	02 DEC 13
	Criteria: A320 Applicable to: MSN 2649				
	LIM-22-FGS		Minimum Height for Use of the Autopilot	00009242.0001001	23 NOV 09
	Criteria: ((A318 or A319 or A320) or ((318-111 or 318-112 or A319 or A320) and 30096)) Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	LIM-22-FGS		CAT II / CAT III Operations	00009243.0005001	23 NOV 09
	Criteria: (320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	LIM-24		Electrical	00007263.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-25		In-Seat Power Supply System (ISPSS)	00007265.0001001	23 NOV 09
	Criteria: (SA and (27230 or 28777 or 30339 or 31090 or 32228)) Applicable to: MSN 2649				
	LIM-28		Fuel and Additive Specifications	00007246.0002001	02 DEC 13
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	LIM-28		Usable Fuel	00007248.0003001	23 NOV 09
	Criteria: (A318 or A319 or 320-200) Applicable to: MSN 2649				
	LIM-28		Fuel Imbalance	00007254.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	LIM-28		Fuel Temperature Limits	00007259.0007001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	LIM-29		Hydraulics Fluid	00007262.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	LIM-32		Tire Speed	00011074.0001001	03 AUG 10
	Criteria: SA Applicable to: MSN 2649				
	LIM-34		Inertial Reference System (IRS)	00007264.0001001	23 NOV 09
	Criteria: (A318 or A320) Applicable to: MSN 2649				
	LIM-34		Reduced Vertical Separation Minimum (RVSM)	00007359.0001001	23 NOV 09
	Criteria: (SA and (25861 or 25910 or 25952 or 31039 or 31528)) Applicable to: MSN 2649				
	LIM-46		Airline Operation Control Applications	00006965.0001001	23 NOV 09
	Criteria: (SA and 27522) Applicable to: MSN 2649				
	LIM-46		FANS - ATC Datalink Application System	00006967.0003001	03 AUG 10
	Criteria: (SA and 35865)				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 2649				
	LIM-49		Auxiliary Power Unit (APU)	00007260.0003001	23 NOV 09
	Criteria: (SA and (25888 or 37987))				
	Applicable to: MSN 2649				
	LIM-70		Main Engines	00007233.0007001	23 NOV 09
	Criteria: 320-232				
	Applicable to: MSN 2649				
	LIM-70		Engine Parameters	00007235.0003001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233)				
	Applicable to: MSN 2649				
	LIM-70		Reverse Thrust	00007236.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	LIM-70		Oil	00007232.0003001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)				
	Applicable to: MSN 2649				
	LIM-70		Reduced Thrust Takeoff	00007239.0006001	23 NOV 09
	Criteria: (320-232 or 320-233)				
	Applicable to: MSN 2649				
	LIM-70		Operations in Icing Conditions	00006881.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	EMER-GEN		INTRODUCTION	00007037.0001001	02 DEC 13
	Criteria: SA				
	Applicable to: MSN 2649				
	EMER-GEN	x	LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE	00014547.0003001	26 FEB 14
	Criteria: (A318 or A319 or A320 or A321)				
	Applicable to: MSN 2649				
	<i>Impacted DU: NONE</i>				
	EMER-GEN		LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE	00015177.0001001	02 DEC 13
	Criteria: SA				
	Applicable to: MSN 2649				
	EMER-GEN		FIRE/SMOKE	00007038.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	EMER-21		CAB PR - EXCESS CAB ALT	00007053.0002001	04 APR 11
	Criteria: ((A319 or A320 or A321) and 31283)				
	Applicable to: MSN 2649				

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	EMER-21		CAB PR - EXCESS RESIDUAL PR	00009326.0001001	23 NOV 09
	Criteria: ((318-111 or 318-112 or A319 or A320 or A321) and 35220) Applicable to: MSN 2649				
	EMER-24		ELEC - EMER CONFIG (BOTH ENGINE GENERATORS FAILED)	00006884.0003001	02 DEC 13
	Criteria: (A320 and 28160) Applicable to: MSN 2649				
	EMER-26		ENG 1 (2) FIRE (In Flight)	00007041.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	EMER-26		ENG 1 (2) FIRE (On Ground)	00007042.0001001	23 NOV 09
	Criteria: (318-111 or 318-112 or A319 or A320 or A321) Applicable to: MSN 2649				
	EMER-26		APU FIRE	00007043.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	EMER-26		SMOKE - FWD or AFT CARGO SMOKE	00009335.0001001	23 NOV 09
	Criteria: ((318-111 or 318-112 or A319 or A320 or A321) and (20067 or 20069)) Applicable to: MSN 2649				
	EMER-26		SMOKE/FUMES/AVNCS SMOKE	00007044.0002001	02 DEC 13
	Criteria: (A319 or A320 or A321) and 31276) Applicable to: MSN 2649				
	EMER-26		REMOVAL OF SMOKE/FUMES	00007045.0001001	02 DEC 13
	Criteria: (A319 or A320) Applicable to: MSN 2649				
	EMER-27		F/CTL - L + R ELEV FAULT	00007051.0001001	02 DEC 13
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	EMER-27		F/CTL - FLAP LVR NOT ZERO	00009325.0001001	23 NOV 09
	Criteria: (SA and (28479 or 28916)) Applicable to: MSN 2649				
	EMER-29		HYD - G + B SYS LO PR	00007048.0003001	02 DEC 13
	Criteria: (A320 and (26925 and 35220)) Applicable to: MSN 2649				
	EMER-29		HYD - B + Y SYS LO PR	00007049.0003001	02 DEC 13
	Criteria: ((A319 or A320) and 26925) Applicable to: MSN 2649				
	EMER-29		HYD - G + Y SYS LO PR	00007050.0001001	02 DEC 13
	Criteria: (A319 or A320) Applicable to: MSN 2649				

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M ⁽⁷⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	EMER-32		L/G - GEAR NOT DOWNLOCKED	00007052.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	EMER-32		LOSS OF BRAKING	00009809.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	EMER-70		DUAL ENG FAILURE (BOTH ENGINES FLAME OUT)	00007039.0004001	23 NOV 09
	Criteria: ((320-232 or 320-233) and 28160) Applicable to: MSN 2649				
	EMER-70		ENG - 1(2) OIL LO PR	00007040.0002001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	EMER-90		STALL RECOVERY	00013505.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	EMER-90		EMER DESCENT	00006626.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	EMER-90		EMERGENCY EVACUATION	00006625.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	EMER-90		DITCHING	00006622.0002001	23 NOV 09
	Criteria: ((A319 or A320 or A321) and 31276) Applicable to: MSN 2649				
	EMER-90		FORCED LANDING	00006621.0002001	23 NOV 09
	Criteria: ((A319 or A320 or A321) and 31276) Applicable to: MSN 2649				
	ABN-GEN		INTRODUCTION	00007087.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-GEN	x	LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE	00014548.0003001	26 FEB 14
	Criteria: (A318 or A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	ABN-GEN		LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE	00015178.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				

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	ABN-OEI-TO		ENGINE FAILURE BEFORE V1 (REJECTED TAKEOFF)	00007100.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-OEI-TO		ENGINE FAILURE BETWEEN V1 AND V2	00007102.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-OEI-TO		ENGINE FAILURE DURING INITIAL CLIMB OUT	00007103.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-OEI-LDG		APPROACH AND LANDING	00007104.0001001	02 DEC 13
	Criteria: A320 Applicable to: MSN 2649				
	ABN-OEI-LDG		MISSED APPROACH (FROM INTERMEDIATE APPROACH CONFIGURATION)	00007105.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-OEI-LDG		BALKED LANDING	00007106.0001001	23 NOV 09
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	ABN-21		AIR - PACK 1 + 2 FAULT	00007161.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	ABN-21		CAB PR - SYS 1 + 2 FAULT	00006672.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-21		CAB PR - SAFETY VALVE OPEN	00007162.0002001	23 NOV 09
	Criteria: (SA and 35220) Applicable to: MSN 2649				
	ABN-21		COND - HOT AIR FAULT	00007164.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-21		VENT - SKIN VALVE FAULT	00007165.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-AUTOFLT		AUTO FLT - FCU 1(2) FAULT	00009309.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M ⁽⁷⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	ABN-22-AUTOFLT		AUTO FLT - RUD TRV LIM SYS	00006936.0001001	03 AUG 10
	Criteria: (318-111 or 318-112 or A319 or A320 or A321) Applicable to: MSN 2649				
	ABN-22-AUTOFLT		AUTO FLT - FAC 1+2 FAULT	00009311.0001001	23 NOV 09
	Criteria: (318-111 or 318-112 or A319 or A320 or A321) Applicable to: MSN 2649				
	ABN-22-AUTOFLT		AUTO FLT - YAW DAMPER SYS	00009310.0001001	03 AUG 10
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Multiple Failures or Warnings (CAT II)	00009313.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Altitude Loss with Autopilot Malfunction (CAT II)	00009795.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Failure Leading to Slats/Flaps less than FLAPS 3 (CAT II)	00009315.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Antiskid System and/or Nosewheel Steering Failure (CAT II)	00009338.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Alpha Floor Activation (CAT II)	00009342.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		One Engine Failure (CAT II)	00009343.0003001	23 NOV 09
	Criteria: A320 Applicable to: MSN 2649				
	ABN-22-CATII		Red "RA" Flag on two PFDs (CAT II)	00009344.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Amber "CHECK ATT" Flag on two PFDs (CAT II)	00009349.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Red "ATT" Flag on one PFD (CAT II)	00009350.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	ABN-22-CATII		Diagonal Line or "INVALID DATA" on one PFD and one ND (CAT II)	00009351.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Amber "CHECK HDG" Flag on two PFDs and on two NDs (CAT II)	00009352.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Red "HDG" Flag on one PFD and one ND (CAT II)	00009353.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Red "SPD" Flag on one PFD (CAT II)	00009354.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		"AP OFF" Warning (CAT II)	00009355.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Loss of "CAT 2" Capability (CAT II)	00009314.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		LOC or G/S Excessive Deviation on PFD (CAT II)	00009356.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		"AUTOLAND" Light (CAT II)	00009357.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		A/THR Fault (CAT II)	00009358.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		No "LAND" at 350 ft (CAT II)	00009359.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		Incorrect Selected Course at 350 ft > 5 deg (CAT II)	00009360.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATII		No "FLARE" at 30 ft (CAT II)	00009361.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-22-CATIIIDH		Multiples Failures or Warnings (CAT III with DH)	00009366.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Failure Leading to Slats/Flaps less than CONF 3 (CAT III with DH)	00009383.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Nosewheel Steering Failure (CAT III with DH)	00009382.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Antiskid Failure (CAT III with DH)	00009381.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Alpha Floor Activation (CAT III with DH)	00009380.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		One Engine Failure (CAT III with DH)	00009379.0003001	23 NOV 09
	Criteria: A320 Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Auto Callout RA Failure (CAT III with DH)	00009378.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Red "RA" Flag on two PFDs (CAT III with DH)	00009377.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Amber "CHECK ATT" Flag on two PFDs (CAT III with DH)	00009386.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Red "ATT" Flag on one PFD (CAT III with DH)	00009385.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIIDH		Amber "CHECK HDG" Flag on two PFDs and two NDs (CAT III with DH)	00009376.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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	ABN-22-CATIIDH		Red "HDG" Flag on one PFD and one ND (CAT III with DH)	00009375.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		Red "SPD" Flag on one PFD (CAT III with DH)	00009374.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		"AP OFF" Warning (CAT III with DH)	00009373.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		Capability Decrease (Except if due to A/THR Loss) (CAT III with DH)	00009372.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		Total Loss of A/THR ("CAT 3" Decreases to "CAT 2") (CAT III with DH)	00009384.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		LOC or G/S Excessive Deviation on PFD (CAT III with DH)	00009371.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		"AUTOLAND" Light (CAT III with DH)	00009370.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		No "LAND" at 350 ft (CAT III with DH)	00009369.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		Incorrect Selected Course at 350 ft > 5 deg (CAT III with DH)	00009368.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIDH		No "FLARE" at 30 ft (CAT III with DH)	00009367.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Multiple Failures or Warnings (CAT III no DH)	00009393.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-22-CATIIInoDH		Failure Leading to Slats/Flaps less than CONF 3 (CAT III no DH)	00009394.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Nosewheel Steering Failure (CAT III no DH)	00009395.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Antiskid Failure (CAT III no DH)	00009396.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Alpha Floor Activation (CAT III no DH)	00009397.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		One Engine Failure (CAT III no DH)	00009413.0003001	23 NOV 09
	Criteria: A320 Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Auto Callout RA Failure (CAT III no DH)	00009398.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Red "RA" Flag on two PFDs (CAT III no DH)	00009399.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Amber "CHECK ATT" Flag on two PFDs (CAT III no DH)	00009400.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Red "ATT" Flag on one PFD (CAT III no DH)	00009401.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Amber "CHECK HDG" Flag on two PFDs and two NDs (CAT III no DH)	00009402.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIIInoDH		Red "HDG" Flag on one PFD and one ND (CAT III no DH)	00009403.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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	ABN-22-CATIII no DH		Red "SPD" Flag on one PFD (CAT III no DH)	00009404.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		"AP OFF" Warnings (CAT III no DH)	00009405.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		Capability Decrease (Except if due to A/THR Loss) (CAT III no DH)	00009406.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		Total Loss of A/THR ("CAT 3" Decreases to "CAT 2") (CAT III no DH)	00009407.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		LOC or G/S Excessive Deviation on PFD (CAT III no DH)	00009408.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		"AUTOLAND" Light (CAT III no DH)	00009409.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		No "LAND" at 350 ft (CAT III no DH)	00009410.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		Incorrect Selected Course at 350 ft > 5 deg (CAT III no DH)	00009411.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-22-CATIII no DH		No "FLARE" at 30 ft (CAT III no DH)	00009412.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-24		ELEC - AC ESS BUS FAULT	00007139.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-24		ELEC - AC BUS 1 FAULT	00007140.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-24		ELEC - AC BUS 2 FAULT	00007141.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-24		ELEC - DC ESS BUS FAULT	00007143.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-24		ELEC - DC BUS 1 FAULT	00007148.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-24		ELEC - DC BUS 2 FAULT	00007150.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-24		ELEC - DC EMER CONFIG	00007152.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-24		ELEC - DC BUS 1 + 2 FAULT	00007154.0002001	02 DEC 13
	Criteria: ((A320 or A321) and 21678) Applicable to: MSN 2649				
	ABN-24		ELEC - DC ESS BUS SHED	00007159.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - FLAPS FAULT	00007108.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - FLAPS LOCKED	00006637.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - SLATS FAULT	00007109.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - SLATS LOCKED	00006638.0002001	23 NOV 09
	Criteria: ((A318 or A319 or A320) and 20024) Applicable to: MSN 2649				
	ABN-27		APPROACH SPEED INCREMENT AND LANDING DISTANCE MULTIPLICATION FACTOR	00006879.0001001	02 DEC 13
	Criteria: A320 Applicable to: MSN 2649				
	ABN-27		PERFORMANCE LIMITATION FOR LANDING IN CLEAN CONFIGURATION	00007110.0011001	02 DEC 13
	Criteria: (320-232 or 320-233) Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-27		F/CTL - SPLR FAULT	00006639.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - GND SPLR FAULT	00007114.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - SPD BRK DISAGREE	00007117.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - SPD BRK FAULT	00007118.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - RUDDER JAM	00007119.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - L (R) ELEV FAULT	00007120.0001001	02 DEC 13
	Criteria: (A320 or A321) Applicable to: MSN 2649				
	ABN-27		F/CTL - ELAC 1(2) FAULT	00007121.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - SEC FAULT	00006640.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - FCDC 1 + 2 FAULT	00007131.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - STABILIZER JAM	00007132.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-27		F/CTL - ATLNL LAW (PROT LOST)	00006618.0001001	02 DEC 13
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	ABN-27		F/CTL - DIRECT LAW (PROT LOST)	00006671.0001001	02 DEC 13
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	ABN-28		FUEL - L(R) TK PUMP 1+2 LO PR	00007194.0002001	23 NOV 09
	Criteria: ((A319 or A320) and 20024) Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-28		FUEL - L(R) WING TK LO LVL	00007198.0002001	23 NOV 09
	Criteria: ((A319 or A320) and 20024) Applicable to: MSN 2649				
	ABN-28		FUEL - L+R WING TK LO LVL	00007200.0002001	23 NOV 09
	Criteria: ((A319 or A320) and 20024) Applicable to: MSN 2649				
	ABN-28		FUEL - CTR TK PUMPS LO PR	00009364.0001001	23 NOV 09
	Criteria: ((A319 or A320) and 20024) Applicable to: MSN 2649				
	ABN-28		FUEL GRAVITY FEEDING	00006624.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-28		FUEL - L INNER (R INNER) (L OUTER) (R OUTER) TK HI TEMP	00007201.0002001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	ABN-28		FUEL IMBALANCE	00007203.0002001	23 NOV 09
	Criteria: (((319-111 or 319-112 or 319-113 or 319-114 or 319-115 or 320-111 or 320-211 or 320-212 or 320-214 or 320-215 or 320-216 or A318) and 20024) or (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233)) Applicable to: MSN 2649				
	ABN-28		FUEL LEAK	00006692.0003001	23 NOV 09
	Criteria: ((320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233 or A318 or A319) and 20024) Applicable to: MSN 2649				
	ABN-29		HYD - G SYS LO PR	00006656.0005001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-29		HYD - Y SYS LO PR	00006657.0002001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and 26925) Applicable to: MSN 2649				
	ABN-29		HYD - B SYS LO PR	00006658.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-29		HYD - RSVR LO AIR PR	00009203.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-29		HYD - RSVR OVHT	00009204.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-29		HYD - RSVR LO LVL	00009205.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-30		ANTI ICE - CAPT (F/O) PROBES HEAT FAULT	00007178.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-30		DOUBLE AOA HEAT FAILURE	00007179.0002001	23 NOV 09
	Criteria: (SA and 31283) Applicable to: MSN 2649				
	ABN-30		WING A.ICE - SYS FAULT or OFF	00006619.0005001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-30		ANTI ICE - CAPT + F/O (CAPT + STBY) (F/O + STBY) PITOT HEAT FAULT	00009388.0002001	23 NOV 09
	Criteria: (SA and 35220) Applicable to: MSN 2649				
	ABN-30		ANTI ICE - ALL PITOT HEAT FAULT	00009389.0002001	23 NOV 09
	Criteria: (SA and 35220) Applicable to: MSN 2649				
	ABN-31		FWS - FWC 1 + 2 FAULT	00007209.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-31		FWS - SDAC 1 + 2 FAULT	00007210.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-31		DISPLAY UNIT FAILURE	00007211.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-32		L/G GRAVITY EXTENSION	00006663.0002001	23 NOV 09
	Criteria: ((A319 or A320 or A321) and 26925) Applicable to: MSN 2649				
	ABN-32		L/G - GEAR NOT UNLOCKED	00007168.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-32		L/G - GEAR UNLOCK FAULT	00007169.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-32		L/G - SHOCK ABSORBER FAULT	00007170.0001001	23 NOV 09
	Criteria: SA				

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	Applicable to: MSN 2649				
	ABN-32		L/G - DOORS NOT CLOSED	00007171.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-32		BRAKES - A-SKID N-WS FAULT or OFF	00006623.0005001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	ABN-32		BRAKES - HOT	00007176.0002001	23 NOV 09
	Criteria: (A318 or ((A319 or A320 or A321) and 31283)) Applicable to: MSN 2649				
	ABN-32		AUTOBRAKE	00007177.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-32		BRAKES - NORM BRK FAULT	00009339.0006001	02 DEC 13
	Criteria: (A318 or ((A319 or A320 or A321) and 26925)) Applicable to: MSN 2649				
	ABN-32		BRAKES - NORM + ALTN FAULT	00009340.0001001	23 NOV 09
	Criteria: ((A319 or A320 or A321) and 26925) Applicable to: MSN 2649				
	ABN-32		BRAKES - RELEASED	00009341.0001001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and 26925) Applicable to: MSN 2649				
	ABN-34	x	Erroneous RA Height Indication	00009722.0001001	09 DEC 13
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	ABN-34		NAV - RA 1+2 FAULT	00007212.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-34		NAV - IR 1+2 (1+3) (2+3) FAULT	00007213.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-34		NAV IR DISAGREE	00007214.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-34		NAV - ADR 1+2 FAULT	00007186.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-34		NAV - ADR 1+3 FAULT	00007187.0001001	23 NOV 09
	Criteria: SA				

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	Applicable to: MSN 2649				
	ABN-34		NAV - ADR 2+3 FAULT	00009566.0001001	03 AUG 10
	Criteria: SA Applicable to: MSN 2649				
	ABN-34		ADR 1+2+3 FAULT	00006691.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-34		NAV ADR DISAGREE	00007192.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-34		UNRELIABLE AIRSPEED INDICATION	00006690.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-36		AIR - ENG 1(2) BLEED FAULT	00007180.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	ABN-36		AIR - ENG 1(2) BLEED ABNORM PR	00007181.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	ABN-36		AIR - X BLEED FAULT	00007184.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-36		AIR - L (R) WING LEAK	00007188.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-36		AIR - ENG 1(2) BLEED LEAK	00007190.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-36		AIR - ENG 1(2) BLEED LO TEMP	00009345.0001001	23 NOV 09
	Criteria: (A321 or ((A318 or A319 or A320) and 21566)) Applicable to: MSN 2649				
	ABN-36		AIR - ENG 1 + 2 BLEED LO TEMP	00009346.0001001	23 NOV 09
	Criteria: (A321 or ((A318 or A319 or A320) and 21566)) Applicable to: MSN 2649				
	ABN-52		DOOR - DOOR NOT CLOSED	00010780.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	ABN-70		ENG - FAIL	00006885.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-70		ENG - SHUTDOWN	00007091.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-70		ENG - REV PRESSURIZED	00007092.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-70		ENG - REVERSE UNLOCKED	00007093.0002001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and 30660) Applicable to: MSN 2649				
	ABN-70		ENG - REVERSER FAULT	00009156.0001001	23 NOV 09
	Criteria: (SA and 30660) Applicable to: MSN 2649				
	ABN-70		ENG - THR LEVER FAULT	00009157.0001001	23 NOV 09
	Criteria: (SA and 30660) Applicable to: MSN 2649				
	ABN-70		ENG - THR LEVER DISAGREE	00009158.0001001	23 NOV 09
	Criteria: (SA and 30660) Applicable to: MSN 2649				
	ABN-70		ENG - OIL HI TEMP	00007095.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-70		ENG - FADEC FAULT	00007096.0001001	23 NOV 09
	Criteria: (318-111 or 318-112 or A319 or A320 or A321) Applicable to: MSN 2649				
	ABN-70		ENG - HOT FUEL	00009159.0001001	23 NOV 09
	Criteria: (318-121 or 318-122 or 319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	ABN-70		ENG - FADEC OVHT	00009160.0001001	23 NOV 09
	Criteria: (318-121 or 318-122 or 319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	ABN-70		ENG - EPR MODE FAULT	00009161.0001001	02 DEC 13
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	ABN-70		ENG - N1 (N2) (EGT) OVERLIMIT	00007098.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	ABN-70		ENG RELIGHT IN FLIGHT	00006620.0008001	02 DEC 13
	Criteria: ((319-131 or 319-132 or 319-133 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) and (22562 or 35864)) Applicable to: MSN 2649				
	ABN-90		BOMB ON BOARD	00007024.0002001	04 APR 11
	Criteria: ((A319 or A320 or A321) and 31276) Applicable to: MSN 2649				
	ABN-90		OVERWEIGHT LANDING	00007107.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	ABN-90		REJECTED TAKEOFF WITH ALL ENGINES OPERATIVE	00007183.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-GEN		Introduction	00009222.0001001	03 AUG 10
	Criteria: SA Applicable to: MSN 2649				
	NORM-PFLT		Electrical	00007056.0002001	23 NOV 09
	Criteria: ((A318 or A319 or A321) or (A320 and 24701)) Applicable to: MSN 2649				
	NORM-PFLT		Cockpit Door	00007057.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-PFLT		Braking Efficiency Test	00007058.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-TO		Takeoff Procedure	00007059.0003001	02 DEC 13
	Criteria: ((319-131 or 319-132 or 319-133 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) and 32656) Applicable to: MSN 2649				
	NORM-FLT		Buffet Onset	00007063.0001001	03 AUG 10
	Criteria: A320 Applicable to: MSN 2649				
	NORM-FLT		Flight in Severe Turbulence	00007066.0002001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	NORM-LDG		Normal Landing	00007067.0001001	23 NOV 09
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	NORM-LDG		Balked Landing (All Engines Operating)	00007068.0001001	23 NOV 09
	Criteria: SA				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 2649				
	NORM-LDG		Reverse Thrust	00007069.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-LDG		Autobrake	00007070.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		AP/FD, Speed modes, Autothrust	00009463.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		Takeoff	00009464.0001001	02 DEC 13
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		Climb, Cruise, Descent	00009465.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		Non Precision Approach	00009466.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		CAT I ILS Approach	00009467.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		CAT II ILS Approach	00009468.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		CAT II/III ILS Approach and Automatic Approach	00009469.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-CONF		Go-around	00009470.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-NPA		General	00009575.0001001	02 DEC 13
	Criteria: SA				
	Applicable to: MSN 2649				
	NORM-22-NPA		Instrument Approach Using NAV Mode	00009576.0004001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and ((25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635) and 150110))				
	Applicable to: MSN 2649				

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	NORM-22-PA		CAT II and CAT III Approach and/or Automatic Landing	00009482.0003001	23 NOV 09
	Criteria: (A320 and 25225) Applicable to: MSN 2649				
	NORM-22-PA		Required Equipment for CAT II and CAT III Approach and Landing	00009476.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-28		Fuel System	00009172.0001001	23 NOV 09
	Criteria: (A320 and 20024) Applicable to: MSN 2649				
	NORM-30		Operations in Icing Conditions	00007071.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-30		Rain Repellent (If Activated)	00007080.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-31		ECAM System	00007073.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-34		Ground Proximity Warning System (GPWS)	00007081.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-34		Inertial Reference System (IRS)	00009174.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	NORM-34		Reduced Vertical Separation Minimum (RVSM)	00009175.0002001	23 NOV 09
	Criteria: (A318 or ((A319 or A320 or A321) and (31039 or 31528))) Applicable to: MSN 2649				
	NORM-34		Windshear Warning and Guidance System	00009761.0001001	23 NOV 09
	Criteria: (SA and 22249) Applicable to: MSN 2649				
	NORM-34		Integrated Standby Instrument System (ISIS)	00010642.0001001	03 AUG 10
	Criteria: (SA and 27620) Applicable to: MSN 2649				
	NORM-49		Auxiliary Power Unit (APU)	00006923.0011001	23 NOV 09
	Criteria: (A320 and (22562 or 35864))				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 2649				
	PERF-GEN		Introduction	00006988.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	PERF-GEN		Aircraft Configuration	00007266.0001001	23 NOV 09
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	PERF-GEN		Maximum Demonstrated Crosswind at Takeoff and Landing	00007267.0001001	03 AUG 10
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	PERF-CAL-TO		Speed Corrections in Ground Effect	00007268.0001001	23 NOV 09
	Criteria: A320 Applicable to: MSN 2649				
	PERF-CAL-TO		Speed Corrections out of Ground Effect	00007269.0002001	02 DEC 13
	Criteria: (320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	PERF-CAL-TO		Altitude Corrections	00007270.0002001	02 DEC 13
	Criteria: (320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	PERF-CAL-CRU		Speed and Mach Corrections	00007271.0002001	23 NOV 09
	Criteria: ((A320 or A321) and (25490 or 25570)) Applicable to: MSN 2649				
	PERF-CAL-CRU		Altitude Corrections	00007272.0002001	23 NOV 09
	Criteria: ((A320 or A321) and (25490 or 25570)) Applicable to: MSN 2649				
	PERF-CAL-LDG		Speed Corrections in Ground Effect	00007273.0001001	23 NOV 09
	Criteria: A320 Applicable to: MSN 2649				
	PERF-CAL-LDG		Speed Corrections Out of Ground Effect	00007274.0002001	03 AUG 10
	Criteria: (320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	PERF-CAL-LDG		Altitude Corrections	00007275.0002001	03 AUG 10
	Criteria: (320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	PERF-TO		Speeds Definitions	00006991.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	PERF-TO		Distances Definitions	00006992.0001001	23 NOV 09
	Criteria: SA				

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A320
AIRPLANE FLIGHT MANUAL

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 2649				
	PERF-TO		Takeoff Performance	00006904.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	PERF-TO		Takeoff Flight Path	00006935.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	PERF-FLT		In-Flight Performance	00006995.0002001	04 APR 11
	Criteria: (320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	PERF-LDG		Approach Climb and Landing Climb	00006909.0002001	02 DEC 13
	Criteria: (320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	PERF-LDG		Approach and Landing Speeds Definition	00006996.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	PERF-LDG		Landing Distance Definitions	00006997.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	PERF-LDG		Landing Performance	00006910.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	PERF-LDG		Autoland Landing Distance Increments	00006998.0010001	23 NOV 09
	Criteria: (320-231 or 320-232 or 320-233) Applicable to: MSN 2649				
	PERF-OCTO		Performance Database	00006895.0055001	04 APR 11
	Criteria: (320-232 and 34221) Applicable to: MSN 2649				
	PERF-ENG		Takeoff Thrust	00006989.0013001	23 NOV 09
	Criteria: 320-232 Applicable to: MSN 2649				
	PERF-ENG		Maximum Continuous Thrust	00007420.0011001	23 NOV 09
	Criteria: ((320-232 or 320-233) and 34221) Applicable to: MSN 2649				
	PERF-ENG		Go-Around Thrust	00007455.0006001	23 NOV 09
	Criteria: 320-232 Applicable to: MSN 2649				
	APP-NOI		General	00007036.0002001	23 NOV 09
	Criteria: (321-111 or 321-112 or 321-131 or 321-231 or 321-232 or A318 or A319 or A320)				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 2649				
	APP-NOI		External Noise	00006882.0009001	23 NOV 09
	Criteria: (320-232 or 320-233)				
	Applicable to: MSN 2649				
	APP-TCAS		General	00007060.0003001	23 NOV 09
	Criteria: ((A319 or A320 or A321) and (26877 or 27698 or 27740 or 27753 or 28738 or 28739 or 30163))				
	Applicable to: MSN 2649				
	APP-TCAS		Procedures	00007062.0002001	23 NOV 09
	Criteria: (SA and (26877 or 27698 or 27740 or 27753 or 28738 or 28739 or 30163))				
	Applicable to: MSN 2649				
	APP-INOP		General	00006946.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	APP-INOP		Performance	00007064.0001001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)				
	Applicable to: MSN 2649				
	APP-LGDN-GEN		General	00007074.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	APP-LGDN-LIM		Limitations	00007075.0002001	23 NOV 09
	Criteria: (A320 and 28160)				
	Applicable to: MSN 2649				
	APP-LGDN-EMER		ENG DUAL FAILURE	00007079.0009001	23 NOV 09
	Criteria: ((320-232 or 320-233) and 28160)				
	Applicable to: MSN 2649				
	APP-LGDN-ABN		F/CTL FLIGHT CONTROLS FAILURE	00007078.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	APP-LGDN-NORM		Preflight Check	00007076.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	APP-LGDN-PERF		Performance	00007354.0002001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	APP-LGDN-APP		Appendices and Supplements	00009236.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	APP-N1-GEN		General	00007099.0001001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)				
	Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	APP-N1-LIM		Limitations	00007101.0001001	02 DEC 13
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	APP-N1-NORM		Takeoff Procedure	00007090.0002001	23 NOV 09
	Criteria: ((320-232 or 320-233) and 32656) Applicable to: MSN 2649				
	APP-N1-PERF		Performance	00007094.0001001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	APP-N1-PERF		Engine Management - Takeoff Thrust	00006850.0002001	04 APR 11
	Criteria: 320-232 Applicable to: MSN 2649				
	APP-N1-PERF		Engine Management - Maximum Continuous Thrust	00006851.0004001	23 NOV 09
	Criteria: ((320-232 or 320-233) and 34221) Applicable to: MSN 2649				
	APP-N1-PERF		Engine Management - Go-Around Thrust	00006852.0002001	04 APR 11
	Criteria: 320-232 Applicable to: MSN 2649				
	APP-N1-APP		Appendices and Supplements	00007166.0001001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	APP-TLWD		General	00007146.0004001	23 NOV 09
	Criteria: ((A318 or A319 or A321 or 320-200) and ((23222 and 26398) or (26057 and 26398))) Applicable to: MSN 2649				
	APP-TLWD		Limitations	00007147.0007001	23 NOV 09
	Criteria: ((A318 or A319 or 320-200 or 321-200) and ((23222 and 26398) or (26057 and 26398))) Applicable to: MSN 2649				
	APP-TLWD		Normal Procedures	00009244.0001001	23 NOV 09
	Criteria: ((319-113 or 319-114 or 319-131 or 319-132 or 319-133 or 320-211 or 320-212 or 320-231 or 320-232 or 320-233 or A321) and 26398) Applicable to: MSN 2649				
	APP-TAWS	x	General	00015058.0001001	22 JAN 14
	Criteria: (SA and (26526 or 28244 or 34637 or 39146)) Applicable to: MSN 2649 <i>Impacted DU: 00007228 General</i>				
	APP-TAWS		General	00007228.0001001	23 NOV 09
	Criteria: (SA and (26526 or 28244)) Applicable to: MSN 2649 <i>Impacted by TDU: 00015058 General</i>				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	APP-TAWS		Limitations	00007229.0001001	23 NOV 09
	Criteria: (SA and (26526 or 28244)) Applicable to: MSN 2649				
	APP-TAWS		Normal Procedures	00007231.0002001	23 NOV 09
	Criteria: (SA and 28244) Applicable to: MSN 2649				
	APP-NRWY		General	00006985.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	APP-NRWY		Performance	00006986.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	APP-PFC		General	00007028.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	APP-PFC		Performance	00007029.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-GEN-INTR		Introduction	00006202.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-GEN-LIM		Limitations	00006203.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-GEN-PERF		Performance Determination Method	00006204.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-GEN-PERF		Performance Penalties published in the Airplane Flight Manual MCDL Chapter	00006205.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-GEN-PERF	x	Performance Penalties calculated with AFM_OCTO Software	00015363.0001001	18 FEB 14
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: 00006206 Performance Penalties calculated with AFM_OCTO Software</i>				
	MCDL-GEN-PERF		Performance Penalties calculated with AFM_OCTO Software	00006206.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				

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	<i>Impacted by TDU: 00015363 Performance Penalties calculated with AFM_OCTO Software</i>				
	MCDL-21-01		Ram Air Inlet Flap	00006207.0002001	23 NOV 09
	Criteria: (SA and ((26363 and A319) or (26363 and A320) or (26363 and A321) or A318)) Applicable to: MSN 2649				
	MCDL-21-01		Illustration Ram Air Inlet Flap	00006213.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-21-03		Ram Air Inlet Leading Edge	00006216.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-21-03		Illustration Ram Air Inlet Leading Edge	00006219.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-23-01		Static Discharger	00006220.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-23-01		Illustration Static Discharger	00006221.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-01		Flap Track Fairing	00006235.0001001	02 DEC 13
	Criteria: (A319 or A320) Applicable to: MSN 2649				
	MCDL-27-01		Illustration Flap track fairing	00006236.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-03		Slat Track Closing Plate	00006239.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-03		Illustration Slat track closing plate	00006240.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-05		Access Panel for Bearings at Elevator	00006243.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-05		Illustration Access panel for bearings at elevator	00006244.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	MCDL-27-06		Flap Track Fairing Rear Top Cover and Tail Cone	00006245.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-06		Illustration Flap track fairing rear top cover and tail cone	00006246.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-07		Rubber Seal under Slat	00006247.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-07		Illustration Rubber seal under slat	00006248.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-08		Seal Between Inboard and Outboard Flap	00006250.0001001	23 NOV 09
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	MCDL-27-08		Illustration Seal Between Inboard and Outboard Flap	00006251.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-09		Inboard Aileron Edge to Wing Seal	00006252.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-09		Illustration Inboard Aileron to Wing Seal	00006253.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-10		Slat End Seal and Weather Seal	00006254.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-10		Illustration Slat End Seal and Weather Seal	00006255.0001001	19 FEB 10
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-11		Slat Track Filler Block	00006256.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-11		Illustration Slat track filler block	00006257.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	MCDL-27-12		Slat Track Sealing Packer	00006258.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-12		Illustration Slat track sealing packer	00006259.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-13		Inter-flap Cushion Seal	00006249.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-13		Illustration Inter-flap cushion seal	00006260.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-14		Flap Track Moveable Fairing Seal	00006261.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-14		Illustration Moveable flap track fairing seal	00006262.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-15		Flap Track Fixed Fairing seal	00006263.0001001	02 DEC 13
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-27-15		Illustration Fixed flap track fairing seal	00006264.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-27-16		Flap Track Moveable Fairing Pivot Cover	00006265.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-27-16		Illustration Flap Track Moveable Fairing Pivot Cover	00006266.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-28-01		Refuel/Defuel Coupling Cap 101 QM Or 41 QM	00006282.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-28-01		Illustration Refuel/Defuel Coupling Cap 101 QM or 41 QM	00006283.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M ⁽⁷⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	MCDL-28-02		Refuel Panel Door	00006285.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-28-02		Illustration Refuel Panel Door 192MB	00006286.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-30-01		Icing Indicator	00006287.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-30-01		Illustration Icing Indicator	00006288.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-32-03		Nose Wheel Hubcap	00006297.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-32-03		Illustration Nose Wheel Hubcap	00006298.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-32-04		Nose Fitting Towing	00006299.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-32-04		Illustration Nose Fitting Towing	00006300.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-01		Wing/Engine Scan Light Cover 3LX, 4LX	00006301.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-01		Illustration Wing/Engine Scan light Cover 3LX, 4LX	00006302.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-02		Taxi Light Lamp 8LR	00006303.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-02		Illustration Taxi Light Lamp 8LR	00006304.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-03		Rear Navigation Light Lens 15LA	00006305.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	MCDL-33-03		Illustration Rear Navigation Light Lens 15LA	00006306.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-04		Upper 7LV and Lower 6LV Anti-collision (Beacon) Light Cover	00006307.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-04		Illustration Upper and Lower Anti-Collision (Beacon) Light Cover	00006308.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-05		Logo Light Lens (Cover) 3LY, 4LY	00006309.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-05		Illustration Logo Light Lens (Cover) 3LY, 4LY	00006310.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-07		Landing Light Lens 7LB, 8LB	00006321.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-07		Illustration Landing Light Lens 7LB, 8LB	00006322.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-08		Turn OFF Light Lamp 3LC1, 3LC2	00006324.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-08		Illustration Turn OFF Light Lamp 3LC1, 3LC2	00006325.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-09		Takeoff light lamp 7LR	00006327.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-33-09		Illustration Takeoff Light Lamp 7LR	00006328.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-49-01		APU Overpressure Release Door	00006329.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	MCDL-49-01		Illustration APU Overpressure Release Door	00006330.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-51-01		Radome conductive strip	00006331.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-51-01		Illustration Radome Conductive Strip	00006332.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-51-02		Passenger Door Scuff Plate	00006333.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-51-02		Illustration Passenger Door Scuff Plate	00006334.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-51-03		Bulk Cargo Door Scuff Plate	00006335.0001001	23 NOV 09
	Criteria: ((A320 or A321) and 20029) Applicable to: MSN 2649				
	MCDL-51-03		Illustration Bulk Cargo Door Scuff Plate	00009710.0001001	23 NOV 09
	Criteria: ((A320 or A321) and 20029) Applicable to: MSN 2649				
	MCDL-51-04		Fairing Aft Safety Stay Point 311 AL	00006338.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-51-04		Illustration Fairing Aft Safety Stay Point 311AL	00006339.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
N	MCDL-52-01	x	Toilet Servicing and Drainage Door	00015417.0003001	17 APR 14
	Criteria: ((A319 or A320 or A321) and 20109) Applicable to: MSN 2649 <i>Impacted DU: 00006441 Toilet Servicing and Drainage Door</i>				
	MCDL-52-01		Toilet Servicing And Drainage Door 172 AR	00006441.0003001	02 DEC 13
	Criteria: ((A319 or A320 or A321) and 20109) Applicable to: MSN 2649 <i>Impacted by TDU: 00015417 Toilet Servicing and Drainage Door</i>				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	MCDL-52-01		Illustration Toilet Servicing and Drainage Door	00006442.0002001	23 NOV 09
Criteria: (SA and 20109) Applicable to: MSN 2649					
N	MCDL-52-02	x	Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB	00015418.0001001	17 APR 14
Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted DU: 00006447 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB</i>					
	MCDL-52-02		Access Door To Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB	00006447.0001001	02 DEC 13
Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted by TDU: 00015418 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB</i>					
	MCDL-52-02		Illustration Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB	00006449.0001001	17 JUL 12
Criteria: SA Applicable to: MSN 2649					
N	MCDL-52-03	x	Access Door to Potable Water Filling and Drainage	00015419.0001001	17 APR 14
Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted DU: 00006452 Access Door to Potable Water Filling and Drainage</i>					
	MCDL-52-03		Access Door To Potable Water Filling And Drainage 133 AL - 171 AL - 192 NB	00006452.0001001	23 NOV 09
Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted by TDU: 00015419 Access Door to Potable Water Filling and Drainage</i>					
	MCDL-52-03		Illustration Access Door to Potable Water Filling and Drainage	00006453.0001001	23 NOV 09
Criteria: (A319 or A320 or A321) Applicable to: MSN 2649					
N	MCDL-52-04	x	Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB	00015420.0001001	17 APR 14
Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted DU: 00006455 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB</i>					

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	MCDL-52-04		Access Door To Opening Control Of Landing Gear Doors On Ground 195 BB - 196 BB	00006455.0001001	02 DEC 13
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted by TDU: 00015420 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB</i>				
	MCDL-52-04		Illustration Access door to opening control of landing gear doors on ground 195 BB - 196 BB	00006456.0001001	03 AUG 10
	Criteria: SA Applicable to: MSN 2649				
N	MCDL-52-05	x	Access Door to Air Conditioning Ground Supply 191 CB	00015421.0001001	17 APR 14
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649 <i>Impacted DU: 00006457 Access Door to Air Conditioning Ground Supply 191 CB</i>				
	MCDL-52-05		Access Door To Air Conditioning Ground Supply 191 CB	00006457.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649 <i>Impacted by TDU: 00015421 Access Door to Air Conditioning Ground Supply 191 CB</i>				
	MCDL-52-05		Illustration Access door to air conditioning ground supply 191 CB	00006458.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-07		External Power Ground Connection Access Door Assy 121 AL	00006461.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-07		Illustration External Power Ground Connection Access Door Assy 121 AL	00006462.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-08		Access Door Of Cargo Opening System 134 AR - 154 AR	00006463.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-52-08		Illustration Access Door of Cargo Opening System 134 AR - 154 AR	00006464.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	MCDL-52-09		Nose Landing Gear Main Door (713, 714)	00006465.0001001	02 DEC 13
	Criteria: (A319 or A320) Applicable to: MSN 2649				
	MCDL-52-09		Illustration Nose Landing Gear Main Door (713, 714)	00006466.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-10		Nose Landing Gear Aft Door (715, 716)	00006467.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-10		Illustration Nose Landing Gear Aft Door (715, 716)	00006468.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-11		Nose Landing Gear Leg Door (712)	00006471.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-11		Illustration Nose Landing Gear Leg Door (712)	00006472.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-12		Main Landing Gear Door (732, 742) (flight with gear up)	00006473.0001001	02 DEC 13
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-52-12		Illustration Main Landing Gear Door (732, 742)	00006474.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-13		Main Landing Gear Door (733, 743) (flight with gear up)	00006487.0001001	02 DEC 13
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	MCDL-52-13		Illustration Main Landing Gear Door (733, 743)	00006488.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-14		Main Landing Gear Door (732, 742) (Flight with gear down)	00006475.0001001	02 DEC 13
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				

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M ⁽⁷⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	MCDL-52-14		Illustration Main Landing Gear Door (732, 742)	00006476.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-15		Main Landing Gear Door (733, 743) (Flight with gear down)	00006489.0001001	02 DEC 13
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649				
	MCDL-52-15		Illustration Main Landing Gear Door (733, 743)	00006490.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-16		Main Landing Gear Door (734, 744) (Flight with gear down)	00006491.0001001	02 DEC 13
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-52-16		Illustration Main Landing Gear Door (734, 744)	00006492.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-18		Main Landing Gear Door : Seal On Secondary Hinged Fairing	00006479.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-18		Illustration Main Landing Gear Door : Seal on Secondary Hinged Fairing	00006480.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-19		Pax Door Upper Cover Plate	00006481.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-52-19		Illustration Pax Door Upper Cover Plate	00006482.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
N	MCDL-52-20	x	Access Door to HP Air Ground Connector 191 DB	00015422.0001001	17 APR 14
	Criteria: SA Applicable to: MSN 2649 <i>Impacted DU: 00006483 Access Door to HP Air Ground Connector 191 DB</i>				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	MCDL-52-20		Access Door To HP Air Ground Connector 191 DB	00006483.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649 <i>Impacted by TDU: 00015422 Access Door to HP Air Ground Connector 191 DB</i>				
	MCDL-52-20		Illustration Access Door to HP Air Ground Connector 191 DB	00006484.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-21		Blue Hydraulic Access Door 197 FB	00007449.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-21		Illustration Blue Hydraulic Access Door 197 FB	00007450.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-22		Forward Cargo Door Access Cover Panel 825 AR	00007451.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-22		Illustration Forward Cargo Door Access Cover Panel 825 AR	00007452.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-23		Aft Cargo Door Access Cover Panel 826 AR	00007453.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-52-23		Illustration Aft Cargo Door Access Cover Panel 826 AR	00007454.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-53-01		Belly Fairing Vent Louver Vane	00006512.0001001	02 DEC 13
	Criteria: SA Applicable to: MSN 2649				
	MCDL-53-01		Illustration Belly Fairing Vent Louver Vane	00006513.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-53-03		Root Fillet Fairing	00011063.0002001	02 DEC 13
	Criteria: (320-231 or 320-232 or 320-233)				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	Applicable to: MSN 2649				
	MCDL-53-03		Illustration Root Fillet Fairing	00011064.0001001	03 AUG 10
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-54-01		Nacelle Strake	00006516.0002001	02 DEC 13
	Criteria: (320-231 or 320-232 or 320-233)				
	Applicable to: MSN 2649				
	MCDL-54-01		Illustration Nacelle Strake	00006517.0001001	23 NOV 09
	Criteria: 320-200				
	Applicable to: MSN 2649				
	MCDL-54-03		Pylon Pressure Relief Door 413(423) BL - 414(424) BR	00006540.0005001	02 DEC 13
	Criteria: (320-231 or 320-232 or 320-233)				
	Applicable to: MSN 2649				
	MCDL-54-03		Illustration Pylon Pressure Relief Door 413(423) BL - 414(424) BR	00006541.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-54-04		Pylon Access Door 415(425) AL - 415(425) AR	00006543.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-54-04		Illustration Pylon Access Door 415(425) AL - 415(425) AR	00006544.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-54-05		Pylon Fairing seal	00006545.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-54-05		Illustration Pylon Fairing Seal	00006546.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-54-06		Aerodynamic Seal	00006547.0001001	02 DEC 13
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-54-06		Illustration Aerodynamic Seal	00006548.0001001	23 NOV 09
	Criteria: SA				
	Applicable to: MSN 2649				
	MCDL-57-01		Wing Tip Fence	00006549.0002001	02 DEC 13
	Criteria: A320				

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	Applicable to: MSN 2649				
	MCDL-57-01		Illustration Wing Tip Fence	00006550.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	MCDL-57-02		Belly Fairing Sliding Panel	00006551.0002001	23 NOV 09
	Criteria: (SA and 26495) Applicable to: MSN 2649				
	MCDL-57-02		Illustration Belly Fairing Sliding Panel	00006552.0003001	04 APR 11
	Criteria: (SA and 38211) Applicable to: MSN 2649				
	MCDL-57-03		Outboard Flap Rubbing Strip Items 10, 15, 20, 40	00006564.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-57-03		Illustration Outboard Flap Rubbing Strip	00006565.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-57-04		Inboard Flap Rubbing Strip items 1, 5, 10, 30	00006567.0001001	23 NOV 09
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-57-04		Illustration Inboard Flap Rubbing Strip	00006568.0001001	02 DEC 13
	Criteria: (A318 or A319 or A320) Applicable to: MSN 2649				
	MCDL-71-09		Fan Cowl Hold Open Rod	00006587.0003001	02 DEC 13
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	MCDL-71-09		Illustration Fan Cowl Hold Open Rod	00006588.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	MCDL-78-01		Duct Opening Actuator	00006592.0001001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	MCDL-78-01		Illustration Duct Opening Actuator	00006593.0001001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	MCDL-78-03		Thrust Reverser Blocker Door	00006604.0001001	02 DEC 13
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				

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M⁽¹⁾	Localization	T⁽²⁾	DU Title	DU identification	DU date
	MCDL-78-03		Illustration Thrust Reverser Blocker Door	00006605.0001001	23 NOV 09
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	MCDL-78-04		Lockout Pin	00006598.0001001	02 DEC 13
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	MCDL-78-04		Illustration Lockout Pin	00006599.0001001	13 FEB 14
	Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) Applicable to: MSN 2649				
	SPERF-CONT-GEN		General	00009415.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	SPERF-CONT-LIM		Limitations	00009416.0001001	04 APR 11
	Criteria: SA Applicable to: MSN 2649				
	SPERF-CONT-PERF		Introduction	00009417.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	SPERF-CONT-PERF		Aircraft Configuration	00009441.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	SPERF-CONT-PERF		Takeoff and Landing Performance	00009429.0001001	23 NOV 09
	Criteria: SA Applicable to: MSN 2649				
	REG-CIS-GEN		General	00007291.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-LIM-OPS		Environmental Envelope	00007297.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-LIM-OPS		Runway Conditions	00007293.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-LIM-OPS		Crosswind	00007294.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				

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	REG-CIS-LIM-23		VHF	00007296.0001001	02 DEC 13
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-LIM-34		Secondary Radar Control	00007292.0001001	02 DEC 13
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-LIM-34		Weather Radar Information	00007295.0001001	02 DEC 13
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-LIM-49	x	APU Limitations from CIS for Aircraft fitted with APU 131-9	00009654.0001001	23 NOV 09
	Criteria: ((320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233 or A319 or A321) and (25888 or 37987)) Specific to: CIS Applicable to: MSN 2649 <i>Impacted DU: NONE</i>				
	REG-CIS-EMER		Forced Landing	00015242.0001001	02 DEC 13
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-EMER		Ditching	00007298.0001001	02 DEC 13
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-ABN		ELEC - IDG OIL LO PR	00007299.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-ABN		ELEC - IDG OIL OVHT	00007300.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-ABN		ELEC - GEN FAULT	00007301.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100) Specific to: CIS Applicable to: MSN 2649				
	REG-CIS-APP		Cold Weather Operations	00009150.0001001	23 NOV 09
	Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)				

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M ⁽¹⁾	Localization	T ⁽²⁾	DU Title	DU identification	DU date
	Specific to: CIS Applicable to: MSN 2649				

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

(2) Temporary information



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M⁽¹⁾	TR identification	TR approval date	TR Title	Deleted by
	TR1 issue 1.0	23 NOV 09	(TR 2.05.00/47) - Non Precision Approaches with OEI	Mod 37665
	Criteria: SA Applicable to: MSN 2649			
	TR30 issue 1.0	23 NOV 09	(TR 8.02.00/03 Issue 3) - APU Limitations from CIS for Aircraft fitted with APU 131-9	
	Criteria: ((320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233 or A319 or A321) and (25888 or 37987)) Specific to: CIS Applicable to: MSN 2649			
	TR33 issue 2.0	09 DEC 13	Erroneous RA Height Indication	
	Criteria: SA Applicable to: MSN 2649			
	TR369 issue 1.0	22 JAN 14	TAWS Database Compliance Statement	
	Criteria: (SA and (26526 or 28244 or 34637 or 39146)) Applicable to: MSN 2649			
	TR388 issue 1.0	22 JAN 14	FMS - FAA AC 90-105 Compliance	
	Criteria: (SA and ((31896 or 31897 or 32401 or 32402 or 32475 or 32929) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))) Applicable to: MSN 2649			
	TR394 issue 1.0	18 FEB 14	MCDL Performance database	
	Criteria: SA Applicable to: MSN 2649			
	TR402 issue 1.0	26 FEB 14	Landing Distance Determination in case of In-Flight Failure	
	Criteria: (A318 or A319 or A320 or A321) Applicable to: MSN 2649			
N	TR413 issue 1.0	17 APR 14	Update of MCDL 52-02, 52-03, 52-04, -52-05	
	Criteria: (A319 or A320 or A321) Applicable to: MSN 2649			
N	TR415 issue 1.0	17 APR 14	Update of MCDL 52-01	
	Criteria: ((A319 or A320 or A321) and 20109) Applicable to: MSN 2649			
N	TR419 issue 1.0	17 APR 14	Update of MCDL 52-20	
	Criteria: SA Applicable to: MSN 2649			

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



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LIST OF MODIFICATIONS

M⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date	Title
	20069		27 FEB 13	FIRE PROTECTION - AFT CARGO COMPARTMENT - INSTALL SMOKE DETECTION SYSTEM -
	Applicable to: MSN 2649			
	25225		27 FEB 13	AUTO FLIGHT-FMGC-REDUCE VAPP FOR A320 CFM/IAE
	Applicable to: MSN 2649			
	35220		27 FEB 13	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2F3
	Applicable to: MSN 2649			
	35864		27 FEB 13	AIRBORNE AUXILIARY POWER - GENERAL - INSTALL APIC APS3200 APU AS STANDARD (REPLACES HONEYWELL GTC36-300)
	Applicable to: MSN 2649			
	28160		27 FEB 13	ELEC PWR-AC EMERGENCY GENERATION- ACTIVATE A319/A321 ELECTRICAL EMERGENCY CONFIGURATION ON A320 A/C
	Applicable to: MSN 2649			
	23222		27 FEB 13	CERTIFICATION DOCUMENTS - GENERAL - CERTIFICATION FOR TAKE-OFF WITH 15 KNOT TAILWIND
	Applicable to: MSN 2649			
	35865		27 FEB 13	INFORMATION SYSTEMS - GENERAL - CERTIFY FANS B CONFIGURATIONS
	Applicable to: MSN 2649			
	30479		27 FEB 13	GENERAL - DESIGN WEIGHT - INCREASE A320 DESIGN WEIGHTS TO 77.0 MTOW, 66.0T MLW AND 62.5T MZFW (WV 012)
	Applicable to: MSN 2649			
	30096		14 DEC 13	AUTO-FLIGHT-DEFINE "GUIDED RADAR APPROACH WITH AUTOPILOT ENGAGED" PROCEDURE (MUH 250 FT)
	Applicable to: MSN 2649			
	27522		27 FEB 13	INFORMATION SYSTEM - AIR TRAFFIC AND INFORMATION SYSTEM (ATIMS) - INSTALL ATSU COMPUTER FOR ACARS
	Applicable to: MSN 2649			
	20067		27 FEB 13	FIRE PROTECTION - FWD CARGO COMPARTMENT - INSTALL SMOKE DETECTION SYSTEM -
	Applicable to: MSN 2649			

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M ⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date	Title
	24701		27 FEB 13	HYDRAULIC POWER-AUXILIARY HYDRAULIC POWER-RAT-INTRODUCE MODIFIED RAT (NEW BEARING)
	Applicable to: MSN 2649			
	28244		27 FEB 13	NAVIGATION-GPWS-INTRODUCE EGPWS P/N 206-206 AND INHIBIT AUTOMATIC DEACTIVATION ENHANCED FUNCTIONS
	Applicable to: MSN 2649			
	31276		27 FEB 13	ELECTRICAL POWER - GENERAL - INSTALL A COMMERCIAL SHEDDING PUSH-BUTTON SWITCH IN COCKPIT
	Applicable to: MSN 2649			
	25888		27 FEB 13	A.P.U.-POWER PLANT-INTRODUCE ALLIED SIGNAL APU 131-9(A)
	Applicable to: MSN 2649			
	31528		27 FEB 13	NAVIGATION-ADIRU-RESTORE RVSM 3 CIRCUIT CAPABILITIES (SERIAL SOLUTION)
	Applicable to: MSN 2649			
	21566		27 FEB 13	ICE AND RAIN PROTECTION - MODIFY AIR BLEED SYSTEM TO PROVIDE LOW TEMPERATURE WARNING-
	Applicable to: MSN 2649			
	25861		27 FEB 13	NAVIGATION-REDUCED VERTICAL SEPARATION MINIMUM (RVSM) (CERTIFICATION APPLICABLE ON A319/A320 ONLY)
	Applicable to: MSN 2649			
	26363		27 FEB 13	AIR CONDITIONING-AIR COOLING SYSTEM-INTRODUCE MODIFIED RAM AIR OUTLET
	Applicable to: MSN 2649			
	22562		27 FEB 13	AIRBORNE AUXILIARY POWER UNIT - INTRODUCE APIC APS-3200
	Applicable to: MSN 2649			
	27620		27 FEB 13	NAVIGATION-STANDBY DATA : ALTITUDE AND HEADING - INSTALL INTEGRATED STANDBY INSTRUMENT SYSTEM (ISIS)
	Applicable to: MSN 2649			
	34221		27 FEB 13	ENGINE FUEL AND CONTROL - CONTROLLING - INSTALL EEC SOFTWARE "SCN18" ON IAE V2500-A5 ENGINES
	Applicable to: MSN 2649			

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M⁽¹⁾	MODIFICATION	Linked SB	Incorp. Date	Title
	30660		27 FEB 13	INDICATING/RECORDING SYSTEMS - FWC - INSTALL FWC STANDARD H2E4
	Applicable to: MSN 2649			
	26398		27 FEB 13	ADDITIONAL CERTIFICATION ITEMS - LANDING WITH A 15 KNOT TAILWIND
	Applicable to: MSN 2649			
	150110		27 FEB 13	AUTO FLIGHT- FLIGHT MANAGEMENT SYSTEM- ACTIVATE BARO RADIO SETTING FUNCTION
	Applicable to: MSN 2649			
	27753		27 FEB 13	NAVIGATION - TCAS - INSTALL COLLINS TCAS TTR921 WITH COLLINS ATC TPR901
	Applicable to: MSN 2649			
	23893		27 FEB 13	AUTO FLIGHT - LAND CAT III CAPABILITY TEST - EXTEND CAT III CAPABILITY FOR IAE ENGINE
	Applicable to: MSN 2649			
	26495		27 FEB 13	WINGS-INBOARD FLAP-MODIFY SLIDING PANEL DRIVING MECHANISM
	Applicable to: MSN 2649			
	28479		27 FEB 13	INDICATING RECORDING SYSTEM-FWC- INTRODUCE FWC STANDARD H2/E3P
	Applicable to: MSN 2649			
	32228		27 FEB 13	EQUIPMENT/FURNISHINGS-PASSENGER COMPART SEATS - INTRODUCE ISPPS IN CONJUNCTION WITH INTEGRATED IFE/SPSS
	Applicable to: MSN 2649			
	38211		27 FEB 13	WINGS - INBOARD FLAP - INSTALL TRUNNION SLIDING PANEL WITH NEW ATTACHMENT
	Applicable to: MSN 2649			
	26999		27 FEB 13	NAVIGATION - MMR - INSTALL COLLINS MMR PROVIDING ILS AND GPS FUNCTION
	Applicable to: MSN 2649			
	26526		27 FEB 13	NAVIGATION - GPWS - ACTIVATE ENHANCED FUNCTIONS OF THE EGPWS
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	25570		27 FEB 13	NAVIGATION-SENSORS-POWER SUPPLY AND SWITCHING MODIFY CAPTAIN PITOT POSITION
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	20024		27 FEB 13	FUEL- INSTALL A CENTRE TANK SYSTEM-
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	Applicable to: MSN 2649			
	21678		27 FEB 13	ELECTRICAL POWER-AC/DC ESSENTIAL POWER DISTRIBUTION-PROVIDE PROVISIONS FOR ETOPS-
	Applicable to: MSN 2649			
	30748		27 FEB 13	GENERAL-FLIGHT ENVIRONMENTAL ENVELOPE- EXTENSION TO 12100 M (39800 FT)
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	26925		27 FEB 13	LANDING GEAR-ALTERNATE BRAKING- INTRODUCE MODIFIED ALTERNATE BRAKING SYSTEM
	Applicable to: MSN 2649			
	20029		27 FEB 13	DOORS- BULK CARGO COMPARTMENT- INSTALL AN ADDITIONAL DOOR AT FR 60/62-
	Applicable to: MSN 2649			
	32656		27 FEB 13	ENGINE FUEL AND CONTROL - CONTROLLING - INTRODUCE EEC SOFTWARE STANDARD "SCN17" ON V2500-A5 ENGINES
	Applicable to: MSN 2649			

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

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Localization Title	Toc Index	ID	Reason
APPRO-TR Update of MCDL 52-02, 52-03, 52-04, -52-05	H	1	Documentation update: Addition of "Update of MCDL 52-02, 52-03, 52-04, -52-05" documentary unit
APPRO-TR Update of MCDL 52-01	I	2	Documentation update: Addition of "Update of MCDL 52-01" documentary unit
APPRO-TR Update of MCDL 52-20	J	3	Documentation update: Addition of "Update of MCDL 52-20" documentary unit



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APPROVAL REFERENCE A320-232

Ident.: **APPRO-ENV-00007012.0020001 / 02 DEC 13**
Criteria: 320-232

EASA APPROVED

AIRPLANE FLIGHT MANUAL	MODEL	REVISION
ENVELOPE	320-232	30

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 02 DEC 13

Approval reference: 10047319

The LEDU (Refer to LEDU) and LETR (Refer to LETR) identify all the Documentary Units (DU) defining the Airplane Flight Manual (AFM) for specific Airbus A320-232 aircraft definitions at the latest EASA approved envelope revision given in the above table.



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TR369 Issue 1.0
TAWS DATABASE COMPLIANCE STATEMENT

Ident.: TDU / APPRO-TR-00015062.0001001 / 22 JAN 14

EASA APPROVED

Criteria: (SA and (26526 or 28244 or 34637 or 39146))

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 22 JAN 14

Approval reference: 10047801

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

Reason for issue: This Temporary Revision is issued to provide statement of compliance of the TAWS database of the T2CAS/T3CAS TAWS function, and of the EGPWS, with DO-200A DPAL2.

Applicable to: A318/A319/A320/A321 aircraft equipped with MOD 26526 or MOD 28244 or MOD 34637 or MOD 39146.

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

APPRO-TR-00015062.0001001/22 JAN 14

APP-TAWS-00015058.0001001/22 JAN 14



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TR388 Issue 1.0
FMS - FAA AC 90-105 COMPLIANCE

Ident.: TDU / APPRO-TR-00010498.0009001 / 22 JAN 14

EASA APPROVED

Criteria: (SA and ((31896 or 31897 or 32401 or 32402 or 32475 or 32929) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635)))

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 22 JAN 14

Approval reference: 10047802

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

Reason for issue: This TR provides the compliance statement with the FAA AC 90-105.

Applicable to: A318 or A319 or A320 or A321 aircraft fitted with the FMS2 (Honeywell or Thales) and with GPS.

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

APPRO-TR-00010498.0009001/22 JAN 14

LIM-22-FMS-00015234.0001001/22 JAN 14



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TR33 Issue 2.0
ERRONEOUS RA HEIGHT INDICATION

Ident.: TDU / APPRO-TR-00009724.0001001 / 09 DEC 13

EASA APPROVED

Criteria: SA

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 09 DEC 13

Approval reference: 10047390

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

Reason for issue: This Temporary Revision gives the operational procedure in the case of an erroneous Radio Altimeter (RA) height indication.
Reason for issue 2: Enhancement of the procedure.

Applicable to: All A318 or A319 or A320 or A321 aircraft.

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

APPRO-TR-00009724.0001001/09 DEC 13

ABN-34-00009722.0001001/09 DEC 13



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TR1 Issue 1.0
(TR 2.05.00/47) - NON PRECISION APPROACHES WITH OEI

Ident.: TDU / APPRO-TR-00009667.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 23 NOV 09

Approval reference: 10027986

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

Reason for issue: This TR is issued in digital format to provide the content of TR 2.05.00/47 approved by the DGAC on June 21st, 2001.

Applicable to: SA.

Cancelled by: Mod 37665

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

APPRO-TR-00009667.0001001/23 NOV 09

LIM-22-FMS-00009620.0001001/23 NOV 09



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TR30 Issue 1.0
(TR 8.02.00/03 ISSUE 3) - APU LIMITATIONS FROM
CIS FOR AIRCRAFT FITTED WITH APU 131-9

Ident.: **TDU / APPRO-TR-00009693.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: ((320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233 or A319 or A321) and (25888 or 37987))

Specific: CIS

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 23 NOV 09

Approval reference: 10027986

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

Reason for issue: This TR is issued in digital format to provide the content of TR 8.02.00/03 Issue 3 approved by the EASA under reference 2004-11877 on December 07th, 2004.
This Temporary Revision amends temporarily the special requirements from CIS.

Applicable to: A319 or 320-111/-211/-212/-214/-231/-232/-233 or 321 aircraft fitted with one Allied Signal APU 131-9[A] (Mod 25888).

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

APPRO-TR-00009693.0001001/23 NOV 09

REG-CIS-LIM-49-00009654.0001001/23 NOV 09



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TR402 Issue 1.0

LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE

Ident.: **TDU / APPRO-TR-00013997.0003001 / 26 FEB 14**

EASA APPROVED

Criteria: (A318 or A319 or A320 or A321)

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 26 FEB 14

Approval reference: 10048269

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

Reason for issue: This Temporary Revision provides the rules to apply in Abnormal and Emergency Procedures for Landing Distance Determination in case of In-Flight Failure. This TR is issued to reference the new landing failure file.

Applicable to: A318, A319, A320, or A321 aircraft.

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

APPRO-TR-00013997.0003001/26 FEB 14

ABN-GEN-00014548.0003001/26 FEB 14

EMER-GEN-00014547.0003001/26 FEB 14



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TR394 Issue 1.0
MCDL PERFORMANCE DATABASE

Ident.: TDU / APPRO-TR-00015362.0001001 / 18 FEB 14

EASA APPROVED

Criteria: SA

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 18 FEB 14

Approval reference: 10048180

Reason for issue: This TR provides the CDL data file version to be used in OCTOPUS for the calculation of CDL effects on performance

Applicable to: All A320 family.

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

APPRO-TR-00015362.0001001/18 FEB 14

MCDL-GEN-PERF-00015363.0001001/18 FEB 14



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TR413 Issue 1.0
UPDATE OF MCDL 52-02, 52-03, 52-04, -52-05

1 Ident.: TDU / APPRO-TR-00015534.0001001 / 17 APR 14

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted DU: NONE

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 17 APR 14

Approval reference: 10048877

Reason for issue: This TR is issued to update MCDL items 52-02, 52-03, 52-04 and 52-05 in order to remove the reference to MCDL item 52-06 that does not exist anymore.

Applicable to: All A319/A320/A321 aircraft models.

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

APPRO-TR-00015534.0001001/17 APR 14

MCDL-52-04-00015420.0001001/17 APR 14

MCDL-52-02-00015418.0001001/17 APR 14

MCDL-52-05-00015421.0001001/17 APR 14

MCDL-52-03-00015419.0001001/17 APR 14



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TR415 Issue 1.0
UPDATE OF MCDL 52-01

2 Ident.: **TDU / APPRO-TR-00015536.0001001 / 17 APR 14**
Criteria: ((A319 or A320 or A321) and 20109)
Impacted DU: NONE

EASA APPROVED

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 17 APR 14

Approval reference: 10048877

Reason for issue: This TR is issued to update MCDL item 52-01 in order to remove the reference to MCDL item 52-06 that does not exist anymore.

Applicable to: All A319/A320/A321 aircraft models with Mod 20109.

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

APPRO-TR-00015536.0001001/17 APR 14

MCDL-52-01-00015417.0003001/17 APR 14



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TR419 Issue 1.0
UPDATE OF MCDL 52-20

Ident.: TDU / APPRO-TR-00015540.0001001 / 17 APR 14
Criteria: SA
Impacted DU: NONE

EASA APPROVED

APPROVAL REFERENCE

APPROVED BY: EASA

Approval date: 17 APR 14

Approval reference: 10048877

Reason for issue: This TR is issued to update MCDL item 52-20 in order to remove the reference to MCDL item 52-06 that does not exist anymore.

Applicable to: All A318/A319/A320/A321 aircraft models.

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

APPRO-TR-00015540.0001001/17 APR 14

MCDL-52-20-00015422.0001001/17 APR 14

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GENERAL INTRODUCTION

INTRODUCTION

Ident.: GEN-INTR-00007010.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 non 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*) and Approval Reference Documentary Unit (*Refer to APPRO-ENV Approval Reference*) of this AFM.

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). 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.



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INTRODUCTION

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GENERAL
AFM DESCRIPTION

APPROVED AFM FORMAT

Ident.: GEN-DESC-00015195.0001001 / 02 DEC 13
Criteria: SA

EASA APPROVED

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-00007013.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

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 thus will not assume the responsibility of 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-00007015.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

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

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

DOCUMENTARY UNIT (DU)Ident.: GEN-DESC-00007016.0001001 / 23 NOV 09
Criteria: SA**EASA APPROVED**

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

The DUs are listed on a separate "List of Effective Documentary Unit" (LEDU).

IDENTIFICATION STRIPIdent.: GEN-DESC-00007017.0001001 / 23 NOV 09
Criteria: SA**EASA APPROVED**

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: SA stands for Single Aisle meaning that this DU is applicable to all A318/A319/A320/A321 family.

- 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 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.

AFM REVISIONIdent.: GEN-DESC-00007366.0001001 / 03 AUG 10
Criteria: SA**EASA APPROVED**

For each revision, a new LEDU is issued. The LEDU shows the revision number, the issue date of the revision, the operator/owner code and the aircraft model. In addition, the individual effectivity per MSN is stated for each mentioned DU.

The LEDU consists of:

- 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 MSNs 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 MSNs to which the DU applies and the information defined in the Identification Strip (*Refer to GEN-DESC Identification Strip*).

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

AFM general revisions enable update of the technical content of DUs through the approval of the updated aircraft model envelope AFM. Each AFM general revision is identified by a new revision number, a new approval date and an issue date.

Intermediary revisions of the operator/owner AFM are carried out based on the latest approved general revision of the aircraft model envelope AFM. Each intermediary revision has the same revision number and the same approval date as the latest approved general revision, but a new issue date. An intermediary revision may be issued following a fleet modification or the embodiment of an approved Airbus SB.

TEMPORARY REVISION (TR)

Ident.: GEN-DESC-00007018.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

A Temporary Revision (TR) is related to amendments to be quickly approved and introduced in the AFM. A TR is made of Temporary Documentary Units (TDU).

The TRs are indicated with a dedicated layout and are listed on a separate "List of Effective Temporary Revisions" (LETR).

A TR has always precedence on a normal AFM content (TDU has always precedence on a normal impacted DU content) until deleted by another TR, a normal revision or a retrofit of SB.

Note: When applicable, the identification strip of a TDU provides the identification number and the title of the impacted DU.



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AFM DESCRIPTION

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WARNING DEFINITIONIdent.: GEN-DEF-00007020.0001001 / 23 NOV 09
Criteria: SA**EASA APPROVED**

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 DEFINITIONIdent.: GEN-DEF-00007021.0001001 / 23 NOV 09
Criteria: SA**EASA APPROVED**

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 DEFINITIONIdent.: GEN-DEF-00006982.0001001 / 23 NOV 09
Criteria: SA**EASA APPROVED**

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 DEFINITIONIdent.: GEN-DEF-00007322.0001001 / 23 NOV 09
Criteria: SA**EASA APPROVED****LAND ASAP (red on ECAM)**

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

LAND ASAP (amber on ECAM)

Advise the flight crew to consider landing at the nearest suitable airport.



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WORDING DEFINITIONS

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ABBREVIATIONS

Ident.: GEN-ABB-00006976.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

A

Abbreviation	Term
A/C	Aircraft
AC	Advisory Circular
	Alternative Current
ACD	Airworthiness Compliance Document
ACJ	Advisory Circular-Joint
ACL	ATC Clearance
ACM	ATC Communication Management
ACT	Additional Center Tank
ADIRU	Air Data Inertial Reference Unit
ADR	Air Data Reference
ADS-B	Automatic Dependent Surveillance-Broadcast
ADS-C	Automatic Dependent Surveillance-Contract
AEO	All Engines Operative
AFM	Airplane Flight Manual
AGL	Above Ground Level
AIME	Autonomous Integrity Monitoring Extrapolation
ALD	Actual Landing Distance
AMC	ATC Microphone Check
	Acceptable Means of Compliance
AMJ	Advisory Material-Joint
AMM	Aircraft Maintenance Manual
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	Air Speed Indicator
ATA	Air Transport Association
ATC	Air Traffic Control
ATS	Air Traffic Service
ATSA-AIRB	Air Traffic Situational Awareness - Airborne
ATSA-ITP	Air Traffic Situational Awareness - In Trail Procedures
ATSA-VSA	Air Traffic Situational Awareness - Visual Separation on Approach

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Abbreviation	Term
ATSAW	Airborne Traffic Situational Awareness
ATSU	Air Traffic Service Unit
AWO	All Weather Operations

B

Abbreviation	Term
BC	Back Course
BSCU	Braking and Steering Control Unit

C

Abbreviation	Term
C/B	Circuit Breaker
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CAS	Calibrated Airspeed
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
CJ	Corporate Jet
CLD	Certified Landing Distance
CM	Context Management
CML	Consumable Material List
CMP	Configuration, Maintenance and Procedures
CONF	Configuration
CPDLC	Controller Pilot Datalink Communication
CS	Certification Specifications
CSMG	Constant Speed Motor Generator
CWY	Clearway

D

Abbreviation	Term
DA	Decision Altitude
DAC	Dual Annular Combustor
D-ATIS	Digital Automatic Terminal Information Service
DC	Direct Current
DCL	Departure Clearance

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Abbreviation	Term
DGAC	Direction Générale de l'Aviation Civile Dirrection Generale de Aviation Civile
DH	Decision Height
DLIC	Data Link Initiation Capability
DMC	Display Management Computer
DME	Distance Measuring Equipment
DNA	Dirección National de Aeronavegabilidad
DO	Document Order (RTCA)
DU	Display Unit Documentary Unit

E

Abbreviation	Term
EASA	European Aviation Safety Agency
ECAM	Electronic Centralized Aircraft Monitoring Computer
ED	EUROCAE Document
EDTO	Extended Diversion Time Operations
EFB	Electronic Flight Bag
EFIS	Electronic Flight Instrument System
EGPWS	Enhanced Ground Proximity Warning System
EGT	Exhaust Gas Temperature
EHS	Enhanced Surveillance
EIS	Electronic Instrument System
ELAC	Elevator Aileron Computer
ELT	Electronic Locator Transmitter
EMER	Emergency
ENG	Engine
EPR	Engine Pressure Ratio
ESS	Essential
ETOPS	Extended range operations for two engine aeroplanes (EASA) Extended operations (FAA)
EWD	Engine Warning Display

F

Abbreviation	Term
F	Fuel
F/CTL	Flight Controls
F-PLN	Flight Plan
FAA	Federal Aviation Administration
FAC	Flight Augmentation Computer

Continued on the following page

Continued from the previous page

Abbreviation	Term
FADEC	Full Authority Digital Engine Control System
FAF	Final Approach Fix
FANS	Future Air Navigation System
FAR	Federal Aviation Regulations
FCDC	Flight Control Data Concentrator
FCOM	Flight Crew Operating Manual
FCU	Flight Control Unit
FD	Flight Director
FI	Filling Instructions
FLS	FMS Landing System
FLX	Flex
FM	Flight Management
FMA	Flight Mode Annunciator
FMGC	Flight Management and Guidance Computer
FMGS	Flight Management and Guidance System
FMS	Flight Management System
FOB	Fuel on Board
FPA	Flight Path Angle
FPV	Flight Path Vector
FQI	Fuel Quantity Indication
FU	Fuel Used
FWC	Flight Warning Computer

G

Abbreviation	Term
GBAS	Ground-Based Augmentation System
GEN	Generator
GLS	GPS Landing System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GPWS	Ground Proximity Warning System
GSM	Global System for Mobile Communication

H

Abbreviation	Term
HF	High Frequency
HKCAD	Hong Kong Civil Aviation Department
HPC	High Pressure Compressor
HUD	Head Up Display

I

Abbreviation	Term
IAC	Instrução de Aviação Civil (Civil Aviation Instruction)
IAC AR	Interstate Aviation Committee Aviation Register
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

J

Abbreviation	Term
JAA	Joint Aviation Authorities
JAR	Joint Aviation Regulation
JCAB	Japan Civil Aviation Bureau

K

Abbreviation	Term
KOZ	Keep Out Zone

L

Abbreviation	Term
L/G	Landing Gear
LD	Landing Distance
LDA	Localizer Directional Aid Landing Distances Available
LDG	Landing
LEDU	List of Effective Documentary Unit
LETR	List of Effective Temporary Revision
LGCIU	Landing Gear Control and Interface Unit
LH	Left Hand
LIP	Lift Improvement Package
LNAV	Lateral Navigation
LOC	Localizer

Continued on the following page

Continued from the previous page

Abbreviation	Term
LOC-BC	Localizer Back Course
LRBL	Least Risk Bomb Location

M

Abbreviation	Term
MAC	Mean Aerodynamic Chord
MAP	Missed Approach Point
MAPSC	Maximum Approved Passenger Seating Configuration
MCDL	Master Configuration Deviation List
MCDU	Multipurpose Control & Display Unit
MCPSC	Maximum Certificated Passenger Seating Capacity
MCT	Maximum Continuous Thrust
MDA	Minimum Descent Altitude
MDH	Minimum Descent Height
MEA	Minimum En route Altitude
MLE	Maximum Landing Gear Extended Mach
MLS	Microwave Landing Distance
MLW	Maximum Landing Weight
MMEL	Master Minimum Equipment List
MMO	Maximum Operating Mach
MMR	Multi-Mode Receiver
MOPS	Minimum Operational Performance Standards
MORA	Minimum Off Route Altitude
MSN	Manufacturer Serial Number
MTOW	Maximum Takeoff Weight
MZFW	Maximum Zero Fuel Weight

N

Abbreviation	Term
N1	Low Pressure Rotor Speed
N2	High Pressure Rotor Speed
NAI	Nose Air Intake
NDB	Non-Directional Beacon
NAV	Navigation
ND	Navigation Display
NPA	Non Precision Approach
NSA	Norme Sud Aviation

O

Abbreviation	Term
OAT	Outside Air Temperature
OCL	Oceanic Clearance
OEI	One Engine Inoperative
OEW	Operational Empty Weight
OLB	Ops Library Browser
OLD	Operational Landing Distance
OVHT	Overheat
OW	Operational Weight

P

Abbreviation	Term
P/B	Pushbutton
PAPI	Precision Approach Path Indicator
PAR	Precision Approach Radar
PC	Personal Computer
PED	Portable Electronic Devices
PF	Pilot Flying
PFC	Porous Friction Course
PFD	Primary Flight Display
PNF	Pilot Non Flying
PTU	Power Transfer Unit
PVI	Paravisual Indicator

Q

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

R

Abbreviation	Term
RA	Radio Altimeter
	Resolution Advisory
RAT	Ram Air Turbine
RBS	Radio Beacon System
RH	Right Hand
RLD	Required Landing Distance
RNAV	Area Navigation
RNP	Required Navigation Performance

Continued on the following page

Continued from the previous page

Abbreviation	Term
ROP	Runway Overrun Protection
ROPS	Runway Overrun Prevention System
ROW	Runway Overrun Warning
RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minima

S

Abbreviation	Term
SA	Single Aisle
SAAAR	Special Aircrew and Aircraft Authorization Required
SAC	Single Annular Combustor
SAC-TI	Single Annular Combustor- Tech Insertion
SAL	Steep Approach Landing
SAT	Static Air Temperature
SATCOM	Satellite Communication
SB	Service Bulletin
SD	System Display
SDF	Simplified Directional Facility
SEC	Spoiler Elevator Computer
SFCC	Slat Flap Control Computer
SIL	Service Information Letter
SRS	Speed Reference System
STAT INV	Static Inverter
SWY	Stopway

T

Abbreviation	Term
TA	Traffic Advisory
TAB	Tabulation and Interpolation Program
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
TI	Tech Insertion
TO	Takeoff
TOD	Takeoff Distance
TODA	Takeoff Distance Available
TOGA	Takeoff - Go-Around
TOR	Takeoff Run

Continued on the following page

Continued from the previous page

Abbreviation	Term
TORA	Takeoff Run Available
TR	Temporary Revision
TRU	Transformer Rectifier Unit

V

Abbreviation	Term
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
V/DEV	Vertical Deviation
VDL	VHF Data Link
VFE	Maximum Flap Extended Speed
VFR	Visual Flight Rules
VHF	Very High Frequency
VLE	Max L/G Extended Speed
VLO	Max L/G Operating Speed
VLOF	Lift-Off Speed
VLS	Lowest Selectable Speed
VMC	Visual Meteorological Conditions
VMCA	Minimum Control Airspeed
VMCG	Minimum Control Speed Ground
VMIN	Minimum Operating Speed
VMIN 1G	Minimum Operating Speed under 1g Load Factor
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
VSW	Stall Warning Speed

W

Abbreviation	Term
WBM	Weight and Balance Manual
WV	Weight Variant
WX	Weather mode (ND)



A320
AIRPLANE FLIGHT MANUAL

GENERAL
ABBREVIATIONS

Z

Abbreviation	Term
ZFCG	Zero Fuel Center of Gravity
Zp	Pressure Altitude



A320
AIRPLANE FLIGHT MANUAL

GENERAL

UNITS

CORRESPONDENCE BETWEEN UNITS

Ident.: GEN-UNIT-00006979.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

METRIC TO US

	METRIC	US
LENGTH	1 mm	0.0394 in
	1 m	3.281 ft
	1 m	1.094 yd
	1 km	0.540 nm
SPEED	1 m/s	3.281 ft/s
	1 km/h	0.540 kt
WEIGHT	1 g	0.0353 oz
	1 kg	2.204623 lb
	1 t	2 204.623 lb
FORCE	1 N	0.2248 lb
	1 daN	2.248 lb
PRESSURE	1 bar	14.505 PSI
	1 mbar	0.0145 PSI
VOLUME	1 l	0.2642 US Gal
	1 m ³	264.2 US Gal
MOMENTUM	1 daN.m	88.50 lb.in
TEMPERATURE	$t(^{\circ}\text{F}) = t(^{\circ}\text{C}) \times 1.8 + 32$	

US TO METRIC

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

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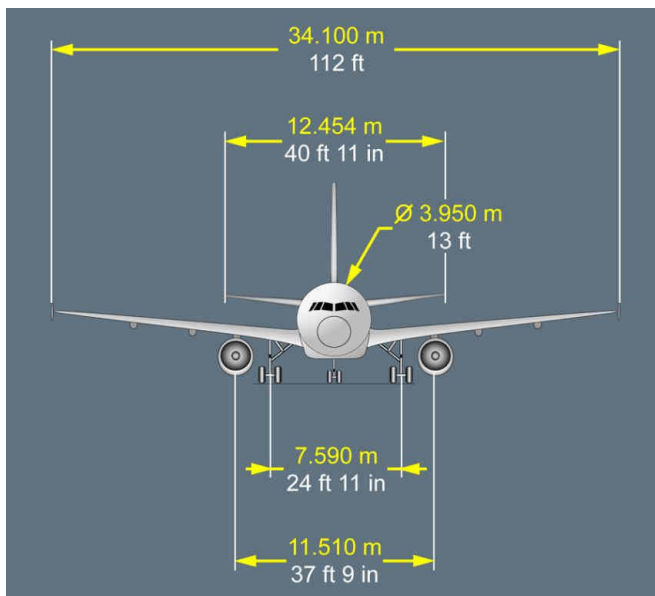
 A320 AIRPLANE FLIGHT MANUAL	GENERAL UNITS

Continued from the previous page

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

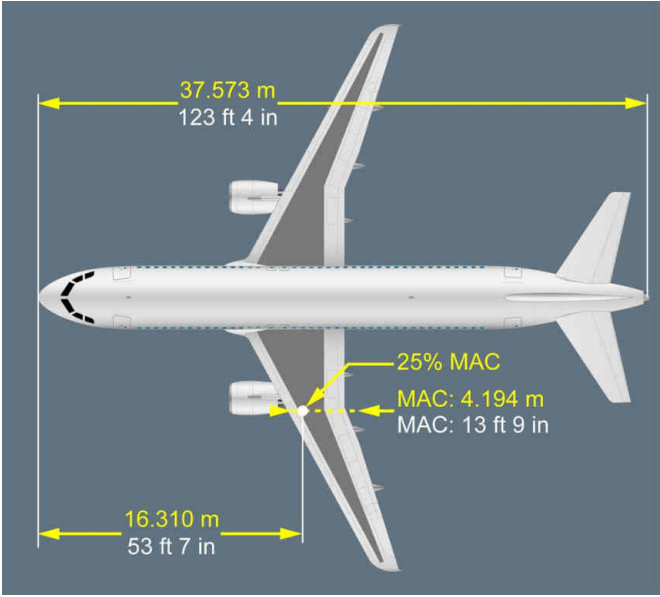
3-VIEW DRAWING

 Ident.: GEN-VIEW-00006880.0002001 / 23 NOV 09
 Criteria: 320-200

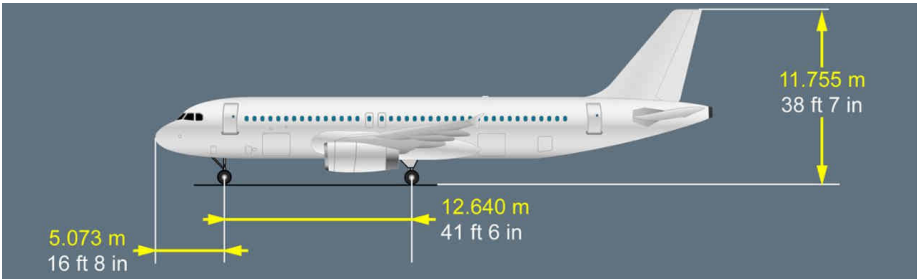
EASA APPROVED
Front View


GENERAL
3-VIEW DRAWING

Top View



Side View



	WING	
Reference area	122.4 m ²	1 317 ft ² 72 in ²
Root chord	6.074 m	19 ft 11 in
MAC (LA)	4.194 m	13 ft 9 in
Aspect ratio	9.396	

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	GENERAL 3-VIEW DRAWING

	HORIZONTAL TAIL PLANE	
Reference area	31 m ²	333 ft ² 98 in ²
MAC (LH)	2.701 m	8 ft 10 in
Aspect ratio	5	
Distance from 25 %LA to 25 % LH	17.588 m	57 ft 8 in

	VERTICAL TAIL PLANE	
Reference area	21.51 m ²	231 ft ² 77 in ²
MAC (LV)	3.948 m	12 ft 11 in
Aspect ratio	1.6	
Distance from 25 %LA to 25 % LV	16.723 m	54 ft 10 in



A320
AIRPLANE FLIGHT MANUAL

GENERAL
3-VIEW DRAWING

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LIMITATIONS

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AIRPLANE FLIGHT MANUAL

LIMITATIONS

PRELIMINARY PAGES

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
GENERAL

INTRODUCTION

Ident.: LIM-GEN-00006957.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

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-00006958.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

The aircraft is certified in the public transport category (passengers and 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-00006959.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

Minimum flight crew: 2 pilots.

MAXIMUM OPERATING ALTITUDE

Ident.: LIM-GEN-00006960.0002001 / 23 NOV 09
Criteria: (SA and 30748)

EASA APPROVED

Slats and flaps retracted: 39 800 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-00006961.0001001 / 02 DEC 13
Criteria: SA

EASA APPROVED

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

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



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GENERAL

ICING CONDITIONS DEFINITION

Ident.: LIM-GEN-00009165.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Icing conditions exist when the OAT on the ground and for takeoff, or when 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 and ice crystals).

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



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AIRPLANE FLIGHT MANUAL

LIMITATIONS
WEIGHTS AND LOADING

WEIGHT LIMITATIONS

Ident.: LIM-WGHT-00006860.0044001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233) and 30479)

Weight Variant : WV 12

Maximum Taxi Weight	77 400 kg	170 637 lb
Maximum Takeoff Weight (MTOW)	77 000 kg	169 755 lb
Maximum Landing Weight (MLW)	66 000 kg	145 505 lb
Maximum Zero Fuel Weight (MZFW)	62 500 kg	137 788 lb
Minimum Weight	37 230 kg	82 079 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-00006861.0049001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-212 or 320-232) and 30479)

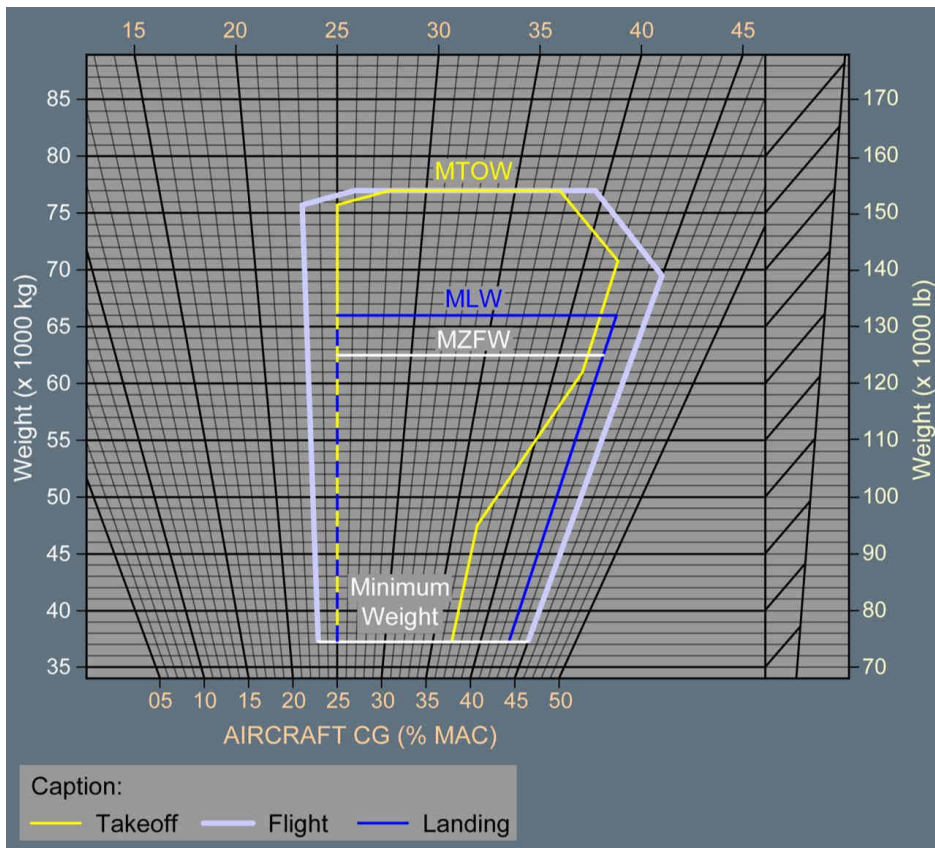
For Mean Aerodynamic Chord (MAC) and datum, see 3 - View Drawing. *Refer to GEN-VIEW 3-View Drawing.*

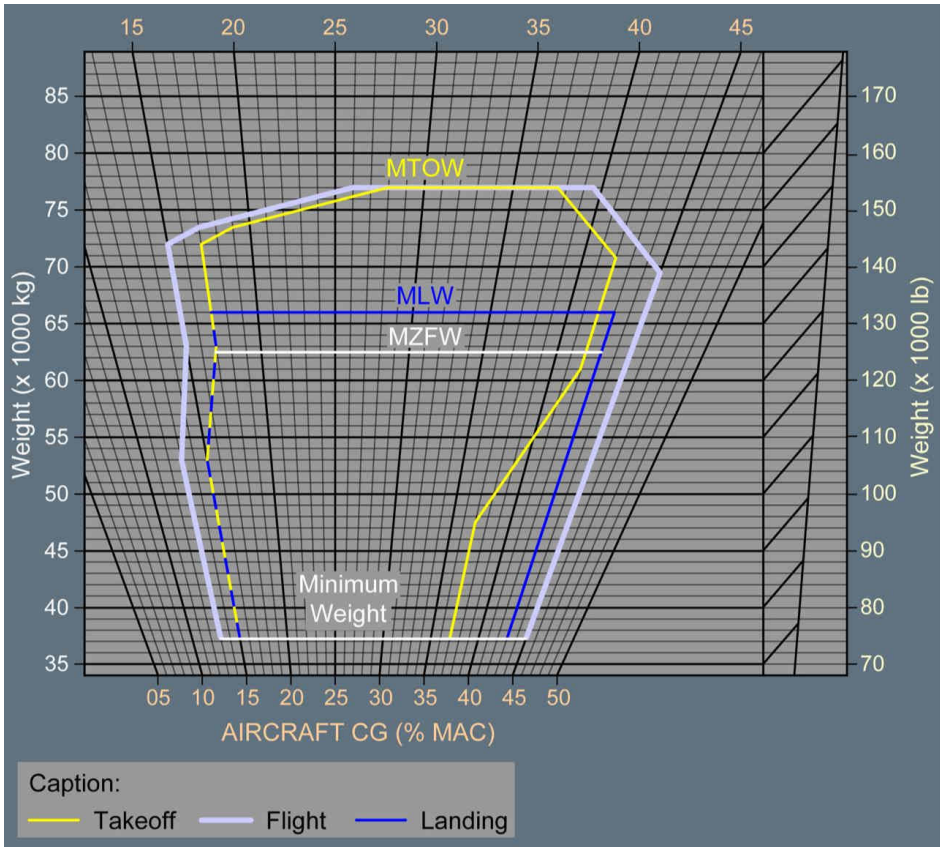
Takeoff and landing CG limits are given for landing gear down configuration.

Flight CG limits are given for landing gear up configuration.

LIMITATIONS WEIGHTS AND LOADING

Basic CG Envelope WV 12



Extended Forward CG Envelope WV 12


When the CG is outside of the basic CG envelope, but within the Extended forward CG envelope, the corresponding performance data is obtained by selecting EXTENDED FORWARD CG in the Performance Engineer's Programs/AFM_OCTO approved FM module at the latest approved revision. *Refer to PERF-OCTO Performance Database*



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS

WEIGHTS AND LOADING

PERFORMANCE LIMITATIONS

Ident.: LIM-WGHT-00006962.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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-00006963.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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

LANDING GEAR LIMITATION

Ident.: LIM-WGHT-00006964.0001001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233) and (23264 or 30479))

- **When the takeoff weight is higher than 76 000 kg (167 549 lb) :**

Do not exceed a maximum taxiing speed of 20 kt during a turn.

VMO/MMO

Ident.: LIM-SPD-00007065.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

MAXIMUM OPERATING LIMIT SPEED (VMO/MMO)

VMO = 350 kt IAS

MMO = M 0.82

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

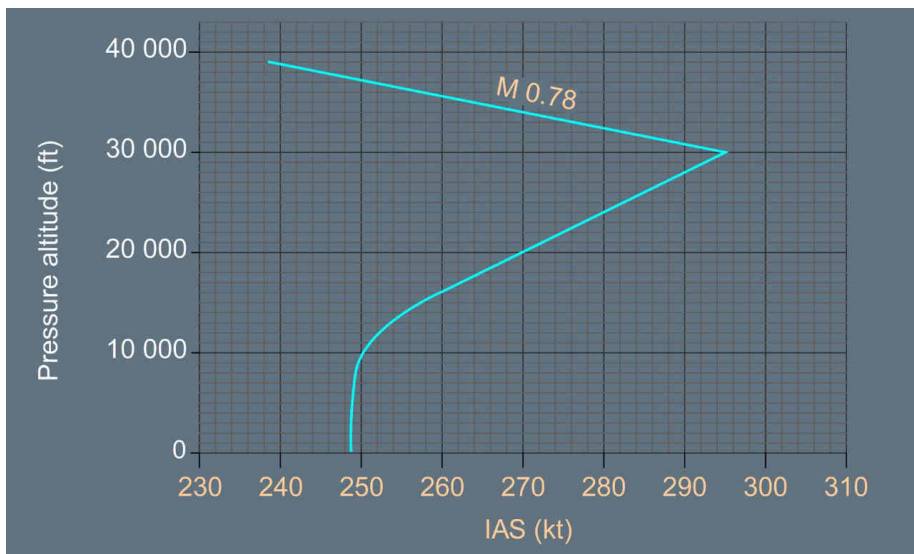
VA

Ident.: LIM-SPD-00007319.0002001 / 23 NOV 09

EASA APPROVED

Criteria: 320-200

MAXIMUM DESIGN MANEUVERING SPEED (VA)
Note: This limitation only applies in alternate or direct flight control laws.

VA


If alternate or direct law is active:

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



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AIRPLANE FLIGHT MANUAL

LIMITATIONS

AIRSPEEDS

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-00006883.0004001 / 23 NOV 09

EASA APPROVED

Criteria: (320-231 or 320-232 or 320-233 or A318 or A319)

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

Flight Phase	Slats Position	Flaps Position	Flaps Lever Position	VFE
Intermediate approach	18 °	0 °	1	230 kt IAS
Takeoff 1+F	18 °	10 °	1	215 kt IAS
Approach and takeoff	22 °	15 °	2	200 kt IAS
Approach, takeoff and landing	22 °	20 °	3	185 kt IAS
Landing	27 °	40 °	FULL	177 kt IAS

VLO AND VLE/MLE

Ident.: LIM-SPD-00007317.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

MAXIMUM SPEED DURING LANDING GEAR EXTENSION

VLO = 250 kt IAS

MAXIMUM SPEED DURING LANDING GEAR RETRACTION

VLO = 220 kt IAS

MAXIMUM SPEED WITH LANDING GEAR LOCKED DOWN

VLE/MLE = 280 kt IAS / M 0.67



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AIRPLANE FLIGHT MANUAL

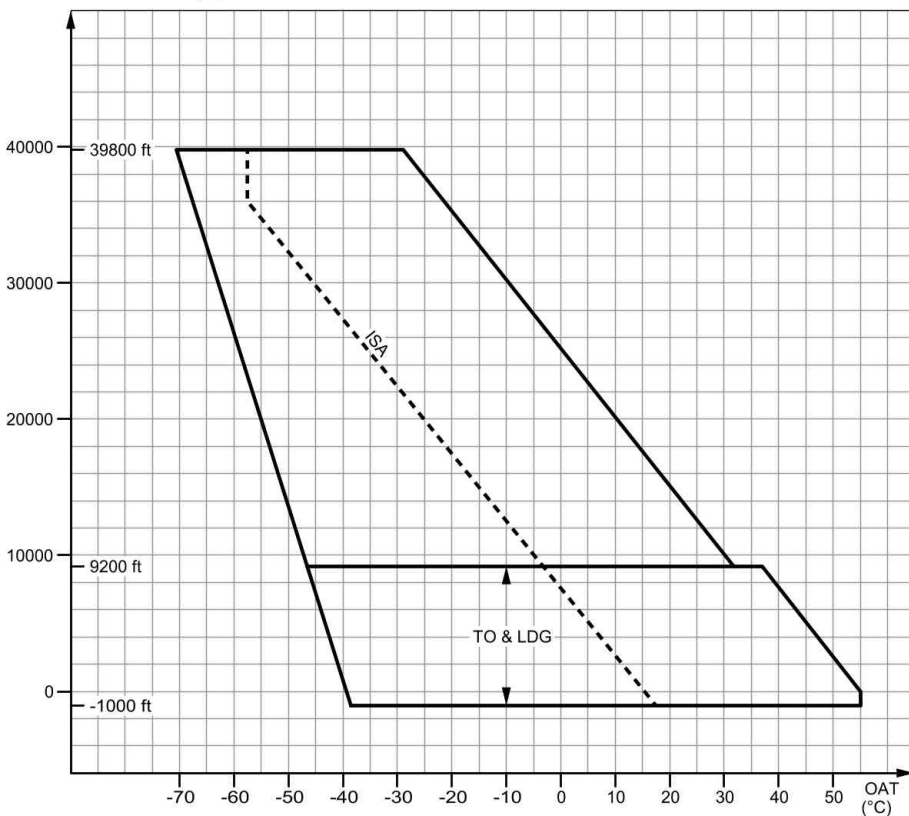
LIMITATIONS OPERATIONAL PARAMETERS

ENVIRONMENTAL ENVELOPE

Ident.: LIM-OPS-00006919.0003001 / 23 NOV 09
Criteria: ((320-214 or 320-232 or 320-233) and 30748)

EASA APPROVED

PRESSURE ALTITUDE (ft)



TAILWIND

Ident.: LIM-OPS-00007309.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

Maximum tailwind for takeoff and landing: 10 kt



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AIRPLANE FLIGHT MANUAL

LIMITATIONS
OPERATIONAL PARAMETERS

RUNWAY SLOPE

Ident.: LIM-OPS-00007310.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

Maximum mean runway slope: $\pm 2 \%$



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS TOWING AND TAXIING

MANEUVERS ON GROUND

Ident.: LIM-09-00007357.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and SA)

During towing, $\pm 85^\circ$ of nosewheel travel must not be exceeded.

Note: *Mechanical stop is designed at $\pm 95^\circ$ of nosewheel travel.*

TOWBARLESS OPERATIONS

Ident.: LIM-09-00007358.0001001 / 03 AUG 10

EASA APPROVED

Criteria: (SA and SA)

Towbarless operations on nose landing gear (towing and pushback) are approved 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 A318/A319/A320/A321 aircraft are listed in Airbus Service Information Letter SIL 09-002.



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
TOWING AND TAXIING

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
AIR COND/PRESS/VENT

CABIN PRESSURIZATION

Ident.: LIM-21-00007261.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Maximum safety relief differential pressure: 8.6 PSI (600 hPa).

Maximum negative differential pressure: -1 PSI (-70 hPa).

Note: *The ram air inlet must only be opened when the cabin differential pressure is less than +1 PSI (70 hPa).*



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
AIR COND/PRESS/VENT

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
AUTO FLIGHT SYSTEM
FLIGHT MANAGEMENT SYSTEM

GENERAL

Ident.: LIM-22-FMS-00009567.0002001 / 23 NOV 09

EASA APPROVED

Criteria: ((A319 or A320 or A321) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))

The FMGS 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, GLS and MLS) and missed approach procedures.

Approval of the FMGS 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: 1. *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 (GPS) and RNP RNAV approach procedures require WGS-84 coordinates and GPS PRIMARY.*

AIRWORTHINESS STANDARDS COMPLIANCE

Ident.: TDU / LIM-22-FMS-00015234.0001001 / 22 JAN 14

EASA APPROVED

Criteria: (SA and ((31896 or 31897 or 32401 or 32402 or 32475 or 32929) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635)))

Impacted DU: NONE

Impacted by TR388 Issue 1.0

The FMGS complies with the airworthiness part of the FAA AC 90-105 including RF leg capability for:

- RNP APPROACH (RNP APCH) Operations with or without APV BARO-VNAV Operations,
- RNP1 operations in Terminal area.



A320

AIRPLANE FLIGHT MANUAL

LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT MANAGEMENT SYSTEM

AIRWORTHINESS STANDARDS COMPLIANCE

Ident.: LIM-22-FMS-00009568.0016001 / 02 DEC 13

EASA APPROVED

Criteria: ((A319 or A320 or A321) and ((31896 or 31897) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635)))

The FMGS 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 FMGS also complies with the airworthiness part of:

- EASA AMC 20-4 (or 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

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 20-129 for baro VNAV
- FAA Advisory Circular 90-100A for terminal and en route RNAV operations
- FAA Order 8400.33 for RNP 4 in oceanic and remote area
- FAA Order 8400.12A for RNP 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.

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



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
AUTO FLIGHT SYSTEM
FLIGHT MANAGEMENT SYSTEM

NAVIGATION PERFORMANCE

Ident.: LIM-22-FMS-00009569.0003001 / 23 NOV 09

EASA APPROVED

Criteria: ((A319 or A320 or A321) and ((31896 or 31897 or 32475 or 32929) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635)))

● **With GPS PRIMARY:**

The FMGS is certified in accordance with the performance requirements of MASPS ED-75/DO-236 for RNP RNAV 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

● **Without GPS PRIMARY:**

The FMGS is certified in accordance with the accuracy requirements and assumptions of MASPS ED-75/DO-236 for RNP RNAV 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-00009570.0003001 / 02 DEC 13

EASA APPROVED

Criteria: ((A319 or A320 or A321) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))

NAV mode may be used:

- After takeoff provided:
 - GPS PRIMARY is available, or
 - FMGS 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, GLS or MLS final approach.



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AIRPLANE FLIGHT MANUAL

LIMITATIONS
AUTO FLIGHT SYSTEM
FLIGHT MANAGEMENT SYSTEM

NON PRECISION APPROACHES WITH OEI

Ident.: TDU / LIM-22-FMS-00009620.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Impacted DU: NONE

Impacted by TR1 Issue 1.0

In the case of One Engine Inoperative, the use of autopilot is not allowed to perform Non Precision Approaches in the following flight modes:

- FINAL APP
- NAV/VS
- NAV/FPA.

Note: The use of FD in NAV mode remains authorized.

APPROACHES

Ident.: LIM-22-FMS-00009571.0002001 / 02 DEC 13

EASA APPROVED

Criteria: ((A319 or A320 or A321) and (25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635))

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.

Note: The RNAV(GNSS) approach limitations and procedures must be used to fly a RNAV approach where the GPS is not required.



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
AUTO FLIGHT SYSTEM
FLIGHT GUIDANCE SYSTEM

AIRWORTHINESS STANDARDS COMPLIANCE

Ident.: LIM-22-FGS-00009235.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

The Flight Management and Guidance System (FMGS) with the associated equipment has been found to meet the airworthiness requirements and performance criteria of:

- JAR 25
- ACJ 25.1329 for automatic flight system
- JAR AWO Subpart 1 - Automatic landing systems
- JAR AWO Subpart 2 - Category 2 operations
- JAR AWO Subpart 3 - Category 3 operations.

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

Ident.: LIM-22-FGS-00009238.0004001 / 02 DEC 13

EASA APPROVED

Criteria: ((320-231 or 320-232 or 320-233) and 23893)

Autoland has been demonstrated:

- With CAT II and CAT III ILS beam, with ILS slope angle inside a range of -2.5° and -3.15°
- For an airport that has an elevation between -1 000 ft and 6 500 ft.

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

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.

AUTOLAND WITH OEI

Ident.: LIM-22-FGS-00015319.0001001 / 02 DEC 13

EASA APPROVED

Criteria: A320

Autoland with OEI is demonstrated in CONF FULL only.

MINIMUM HEIGHT FOR USE OF THE AUTOPILOT

Ident.: LIM-22-FGS-00009242.0001001 / 23 NOV 09

EASA APPROVED

Criteria: ((A318 or A319 or A320) or ((318-111 or 318-112 or A319 or A320) and 30096))

At takeoff	:	100 ft AGL and at least 5 seconds after liftoff.
In non precision straight-in approach	:	MDA/MDH (or DA for LNAV/VNAV approach).
In circling approach	:	MDA/MDH - 100 ft.



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT GUIDANCE SYSTEM

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-00009243.0005001 / 23 NOV 09

Criteria: (320-231 or 320-232 or 320-233)

EASA APPROVED

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

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: 100 ft

■ CAT III with DH:

Minimum Approach Break-off Height: 25 ft AGL based on a demonstrated height loss from when TOGA is selected in a go-around and windspeeds of 5 kt tail, 15 kt head or below.

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



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT GUIDANCE SYSTEM

■ CAT III without DH:

Two 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 ROLLOUT

Headwind: 30 kt

Tailwind: 10 kt

Crosswind: 20 kt



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS

AUTO FLIGHT SYSTEM

FLIGHT GUIDANCE SYSTEM

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 AIRBUS A320 AIRPLANE FLIGHT MANUAL	LIMITATIONS ELECTRICAL POWER

ELECTRICAL

Ident.: LIM-24-00007263.0001001 / 23 NOV 09 Criteria: SA	<u>EASA APPROVED</u>

Maximum continuous load per generator (100 %): 90 KVA
Maximum continuous load per TRU: 200 A



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
ELECTRICAL POWER

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
EQUIPMENT FURNISHING

IN-SEAT POWER SUPPLY SYSTEM (ISPSS)

Ident.: LIM-25-00007265.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and (27230 or 28777 or 30339 or 31090 or 32228))

The In-Seat Power Supply System (ISPSS) for Portable Electronic Devices (PED carried by the passengers) must be turned off during takeoff and landing. The airworthiness approval of the ISPSS for PED does not constitute an operational approval to connect a PED to the system. Such authorization must be obtained by the operator from the appropriate authorities.



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AIRPLANE FLIGHT MANUAL

LIMITATIONS
EQUIPMENT FURNISHING

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS

FUEL

FUEL AND ADDITIVE SPECIFICATIONS

Ident.: LIM-28-00007246.0002001 / 02 DEC 13

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

The fuel system has been certified with: JET A1, JET B, JP4, JET A, JP5, JP8, RT, TS-1 and N° 3 JET.

- Note:
1. For additives, refer to IAE V2500 installation and operating manual IAE 00-43 or the standard practices and processes manual in IETM.
 2. See Airbus Consumable Material List (CML) Part 1 / S01-Fuels at the latest issue for approved fuel specifications.

USABLE FUEL

Ident.: LIM-28-00007248.0003001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or 320-200)

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

Tanks	Fuel Quantity	
2 Wing Tanks	15 609 l	4 123 US Gal
1 Center Tank	8 250 l	2 179 US Gal
Total	23 859 l	6 303 US Gal

Tanks	Fuel Specific Gravity	
	0.80 kg/l	6.676 lb/US Gal
Fuel Weight		
2 Wing Tanks	12 487 kg	27 525 lb
1 Center Tank	6 600 kg	14 547 lb
Total	19 087 kg	42 078 lb

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

WARNING Takeoff on center tank feeding is prohibited.

FUEL IMBALANCE

Ident.: LIM-28-00007254.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or A320)

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****INNER TANKS (OUTER BALANCED)**

Tank Fuel Quantity (Heavier Tank)	Maximum Asymmetry
Full	1 500 kg (3 306 lb)
4 300 kg (9 479 lb)	1 600 kg (3 527 lb)
2 250 kg (4 960 lb)	2 250 kg (4 960 lb)

With linear variation between there values (No limitation below 2 250 kg/4 960 lb).

OUTER TANKS (INNER BALANCED)

Maximum Asymmetry	690 kg (1 521 lb)

Higher outer wing tank asymmetry (up to the max outer tank quantity: one full/one empty) is allowed provided:

- Fuel content of one side (outer + inner) is equal to the fuel content of the other side (outer + inner), or
- Inner tank fuel quantity on the empty outer tank side is equal or higher, up to 3 t higher, than the opposite inner tank.

FUEL TEMPERATURE LIMITS

Ident.: LIM-28-00007259.0007001 / 23 NOV 09

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233)

MINIMUM:

Fuel temperature must not be less than:

JET A: -36 °C

JP5: -42 °C

JET A1, JP8, N° 3 JET: -43 °C

JET B: -46 °C

JP4: -54 °C

RT, TS-1: -45 °C

● **When using JET A:**

If TAT reaches -34 °C, call ECAM fuel page and monitor that fuel temperature remains higher than -36 °C.

MAXIMUM:

JET A1, JET A, JP5, JP8, JET B, (JP4), RT, TS-1, N° 3 JET: +54 °C

● **When using JP4 or JET B:**

Fuel in center tank is to be regarded as unusable if the wing fuel temperature exceeds the following values before engine start and if the given flight level is exceeded before the center tank has been used :

+30 °C not above FL 350

+40 °C not above FL 300

+49 °C not above FL 250



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AIRPLANE FLIGHT MANUAL

LIMITATIONS

FUEL

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AIRPLANE FLIGHT MANUAL

LIMITATIONS
HYDRAULIC

HYDRAULICS FLUID

Ident.: LIM-29-00007262.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

FLUID SPECIFICATIONS :

Refer to NSA 307-110

MAX OPERATING PRESSURE (AT ZERO DELIVERY) :

3 000 PSI $\pm$ 200 PSI (207 bar $\pm$ 14 bar)



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AIRPLANE FLIGHT MANUAL

LIMITATIONS

HYDRAULIC

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 AIRBUS A320 AIRPLANE FLIGHT MANUAL	LIMITATIONS LANDING GEAR

TIRE SPEED

Ident.: LIM-32-00011074.0001001 / 03 AUG 10 Criteria: SA	<u>EASA APPROVED</u>

Maximum tire speed: 195 kt (ground speed).



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AIRPLANE FLIGHT MANUAL

LIMITATIONS
LANDING GEAR

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS

NAVIGATION

INERTIAL REFERENCE SYSTEM (IRS)

Ident.: LIM-34-00007264.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A320)

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 16 h (ie in excess of aircraft range).

Ground alignment of the IRS has been demonstrated to be satisfactory up to 73 ° of latitude. In the NAV mode the IR will not provide valid magnetic heading North of 73 ° North and South of 60 ° South.

REDUCED VERTICAL SEPARATION MINIMUM (RVSM)

Ident.: LIM-34-00007359.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and (25861 or 25910 or 25952 or 31039 or 31528))

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

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



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS

NAVIGATION

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS INFORMATION SYSTEMS

AIRLINE OPERATION CONTROL APPLICATIONS

Ident.: LIM-46-00006965.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and 27522)

The Air Traffic Service Unit (ATSU) equipment has been approved for the provision of Airlines Operational Control (AOC) applications.

The definition of the AOC application and obtaining its subsequent approval, is the responsibility of the operator.

FANS - ATC DATALINK APPLICATION SYSTEM

Ident.: LIM-46-00006967.0003001 / 03 AUG 10

EASA APPROVED

Criteria: (SA and 35865)

The ATC datalink communications system and its applications have been demonstrated to comply with airworthiness requirements contained in ED-110A/DO-280A and ED-120/DO-290 and FAA AC 20-140 for:

- The Controller-Pilot Data-Link Communication (CPDLC) which supports the implementation of the following operational Air Traffic Services (ATS):
 - The ATC Communication Management (ACM)
 - The ATC Clearance (ACL)
 - ATC Microphone Check (AMC).
- The Context Management (CM) which supports:
 - The Data Link Initiation Capability (DLIC) Air Traffic Service (ATS).

This approval is based on assumptions and requirements contained in FANS B Airworthiness Approval Summary document reference 00D460P1210/C02 for:

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

Note:

1. Voice communication remains the primary means of communication.
2. The ATC datalink function is only available when there is a VDL Mode 2 (VHF Data Link Mode 2) coverage.
3. Compliance with the above does not constitute an operational approval. Such authorization must be obtained by the operator from the appropriate authorities.



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
INFORMATION SYSTEMS

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS
AUXILIARY POWER UNIT

AUXILIARY POWER UNIT (APU)

Ident.: LIM-49-00007260.0003001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and (25888 or 37987))

One Allied Signal APU 131-9[A].

APU PARAMETERS:

Maximum EGT: 675 °C

Maximum for start:

- 1 090 °C at altitudes below 35 000 ft
- 1 120 °C at altitudes at or above 35 000 ft

Maximum rotor speed: 107 %

OIL SPECIFICATIONS:

Model Specification 31-12048A-3A.



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AIRPLANE FLIGHT MANUAL

LIMITATIONS
AUXILIARY POWER UNIT

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A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS POWER PLANT

MAIN ENGINES

Ident.: LIM-70-00007233.0007001 / 23 NOV 09
Criteria: 320-232

EASA APPROVED

Two IAE V2527-A5.

ENGINE PARAMETERS

Ident.: LIM-70-00007235.0003001 / 23 NOV 09

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233)

Operating Condition		Time Limit	ENG Indicated EGT Limit	Maximum Rotor Speed	
				N1	N2
Starting		(1)	635 °C	----	----
Maximum Continuous		CONT.	610 °C	----	----
Takeoff and Go-around	Normal	5 min	635 °C	100 %	100 %
	One ENG OUT	10 min	635 °C	100 %	100 %

(1) 3 consecutive cycles (2 of 2 min each followed by a 3rd of 1 min).

REVERSE THRUST

Ident.: LIM-70-00007236.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

The selection of the thrust reversers in flight or their preselection before touchdown is prohibited.
On ground, backing the aircraft with use of reverse thrust is not permitted.

OIL

Ident.: LIM-70-00007232.0003001 / 23 NOV 09

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

SPECIFICATION:

Service Bulletin IAE V2500-ENG-12 at the latest issue.

MINIMUM PRESSURE:

60 PSI

MAXIMUM TEMPERATURE:

- 155 °C for continuous operation
- 165 °C for transient operation (limited to 15 min).



A320
AIRPLANE FLIGHT MANUAL

LIMITATIONS POWER PLANT

REDUCED THRUST TAKEOFF

Ident.: LIM-70-00007239.0006001 / 23 NOV 09

EASA APPROVED

Criteria: (320-232 or 320-233)

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 above requirements.

Note: *Allowed inoperative items may be identified through DISPATCH WITH INOPERATIVE ITEMS chapter of this 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 + 55 (in order that the amount of thrust reduction does not exceed 25 % of the full rated takeoff thrust)
- 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-70-00006881.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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.

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

EMERGENCY PROCEDURES

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EMER-GEN GENERAL

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LANDING DISTANCE DETERMINATION IN CASE OF IN-FLIGHT FAILURE.....	B
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FIRE/SMOKE.....	D

EMER-21 AIR COND/PRESS/VENT

CAB PR - EXCESS CAB ALT.....	A
CAB PR - EXCESS RESIDUAL PR.....	B

EMER-24 ELECTRICAL POWER

ELEC - EMER CONFIG (BOTH ENGINE GENERATORS FAILED).....	A

EMER-26 FIRE/SMOKE

ENG 1 (2) FIRE (In Flight).....	A
ENG 1 (2) FIRE (On Ground).....	B
APU FIRE.....	C
SMOKE - FWD or AFT CARGO SMOKE.....	D
SMOKE/FUMES/AVNCS SMOKE.....	E
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EMER-27 FLIGHT CONTROLS

F/CTL - L + R ELEV FAULT.....	A
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EMER-29 HYDRAULIC

HYD - G + B SYS LO PR.....	A
HYD - B + Y SYS LO PR.....	B
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EMER-32 LANDING GEAR

L/G - GEAR NOT DOWNLOCKED.....	A
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EMER-70 POWER PLANT

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EMER-90 MISCELLANEOUS

STALL RECOVERY.....A
EMER DESCENT..... B
EMERGENCY EVACUATION..... C
DITCHING.....D
FORCED LANDING..... E

INTRODUCTION

Ident.: EMER-GEN-00007037.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

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 warnings 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 (■) 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 the 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-00014547.0003001 / 26 FEB 14

EASA APPROVED

Criteria: (A318 or A319 or A320 or A321)

Impacted DU: NONE

Impacted by TR402 Issue 1.0

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

- LSAB01.fail file using the AFM_OCTO approved FM module at revision 28, or
- LSAC02.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-00015177.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

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



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AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

GENERAL

- combined with LSAB01.fail file using the AFM_OCTO approved FM module at revision 28, or
- combined with LSAC01.fail file using the AFM_OCTO approved FM module at revision 30 or higher.

FIRE/SMOKE

Ident.: EMER-GEN-00007038.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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.



A320
AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

GENERAL

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A320
AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

AIR COND/PRESS/VENT

CAB PR - EXCESS CAB ALT

Ident.: EMER-21-00007053.0002001 / 04 APR 11

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 31283)

- **If above FL 100:**

Use crew oxygen masks.

Initiate emergency descent to the higher one of: FL 100 or MEA. *Refer to EMER-90 EMER DESCENT.*

- **If cabin altitude above 14 000 ft:**

Manually confirm passengers oxygen masks on.

CAB PR - EXCESS RESIDUAL PR

Ident.: EMER-21-00009326.0001001 / 23 NOV 09

EASA APPROVED

Criteria: ((318-111 or 318-112 or A319 or A320 or A321) and 35220)

Turn off both packs.

Alert cabin crew.



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AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

AIR COND/PRESS/VENT

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ELEC - EMER CONFIG (BOTH ENGINE GENERATORS FAILED)

Ident.: EMER-24-00006884.0003001 / 02 DEC 13

EASA APPROVED

Criteria: (A320 and 28160)

LAND ASAP

Minimum RAT speed: 140 kt

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.

● If any generator reset is successful:

Turn off then on both FACs one after the other.

● If generator reset still unsuccessful:

- Note:
1. For communications, only VHF 1 and ATC 1 are available.
 2. Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).
 3. Engines are fed by gravity. Refer to ABN-28 FUEL GRAVITY FEEDING.
 4. The Cockpit Door Locking System (CDLS) is inoperative (if installed).

Manually confirm emergency electrical power on.

Set ENG MODE selector to IGN START.

Turn off then on FAC 1.

Set BUS TIE to AUTO.

Start APU if available.

Set ventilation blower and extract to OVRD.

● For approach and landing:

Note: Slats and flaps extend slowly.

Apply necessary landing performance corrections.

- Note:
1. Antiskid is inoperative. Refer to ABN-32 BRAKES - A-SKID N-WS FAULT or OFF.
 2. Half spoilers are inoperative.



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AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

ELECTRICAL POWER

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ENG 1 (2) FIRE (IN FLIGHT)

Ident.: EMER-26-00007041.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

LAND ASAP

Shut down affected engine and push relevant FIRE pushbutton.

Discharge AGENT 1 after 10 s.

Notify ATC.

- **If fire not extinguished after 30 s:**

Discharge AGENT 2.

ENG 1 (2) FIRE (ON GROUND)

Ident.: EMER-26-00007042.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (318-111 or 318-112 or A319 or A320 or A321)

Set all thrust levers to idle.

Note: Full thrust reversers may be used to stop the aircraft.

- **When aircraft stopped:**

Set parking brake to ON.

Shut down affected engine and push relevant FIRE pushbutton.

Discharge all fire agents of affected engine.

Shut down other engine.

Notify ATC.

Alert cabin crew.

- **If evacuation required:**

Initiate evacuation.

Shut down APU.



A320
AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

FIRE/SMOKE

APU FIRE

Ident.: EMER-26-00007043.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

LAND ASAP

Push APU FIRE pushbutton.

Discharge agent after 10 s.

Shut down APU.

SMOKE - FWD OR AFT CARGO SMOKE

Ident.: EMER-26-00009335.0001001 / 23 NOV 09

EASA APPROVED

Criteria: ((318-111 or 318-112 or A319 or A320 or A321) and (20067 or 20069))

LAND ASAP

Discharge affected cargo compartment agent (as installed).

SMOKE/FUMES/AVNCS SMOKE

Ident.: EMER-26-00007044.0002001 / 02 DEC 13

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 31276)

● If perceptible smoke is confirmed:**LAND ASAP**

Use crew oxygen masks, if required.

Set ventilation blower and extract to OVRD.

Turn off cabin fans and galleys.

Turn on cabin signs.

Establish communication between cockpit and cabin.

Try to identify and isolate faulty equipment.

● If smoke source not immediately isolated:

Initiate a diversion.

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

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

Consider applying the removal of smoke/fumes procedure and setting Elec Emer Config.

Refer to EMER-26 REMOVAL OF SMOKE/FUMES.

Note: To set Elec Emer Config, turn off EMER ELEC GEN 1 LINE and set EMER ELEC PWR to MAN ON then, when EMER GEN is available, turn off GEN 2 and APU GEN.

Apply the Elec Emer Config procedure without performing generator reset. Refer to EMER-24 ELEC - EMER CONFIG (BOTH ENGINE GENERATORS FAILED).

Before landing gear extension, restore normal electrical supply for landing: turn on GEN 2 and EMER ELEC GEN 1 LINE.

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

Consider landing immediately.

● If air conditioning smoke suspected:

Turn off APU bleed.

Set ventilation blower and extract to AUTO.

Close all cargo isolation valves.

Turn off pack 1.

● If smoke continues:

Turn on pack 1.

Continued on the following page

Continued from the previous page SMOKE/FUMES/AVNCS SMOKE

Turn off pack 2.

● **If smoke still continues:**

Turn on pack 2.

Set ventilation blower and extract to OVRD.

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

● **If cabin equipment smoke suspected:**

● **If smoke continues:**

Turn on emergency exit lights.

Turn off COMMERCIAL.

Check smoke dissipation and try to identify and isolate faulty equipment.

● **If smoke still continues or when faulty equipment confirmed isolated:**

Turn on COMMERCIAL.

Consider 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:**

Consider setting Elec Emer Config.

Note: To set Elec Emer Config, turn off EMER ELEC GEN 1 LINE and set EMER ELEC PWR to MAN ON then, when EMER GEN is available, turn off GEN 2 and APU GEN.

Apply the Elec Emer Config procedure without performing generator reset. Refer to EMER-24 ELEC - EMER CONFIG (BOTH ENGINE GENERATORS FAILED).

Before landing gear extension, restore normal electrical supply for landing: turn on GEN 2 and EMER ELEC GEN 1 LINE.

● **If smoke disappears within 5 min:**

Restore normal ventilation.

REMOVAL OF SMOKE/FUMES

Ident.: EMER-26-00007045.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320)

Turn on emergency exit lights.

■ If fuel vapors:

Turn on CAB FANS.

Turn off both packs.

■ If no fuel vapors:

Turn off CAB FANS.

Set PACK FLOW to HI.

Set landing elevation to the higher one of: 10 000 ft or MEA-MORA.

Descend to the higher one of: FL 100 or MEA-MORA.

Notify ATC.

While descending, continue applying the appropriate steps of the smoke/fumes/avncs smoke procedure.

● When at FL 100 or MEA-MORA:**● If electrical emergency configuration:**

Set APU master switch to ON.

Turn off both packs.

Use manual pressurization mode.

Maintain the cabin vertical speed switch in the UP position.

Turn on RAM AIR when cabin differential pressure below 1 PSI.

Set APU master switch to OFF.

● If smoke persists and PNF cockpit window opening required:

Maximum speed: 200 kt

Open cockpit door.

Put headsets on.

Open PNF cockpit window.

● When window open:

Turn on non affected pack(s) and continue applying the appropriate steps of the smoke/fumes/avncs smoke procedure.

Continued on the following page



A320
AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

FIRE/SMOKE

Continued from the previous page REMOVAL OF SMOKE/FUMES

CAUTION

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



A320
AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES FLIGHT CONTROLS

F/CTL - L + R ELEV FAULT

Ident.: EMER-27-00007051.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320 or A321)

Note: 1. *Pitch mechanical back up.*
2. *Roll is in direct law.*

Use manual pitch trim.

Do not use speed brakes.

Maximum speed: 320 kt/M 0.77

Use FLAPS 3 for landing.

Set GPWS LDG FLAP 3 to ON.

Approach speed = VREF + 10 kt

Apply necessary landing performance corrections.

F/CTL - FLAP LVR NOT ZERO

Ident.: EMER-27-00009325.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and (28479 or 28916))

Set flaps lever to 0.



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AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

FLIGHT CONTROLS

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LAND ASAP

- Note: 1. *Flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).*
2. *Ailerons and left elevator are inoperative.*

Maneuver with care.

● **If blue system has been lost by ELEC PUMP LO PR:**

Manually confirm RAT on.

Minimum RAT speed: 140 kt

Turn off associated pumps.

Do not use speed brakes.

● **For approach and landing:**

Note: *Flaps extend slowly.*

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

Note: *If slats retracted, extend landing gear only below 200 kt.*

Approach speed = VREF + 25 kt

Apply necessary landing performance corrections.

- Note: 1. *Slats are inoperative.*
2. *Spoilers are partially inoperative.*

LAND ASAP

- Note: 1. *Flight controls are in normal law.*
2. *Right elevator is inoperative.*

Maneuver with care.

- **If yellow system has been lost by ENG 2 PUMP LO PR:**

Turn on YELLOW ELEC PUMP.

- **If blue system has been lost by ELEC PUMP LO PR:**

Manually confirm RAT on.

Minimum RAT speed: 140 kt

Turn off associated pumps.

Do not use speed brakes.

- **For approach and landing:**

Note: *Slats and flaps extend slowly.*

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

Apply necessary landing performance corrections.

- Note: 1. *Spoilers are partially inoperative.*
2. *Nosewheel steering is inoperative.*

LAND ASAP

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

Maneuver with care.

Turn off PTU.

Turn off associated pumps.

● **If yellow system has been lost by ENG 2 PUMP LO PR:**

Turn on YELLOW ELEC PUMP.

● **For approach and landing:**

Note: Slats extend slowly.

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

Approach speed = VREF + 25 kt

Apply necessary landing performance corrections.

- Note:
1. Flaps are inoperative.
 2. Most spoilers are inoperative.
 3. Stabilizer control is inoperative.
 4. Antiskid is inoperative.
 5. Nosewheel steering is inoperative.

Apply maximum brake pressure: 1 000 PSI.

Note: Brakes are on YELLOW ACCU. Only 7 full brake applications are available.



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AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

HYDRAULIC

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L/G - GEAR NOT DOWNLOCKED

Ident.: EMER-32-00007052.0001001 / 04 APR 11

EASA APPROVED

Criteria: SA

Recycle landing gear.

- **If unsuccessful after 2 min:**

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

LOSS OF BRAKING

Ident.: EMER-32-00009809.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

- **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.



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AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

LANDING GEAR

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DUAL ENG FAILURE (BOTH ENGINES FLAME OUT)

Ident.: EMER-70-00007039.0004001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-232 or 320-233) and 28160)

LAND ASAP

- Note: 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 WING A.ICE - SYS FAULT or OFF.*

The minimum speed for correct CSMG operation is 140 kt.

Manually confirm emergency electrical power on.

Set all thrust levers to idle.

Turn off then on FAC 1.

Note: For communications, only VHF 1 and ATC 1 are available.

■ If there is fuel remaining on board:

Note: In the case of a "DUAL ENGINE FAILURE" during high power operations (i.e. climb, cruise), it is mandatory to fly at or above the optimum relight speed in order to prevent engine core lock.

Attempt engines relight with optimum relight speed 280 kt.

Refer to ABN-70 ENG RELIGHT IN FLIGHT.

Determine landing strategy.

Notify ATC.

● 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.

● When below FL 200 and APU available:

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 cabin and cockpit.

Turn on cabin signs.

Turn off galleys and COMMERCIAL (if installed).

Continued on the following page

Continued from the previous page DUAL ENG FAILURE (BOTH ENGINES FLAME OUT)

Use rudder with care.

Turn on RAM AIR when below FL 150.

■ **If no fuel on board:**

Optimum speed: 220 kt then green dot.

Determine landing strategy.

Notify ATC.

Use crew oxygen masks above FL 100.

Prepare cabin and cockpit.

Turn on cabin signs.

Turn off galleys and COMMERCIAL (if installed).

Use rudder with care.

Turn on RAM AIR when below FL 150.

● **For approach and landing:**

Minimum approach speed: 150 kt

Use FLAPS 3 for landing.

Note: 1. Flaps are inoperative.
2. Slats extend slowly.

● **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 - A-SKID N-WS FAULT or OFF.*
2. Most spoilers are inoperative.

ENG - 1(2) OIL LO PR

Ident.: EMER-70-00007040.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

● **If OIL PR below 60 PSI:**

Shut down affected engine.

STALL RECOVERYIdent.: EMER-90-00013505.0001001 / 04 APR 11
Criteria: SAEASA APPROVED

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.

EMER DESCENTIdent.: EMER-90-00006626.0001001 / 02 DEC 13
Criteria: SAEASA APPROVED

Use crew oxygen masks.
Notify the cabin of emergency descent.
Turn on cabin signs.
Initiate an emergency descent.
Set all thrust levers to idle (if autothrust not engaged).
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 emergency.
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 passengers oxygen masks on.



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AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES MISCELLANEOUS

EMERGENCY EVACUATION

Ident.: EMER-90-00006625.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

- **When aircraft stopped:**

Set parking brake to ON.

Notify ATC with VHF 1.

Alert cabin crew.

- **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.

- **If evacuation not required:**

Notify cabin crew and passengers to remain seated.

DITCHING

Ident.: EMER-90-00006622.0002001 / 23 NOV 09

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 31276)

Notify ATC and cabin crew of the nature of emergency or use transponder (if available) as required.

Prepare cockpit and cabin.

Turn off TAWS - GPWS.

Turn on cabin signs.

Turn on emergency exit lights.

Turn off COMMERCIAL.

Set landing elevation to sea level.

● **For approach:**

Keep landing gear up.

Use maximum available slats/flaps.

Note: In case of dual engine failure, use FLAPS 3.

Set ENG MODE selector to NORM.

● **At 2 000 ft AGL:**

Check CAB PR MODE SEL is in AUTO position.

Turn off all bleeds (engines and APU).

Notify cabin crew 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).

Initiate evacuation.

Check emergency locator transmitter is emitting (if installed).

FORCED LANDING

Ident.: EMER-90-00006621.0002001 / 23 NOV 09

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 31276)

Notify ATC and cabin crew of the nature of emergency or use transponder (if available) as required.

Prepare cockpit and cabin.

Turn off TAWS - GPWS.

Turn on cabin signs.

Turn on emergency exit lights.

Turn off COMMERCIAL.

Manually set the landing elevation.

● **For approach:**

Turn on RAM AIR.

Extend landing gear.

Note: In case of dual engine failure, extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

Use maximum available slats/flaps.

Note: In case of dual engine failure, use FLAPS 3.

Arm ground spoilers.

Maximum brake pressure: 1 000 PSI.

● **At 2 000 ft AGL:**

Notify cabin crew 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.

Notify ATC with VHF 1.

Push all FIRE pushbuttons (engines and APU).

Discharge all fire agents (engines and APU).

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Continued from the previous page FORCED LANDING

■ **If evacuation required:**

Initiate evacuation.

■ **If evacuation not required:**

Notify cabin crew and passengers to remain seated.

Check emergency locator transmitter is emitting (if installed).



A320
AIRPLANE FLIGHT MANUAL

EMERGENCY PROCEDURES

MISCELLANEOUS

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ABNORMAL PROCEDURES

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Red "SPD" Flag on one PFD (CAT III no DH).....	M
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Capability Decrease (Except if due to A/THR Loss) (CAT III no DH).....	O
Total Loss of A/THR ("CAT 3" Decreases to "CAT 2") (CAT III no DH).....	P
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F/CTL - SPD BRK FAULT.....	J
F/CTL - RUDDER JAM.....	K
F/CTL - L (R) ELEV FAULT.....	L
F/CTL - ELAC 1(2) FAULT.....	M
F/CTL - SEC FAULT.....	N
F/CTL - FCDC 1 + 2 FAULT.....	O
F/CTL - STABILIZER JAM.....	P
F/CTL - ATLN LAW (PROT LOST).....	Q
F/CTL - DIRECT LAW (PROT LOST).....	R

ABN-28 FUEL

FUEL - L(R) TK PUMP 1+2 LO PR.....	A
FUEL - L(R) WING TK LO LVL.....	B
FUEL - L+R WING TK LO LVL.....	C
FUEL - CTR TK PUMPS LO PR.....	D
FUEL GRAVITY FEEDING.....	E
FUEL - L INNER (R INNER) (L OUTER) (R OUTER) TK HI TEMP.....	F
FUEL IMBALANCE.....	G
FUEL LEAK.....	H

ABN-29 HYDRAULIC

HYD - G SYS LO PR.....	A
HYD - Y SYS LO PR.....	B
HYD - B SYS LO PR.....	C
HYD - RSVR LO AIR PR.....	D
HYD - RSVR OVHT.....	E
HYD - RSVR LO LVL.....	F

ABN-30 ICE AND RAIN PROTECTION

ANTI ICE - CAPT (F/O) PROBES HEAT FAULT.....	A
DOUBLE AOA HEAT FAILURE.....	B
WING A.ICE - SYS FAULT or OFF.....	C
ANTI ICE - CAPT + F/O (CAPT + STBY) (F/O + STBY) PITOT HEAT FAULT.....	D
ANTI ICE - ALL PITOT HEAT FAULT.....	E

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*Continued from the previous page***ABN-31 INDICATING/RECORDING SYSTEM**

FWS - FWC 1 + 2 FAULT.....	A
FWS - SDAC 1 + 2 FAULT.....	B
DISPLAY UNIT FAILURE.....	C

ABN-32 LANDING GEAR

L/G GRAVITY EXTENSION.....	A
L/G - GEAR NOT UNLOCKED.....	B
L/G - GEAR UNLOCK FAULT.....	C
L/G - SHOCK ABSORBER FAULT.....	D
L/G - DOORS NOT CLOSED.....	E
BRAKES - A-SKID N-WS FAULT or OFF.....	F
BRAKES - HOT.....	G
AUTOBRAKE.....	H
BRAKES - NORM BRK FAULT.....	I
BRAKES - NORM + ALTN FAULT.....	J
BRAKES - RELEASED.....	K

ABN-34 NAVIGATION

Erroneous RA Height Indication.....	A
NAV - RA 1+2 FAULT.....	B
NAV - IR 1+2 (1+3) (2+3) FAULT.....	C
NAV IR DISAGREE.....	D
NAV - ADR 1+2 FAULT.....	E
NAV - ADR 1+3 FAULT.....	F
NAV - ADR 2+3 FAULT.....	G
ADR 1+2+3 FAULT.....	H
NAV ADR DISAGREE.....	I
UNRELIABLE AIRSPEED INDICATION.....	J

ABN-36 PNEUMATIC

AIR - ENG 1(2) BLEED FAULT.....	A
AIR - ENG 1(2) BLEED ABNORM PR.....	B
AIR - X BLEED FAULT.....	C
AIR - L (R) WING LEAK.....	D
AIR - ENG 1(2) BLEED LEAK.....	E
AIR - ENG 1(2) BLEED LO TEMP.....	F
AIR - ENG 1 + 2 BLEED LO TEMP.....	G

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*Continued from the previous page***ABN-52 DOORS**

DOOR - DOOR NOT CLOSED.....	A

ABN-70 POWER PLANT

ENG - FAIL.....	A
ENG - SHUTDOWN.....	B
ENG - REV PRESSURIZED.....	C
ENG - REVERSE UNLOCKED.....	D
ENG - REVERSER FAULT.....	E
ENG - THR LEVER FAULT.....	F
ENG - THR LEVER DISAGREE.....	G
ENG - OIL HI TEMP.....	H
ENG - FADEC FAULT.....	I
ENG - HOT FUEL.....	J
ENG - FADEC OVHT.....	K
ENG - EPR MODE FAULT.....	L
ENG - N1 (N2) (EGT) OVERLIMIT.....	M
ENG RELIGHT IN FLIGHT.....	N

ABN-90 MISCELLANEOUS

BOMB ON BOARD.....	A
OVERWEIGHT LANDING.....	B
REJECTED TAKEOFF WITH ALL ENGINES OPERATIVE.....	C

INTRODUCTIONIdent.: **ABN-GEN-00007087.0001001 / 02 DEC 13****EASA APPROVED**

Criteria: SA

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

The following important remarks apply:

1. These procedures give information related to system and operational requirements and cover the actions to be followed in case of failures which are not considered as emergency cases (these cases are covered in EMERGENCY PROCEDURES chapter).
2. Only particular operations which are considered useful to highlight are presented. The procedures which 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 the AFM, the AFM procedures have always 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 FAILUREIdent.: **TDU / ABN-GEN-00014548.0003001 / 26 FEB 14****EASA APPROVED**

Criteria: (A318 or A319 or A320 or A321)

Impacted DU: NONE

Impacted by TR402 Issue 1.0

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

- LSAB01.fail file using the AFM_OCTO approved FM module at revision 28, or
- LSAC02.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-00015178.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

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

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

- combined with LSAB01.fail file using the AFM_OCTO approved FM module at revision 28, or
- combined with LSAC01.fail file using the AFM_OCTO approved FM module at revision 30 or higher.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

GENERAL

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A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

ONE ENGINE INOPERATIVE

TAKEOFF

ENGINE FAILURE BEFORE V1 (REJECTED TAKEOFF)

Ident.: ABN-OEI-TO-00007100.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Immediately reduce all engine thrust levers to idle.

Monitor autobrake operation.

Take over 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 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.

ENGINE FAILURE BETWEEN V1 AND V2

Ident.: ABN-OEI-TO-00007102.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED**● If the engine failure occurs before VR:**

Use rudder conventionally to maintain runway centerline.

● At VR:

Rotate the aircraft with a positive side stick input to achieve a normal and continuous rotation rate to a pitch attitude of 12.5 °.

● Once airborne and with positive rate of climb:

Retract landing gear.

Maintain airspeed not below V2.

SRS guidance can be followed when FD pitch order has stabilized.

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 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 MCT/FLX gate, move thrust lever to CL and back to MCT).

Note: *In 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.*



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

ONE ENGINE INOPERATIVE

TAKEOFF

ENGINE FAILURE DURING INITIAL CLIMB OUT

Ident.: ABN-OEI-TO-00007103.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Proceed as for takeoff with engine failure between V1 and V2 (*Refer to ABN-OEI-TO ENGINE FAILURE BETWEEN V1 AND V2*). However, if 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.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

ONE ENGINE INOPERATIVE

TAKEOFF

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APPROACH AND LANDING

Ident.: ABN-OEI-LDG-00007104.0001001 / 02 DEC 13

EASA APPROVED

Criteria: A320

Set ENG MODE selector to IGN START.

■ In the case of manual landing:

Select the standard configuration (CONF3 or CONF FULL) for approach and landing.

■ In the case of automatic landing:

Select CONF FULL

Minimum final approach and landing speed: 1.23 VS1G of the landing configuration.

Note: 1. On the ECAM F/CTL page, check that the rudder trim compensates the aircraft in the correct direction.

2. If the engine is inoperative before starting the approach, the minimum DH to perform automatic approach, automatic landing and automatic roll out must be at least 50 ft.

MISSED APPROACH (FROM INTERMEDIATE APPROACH CONFIGURATION)

Ident.: ABN-OEI-LDG-00007105.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Apply go-around thrust.

Rotate the aircraft to a pitch attitude of 12.5 ° or 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.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

ONE ENGINE INOPERATIVE

APPROACH AND LANDING

BALKED LANDING

Ident.: ABN-OEI-LDG-00007106.0001001 / 23 NOV 09

Criteria: (A319 or A320 or A321)

EASA APPROVED

Apply go-around thrust.

Rotate the aircraft to a pitch of 12.5 ° or as directed by the SRS pitch command bar.

Retract slats/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.

AIR - PACK 1 + 2 FAULTIdent.: **ABN-21-00007161.0001001 / 04 APR 11****EASA APPROVED**

Criteria: SA

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 or below FL 100 or MEA and cabin differential pressure below 1 PSI:**

Turn on RAM AIR.

CAB PR - SYS 1 + 2 FAULTIdent.: **ABN-21-00006672.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

Use manual pressurization mode.

Monitor cabin altitude and 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.

CAB PR - SAFETY VALVE OPENIdent.: **ABN-21-00007162.0002001 / 23 NOV 09****EASA APPROVED**

Criteria: (SA and 35220)

● **If cabin differential pressure below 0 PSI:**

Expect HI CAB rate.

Reduce aircraft vertical speed.

● **If cabin differential pressure above 8 PSI:**

Use manual pressurization mode.

Monitor cabin altitude and differential pressure are within limits.

● **If unsuccessful:**

Reduce aircraft altitude.

During final approach, maintain the cabin vertical speed switch in the UP position.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AIR COND/PRESS/VENT

COND - HOT AIR FAULT

Ident.: ABN-21-00007164.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Turn off hot air (if not automatically done).

● **If unsuccessful:**

Turn off both packs. *Refer to ABN-21 AIR - PACK 1 + 2 FAULT.*

VENT - SKIN VALVE FAULT

Ident.: ABN-21-00007165.0001001 / 04 APR 11

EASA APPROVED

Criteria: SA

Set ventilation blower to OVRD.

Set ventilation extract to OVRD.

● **If unsuccessful:**

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.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

AUTO FLIGHT SYSTEM

AUTO FLT - FCU 1(2) FAULT

Ident.: ABN-22-AUTOFLT-00009309.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

At each baro setting change on FCU, crosscheck the validity of both PFD altitude information with the standby altimeter.

AUTO FLT - RUD TRV LIM SYS

Ident.: ABN-22-AUTOFLT-00006936.0001001 / 03 AUG 10

EASA APPROVED

Criteria: (318-111 or 318-112 or A319 or A320 or A321)

Use rudder with care above 160 kt.
Turn off then on both FACs one after the other.
Use differential braking if necessary as soon as main gears are on ground.

AUTO FLT - FAC 1+2 FAULT

Ident.: ABN-22-AUTOFLT-00009311.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (318-111 or 318-112 or A319 or A320 or A321)

Use rudder with care above 160 kt.
Turn off then on both FACs one after the other.

● **If unsuccessful:**

Turn off both FACs.

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

AUTO FLT - YAW DAMPER SYS

Ident.: ABN-22-AUTOFLT-00009310.0001001 / 03 AUG 10

EASA APPROVED

Criteria: SA

Turn off then on both FACs one after the other.

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



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

AUTO FLIGHT SYSTEM

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A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

MULTIPLE FAILURES OR WARNINGS (CAT II)

Ident.: ABN-22-CATII-00009313.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

In case of multiple failures or warnings, the most limiting applies.

ALTITUDE LOSS WITH AUTOPILOT MALFUNCTION (CAT II)

Ident.: ABN-22-CATII-00009795.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 deviation is negligible.

FAILURE LEADING TO SLATS/FLAPS LESS THAN FLAPS 3 (CAT II)

Ident.: ABN-22-CATII-00009315.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Revert to CAT I minima.

Disengage the autopilot no later than 500 ft.

ANTISKID SYSTEM AND/OR NOSEWHEEL STEERING FAILURE (CAT II)

Ident.: ABN-22-CATII-00009338.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Disconnect the autopilot at touchdown or when the failure occurs during landing roll.



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AIRPLANE FLIGHT MANUAL

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-00009342.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

■ **If activation occurs above 1 000 ft:**

Check the speed.

Disconnect and reengage the autothrust mode (TOGA LK should disappear from the FMA).

■ **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-00009343.0003001 / 23 NOV 09

Criteria: A320

EASA APPROVED

Note: *Automatic approach, landing and rollout have been demonstrated in CONF FULL with one engine inoperative before initiating the approach.*

■ **If failure occurs above 1 000 ft:**

Apply CONF FULL.

■ **If failure occurs between 1 000 ft and DH:**

Go around if visual references are not sufficient.

■ **If failure occurs below DH:**

Land if external visual references are sufficient.

RED "RA" FLAG ON TWO PFDS (CAT II)

Ident.: ABN-22-CATII-00009344.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **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.

Note: AP/FD not available in APPR mode.**AMBER "CHECK ATT" FLAG ON TWO PFDS (CAT II)**

Ident.: ABN-22-CATII-00009349.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

CAUTION Do not make any switching below 1 000 ft.■ **If alert appears above 1 000 ft:**

Check aircraft attitude with the standby horizon.

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 visual references are not sufficient using standby horizon.

■ **If alert appears below DH:**

Land if external visual references are sufficient.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

RED "ATT" FLAG ON ONE PFD (CAT II)

Ident.: ABN-22-CATII-00009350.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 visual references are not sufficient.

■ **If warning appears below DH:**

Land if external visual references are sufficient.

DIAGONAL LINE OR "INVALID DATA" ON ONE PFD AND ONE ND (CAT II)

Ident.: ABN-22-CATII-00009351.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 visual references are not sufficient.

■ **If alert appears below DH:**

Land if external visual references are sufficient.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

AMBER "CHECK HDG" FLAG ON TWO PFDS AND ON TWO NDS (CAT II)

Ident.: ABN-22-CATII-00009352.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 visual references are not sufficient.

■ **If alert appears below DH:**

Land if external visual references are sufficient.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

RED "HDG" FLAG ON ONE PFD AND ONE ND (CAT II)

Ident.: ABN-22-CATII-00009353.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 visual references are not sufficient.

■ **If warning appears below DH:**

Land if external visual references are sufficient.

RED "SPD" FLAG ON ONE PFD (CAT II)

Ident.: ABN-22-CATII-00009354.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 visual references are not sufficient.

■ **If warning appears below DH:**

Land if external visual references are sufficient.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

"AP OFF" WARNING (CAT II)

Ident.: ABN-22-CATII-00009355.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If warning appears above 1 000 ft:**

Try to recover.

● **If no recovery:**

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.

LOSS OF "CAT 2" CAPABILITY (CAT II)

Ident.: ABN-22-CATII-00009314.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If CAT 2 not displayed on FMA above 1 000 ft:**

Try to recover.

● **If no recovery:**

Revert to CAT I minima.

■ **If CAT 2 disappears on FMA between 1 000 ft and DH:**

Go around if visual references are not sufficient.

■ **If CAT 2 disappears on FMA below DH:**

Land if visual references are sufficient.



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AIRPLANE FLIGHT MANUAL

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-00009356.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If alert appears above 200 ft:**

Monitor ILS/MLS tracking.

■ **If alert appears between 200 ft and DH:**

Go around if visual references are not sufficient.

■ **If alert appears below DH:**

Land if external references are sufficient.

"AUTOLAND" LIGHT (CAT II)

Ident.: ABN-22-CATII-00009357.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **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 reference are sufficient.

A/THR FAULT (CAT II)

Ident.: ABN-22-CATII-00009358.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If alert appears above 1 000 ft:**

Change over the autopilot and try to reengage the 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:**

Land if external visual references are sufficient.



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AIRPLANE FLIGHT MANUAL

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-00009359.0001001** / 23 NOV 09

EASA APPROVED

Criteria: SA

Go around or perform a manual landing if visual references are sufficient.

INCORRECT SELECTED COURSE AT 350 FT > 5 DEG (CAT II)

Ident.: **ABN-22-CATII-00009360.0001001** / 23 NOV 09

EASA APPROVED

Criteria: SA

Continue the landing and disconnect autopilot at 50 ft at the latest.

NO "FLARE" AT 30 FT (CAT II)

Ident.: **ABN-22-CATII-00009361.0001001** / 23 NOV 09

EASA APPROVED

Criteria: SA

Disconnect the autopilot.

Land manually.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT II
APPROACH WITH OR WITHOUT AUTOMATIC LANDING

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A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

MULTIPLES FAILURES OR WARNINGS (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009366.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

In case of multiple failures or warnings, the most limiting applies.

FAILURE LEADING TO SLATS/FLAPS LESS THAN CONF 3 (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009383.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Revert to CAT I minima.

Disconnect the autopilot no later than 500 ft.

NOSEWHEEL STEERING FAILURE (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009382.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If failure occurs above 350 ft:**

Revert to CAT III with DH 50 ft.

At touchdown, disconnect the autopilot.

■ **If failure occurs between 350 ft and 100 ft:**

Go around if visual references are not sufficient.

At touchdown, disconnect the autopilot.

■ **If failure occurs below 100 ft:**

Continue the landing.

At touchdown, disconnect the autopilot.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.

■ **If failure appears during landing roll:**

Disconnect autopilot.

ANTISKID FAILURE (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009381.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ If failure occurs above 350 ft:

Revert to CAT III SINGLE minima.

At touchdown, disconnect the autopilot.

■ If failure occurs between 350 ft and 100 ft:

Go around if visual references are not sufficient.

At touchdown, disconnect the autopilot.

■ If failure occurs below 100 ft:

Continue the landing.

At touchdown, disconnect the autopilot.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.

■ If failure appears at landing roll:

Disconnect autopilot.

ALPHA FLOOR ACTIVATION (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009380.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ If activation occurs above 1 000 ft:

Check speed.

Disconnect and reengage the autothrust mode (TOGA LK should disappear from the FMA).

■ If activation occurs below 1 000 ft:

Go around if visual references are not sufficient.

Note: At landing, alpha floor protection is inhibited below 100 ft.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

ONE ENGINE FAILURE (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009379.0003001 / 23 NOV 09

EASA APPROVED

Criteria: A320

Note: Automatic approach, landing and rollout have been demonstrated in CONF FULL with one engine inoperative before initiating the approach.

■ **If failure occurs above 1 000 ft:**

Apply CONF FULL.

Revert to CAT III SINGLE minima.

■ **If failure occurs between 1 000 ft and DH:**

Go around if visual references are not sufficient.

■ **If failure occurs below DH:**

Continue the landing.

AUTO CALLOUT RA FAILURE (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009378.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If failure occurs between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient.

■ **If failure occurs below 100 ft:**

Continue the landing.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

RED "RA" FLAG ON TWO PFDS (CAT III WITH DH)

Ident.: ABN-22-CATIIDH-00009377.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

■ **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.

Note: *AP/FD is not available in APPR mode.*



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

AMBER "CHECK ATT" FLAG ON TWO PFDS (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009386.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

CAUTION	Do not make any switching below 1 000 ft.

■ **If alert appears above 1 000 ft:**

Check aircraft attitude with the standby horizon.

Use switching to recover valid data.

■ **If alert disappears:**

A CAT III SINGLE is still possible.

Note: 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 does not disappear, revert to CAT I.

■ **If alert persists:**

Revert to CAT I minima.

■ **If alert appears between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient using standby horizon.

■ **If alert appears below 100 ft:**

Continue the landing.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate using standby horizon.

RED "ATT" FLAG ON ONE PFD (CAT III WITH DH)

Ident.: ABN-22-CATIIDH-00009385.0001001 / 23 NOV 09

Criteria: SA

EASA 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.

Note: 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 does not disappear, revert to CAT I.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 100 ft:

Go around if visual references are not sufficient.

■ If warning appears below 100 ft:

Continue the landing.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.

AMBER "CHECK HDG" FLAG ON TWO PFDS AND TWO NDS (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009376.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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.

Note: 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 does not disappear, revert to CAT I.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and 100 ft:

Go around if visual references are not sufficient.

■ If alert appears below 100 ft:

Continue the landing.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

RED "HDG" FLAG ON ONE PFD AND ONE ND (CAT III WITH DH)

Ident.: ABN-22-CATIIDH-00009375.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

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 III SINGLE approach is still possible.

Note: 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 does not disappear, revert to CAT I.

■ **If alert persists:**

Revert to CAT I minima.

■ **If alert appears between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient.

■ **If alert appears below 100 ft:**

Continue the landing.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.

RED "SPD" FLAG ON ONE PFD (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009374.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 III SINGLE approach is still possible.

Note: 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 does not disappear, revert to CAT I.

■ If alert persists:

Revert to CAT I minima.

■ If alert appears between 1 000 ft and 100 ft:

Go around if visual references are not sufficient.

■ If alert appears below 100 ft:

Continue the landing.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

"AP OFF" WARNING (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009373.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **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:**

Land if external visual references are sufficient.

CAPABILITY DECREASE (EXCEPT IF DUE TO A/THR LOSS) (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009372.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **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 100 ft:**

Go around if visual references are not sufficient.

TOTAL LOSS OF A/THR ("CAT 3" DECREASES TO "CAT 2") (CAT III WITH DH)

Ident.: ABN-22-CATIIDH-00009384.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ If alert appears above 1 000 ft:

Disconnect AP1 (or change over if only one autopilot is engaged) and try to reengage the autothrust.

■ If successful:

Continue to CAT III SINGLE minima.

■ If not successful:

Continue to CAT II minima.

Control the thrust manually.

■ If alert appears between 1 000 ft and 100 ft:

Continue to CAT II minima.

Control the thrust manually.

■ If alert appears below 100 ft:

Continue the landing.

Note: A go-around must be performed if visual references are not sufficient at 50 ft for a CAT III SINGLE or at CAT II DH as appropriate.

Control the thrust manually.

LOC OR G/S EXCESSIVE DEVIATION ON PFD (CAT III WITH DH)

Ident.: ABN-22-CATIIDH-00009371.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ If failure occurs above 200 ft:

Monitor ILS/MLS 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.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH DH

"AUTOLAND" LIGHT (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009370.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **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 WITH DH)

Ident.: ABN-22-CATIIIDH-00009369.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Go around or perform a manual landing if visual references are sufficient.

INCORRECT SELECTED COURSE AT 350 FT > 5 DEG (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009368.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Revert to CAT II minima.

Disconnect autopilot at 50 ft at the latest.

NO "FLARE" AT 30 FT (CAT III WITH DH)

Ident.: ABN-22-CATIIIDH-00009367.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If visual references are not sufficient:**

Go around.

■ **If visual references are sufficient:**

Disconnect autopilot.

Land manually.



A320
AIRPLANE FLIGHT MANUAL

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-CATIII^{noDH}-00009393.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

In case of multiple failures or warnings, the most limiting applies.

FAILURE LEADING TO SLATS/FLAPS LESS THAN CONF 3 (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009394.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Revert to CAT I minima.

Disconnect autopilot no later than 500 ft.

NOSEWHEEL STEERING FAILURE (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009395.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If failure occurs above 350 ft:**

Revert to CAT III with DH 50 ft.

At touchdown, disconnect the autopilot.

■ **If failure occurs between 350 ft and 100 ft:**

Go around if visual references are not sufficient.

At touchdown, disconnect the autopilot.

■ **If failure occurs below 100 ft:**

Continue the landing.

At touchdown, disconnect the autopilot.

■ **If failure occurs during the landing roll:**

Disconnect autopilot.

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-CATIII**noDH-00009396.0001001 / 23 NOV 09**EASA APPROVED**

Criteria: SA

■ If failure occurs above 350 ft:

Revert to CAT III SINGLE minima.

At touchdown, disconnect autopilot.

■ If failure occurs between 350 ft and 100 ft:

Go around if visual references are not sufficient.

At touchdown, disconnect autopilot.

■ If failure occurs below 100 ft:

Continue the landing.

At touchdown, disconnect autopilot.

■ If failure occurs during the landing roll:

Disconnect autopilot.

ALPHA FLOOR ACTIVATION (CAT III NO DH)Ident.: **ABN-22-CATIII**noDH-00009397.0001001 / 23 NOV 09**EASA APPROVED**

Criteria: SA

■ If activation occurs above 1 000 ft:

Check the speed.

Disconnect and reengage the autothrust mode (TOGA LK should disappear from the FMA).

■ If activation occurs below 1 000 ft:

Go around if visual references are not sufficient.



A320
AIRPLANE FLIGHT MANUAL

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-CATIII^{noDH}-00009413.0003001 / 23 NOV 09

EASA APPROVED

Criteria: A320

■ **If failure occurs above 1 000 ft:**

Apply CONF FULL.

Revert to CAT III SINGLE minima.

■ **If failure occurs between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient.

■ **If failure occurs below 100 ft:**

Continue the landing.

AUTO CALLOUT RA FAILURE (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009398.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If failure occurs between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient.

■ **If failure occurs below 100 ft:**

Continue the landing.

RED "RA" FLAG ON TWO PFDS (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009399.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If warning occurs above 1 000 ft:**

Revert to CAT I minima.

■ **If warning appears below 1 000 ft:**

Go around if visual references are not sufficient.

Note: AP/FD is not available in APPR mode.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

AMBER "CHECK ATT" FLAG ON TWO PFDS (CAT III NO DH)

Ident.: ABN-22-CATIIIInoDH-00009400.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

CAUTION	Do not make any switching below 1 000 ft.

■ **If alert appears above 1 000 ft:**

Check aircraft attitude with the standby horizon.

Use switching to recover valid data.

■ **If alert disappears:**

A CAT III SINGLE approach is still possible.

Note: 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 does not disappear, revert to CAT I.

■ **If alert persists:**

Revert to CAT I minima.

■ **If alert appears between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient using standby horizon.

■ **If alert appears below 100 ft:**

Continue the landing.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

RED "ATT" FLAG ON ONE PFD (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009401.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 approach is still possible.

Note: 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 does not disappear, revert to CAT I.

■ **If warning persists:**

Revert to CAT I minima.

■ **If warning appears between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient.

■ **If warning appears below 100 ft:**

Continue the landing.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

AMBER "CHECK HDG" FLAG ON TWO PFDS AND TWO NDS (CAT III NO DH)

Ident.: ABN-22-CATIII_{noDH}-00009402.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 approach is still possible.

Note: 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 does not disappear, revert to CAT I.

■ **If alert persists:**

Revert to CAT I minima.

■ **If alert appears between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient.

■ **If alert appears below 100 ft:**

Continue the landing.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

RED "HDG" FLAG ON ONE PFD AND ONE ND (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009403.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 approach is still possible.

Note: 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 does not disappear, revert to CAT I.

■ **If warning persists:**

Revert to CAT I minima.

■ **If warning appears between 1 000 ft and 100 ft:**

Go around if visual references are not sufficient.

■ **If warning appears below 100 ft:**

Continue the landing.

RED "SPD" FLAG ON ONE PFD (CAT III NO DH)

Ident.: ABN-22-CATIII no DH-00009404.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 approach is still possible.

Note: 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 does not disappear, revert to CAT I.

■ If warning persists:

Revert to CAT I minima.

■ If warning appears between 1 000 ft and 100 ft:

Go around if visual references are not sufficient.

■ If warning appears below 100 ft:

Continue the landing .

"AP OFF" WARNINGS (CAT III NO DH)

Ident.: ABN-22-CATIII no DH-00009405.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

■ If warning appears above 1 000 ft:

Try to reengage the autopilot.

● If unsuccessful:

Revert to the available capability.

■ If warning appears below 1 000 ft:

Go around if visual references are not sufficient.

CAPABILITY DECREASE (EXCEPT IF DUE TO A/THR LOSS) (CAT III NO DH)

Ident.: ABN-22-CATIII no DH-00009406.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ If alert appears above 1 000 ft:

Try to reengage the autopilot.

● If unsuccessful:

Revert to the available capability.

■ If alert appears between 1 000 ft and 100 ft:

Go around if visual references are not sufficient.

TOTAL LOSS OF A/THR ("CAT 3" DECREASES TO "CAT 2") (CAT III NO DH)

Ident.: ABN-22-CATIII no DH-00009407.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ If alert appears above 1 000 ft:

Disconnect the AP1 and try to reengage the autothrust.

■ If successful:

Continue to CAT III SINGLE minima.

■ If not successful:

Continue to CAT II minima.

Control the thrust manually.

■ If alert appears between 1 000 ft and 100 ft:

Continue to CAT II minima.

Control the thrust manually.

■ If alert appears below 100 ft:

Continue the landing.

Control the thrust manually.



A320
AIRPLANE FLIGHT MANUAL

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-CATIII^{noDH}-00009408.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If failure occurs above 200 ft:**

Monitor ILS/MLS tracking.

■ **If failure occurs below 200 ft:**

Go around if visual references are not sufficient.

"AUTOLAND" LIGHT (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009409.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

● **If alert occurs below 200 ft:**

Go around if visual references are not sufficient.

NO "LAND" AT 350 FT (CAT III NO DH)

Ident.: ABN-22-CATIII^{noDH}-00009410.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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-CATIII^{noDH}-00009411.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Revert to CAT II minima.

Disconnect autopilot at 50 ft at the latest.



A320
AIRPLANE FLIGHT MANUAL

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-CATIII_{noDH}-00009412.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If visual references are not sufficient:**

Go around.

■ **If visual references are sufficient:**

Disconnect autopilot.

Land manually.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

AUTO FLIGHT SYSTEM

FAILURES OR WARNINGS DURING A CAT III APPROACH WITH NO DH

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A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES
ELECTRICAL POWER

ELEC - AC ESS BUS FAULT

Ident.: **ABN-24-00007139.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

Set AC ESS FEED to ALTN.
Set ATC to SYS 2.

ELEC - AC BUS 1 FAULT

Ident.: **ABN-24-00007140.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

Set ventilation blower to OVRD.

Note: 1. Blue hydraulic system is inoperative. Refer to ABN-29 HYD - B SYS LO PR.
 2. Spoilers are partially inoperative.

ELEC - AC BUS 2 FAULT

Ident.: **ABN-24-00007141.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

Set ventilation extract to OVRD.

ELEC - DC ESS BUS FAULTIdent.: **ABN-24-00007143.0001001 / 02 DEC 13****EASA APPROVED**

Criteria: SA

- Note:
1. Wing anti-ice is inoperative. Refer to ABN-30 WING A.ICE - SYS FAULT or OFF.
 2. For communication, only VHF 2 or VHF 3 are available.

Select audio switching.

Check baro reference on FCU.

Turn off GPWS.

● For approach and landing:

Note: Slats and flaps extend slowly.

■ If no ice accretion:

Apply necessary landing performance corrections.

■ If ice accretion:

Approach speed = VLS + 10 kt

Apply necessary landing performance corrections.

- Note:
1. Blue hydraulic system is inoperative. Refer to ABN-29 HYD - B SYS LO PR.
 2. Spoilers are partially inoperative. Refer to ABN-27 F/CTL - SPLR FAULT.

ELEC - DC BUS 1 FAULTIdent.: **ABN-24-00007148.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

Set ventilation blower to OVRD.

Set ventilation extract to OVRD.

ELEC - DC BUS 2 FAULT

Ident.: ABN-24-00007150.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Set AIR DATA switching to F/O 3.

Check baro reference on FCU.

- Note:
1. The Cockpit Door Locking System (CDLS) is inoperative (if installed).
 2. Slats and flaps extend slowly.
 3. Half spoilers are inoperative.
 4. SEC 2+3 are inoperative. Refer to ABN-27 F/CTL - SEC FAULT.

ELEC - DC EMER CONFIG

Ident.: ABN-24-00007152.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

LAND ASAP

Manually confirm emergency electrical power on.

Minimum speed: 140 kt

Apply necessary landing performance corrections.

ELEC - DC BUS 1 + 2 FAULT

Ident.: ABN-24-00007154.0002001 / 02 DEC 13

EASA APPROVED

Criteria: ((A320 or A321) and 21678)

- Note: The Cockpit Door Locking System (CDLS) is inoperative (if installed).

Set ventilation blower to OVRD.

Set ventilation extract to OVRD.

Check baro reference on FCU.

● For approach and landing:

- Note: Slats and flaps extend slowly.

Apply necessary landing performance corrections.

- Note:
1. Antiskid is inoperative. Refer to ABN-32 BRAKES - A-SKID N-WS FAULT or OFF.
 2. Half spoilers are inoperative.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

ELECTRICAL POWER

ELEC - DC ESS BUS SHED

Ident.: **ABN-24-00007159.0001001** / 23 NOV 09

Criteria: SA

EASA APPROVED

Set ventilation extract to OVRD.

F/CTL - FLAPS FAULTIdent.: **ABN-27-00007108.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

Speed is limited to the VFE corresponding to the next more extended flaps configuration.

Refer to LIM-SPD VFE.

● **When speed below VFE:**

Recycle flaps lever.

● **If unsuccessful:**

Apply flaps locked procedure. *Refer to ABN-27 F/CTL - FLAPS LOCKED.*

F/CTL - FLAPS LOCKEDIdent.: **ABN-27-00006637.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

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 3 for landing.

Turn off GPWS flap mode.

■ **If flaps position at 3:**

Use FLAPS 3 for landing.

Turn on GPWS LDG FLAP 3.

■ **If flaps position above 3:**

Use FLAPS FULL for landing.

Turn on GPWS LDG FLAP 3.

Apply necessary approach speed and landing performance corrections. *Refer to ABN-27 APPROACH SPEED INCREMENT AND LANDING DISTANCE MULTIPLICATION FACTOR.*



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

FLIGHT CONTROLS

F/CTL - SLATS FAULT

Ident.: ABN-27-00007109.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

Speed is limited to the VFE corresponding to the next more extended slats configuration.

Refer to LIM-SPD VFE.

- **When speed below VFE :**

Recycle flaps lever.

- **If unsuccessful :**

Apply slats locked procedure. *Refer to ABN-27 F/CTL - SLATS LOCKED.*

F/CTL - SLATS LOCKED

Ident.: ABN-27-00006638.0002001 / 23 NOV 09

Criteria: ((A318 or A319 or A320) and 20024)

EASA APPROVED

Speed is limited to the VFE corresponding to the next more extended slats configuration.

Refer to LIM-SPD VFE.

- **If slats not at 0:**

Set FUEL MODE SEL to MAN.

Set center tank pumps as required.

- **For landing:**

Use FLAPS 3.

Turn off center tank pumps.

Turn on GPWS LDG FLAP 3.

Apply necessary approach speed and landing performance corrections. *Refer to ABN-27 APPROACH SPEED INCREMENT AND LANDING DISTANCE MULTIPLICATION FACTOR.*

Note: *If SLATS FAULT by double SFCC failure, flight controls are in alternate law. Refer to ABN-27 F/CTL - ALTN LAW (PROT LOST).*



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES FLIGHT CONTROLS

APPROACH SPEED INCREMENT AND LANDING DISTANCE MULTIPLICATION FACTOR

Ident.: ABN-27-00006879.0001001 / 02 DEC 13

EASA APPROVED

Criteria: A320

APPROACH SPEED INCREMENT LANDING DISTANCE MULTIPLICATION FACTOR					
	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 3	Flaps above 3
Slats at or above 0 and below 1	⁽¹⁾ VREF + 45 kt	VREF + 30 kt	VREF + 25 kt	VREF + 25 kt	not allowed
Slats at or above 1 and at or below 3	VREF + 25 kt	VREF + 15 kt	VREF + 10 kt	VREF + 10 kt	VREF + 10 kt
Slats above 3	VREF + 25 kt	VREF + 15 kt	VREF + 10 kt	VREF + 5 kt	VREF + 5 kt

⁽¹⁾ If flaps and slats are jammed at position 0, the approach speed increment is VREF + 60 kt, then at 500 ft, reduce speed to obtain VREF + 50 kt at threshold.

For the landing distance apply necessary landing performance corrections.

PERFORMANCE LIMITATION FOR LANDING IN CLEAN CONFIGURATION

Ident.: ABN-27-00007110.0011001 / 02 DEC 13

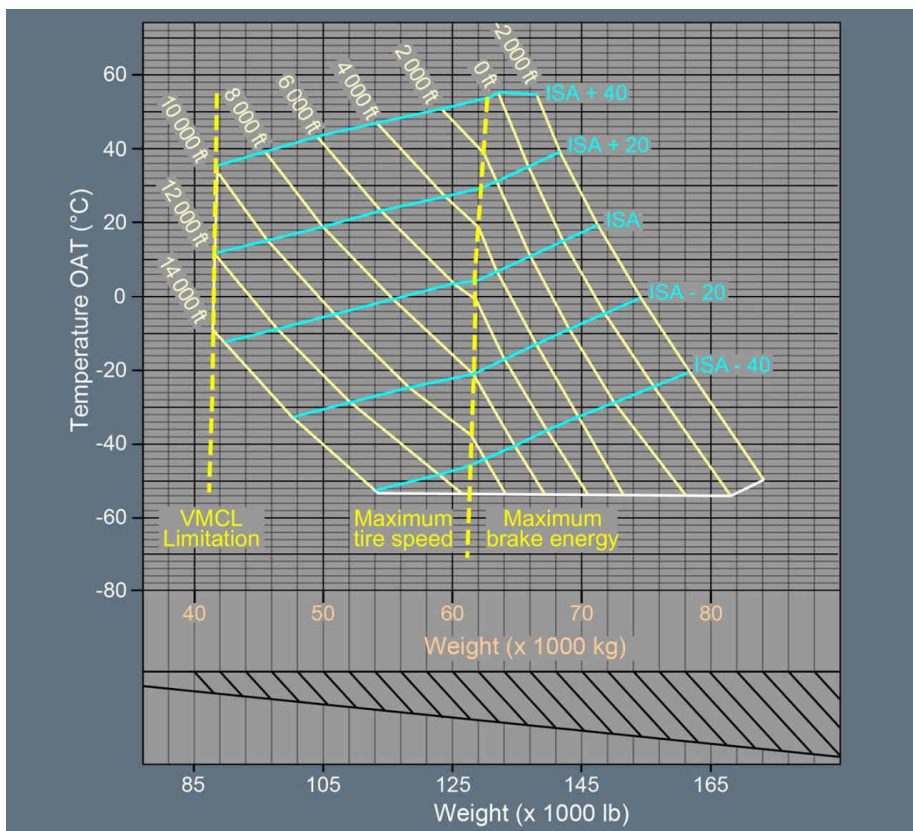
Criteria: (320-232 or 320-233)

EASA 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.*

Maximum brake energy: 70 MJ per wheel.

Landing in Clean Configuration


Continued on the following page

Continued from the previous page PERFORMANCE LIMITATION FOR LANDING IN CLEAN CONFIGURATION

Wind effect on determined weight:

- Headwind: add 0.15 t (330 lb) per kt of headwind
- Tailwind: subtract 1.4 t (3 087 lb) per kt of tailwind.

F/CTL - SPLR FAULT

Ident.: ABN-27-00006639.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

● **If spoilers 3+4 affected:**

Do not use speed brakes.

● **For landing:**

Apply necessary landing performance corrections.

F/CTL - GND SPLR FAULT

Ident.: ABN-27-00007114.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Refer to ABN-27 F/CTL - SPLR FAULT.

F/CTL - SPD BRK DISAGREE

Ident.: ABN-27-00007117.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Retract speed brakes.

Refer to ABN-27 F/CTL - SPLR FAULT.

F/CTL - SPD BRK FAULT

Ident.: ABN-27-00007118.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Refer to ABN-27 F/CTL - SPLR FAULT.

Note: Associated ground spoilers are only available through thrust reversers selection.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES FLIGHT CONTROLS

F/CTL - RUDDER JAM

Ident.: ABN-27-00007119.0001001 / 02 DEC 13

Criteria: SA

EASA APPROVED

● For approach and landing:

Avoid crosswind from the side where the rudder is deflected.

Maximum crosswind: 15 kt

Apply necessary landing performance corrections.

Do not use autobrake.

Use differential braking if necessary as soon as main gears are on ground.

Do not use asymmetric reverse thrust.

Below 70 kt, consider using nosewheel steering handle.

F/CTL - L (R) ELEV FAULT

Ident.: ABN-27-00007120.0001001 / 02 DEC 13

Criteria: (A320 or A321)

EASA APPROVED

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

Do not use speed brakes.

Maximum speed: 320 kt

Use FLAPS 3 for landing.

Set GPWS LDG FLAP 3 to ON.

Approach speed = VREF + 10 kt

Apply necessary landing performance corrections.

F/CTL - ELAC 1(2) FAULT

Ident.: ABN-27-00007121.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Turn off then on affected ELAC.

Note: If both ELACs affected, turn off then on both ELACs one after the other.

● **If reset not successful:**

Turn off affected ELAC.

Note: If both ELACs affected:

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

F/CTL - SEC FAULT

Ident.: ABN-27-00006640.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

Turn off then on affected SEC.

● **If reset not successful:**

Turn off affected SEC.

■ **If SEC 1 or SEC 1+2 or SEC 1+3 affected:**

Do not use speed brakes.

Apply necessary landing performance corrections.

■ **If SEC 2 or SEC 3 or SEC 2+3 affected:**

Apply necessary landing performance corrections.

■ **If all SECs are inoperative:**

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

Do not use speed brakes.

Apply necessary landing performance corrections.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

FLIGHT CONTROLS

F/CTL - FCDC 1 + 2 FAULT

Ident.: ABN-27-00007131.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Monitor flight controls overhead panel.

- Note:
1. Flight controls indications are not available on ECAM.
 2. Control law status is not available on PFD.

F/CTL - STABILIZER JAM

Ident.: ABN-27-00007132.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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).

F/CTL - ATLN LAW (PROT LOST)

Ident.: ABN-27-00006618.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320 or A321)

Maximum speed : 320 kt

- **For approach and landing:**

Use FLAPS 3 for landing.

Set GPWS LDG FLAPS 3 to ON.

Approach speed = VREF + 10 kt

Apply necessary landing performance corrections.

- Note:
1. When landing gear extended and autopilots off, controls revert to direct law.
 2. If manual pitch trim not available, extend landing gear when in CONF 3 and at approach speed in order to delay the reversion to direct law.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES
FLIGHT CONTROLS

F/CTL - DIRECT LAW (PROT LOST)

Ident.: ABN-27-00006671.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320 or A321)

Maximum speed: 320 kt / M 0.77

● **If manual pitch trim available:**

Use manual pitch trim.

Maneuver with care.

Use speed brakes with care.

● **For approach and landing:**

Use FLAPS 3 for landing.

Set GPWS LDG FLAPS 3 to ON.

Approach speed = VREF + 10 kt

Apply necessary landing performance corrections.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

FLIGHT CONTROLS

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FUEL - L(R) TK PUMP 1+2 LO PR

Ident.: ABN-28-00007194.0002001 / 23 NOV 09

EASA APPROVED

Criteria: ((A319 or A320) and 20024)

CAUTIONDo not apply this procedure if a fuel leak is suspected. *Refer to ABN-28 FUEL LEAK.*● **If center tank not empty:**

Manually perform a fuel transfer from the center tank.

● **When center tank empty:**● **If above FL 150:**

Open crossfeed valve.

Set ENG MODE selector to IGN START.

Turn off affected side tank pumps.

● **When L(R) tank fuel required:**Apply fuel gravity feeding procedure. *Refer to ABN-28 FUEL GRAVITY FEEDING.***FUEL - L(R) WING TK LO LVL**

Ident.: ABN-28-00007198.0002001 / 23 NOV 09

EASA APPROVED

Criteria: ((A319 or A320) and 20024)

CAUTIONDo not apply this procedure if a fuel leak is suspected. *Refer to ABN-28 FUEL LEAK.*● **If center tank not empty:**

Manually perform a fuel transfer from the center tank.

● **If fuel imbalance:**

Open crossfeed valve.

Turn off affected side pumps.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

FUEL

FUEL - L+R WING TK LO LVL

Ident.: **ABN-28-00007200.0002001 / 23 NOV 09**

Criteria: ((A319 or A320) and 20024)

EASA APPROVED

LAND ASAP

● **If center tank not empty:**

Manually perform a fuel transfer from the center tank.

Turn on all wing tank pumps.

Close crossfeed valve.

FUEL - CTR TK PUMPS LO PR

Ident.: **ABN-28-00009364.0001001 / 23 NOV 09**

Criteria: ((A319 or A320) and 20024)

EASA APPROVED

Turn off both center tank pumps.

Note: 1. *Center tank fuel is unusable.*
 2. *Gravity feeding from center tank is not possible.*

FUEL GRAVITY FEEDING

Ident.: ABN-28-00006624.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Descend to gravity feed ceiling (if applicable):

Flight conditions at the time of gravity feeding	Gravity feed ceiling
Flight time above FL 300 greater than 30 min (Fuel deaerated)	Current FL ⁽¹⁾
Flight time above FL 300 lower than 30 min (Fuel non-deaerated)	FL 300 ⁽¹⁾
Aircraft flight level never exceeded FL 300 (Fuel non-deaerated)	The highest of: - FL 150 ⁽¹⁾ - 7 000 ft above takeoff airport altitude

⁽¹⁾ In case JET B fuel is used, the gravity feed ceiling is FL 100 in all cases.**● When reaching gravity feed ceiling:**

Set ENG MODE selector to IGN START.

Avoid negative g load factor.

Close crossfeed valve.

● If only one engine is running and is fed by gravity:

Open crossfeed valve.

Adjust bank angle 1 ° wing down on running engine side.

Use rudder trim to get constant course and neutral stick.

● When fuel imbalance at or above 1 000 kg (2 204 lb):

Increase bank angle to 2 ° or 3 ° wing down on running engine side.

Note: Fuel from opposite wing is used until imbalance is reduced to 0.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

FUEL

FUEL - L INNER (R INNER) (L OUTER) (R OUTER) TK HI TEMP

Ident.: ABN-28-00007201.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233)

Turn off affected generator.

■ On ground:

- If fuel temperature above 60 °C in outer tank or 54 °C in inner tank:

Delay takeoff.

Set affected engine master lever to OFF.

■ In flight:

- If fuel temperature above 60 °C in outer tank or 54 °C in inner tank:

Increase engine fuel flow on affected side.

- If fuel temperature above 65 °C in outer tank or 57 °C in inner tank:

Start APU as required.

- If opposite IDG not fault:

Turn off affected IDG.

FUEL IMBALANCE

Ident.: ABN-28-00007203.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (((319-111 or 319-112 or 319-113 or 319-114 or 319-115 or 320-111 or 320-211 or 320-212 or 320-214 or 320-215 or 320-216 or A318) and 20024) or (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233))

Compare the FOB + FU with the FOB at departure. If the difference is significant, or if the FOB + FU decreases, suspect a fuel leak.

CAUTION

Do not apply this procedure if a fuel leak is suspected. *Refer to ABN-28 FUEL LEAK.*

Open wing crossfeed valve.

Turn off fuel pumps on the lighter side and on center tank.

● When fuel balanced:

Turn on wing and center fuel pumps.

Close wing crossfeed valve.

FUEL LEAKIdent.: **ABN-28-00006692.0003001 / 23 NOV 09****EASA APPROVED**

Criteria: ((320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233 or A318 or A319) and 20024)

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
- A passenger 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
- Fuel flow is excessive (leak from engine), or
- Fuel is smelt in the cabin.

If visibility permits, a visual check from the cabin 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.

Turn off both center tank pumps.

Monitor inner fuel tank quantities and look for one tank depleting faster.

● **If one inner tank depletes faster than the other by at least 300 kg (661 lb) in less than 30 min:**

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.

Continued on the following page

Continued from the previous page FUEL LEAK

Monitor fuel leak.

Turn on both center tank pumps.

Note: *If the leak continues after engine shutdown, suspect leak from wing and consider restarting the engine. 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 cabin:**

● **If APU running:**

Shut down APU.

● **When inner wing tank fuel quantity below 3 t (6 614 lb):**

Turn on both center tank pumps.

● **For landing:**

CAUTION	Do not use reverse.

HYD - G SYS LO PR

Ident.: ABN-29-00006656.0005001 / 02 DEC 13

EASA APPROVED

Criteria: SA

● **If hydraulic system not recovered:**● **For approach and landing:**Note: *Slats and flaps extend slowly.*Extend landing gear by gravity. *Refer to ABN-32 L/G GRAVITY EXTENSION.*

Apply necessary landing performance corrections.

Note: *Spoilers are partially inoperative.***HYD - Y SYS LO PR**

Ident.: ABN-29-00006657.0002001 / 02 DEC 13

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 26925)

● **If hydraulic system not recovered:**● **For approach and landing:**Note: *Flaps extend slowly.*

Apply necessary landing performance corrections.

Note: *1. Nosewheel steering is inoperative.
2. Spoilers are partially inoperative.***HYD - B SYS LO PR**

Ident.: ABN-29-00006658.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

● **If hydraulic system not recovered:**● **For approach and landing:**Note: *Slats extend slowly.*

Apply necessary landing performance corrections.

Note: *Spoilers are partially inoperative.*

HYD - RSVR LO AIR PR

Ident.: ABN-29-00009203.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED**● If pressure fluctuates:**

Turn off associated hydraulic pumps.

● If green hydraulic system affected:

Set PTU to OFF.

Apply green hydraulic system low pressure procedure. *Refer to ABN-29 HYD - G SYS LO PR.***● If yellow hydraulic system affected:**

Set PTU to OFF.

Apply yellow hydraulic system low pressure procedure. *Refer to ABN-29 HYD - Y SYS LO PR.*Note: System may be recovered at low altitude.**HYD - RSVR OVHT**

Ident.: ABN-29-00009204.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

Turn off associated hydraulic pumps.

● If green hydraulic system affected:

Set PTU to OFF.

Apply green hydraulic system low pressure procedure. *Refer to ABN-29 HYD - G SYS LO PR.***● If yellow hydraulic system affected:**

Set PTU to OFF.

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.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES HYDRAULIC

HYD - RSVR LO LVL

Ident.: ABN-29-00009205.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Turn off associated hydraulic pumps.

● **If green hydraulic system affected:**

Set PTU to OFF.

Apply green hydraulic system low pressure procedure. *Refer to ABN-29 HYD - G SYS LO PR.*

● **If yellow hydraulic system affected:**

Set PTU to OFF.

Apply yellow hydraulic system low pressure procedure. *Refer to ABN-29 HYD - Y SYS LO PR.*

Note: If blue system affected, EMER GEN is inoperative.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

HYDRAULIC

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A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES ICE AND RAIN PROTECTION

ANTI ICE - CAPT (F/O) PROBES HEAT FAULT

Ident.: ABN-30-00007178.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

- **If ADR 3 available:**

Use AIR DATA switching as appropriate.

DOUBLE AOA HEAT FAILURE

Ident.: ABN-30-00007179.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and 31283)

- **If icing conditions cannot be avoided:**

Turn off one of affected ADRs.

WING A.ICE - SYS FAULT OR OFF

Ident.: ABN-30-00006619.0005001 / 02 DEC 13

EASA APPROVED

Criteria: SA

Turn off wing anti-ice.

Avoid icing conditions.

- **If ice accretion:**

- **If FLAPS 0:**

Minimum speed: VLS + 15 kt

- **If FLAPS above 0:**

Minimum speed: VLS + 10 kt

- **For landing:**

Apply necessary landing performance correction.

Note: *In the case of severe ice accretion, with anti-ice failed, the AOA protections are still efficient.*

Maneuver with care. Avoid large roll inputs at high AOA and high thrust setting. In the case of abnormal response in pitch or roll, release the backstick and reduce thrust.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES ICE AND RAIN PROTECTION

ANTI ICE - CAPT + F/O (CAPT + STBY) (F/O + STBY) PITOT HEAT FAULT

Ident.: ABN-30-00009388.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and 35220)

- **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.

Consider applying unreliable airspeed procedure. *Refer to ABN-34 UNRELIABLE AIRSPEED INDICATION.*

ANTI ICE - ALL PITOT HEAT FAULT

Ident.: ABN-30-00009389.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and 35220)

Turn off one of appropriate affected ADRs.

- **If icing conditions expected:**

Turn off another one of appropriate affected ADRs.

Consider applying unreliable airspeed procedure. *Refer to ABN-34 UNRELIABLE AIRSPEED INDICATION.*



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES INDICATING/RECORDING SYSTEM

FWS - FWC 1 + 2 FAULT

Ident.: ABN-31-00007209.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Monitor systems.

Monitor overhead panel.

Note: *ECAM cautions and warnings are lost, but ECAM system pages are available. Regularly call ECAM system pages for systems checks.*

FWS - SDAC 1 + 2 FAULT

Ident.: ABN-31-00007210.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Monitor overhead panel.

Note: *Only ECAM ENG, FUEL, F/CTL, WHEEL pages are available.*

DISPLAY UNIT FAILURE

Ident.: ABN-31-00007211.0001001 / 02 DEC 13

Criteria: SA

EASA APPROVED**■ Affected DU blank or display distorted:**

Turn off affected DU as required.

● If ECAM DUs affected:

Use ECAM/ND SEL.

● If EFIS DUs affected:

Use PFD/ND XFR.

■ Diagonal line or "INVALID DATA" on affected DU:

Attempt to recover affected DU by using associated DMC switching.

● If unsuccessful:

Turn off then on affected DU.

■ Inversion of EWD and SD displays:

Turn off then on ECAM upper display.

■ Affected DU(s) or MCDU flashes intermittently:**■ If Captain PFD or ND, both ECAM DUs or upper ECAM DU, or MCDU 1 is (are) affected:**

Turn off GEN 1.

■ If DU(s) stop(s) flashing:

Keep GEN 1 off for the rest of the flight.

Use the sideslip indication to verify if the rudder trim needs to be reset. If necessary, reset the rudder trim.

Note: Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.

Select AP and/or autothrust as required.

APU may be started (*Refer to NORM-49 Auxiliary Power Unit (APU)*) and APU generator may be used (if available).**■ If DU(s) do(es) not stop flashing:**

Restore GEN 1.

Continued on the following page

Continued from the previous page DISPLAY UNIT FAILURE

■ **If First Officer PFD or ND, lower ECAM DU, or MCDU 2 is (are) affected:**

Turn off GEN 2.

■ **If DU(s) stop(s) flashing:**

Keep GEN 2 off for the rest of the flight.

Use the sideslip indication to verify if the rudder trim needs to be reset. If necessary, reset the rudder trim.

Note: *Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.*

Select AP and/or autothrust as required.

APU may be started (*Refer to NORM-49 Auxiliary Power Unit (APU)*) and APU generator may be used (if available).

■ **If DU(s) do(es) not stop flashing:**

Restore GEN 2.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES
INDICATING/RECORDING SYSTEM

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A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES LANDING GEAR

L/G GRAVITY EXTENSION

Ident.: ABN-32-00006663.0002001 / 23 NOV 09

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 26925)

Pull and turn the gravity extension handle and pull down landing gear lever.
Confirm landing gear locked down.

L/G - GEAR NOT UNLOCKED

Ident.: ABN-32-00007168.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ **If landing gear not downlocked:**

Maximum speed: VLO (Retraction)

Recycle landing gear.

● **If unsuccessful:**

Pull down landing gear lever.

■ **If landing gear downlocked:**

Maximum speed: VLE

■ **If landing gear doors closed and landing gear not unlocked:**

Avoid excessive g load factor.

L/G - GEAR UPLOCK FAULT

Ident.: ABN-32-00007169.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Maximum speed: VLE
Keep landing gear down.

L/G - SHOCK ABSORBER FAULT

Ident.: ABN-32-00007170.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Maximum speed: VLE.
Keep landing gear down.

ABNORMAL PROCEDURES**LANDING GEAR****L/G - DOORS NOT CLOSED**Ident.: **ABN-32-00007171.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

● When speed below VLO (Retraction):

Recycle landing gear.

● If unsuccessful:

Maximum speed: VLO (Extension)

BRAKES - A-SKID N-WS FAULT OR OFFIdent.: **ABN-32-00006623.0005001 / 02 DEC 13****EASA APPROVED**

Criteria: SA

Apply maximum brake pressure 1 000 PSI.

Note: *Nosewheel steering is inoperative.*

Apply necessary landing performance corrections.

BRAKES - HOTIdent.: **ABN-32-00007176.0002001 / 23 NOV 09****EASA APPROVED**

Criteria: (A318 or ((A319 or A320 or A321) and 31283))

■ 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/VLO



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES LANDING GEAR

AUTOBRAKE

Ident.: **ABN-32-00007177.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

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 autobrake and proceed as circumstances dictate.

BRAKES - NORM BRK FAULT

Ident.: **ABN-32-00009339.0006001 / 02 DEC 13**

EASA APPROVED

Criteria: (A318 or ((A319 or A320 or A321) and 26925))

Apply necessary landing performance corrections.

BRAKES - NORM + ALTN FAULT

Ident.: **ABN-32-00009340.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 26925)

Only parking brake is available.

Note: *Antiskid is inoperative. Refer to ABN-32 BRAKES - A-SKID N-WS FAULT or OFF.*

BRAKES - RELEASED

Ident.: **ABN-32-00009341.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 26925)

Apply necessary landing performance corrections.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

LANDING GEAR

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ERRONEOUS RA HEIGHT INDICATION

Ident.: TDU / ABN-34-00009722.0001001 / 09 DEC 13

EASA APPROVED

Criteria: SA

Impacted DU: NONE

Impacted by TR33 Issue 2.0

During all phases of flight, monitor and crosscheck all primary flight parameters and FMA indications.

During an ILS, or GLS, or MLS approach with autopilot engaged, and in the event of an early/untimely FLARE and THR IDLE mode engagement:

- Immediately perform an automatic go-around (thrust levers set to TOGA), or
- Immediately disconnect autopilot and set both FDs to OFF. If external visual references are sufficient, the approach may be continued manually.

CAUTION	Significant longitudinal sidestick input may be required.

NAV - RA 1+2 FAULT

Ident.: ABN-34-00007212.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Note: At landing gear extension, flight controls are in direct law. Refer to ABN-27 F/CTL - DIRECT LAW (PROT LOST).

NAV - IR 1+2 (1+3) (2+3) FAULT

Ident.: ABN-34-00007213.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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

Use ATT HDG switching as appropriate.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES NAVIGATION

NAV IR DISAGREE

Ident.: ABN-34-00007214.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Note: Flight controls are in direct law.

Use standby horizon to determine the faulty IR.

■ **If disagree confirmed:**

Turn off faulty IR.

Turn off then on ELAC 2.

Turn off then on ELAC 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 FAULT

Ident.: ABN-34-00007186.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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

Set AIR DATA switching to CAPT 3.

Turn off ADR 1 and ADR 2.

NAV - ADR 1+3 FAULT

Ident.: ABN-34-00007187.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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

Set AIR DATA switching to NORM.

Use ATC SYS 2.

Turn off ADR 1 and ADR 3.

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



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES NAVIGATION

NAV - ADR 2+3 FAULT

Ident.: ABN-34-00009566.0001001 / 03 AUG 10

EASA APPROVED

Criteria: SA

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

Set AIR DATA switching to NORM.

Use ATC SYS 1.

Turn off ADR 2 and ADR 3.

ADR 1+2+3 FAULT

Ident.: ABN-34-00006691.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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

Turn off all ADRs.

Use standby instruments.

- Note:
1. Automatic cabin pressurization system is inoperative. Refer to ABN-21 CAB PR - SYS 1 + 2 FAULT.
 2. Rudder travel limiter is inoperative. Refer to ABN-22-AUTOFLT AUTO FLT - RUD TRV LIM SYS.

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

NAV ADR DISAGREE

Ident.: ABN-34-00007192.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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

Use both PFDs and standby airspeed indicator to determine the faulty ADR.

Turn off faulty ADR.

UNRELIABLE AIRSPEED INDICATION

Ident.: ABN-34-00006690.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Note: Unreliable airspeed indication may be due to radome damage, or due to air probe failure or obstruction. If the failure is due to radome destruction, the drag will be increased and therefore N1 must be increased by 5 %.

● 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.

Target a pitch attitude of 15 °.

■ If above thrust reduction altitude:

Apply CLB thrust.

■ When below FL 100:

Target a pitch attitude of 10 °.

■ When above FL 100:

Target a pitch attitude of 5 °.

Maintain slats/flaps in their 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.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES PNEUMATIC

AIR - ENG 1(2) BLEED FAULT

Ident.: ABN-36-00007180.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or A320)

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

● **If wing anti-ice on and both packs on:**

Turn off affected side pack.

Open crossbleed valve.

AIR - ENG 1(2) BLEED ABNORM PR

Ident.: ABN-36-00007181.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or A320)

● **If wing anti-ice on and both packs on:**

Turn off affected side pack.

Open crossbleed valve.

AIR - X BLEED FAULT

Ident.: ABN-36-00007184.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Use crossbleed valve manual control.

Note: *If crossbleed valve failed closed and one bleed inoperative, wing anti-ice is inoperative.
Refer to ABN-30 WING A.ICE - SYS FAULT or OFF.*

AIR - L (R) WING LEAK

Ident.: ABN-36-00007188.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 WING A.ICE - SYS FAULT or OFF.*



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES PNEUMATIC

AIR - ENG 1(2) BLEED LEAK

Ident.: **ABN-36-00007190.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

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 WING A.ICE - SYS FAULT or OFF.*

AIR - ENG 1(2) BLEED LO TEMP

Ident.: **ABN-36-00009345.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (A321 or ((A318 or A319 or A320) and 21566))

Disconnect autothrust.

Increase affected engine thrust.

- **If unsuccessful:**

- **If opposite bleed available:**

Open crossbleed valve.

Turn off affected side engine bleed.

Turn off affected side pack (if the other pack is on).

AIR - ENG 1 + 2 BLEED LO TEMP

Ident.: **ABN-36-00009346.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (A321 or ((A318 or A319 or A320) and 21566))

Disconnect autothrust.

Increase engines thrust.

Note: *If unsuccessful, wing anti-ice is inoperative. Refer to ABN-30 WING A.ICE - SYS FAULT or OFF.*



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES
DOORS

DOOR - DOOR NOT CLOSED

Ident.: ABN-52-00010780.0001001 / 04 APR 11

EASA APPROVED

Criteria: SA

● **If abnormal cabin vertical speed:**

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



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

DOORS

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ENG - FAIL

Ident.: ABN-70-00006885.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

■ If no damage:

Attempt an immediate engine relight setting ENG MODE selector to IGN START and engine thrust lever to idle.

● If no engine relight after 30 s:

Shut down affected engine.

Consider engine relight. *Refer to ABN-70 ENG RELIGHT IN FLIGHT.*

■ If engine damage:

Push relevant FIRE pb and discharge AGENT 1 after 10 s.

ENG - SHUTDOWN

Ident.: ABN-70-00007091.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

LAND ASAP**● If relevant FIRE pb not pushed:****● If wing anti-ice on:**

Turn off affected side pack.

Open crossbleed valve.

Set ENG MODE selector to IGN START.

● If no fuel leak:

Monitor fuel imbalance.

● If relevant FIRE pb pushed:

Close crossbleed valve.

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

ENG - REV PRESSURIZED

Ident.: ABN-70-00007092.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Set affected engine thrust lever to idle.

ENG - REVERSE UNLOCKEDIdent.: **ABN-70-00007093.0002001 / 02 DEC 13****EASA APPROVED**

Criteria: ((A319 or A320 or A321) and 30660)

● If FADEC sets affected engine to idle:

LAND ASAP

Set affected engine thrust lever to idle.

Maximum speed: 300 kt/M 0.78

● If buffet:

Reduce speed to 240 kt.

Shut down affected engine.

● If reversers actually deployed:

Apply full rudder trim towards live engine.

Control heading with roll.

● For approach and landing:

Use FLAPS 1 for landing.

Turn off GPWS flap mode.

Approach speed = VREF + 55 kt.

Set 5 ° rudder trim towards live engine.

Disconnect autothrust.

Minimize drag until on glide slope.

● At 800 ft AGL:

Target speed = VREF + 40 kt.

Apply necessary landing performance corrections.

ENG - REVERSER FAULTIdent.: **ABN-70-00009156.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: (SA and 30660)

● If FADEC sets affected engine to idle:

LAND ASAP

Set affected engine thrust lever to idle.



A320
AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES POWER PLANT

ENG - THR LEVER FAULT

Ident.: **ABN-70-00009157.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (SA and 30660)

LAND ASAP

Engage autothrust (if not already engaged).

ENG - THR LEVER DISAGREE

Ident.: **ABN-70-00009158.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (SA and 30660)

LAND ASAP

Engage autothrust (if not already engaged).

ENG - OIL HI TEMP

Ident.: **ABN-70-00007095.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

Shut down affected engine.

ENG - FADEC FAULT

Ident.: **ABN-70-00007096.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (318-111 or 318-112 or A319 or A320 or A321)

Confirm engine status using other ECAM system pages (ELEC, HYD, BLEED).

● **If engine failure confirmed:**

Shut down affected engine.

ENG - HOT FUEL

Ident.: **ABN-70-00009159.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (318-121 or 318-122 or 319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

Turn off generator of affected engine.

ENG - FADEC OVHTIdent.: **ABN-70-00009160.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: (318-121 or 318-122 or 319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

■ On ground:

Shut down affected engine.

■ In flight:*Note:* Reducing engine power should decrease temperature.

Confirm engine status using other ECAM system pages (ELEC, HYD, BLEED).

● If abnormal engine operation:

Shut down affected engine.

ENG - EPR MODE FAULTIdent.: **ABN-70-00009161.0001001 / 02 DEC 13****EASA APPROVED**

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

Turn on both engine N1 mode.

● If degraded N1 mode active:

Align affected engine N1 on the N1 engine in rated mode.

Manually adjust thrust.

Note: Autothrust is lost.**ENG - N1 (N2) (EGT) OVERLIMIT**Ident.: **ABN-70-00007098.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

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

● If overlimit persists after throttle back to idle position:

Shut down the affected engine.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES POWER PLANT

ENG RELIGHT IN FLIGHT

Ident.: ABN-70-00006620.0008001 / 02 DEC 13

EASA APPROVED

Criteria: ((319-131 or 319-132 or 319-133 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) and (22562 or 35864))

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.

Note: Engine light up must be achieved within 30 s after fuel flow increases.

● **When idle reached:**

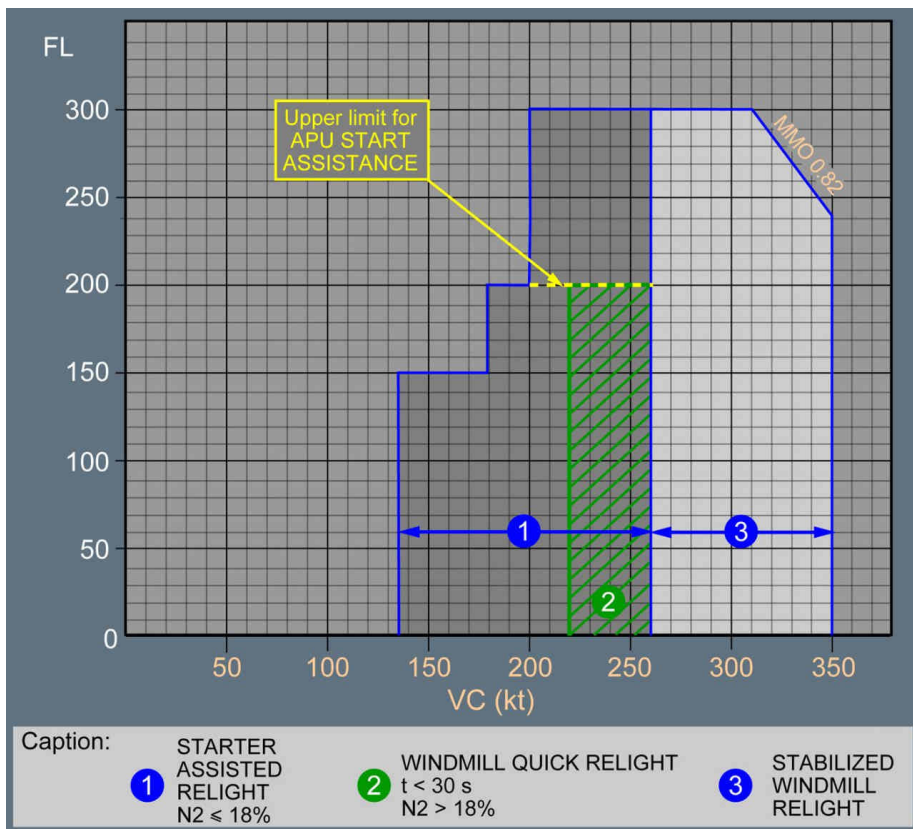
Set ENG MODE selector to NORM.

Continued on the following page

ABNORMAL PROCEDURES
POWER PLANT

Continued from the previous page ENG RELIGHT IN FLIGHT

In Flight Engine Relight Envelope



BOMB ON BOARD

Ident.: ABN-90-00007024.0002001 / 04 APR 11

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 31276)

FLIGHT CREW PROCEDURES

Establish communication between cockpit and cabin.

■ 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 galleys.

● When bomb is secured at the LRBL or if bomb cannot be moved:

Turn on emergency exit light.

Turn 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.

■ If evacuation not required:

Notify cabin crew and passengers.

Continued on the following page

*Continued from the previous page BOMB ON BOARD***CABIN CREW PROCEDURES****● If landing and evacuation not possible within 30 min:**

If the bomb can be moved, move it to the prepared Least Risk Bomb Location (centre of the right hand aft cabin door).

OVERWEIGHT LANDINGIdent.: **ABN-90-00007107.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

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.

● For go-around:

Select FLAPS 3.

■ If approach climb performance requirement is not met in CONF 3:

Use FLAPS 3 for landing.

● For go-around:

Select FLAPS 1.

Note:

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.



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES
MISCELLANEOUS

REJECTED TAKEOFF WITH ALL ENGINES OPERATIVE

Ident.: **ABN-90-00007183.0001001** / 23 NOV 09

EASA APPROVED

Criteria: SA

Immediately reduce all thrust levers to idle.

Monitor autobrake operation.

Take over brake control with brake pedals if necessary.

Note: *If autobrake is not used, maximum brakes must be applied simultaneously with reduction of thrust levers.*



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AIRPLANE FLIGHT MANUAL

ABNORMAL PROCEDURES

MISCELLANEOUS

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NORMAL PROCEDURES

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AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES GENERAL

INTRODUCTION

Ident.: **NORM-GEN-00009222.0001001 / 03 AUG 10**

EASA APPROVED

Criteria: SA

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 (■) 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.



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AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

GENERAL

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A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES PREFLIGHT CHECKS

ELECTRICAL

Ident.: **NORM-PFLT-00007056.0002001 / 23 NOV 09**

EASA APPROVED

Criteria: ((A318 or A319 or A321) or (A320 and 24701))

Batteries conditions must be checked before the first flight of the day.

BAT 1+2 charge current must be reducing to a value below 60 A after BAT 1+2 OFF then ON.

COCKPIT DOOR

Ident.: **NORM-PFLT-00007057.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

- **If required by local Airworthiness Authorities:**

Check that the cockpit door is closed and locked before each flight.

BRAKING EFFICIENCY TEST

Ident.: **NORM-PFLT-00007058.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

- **When starting to taxi or after any BSCU reset on ground:**

As soon as the aircraft starts to move, check the efficiency of the braking system by pressing brake pedals.



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AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

PREFLIGHT CHECKS

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TAKEOFF PROCEDUREIdent.: **NORM-TO-00007059.0003001 / 02 DEC 13****EASA APPROVED**

Criteria: ((319-131 or 319-132 or 319-133 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232) and 32656)

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 MODE selector as required.

Apply 1.05 EPR on both engines with brakes on.

Note: Brakes may be released so as to perform a rolling takeoff.

■ **If crosswind at or below 20 kt and no tailwind:**

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 thrust progressively to get FLX/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.

- Note:
1. 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.
 2. The FADEC includes a Keep-Out Zone (KOZ) which prevents the engine from being stabilized between an approximate range of 60 % to 74 % N1 (limits are a function of the outside air temperature). Therefore, during engine acceleration on ground, the pilot may notice a non-linear thrust response to thrust lever movement.

Check takeoff EPR is set prior to reach 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 $V_2 + 10$ 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:**

Accelerate up to at least 1.18 VS1G of configuration (1+F) or "F" speed if CONF 2 or 3 in use.

Select slats/flaps position 1 and accelerate up to at least 1.23 VS1G of clean configuration ("S" speed).



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

TAKEOFF

Select slats/flaps position 0 and accelerate up to 1.36 VS1G ("green dot" speed).

Disarm ground spoilers.

- Note:
1. For takeoff in configuration 1 (1+F), F speed is not displayed.
 2. If takeoff is performed with packs off, pack 1 should be selected ON after thrust reduction to CLB.

BUFFET ONSETIdent.: **NORM-FLT-00007063.0001001 / 03 AUG 10****EASA APPROVED**

Criteria: A320

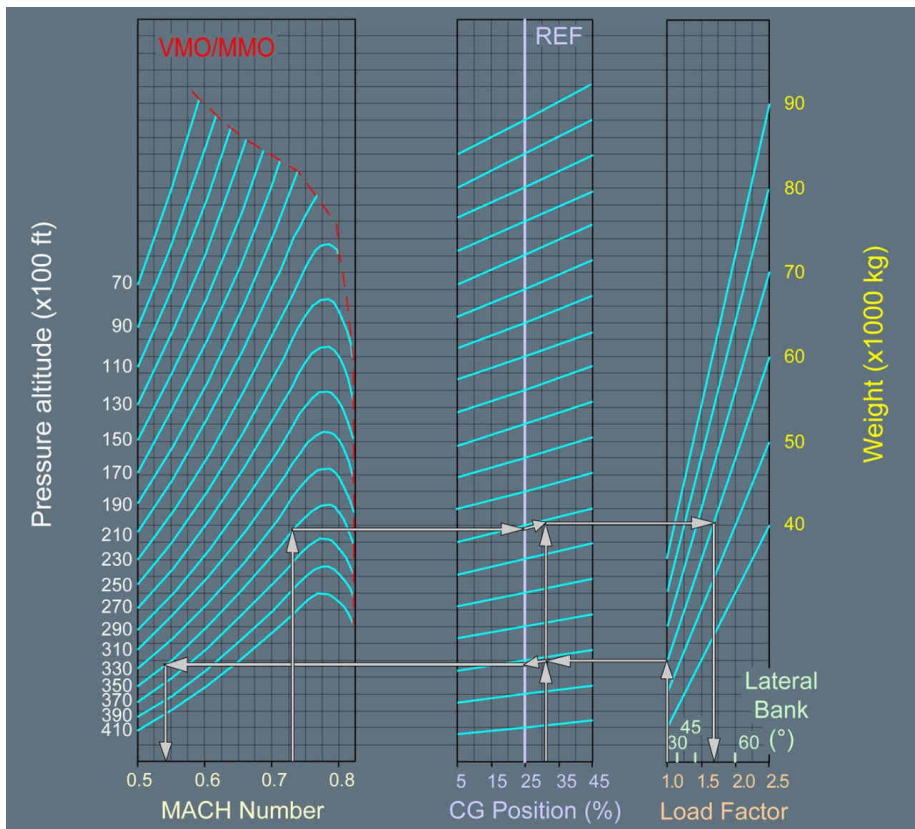
At any flight conditions, it is possible to determine maneuvering margins before buffet onset occurs, by reference to the following graphs.

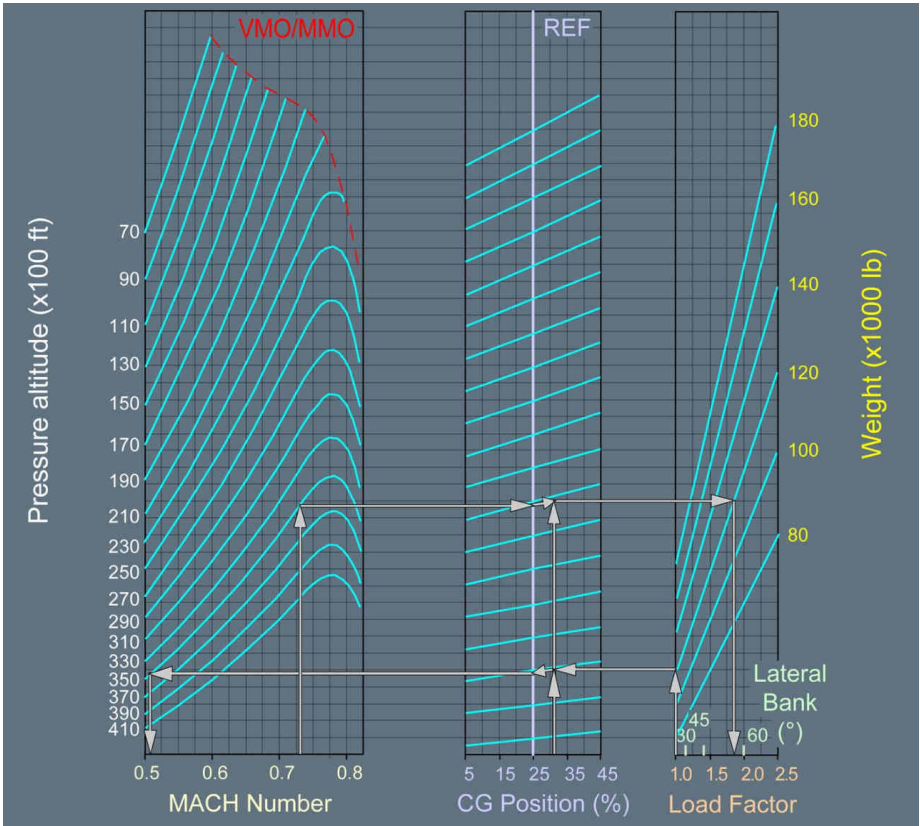
Example 1 (Weight in kg):

- For:
 - $M = 0.73$
 - Flight Level = 350
 - Weight = 60 t
 - CG = 31 %
- Results: Buffet onset at
 - $M = 0.73$ with 54 ° bank angle or at 1.7 g
 - Low Speed (1 g): $M = 0.54$

Example 2 (Weight in lb):

- For:
 - $M = 0.73$
 - Flight Level = 350
 - Weight = 120 000 lb
 - CG = 31 %
- Results: Buffet onset at
 - $M = 0.73$ with 56 ° bank angle or at 1.85 g
 - Low Speed (1 g): $M = 0.51$

BUFFET ONSET (Weight in kg)


BUFFET ONSET (Weight in lb)

FLIGHT IN SEVERE TURBULENCE

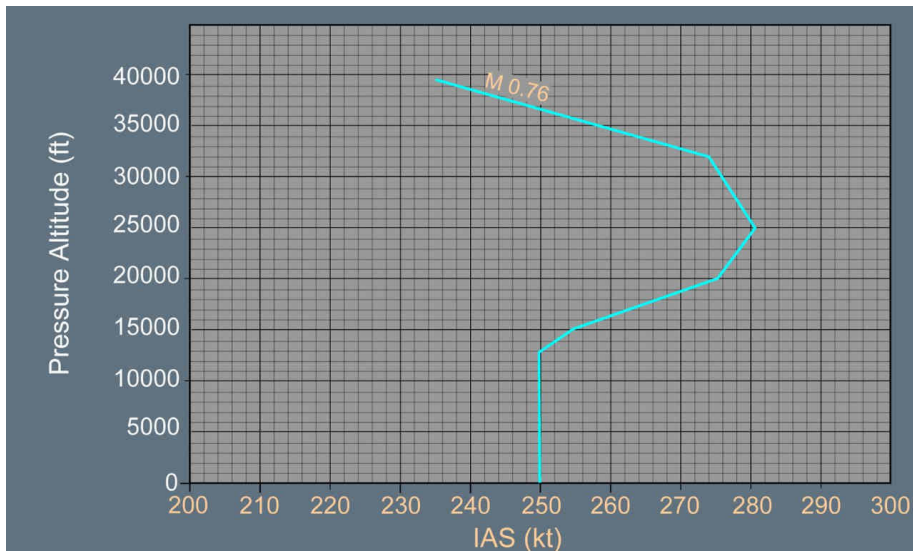
 Ident.: **NORM-FLT-00007066.0002001 / 23 NOV 09**
EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233)

Turn on cabin signs.
 Disconnect autothrust.

Respect the following maximum speed:

Maximum Speed in Severe Turbulence



The recommended speed is:

- Below FL 200: 250 kt IAS
- At or above FL 200: 275 kt IAS/M 0.76



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES APPROACH AND LANDING

NORMAL LANDING

Ident.: **NORM-LDG-00007067.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (A319 or A320 or A321)

The minimum final approach speed is 1.23 VS1G of the landing configuration.
Set ENG MODE selector as required.

Note: *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-00007068.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

Apply go-around thrust.
Rotate to achieve a positive rate of climb and establish the required pitch attitude (not to exceed 18 °) as directed by SRS pitch command bar.
Retract slats/flaps one step.
Maintain the final approach speed.

- **When a positive rate of climb established:**

Retract landing gear.

REVERSE THRUST

Ident.: **NORM-LDG-00007069.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

Note: *Reverse thrust may be applied before the nosewheel is on ground (even with one engine inoperative).*

Maximum reverse thrust may be applied down to 70 kt IAS.

AUTOBRAKE

Ident.: **NORM-LDG-00007070.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

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.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

APPROACH AND LANDING

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.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

AUTO FLIGHT SYSTEM

DEMONSTRATED SYSTEM CONFIGURATION

AP/FD, SPEED MODES, AUTOTHURST

Ident.: **NORM-22-CONF-00009463.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

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-00009464.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: SA

Autopilot engagement is approved with use of SRS + (HDG, TRK, RWY, RWY TRK or NAV) at or above 100 ft AGL and at least 5 s after liftoff.
At acceleration altitude, the use of CLB or OP CLB or V/S or FPA or ALT* or ALT mode is approved.
Use of FD is approved in the same modes after the rotation.

CLIMB, CRUISE, DESCENT

Ident.: **NORM-22-CONF-00009465.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

The use of AP or FD in the following modes is approved:

- Lateral modes: HDG, TRK, NAV
- Vertical modes: V/S, FPA, ALT*, ALT, ALT CRZ, ALT CST, OP CLB, EXP CLB, OP DES, EXP DES, CLB, DES.

NON PRECISION APPROACH

Ident.: **NORM-22-CONF-00009466.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

The following modes are approved to be used with AP and/or FD:

- Lateral modes: LOC, HDG, TRK, NAV, APP NAV
- Vertical modes: ALT*, ALT, V/S, FPA, FINAL APP.

CAT I ILS APPROACH

Ident.: **NORM-22-CONF-00009467.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

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.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

AUTO FLIGHT SYSTEM

DEMONSTRATED SYSTEM CONFIGURATION

CAT II ILS APPROACH

Ident.: **NORM-22-CONF-00009468.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

The use of AP with or without FD with or without autothrust 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 or CAT III performance quality ILS beam only.*

CAT II/III ILS APPROACH AND AUTOMATIC APPROACH

Ident.: **NORM-22-CONF-00009469.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

The use of AP with or without FD with autothrust for CAT III and with or without autothrust for CAT II is approved in 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.
2. 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-00009470.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

The use of AP and/or FD is approved with use of SRS + (GA TRK, HDG, TRK or NAV) modes.

At acceleration altitude, the use of CLB or OP CLB or V/S or FPA or ALT* or ALT mode is approved.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

AUTO FLIGHT SYSTEM

NON PRECISION APPROACH

GENERAL

Ident.: **NORM-22-NPA-00009575.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: SA

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

Ident.: **NORM-22-NPA-00009576.0004001 / 02 DEC 13**

EASA APPROVED

Criteria: ((A319 or A320 or A321) and ((25205 or 26111 or 26485 or 26999 or 28382 or 30241 or 30631 or 30635) and 150110))

■ 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 FMGC, the approach can be continued using AP/FD associated to the other FMGC.
- GPS is not required and navigation accuracy is confirmed against the radio navaid raw data, or

● 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 FMGS 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.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

AUTO FLIGHT SYSTEM

NON PRECISION APPROACH

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CAT II AND CAT III APPROACH AND/OR AUTOMATIC LANDINGIdent.: **NORM-22-PA-00009482.0003001 / 23 NOV 09****EASA APPROVED**

Criteria: (A320 and 25225)

● **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" is displayed on PFD and ILS/MLS course on heading scale.

At 30 ft, check "FLARE" is displayed on PFD.

At 10 ft, reduce thrust to idle.

At touchdown, check "ROLL OUT" is displayed on PFD.

At the latest when leaving the runway, disconnect the autopilot.

- Note:
1. For CAT II automatic approach, the autopilot should be disconnected at or above 80 ft if manual landing is intended.
 2. For CAT III A automatic approach and landing, the autopilot may be disconnected at touchdown if external visual references are sufficient.
 3. For automatic landing in tailwind conditions, it is recommended to use manual braking without delay or automatic braking for an optimized runway centerline tracking during automatic rollout.
 4. 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 -2.5 ° or above +10 ° nose up
 - Bank angle goes above 7 °
 - Descent rate goes above 1 000 ft/min
 - Excessive LOC or GLIDE deviation occurs.
 5. For CAT II approach climb performance, refer to FCOM In Flight Performance Chapter.
 6. 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 approved FM module at the latest approved revision reported in Performance chapter of this AFM) are given in the Automatic Landing Distance Increment chapter of this AFM Refer to PERF-LDG Autoland Landing Distance Increments. 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-00009476.0001001 / 23 NOV 09

Criteria: SA

EASA APPROVED

Required Equipment	CAT II	CAT III Single	CAT III Dual
AP	1 AP engaged	1 AP engaged	2 AP engaged
AP disconnect P/B	2	2	2
Autothrust	0	1	1
ILS or MLS Receiver	2	2	2
Attitude Indication	N°1+N°2+STBY	N°1+N°2+STBY	N°1+N°2+STBY
PF/DND Displays	2/1	2/2	2/2
Radio Altimeter	1 (But two display)	2	2
Auto Callout Radio Altimeter	1 ⁽³⁾	1	1
DH Indication	1 ⁽¹⁾	1 ⁽¹⁾	1 ⁽¹⁾

Continued on the following page



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES
AUTO FLIGHT SYSTEM
PRECISION APPROACH

Continued from the previous page

Required Equipment	CAT II	CAT III Single	CAT III Dual
Flight Warning Computer	1	1	2
"AP OFF" warning	1	1	2
"AUTOLAND" light	1	1	1
Rain Repellent (if activated) or Windshield Wipers	1 ⁽²⁾	1 ⁽²⁾	1 ⁽²⁾
Windshield Heat	1 ⁽²⁾	1 ⁽²⁾	1 ⁽²⁾
Nosewheel steering	1 ⁽⁵⁾	1 ⁽⁵⁾	1
Antiskid	1 ⁽⁵⁾	1 ⁽⁵⁾	1
BSCU Channel	1 ⁽⁵⁾	1 ⁽⁵⁾	1
Beam Excessive Deviation	1 ⁽¹⁾	2	2
FMA	1	2	2
"A/THR OFF" caution	0	1	1
Rudder Travel Limit	1 ⁽⁴⁾	1 ⁽⁴⁾	1 ⁽⁴⁾
Yaw Damper/Rudder Trim	1/1	1/1	2/2
ELAC	1	1	2
ADR/IR	2/2	2/2	3/3
FAC	1	1	2
Hydraulic Circuit	2	2	3
FMGC Electrical Supply Split	0	0	1

(1) One unit required for the PNF.

(2) One unit required for the PF.

(3) Required only for autoland.

(4) Required only for autoland with crosswind above 12 kt.

(5) Required only for autoland rollout.

- Note:
1. Compliance with CAT II approach and landing criteria has been demonstrated with CAT II and CAT III performance quality ILS/MLS beam only.
 2. Compliance with CAT III approach and landing criteria has been demonstrated with CAT II and CAT III performance quality ILS/MLS beam only.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

AUTO FLIGHT SYSTEM

PRECISION APPROACH

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A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES
FUEL

FUEL SYSTEM

Ident.: **NORM-28-00009172.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (A320 and 20024)

Tanks must be emptied in the following order:

1. Center tank
2. Wing tanks.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

FUEL

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OPERATIONS IN ICING CONDITIONSIdent.: **NORM-30-00007071.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

For icing conditions definition: *Refer to LIM-70 Operations in Icing Conditions.*

- **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 formation on non heated structure:**

- **If CONF FULL:**

Minimum speed: VLS + 5 kt

- **If CONF below FULL:**

Minimum speed: VLS + 10 kt

CAUTION

1. Extended flight in icing conditions with slats extended should be avoided.
2. Apply performance adjustments according to the note of the Approach Climb and Landing Climb, *Refer to PERF-LDG Approach Climb and Landing Climb.*

RAIN REPELLENT (IF ACTIVATED)Ident.: **NORM-30-00007080.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

Use rain repellent in the case of heavy rain only.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES
ICE AND RAIN PROTECTION

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A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES
INDICATING/RECORDING SYSTEM

ECAM SYSTEM

Ident.: **NORM-31-00007073.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

Instructions displayed by the ECAM have to be considered as a guidance for pilot judgement, any decision remains at discretion of the pilot.



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES
INDICATING/RECORDING SYSTEM

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GROUND PROXIMITY WARNING SYSTEM (GPWS)Ident.: **NORM-34-00007081.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

● **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 caution alert ceases.

INERTIAL REFERENCE SYSTEM (IRS)Ident.: **NORM-34-00009174.0001001 / 23 NOV 09****EASA APPROVED**

Criteria: SA

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.

REDUCED VERTICAL SEPARATION MINIMUM (RVSM)Ident.: **NORM-34-00009175.0002001 / 23 NOV 09****EASA APPROVED**

Criteria: (A318 or ((A319 or A320 or A321) and (31039 or 31528)))

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



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

NAVIGATION

WINDSHEAR WARNING AND GUIDANCE SYSTEM

Ident.: **NORM-34-00009761.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (SA and 22249)

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 .

If engaged AP may be used for go-around.

FD guidance may lead to speeds of VALPHAMAX (top of the red strip along the speed scale of the PFD).

The aircraft configuration should not be changed before end of windshear conditions.

INTEGRATED STANDBY INSTRUMENT SYSTEM (ISIS)

Ident.: **NORM-34-00010642.0001001 / 03 AUG 10**

EASA APPROVED

Criteria: (SA and 27620)

Whenever the Integrated Standby Instrument System (ISIS) is used as the primary means for indicating the basic parameters for aircraft piloting, do not use BUGS pushbutton.

AUXILIARY POWER UNIT (APU)Ident.: **NORM-49-00006923.0011001 / 23 NOV 09****EASA APPROVED**

Criteria: (A320 and (22562 or 35864))

STARTING IN FLIGHT

Up to 39 000 ft, using main electrical power supply.

Up to 25 000 ft, using batteries.

AIR BLEED EXTRACTION IN FLIGHT**● At ISA:**

Two air conditioning packs up to 15 000 ft (GEN LOAD 89 % (80 KVA) maximum).

One air conditioning pack, up to 20 000 ft (GEN LOAD 71 % (64 KVA) maximum).

Engine starting assistance up to 20 000 ft.

Airbleed extraction for wing anti-ice is not permitted.

MAXIMUM GEN LOAD DURING ENG START ON GROUND

At ISA, 100 % (90 KVA) from sea level up to 8 000 ft.

At ISA + 35 °C, from 90 % (81 KVA) at sea level to 78 % (70 KVA) at 8 000 ft.

FLIGHT WITH APU REMOVED

Flight with APU removed is authorized in accordance with SIL 49-009 revision 7 (or higher).



A320
AIRPLANE FLIGHT MANUAL

NORMAL PROCEDURES

AUXILIARY POWER UNIT

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PERFORMANCE

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PERF-GEN GENERAL

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PERF-ENG ENGINE MANAGEMENT

Takeoff Thrust.....A
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A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE

GENERAL

INTRODUCTION

Ident.: PERF-GEN-00006988.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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.



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE

GENERAL

AIRCRAFT CONFIGURATION

Ident.: PERF-GEN-00007266.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A319 or A320 or A321)

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-00007267.0001001 / 03 AUG 10

EASA APPROVED

Criteria: (A319 or A320 or A321)

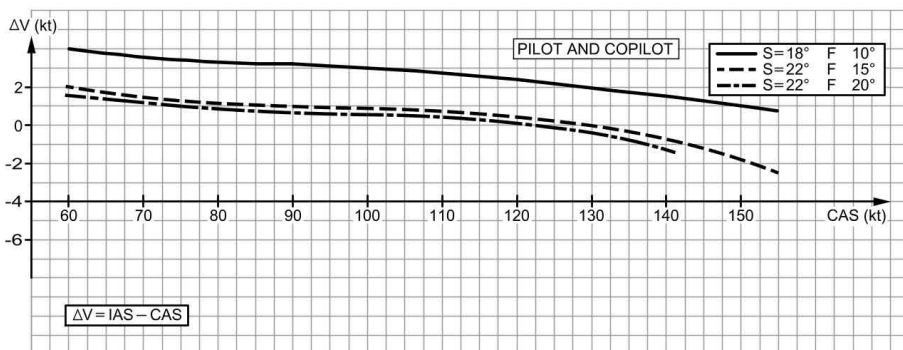
At takeoff and landing: 38 kt (gust included).

SPEED CORRECTIONS IN GROUND EFFECT

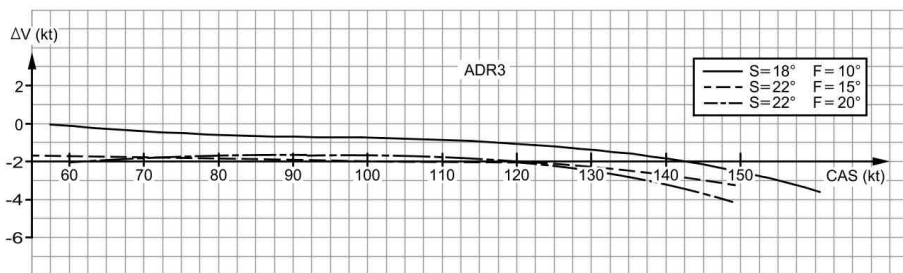
 Ident.: PERF-CAL-TO-00007268.0001001 / 23 NOV 09
 Criteria: A320

EASA APPROVED

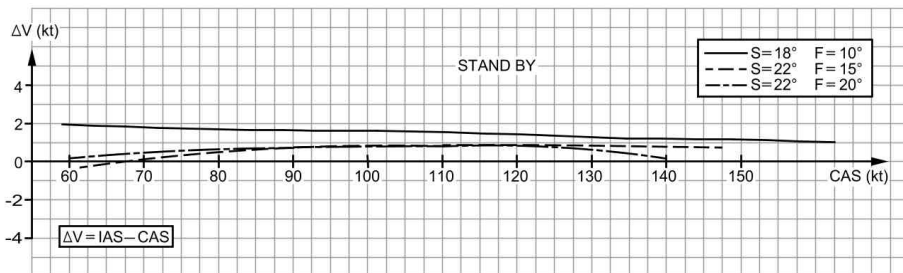
CAPTAIN AND FIRST OFFICER ADR 1 OR 2



ADR 3



STANDBY AIRSPEED INDICATOR





A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
AIRSPEED AND ALTITUDE CALIBRATION
TAKEOFF

SPEED CORRECTIONS OUT OF GROUND EFFECT

Ident.: **PERF-CAL-TO-00007269.0002001 / 02 DEC 13**

Criteria: (320-231 or 320-232 or 320-233)

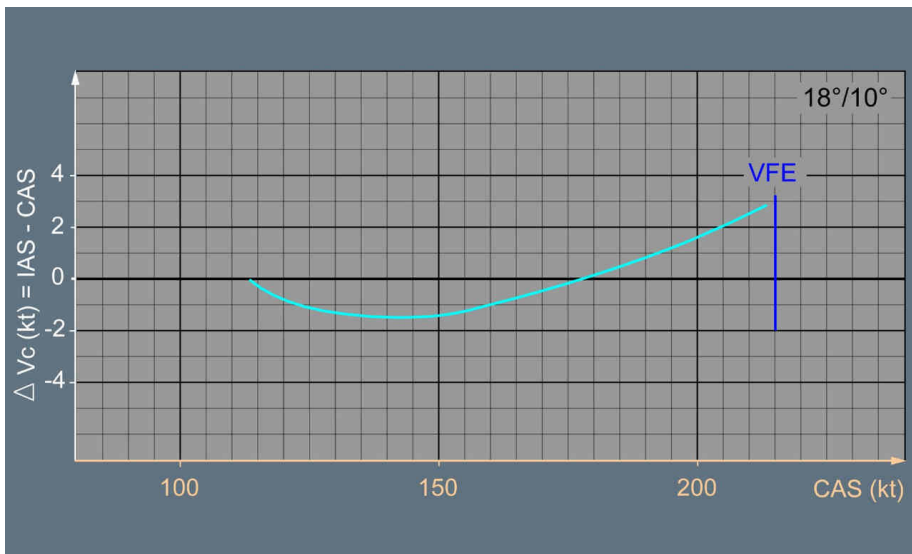
EASA APPROVED

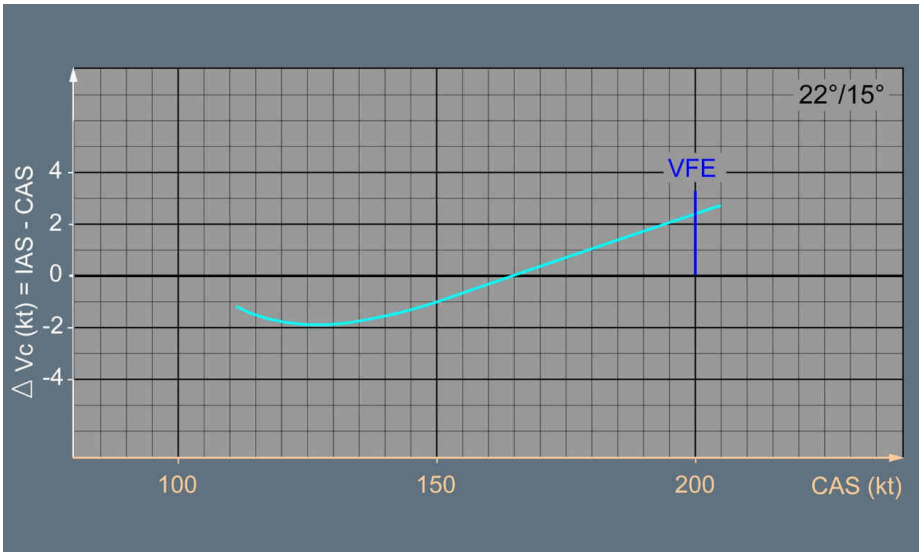
ADR 1 OR 2 OR 3

$$\Delta V = IAS - CAS \leq \pm 1 \text{ kt}$$

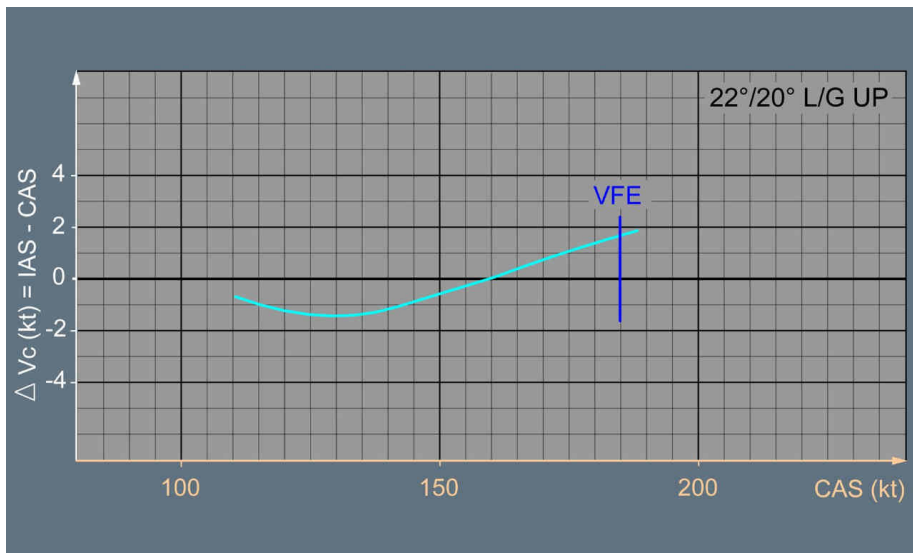
STANDBY AIRSPEED INDICATOR

CONF. 1



CONF. 2


CONF. 3





A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
AIRSPED AND ALTITUDE CALIBRATION
TAKEOFF

ALTITUDE CORRECTIONS

Ident.: PERF-CAL-TO-00007270.0002001 / 02 DEC 13

EASA APPROVED

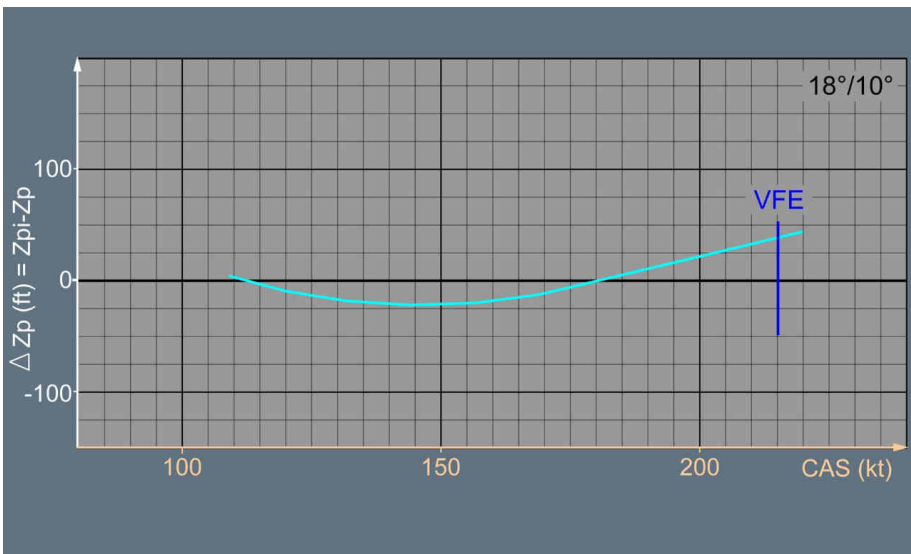
Criteria: (320-231 or 320-232 or 320-233)

ADR 1 OR 2 OR 3

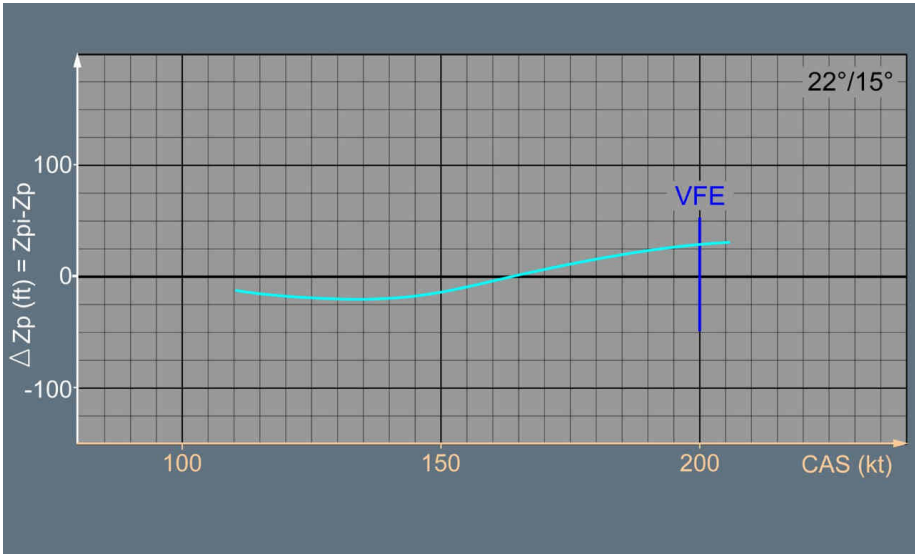
$$\Delta ZP \leq \pm 20 \text{ ft}$$

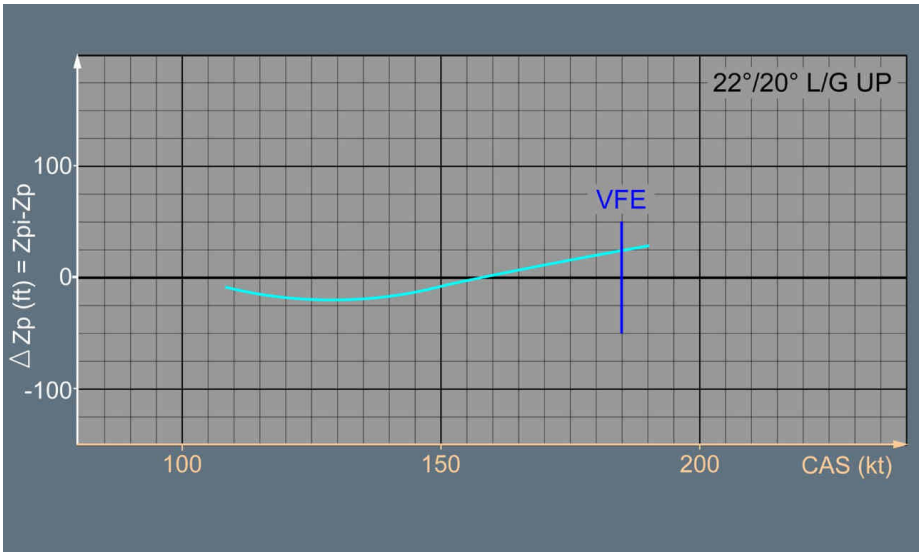
STANDBY ALTITUDE INDICATOR

CONF. 1



CONF. 2



CONF. 3 L/G UP




A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
AIRSPEED AND ALTITUDE CALIBRATION
TAKEOFF

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A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE

AIRSPEED AND ALTITUDE CALIBRATION

CRUISE (CLEAN CONFIGURATION)

SPEED AND MACH CORRECTIONS

Ident.: **PERF-CAL-CRU-00007271.0002001** / 23 NOV 09

EASA APPROVED

Criteria: ((A320 or A321) and (25490 or 25570))

ADR 1 OR 2 OR 3

$$\Delta M \leq 0.007$$

$$\Delta V \leq \pm 1.8 \text{ kt}$$

ALTITUDE CORRECTIONS

Ident.: **PERF-CAL-CRU-00007272.0002001** / 23 NOV 09

EASA APPROVED

Criteria: ((A320 or A321) and (25490 or 25570))

ADR 1 OR 2 OR 3

$$\Delta ZP \leq \pm 150 \text{ ft}$$



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
AIRSPEED AND ALTITUDE CALIBRATION
CRUISE (CLEAN CONFIGURATION)

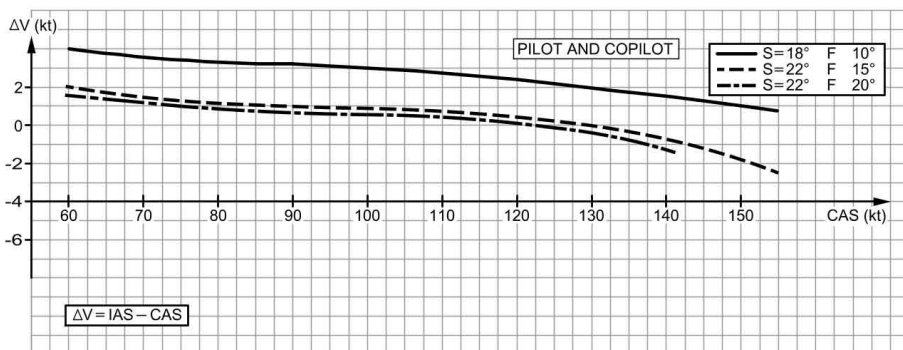
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SPEED CORRECTIONS IN GROUND EFFECT

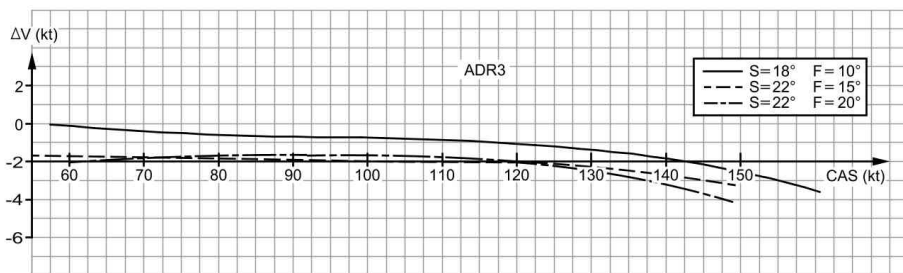
 Ident.: PERF-CAL-LDG-00007273.0001001 / 23 NOV 09
 Criteria: A320

EASA APPROVED

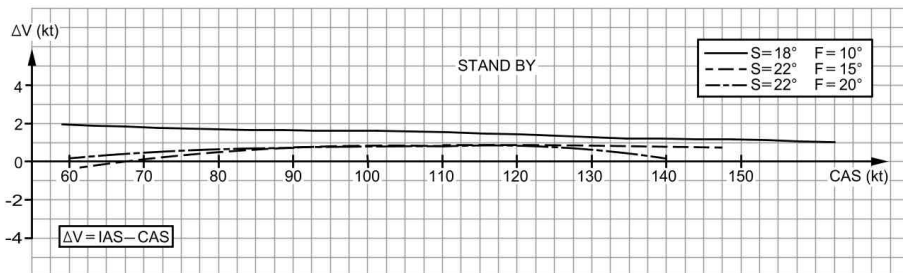
CAPTAIN AND FIRST OFFICER ADR 1 OR 2



ADR 3



STANDBY AIRSPEED INDICATOR





A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
AIRSPEED AND ALTITUDE CALIBRATION
LANDING

SPEED CORRECTIONS OUT OF GROUND EFFECT

Ident.: **PERF-CAL-LDG-00007274.0002001 / 03 AUG 10**

Criteria: (320-231 or 320-232 or 320-233)

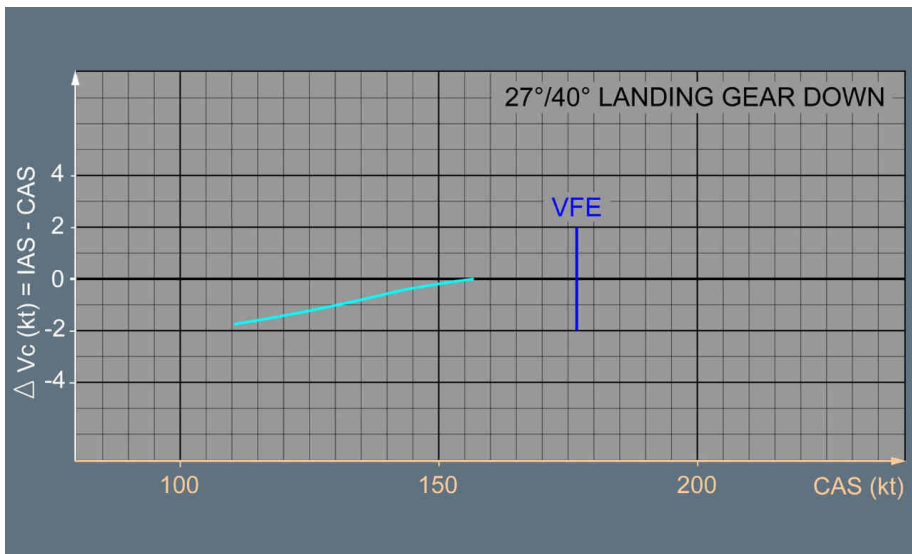
EASA APPROVED

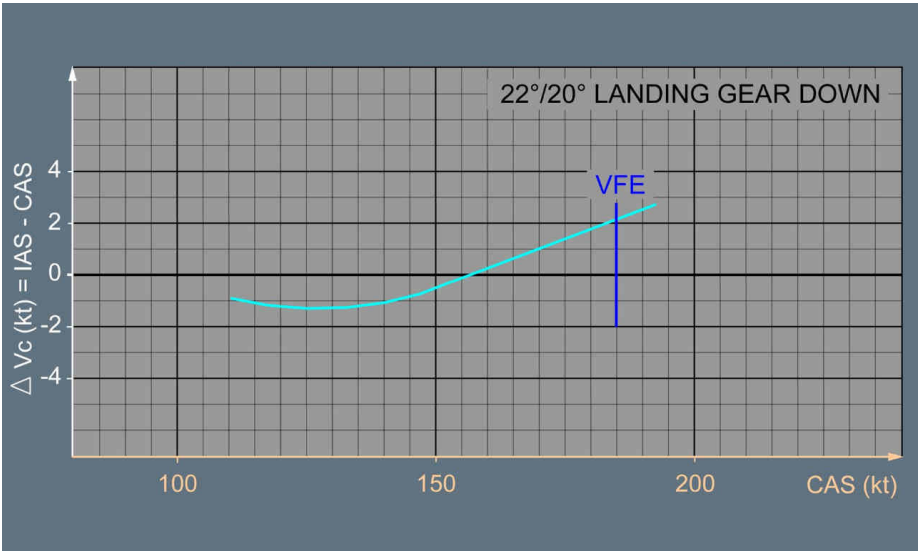
ADR 1 OR 2 OR 3 EXCEPT CONF FULL ADR 3

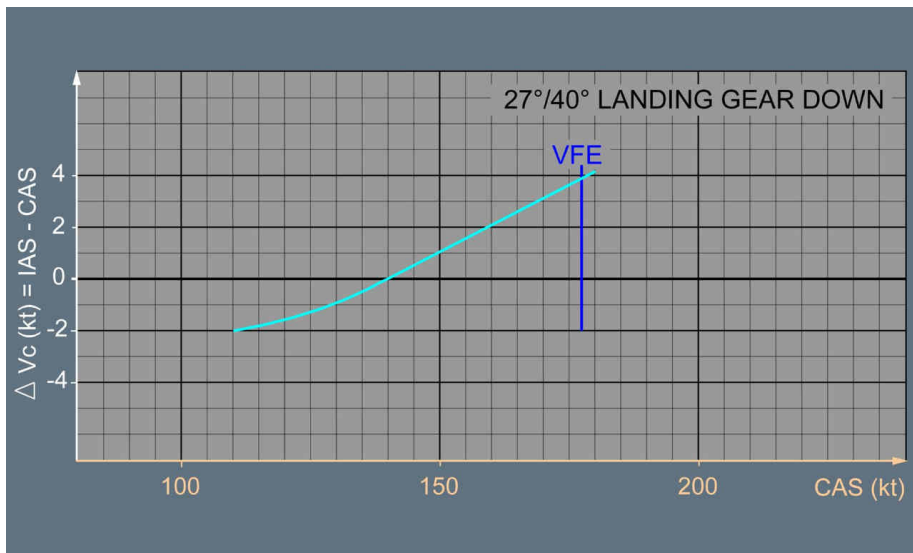
$$\Delta V = \text{IAS} - \text{CAS} \leq \pm 1 \text{ kt}$$

CONF FULL ADR 3

CONF FULL ADR 3



STANDBY AIRSPEED INDICATOR
CONF 3 LANDING GEAR DOWN


CONF FULL




A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
AIRSPEED AND ALTITUDE CALIBRATION
LANDING

ALTITUDE CORRECTIONS

Ident.: PERF-CAL-LDG-00007275.0002001 / 03 AUG 10

EASA APPROVED

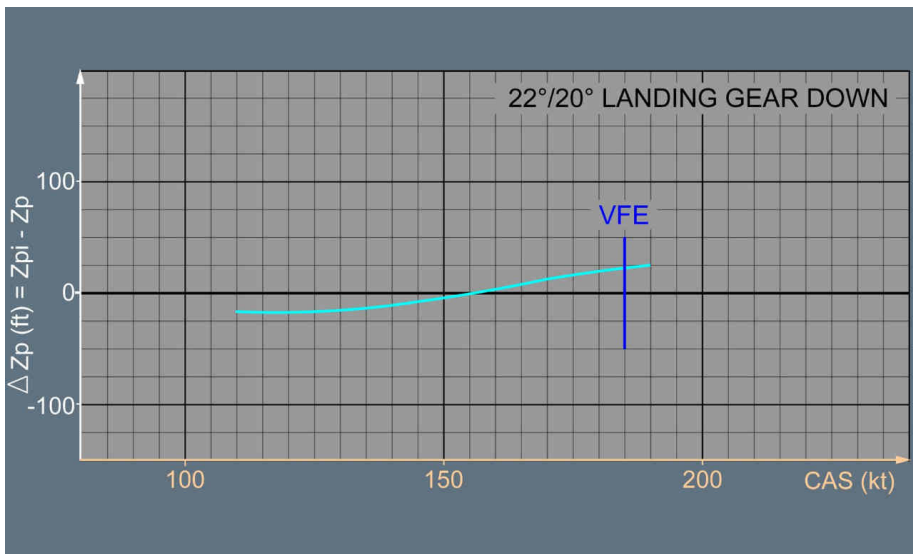
Criteria: (320-231 or 320-232 or 320-233)

ADR 1 OR 2 OR 3

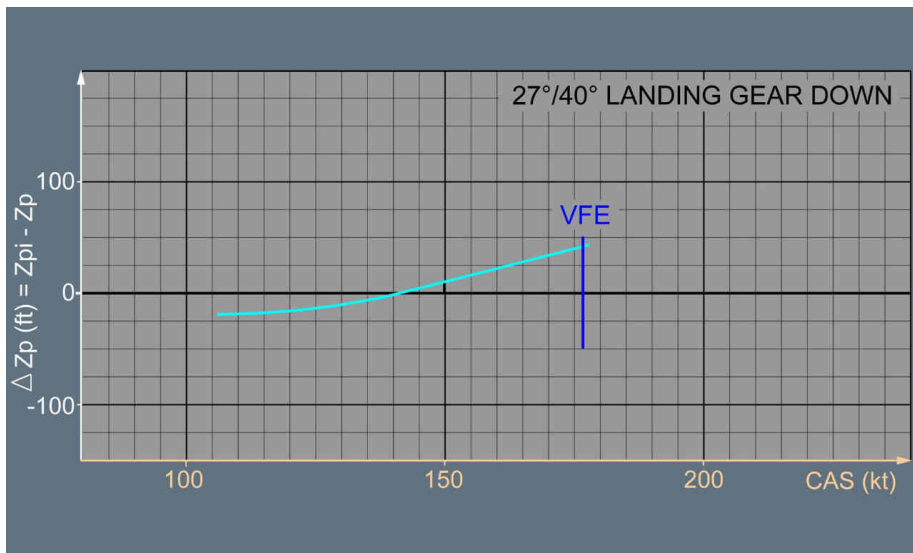
$$\Delta ZP \leq \pm 20 \text{ ft}$$

STANDBY ALTITUDE INDICATOR

CONF 3 LANDING GEAR DOWN



CONF FULL





A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
TAKEOFF PERFORMANCE

SPEEDS DEFINITIONS

Ident.: PERF-TO-00006991.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

V1:

V1 is the highest speed at which the decision must be made:

- To continue the takeoff, or
- To stop the aircraft.

VR:

VR is the speed at which rotation is initiated to reach V2 before an altitude of 35 ft.

V2:

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 %).



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
TAKEOFF PERFORMANCE

DISTANCES DEFINITIONS

Ident.: PERF-TO-00006992.0001001 / 23 NOV 09
Criteria: SA

EASA 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 TORA 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.

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	PERFORMANCE TAKEOFF PERFORMANCE

TAKEOFF PERFORMANCE

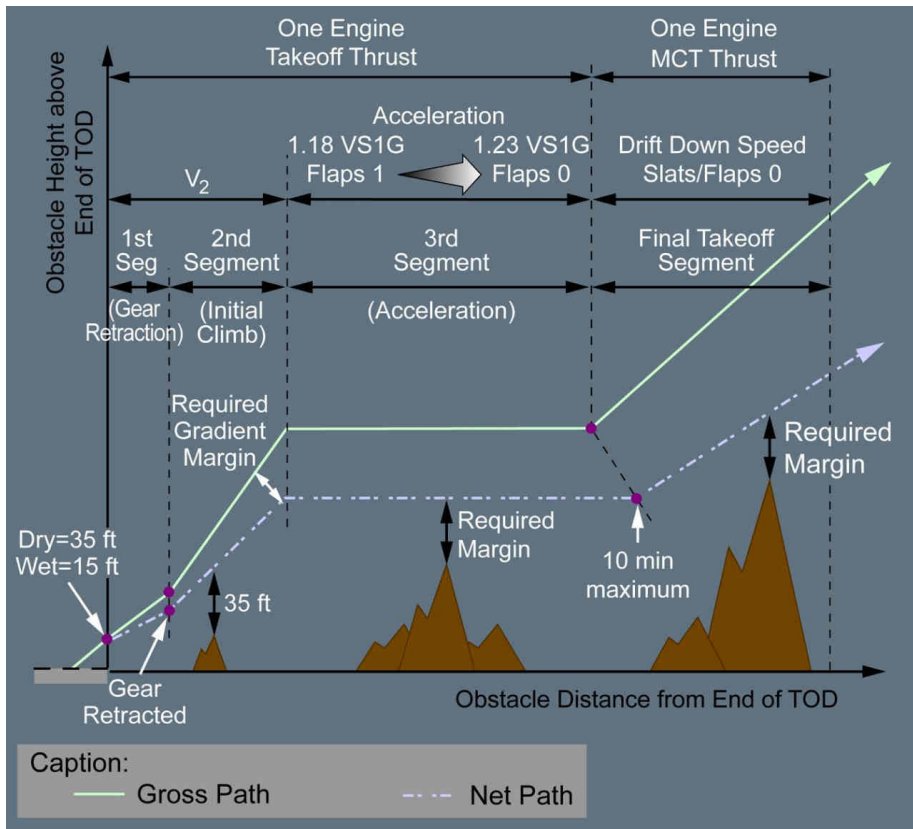
Ident.: PERF-TO-00006904.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

For takeoff performance determination on dry and wet runway, 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.

TAKEOFF FLIGHT PATH

 Ident.: PERF-TO-00006935.0001001 / 04 APR 11
 Criteria: SA

EASA APPROVED




A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
IN FLIGHT PERFORMANCE

IN-FLIGHT PERFORMANCE

Ident.: **PERF-FLT-00006995.0002001 / 04 APR 11**

EASA APPROVED

Criteria: (320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233)

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 used. *Refer to PERF-OCTO Performance Database*

Note: *In the case of severe icing conditions, ice accretion may occur on aircraft surfaces that are not heated. If ice accretion occurs, reduce the one-engine inoperative net ceiling by 2 000 ft.*



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
IN FLIGHT PERFORMANCE

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A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE

LANDING PERFORMANCE

APPROACH CLIMB AND LANDING CLIMB

Ident.: **PERF-LDG-00006909.0002001 / 02 DEC 13**

EASA APPROVED

Criteria: (320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233)

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 modules at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database*

- Note:
1. The go around gradient conditions in landing configuration with two engines operative are never limiting.
 2. 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 formation on the non heated structure:
 - Decrease the approach/landing climb limiting weight by 4.5 %.
 - For landing, increase the approach and landing speeds by:
 - 10 kt in CONF 3
 - 5 kt in CONF FULL
 - For landing distance determination select ice accretion in the AFM_OCTO input data Interface.

APPROACH AND LANDING SPEEDS DEFINITION

Ident.: **PERF-LDG-00006996.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

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.



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE

LANDING PERFORMANCE

LANDING DISTANCE DEFINITIONS

Ident.: PERF-LDG-00006997.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

ACTUAL LANDING DISTANCE (ALD)

The Actual Landing Distance (ALD) 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 touch down, 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 Actual Landing Distance (ALD) divided by 0.6 assuming the surface is dry.

Under wet runway conditions, the Required Landing Distance (RLD) is increased by 15 %.

LANDING PERFORMANCE

Ident.: PERF-LDG-00006910.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

For landing distance determination, the Performance Engineer's Programs/AFM_OCTO approved FM modules at the latest approved revision must be used. *Refer to PERF-OCTO Performance Database.*



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
LANDING PERFORMANCE

AUTOLAND LANDING DISTANCE INCREMENTS

Ident.: PERF-LDG-00006998.0010001 / 23 NOV 09

EASA APPROVED

Criteria: (320-231 or 320-232 or 320-233)

When performing an automatic landing, the required landing distance on dry runway of this chapter must be increased as follows:

		CONF 3	CONF FULL
WEIGHT	WIND (kt)	LANDING DISTANCE INCREMENT	LANDING DISTANCE INCREMENT
45 000 kg (99 200 lb)	- 10	0	0
	- 5	0	0
	0	0	0
	5	0	0
	10	16 m/53 ft	0
	15	34 m/113 ft	0
	20	53 m/173 ft	0
	25	70 m/230 ft	0
	30	86 m/283 ft	07 m/24 ft
50 000 kg (110 230 lb)	- 10	0	0
	- 5	0	0
	0	0	0
	5	0	0
	10	0	0
	15	0	0
	20	14 m/48 ft	0
	25	33 m/109 ft	0
	30	52 m/169 ft	0
55 000 kg (121 250 lb)	- 10	0	0
	- 5	0	0
	0	0	0
	5	0	0
	10	0	0
	15	0	0
	20	0	0
	25	0	0
	30	15 m/51 ft	0
60 000 kg (132 275 lb)	- 10	0	0
	- 5	0	0
	0	0	0
	5	0	0
	10	0	0
	15	0	0
	20	0	0
	25	0	0
	30	2 m/8 ft	0

Continued on the following page



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
LANDING PERFORMANCE

Continued from the previous page

		CONF 3	CONF FULL
WEIGHT	WIND (kt)	LANDING DISTANCE INCREMENT	LANDING DISTANCE INCREMENT
65 000 kg (143 300 lb)	- 10	0	0
	- 5	0	0
	0	0	0
	5	0	0
	10	0	0
	15	0	0
	20	0	0
	25	0	0
	30	22 m/73 ft	0

Increase by 15 % on foreseen wet runway.

PERFORMANCE DATABASEIdent.: **PERF-OCTO-00006895.0055001 / 04 APR 11****EASA APPROVED**

Criteria: (320-232 and 34221)

Takeoff, final takeoff, en route net flight path (single engine), go-around and landing performance are provided in the Performance Engineer's Programs/AFM_OCTO approved FM module:

- At the revision 21.0 or higher using approved aircraft database reference **AE232C01**, or
- At the revision 21.0 or higher using approved aircraft database reference **AE232D01**, or
- At the revision 23.1 or higher using approved aircraft database reference **AE232E02**, or
- At the revision 26.0 or higher using approved aircraft databases reference **AE232G03** or **AE232G04**.

- Note:
1. Only the PC version of this program is approved.
 2. For operations at El Salvador (SCES) airport (optional: mod 28177), only the approved databases reference **AE232E02** or **AE232G03** or **AE232G04** must be used.
 3. For operations on runways with a slope between 2 % and 3 % (optional: mod 37251), only the approved databases reference **AE232E02** or **AE232G03** or **AE232G04** must be used.
 4. For operations on Himalayan routes, only the approved databases reference **AE232E02** or **AE232G03** or **AE232G04** must be used.
 5. For takeoff on PFC/grooved runways (optional: mod 35075), only the approved databases reference **AE232E02** or **AE232G03** or **AE232G04** must be used.
 6. For landing on PFC/grooved runways (optional: mod 37457), only the approved databases reference **AE232G03** or **AE232G04** must be used.
 7. For derated takeoff (optional: mod 35932), only the approved databases reference **AE232G03** or **AE232G04** must be used.
 8. For extended flex temperature (optional: mod 36750) performance computation, only the approved databases reference **AE232G03** or **AE232G04** must be used.
 9. For extended forward CG range at MTOW=78t (optional: mod 38525 or 151634) performance computation, only the approved database reference **AE232G04** must be used.

Launch PEP.



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
PERFORMANCE DATABASE

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A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
ENGINE MANAGEMENT

TAKEOFF THRUST

Ident.: PERF-ENG-00006989.0013001 / 23 NOV 09
Criteria: 320-232

EASA APPROVED

V2527 - TAKEOFF M = .0

V2527-A5		TAKEOFF EPR				NO AIR BLEED				MACH=.000			
CORRECTIONS FOR AIR BLEED													
AIR CONDITIONING ON				ADD -.010 TO EPR									
ENG ANTI-ICE ON				READ AT OAT +5.(C)									
ENG ANTI-ICE AND WING ANTI-ICE ON				READ AT OAT +5.(C) AND ADD -.007 TO EPR									
OAT (°C)	PRESSURE ALTITUDE (FT)												
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.		
-60.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.537		
-40.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.537		
-20.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.537		
0.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.537		
10.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.537		
20.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.537		
22.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.537		
24.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.534	1.533		
26.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.524	1.525	1.523		
28.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.514	1.515	1.513	1.512		
30.0	1.378	1.397	1.413	1.430	1.455	1.479	1.504	1.505	1.504	1.503	1.501		
32.0	1.378	1.397	1.413	1.430	1.455	1.479	1.495	1.494	1.493	1.492	1.491		
34.0	1.378	1.397	1.413	1.430	1.455	1.476	1.485	1.484	1.483	1.482	1.480		
36.0	1.378	1.397	1.413	1.430	1.455	1.466	1.474	1.474	1.473	1.471	1.469		
38.0	1.378	1.397	1.413	1.430	1.448	1.456	1.464	1.464	1.462	1.460	1.459		
40.0	1.378	1.397	1.413	1.429	1.438	1.446	1.454	1.453	1.451	1.450	1.448		
42.0	1.378	1.397	1.413	1.419	1.428	1.436	1.444	1.442	1.441	1.440	1.438		
44.0	1.378	1.397	1.409	1.409	1.418	1.426	1.433	1.432	1.431	1.429	1.428		
46.0	1.378	1.397	1.400	1.399	1.408	1.415	1.423	1.422	1.421	1.419	1.418		
48.0	1.378	1.390	1.391	1.390	1.398	1.405	1.413	1.412	1.411	1.409	1.408		
50.0	1.378	1.383	1.381	1.380	1.388	1.398	1.403	1.402	1.401	1.399	1.398		
52.0	1.374	1.373	1.372	1.371	1.379	1.386	1.393	1.392	1.391	1.389	1.388		
54.0	1.364	1.364	1.363	1.362	1.369	1.377	1.383	1.382	1.381	1.379			
56.0	1.355	1.355	1.354	1.352	1.360	1.367	1.374	1.372	1.371				
58.0	1.346	1.346	1.345	1.343	1.351	1.358	1.364	1.363					
60.0	1.337	1.337	1.336	1.334	1.341	1.348	1.354						
62.0	1.329	1.329	1.327	1.325	1.332	1.339							
64.0	1.320	1.320	1.318	1.316	1.323								
66.0	1.312	1.311	1.310	1.307									
68.0	1.303	1.303	1.301										
70.0	1.295	1.294											
72.0													
74.0													
76.0													
78.0													
DATA GIVEN ABOVE ISA+40 ARE TO BE USED FOR FLEX TAKEOFF ONLY													



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
ENGINE MANAGEMENT

V2527 - TAKEOFF M = .0

V2527-A5		TAKEOFF EPR										NO AIR BLEED		MACH=.000	
CORRECTIONS FOR AIR BLEED															
AIR CONDITIONING ON				ADD -.015 TO EPR											
ENG ANTI-ICE ON				READ AT OAT +5.(C)											
ENG ANTI-ICE AND WING ANTI-ICE ON				READ AT OAT +5.(C) AND ADD -.010 TO EPR											
OAT (°C)	PRESSURE ALTITUDE (FT)														
	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.				
-60.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.567	1.570				
-40.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.567	1.570				
-20.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.567	1.570				
0.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.567	1.570				
5.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.567	1.570				
10.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.567	1.570				
12.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.567	1.569				
14.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.562	1.564	1.565				
16.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.556	1.557	1.559	1.561				
18.0	1.504	1.514	1.524	1.534	1.540	1.545	1.551	1.551	1.552	1.553	1.551				
20.0	1.504	1.514	1.524	1.534	1.540	1.545	1.544	1.544	1.544	1.541	1.539				
22.0	1.504	1.514	1.524	1.534	1.540	1.538	1.536	1.536	1.533	1.530	1.528				
24.0	1.504	1.514	1.524	1.534	1.531	1.529	1.528	1.525	1.522	1.518	1.516				
26.0	1.504	1.514	1.524	1.525	1.521	1.519	1.517	1.514	1.510	1.506	1.504				
28.0	1.504	1.514	1.515	1.513	1.511	1.508	1.506	1.502	1.498	1.494	1.493				
30.0	1.504	1.505	1.504	1.503	1.500	1.498	1.494	1.491	1.487	1.484	1.482				
32.0	1.495	1.494	1.493	1.492	1.490	1.487	1.483	1.479	1.476	1.473	1.471				
34.0	1.485	1.484	1.483	1.482	1.479	1.475	1.472	1.469	1.466	1.463	1.461				
36.0	1.474	1.474	1.473	1.471	1.468	1.465	1.462	1.459	1.455	1.452	1.450				
38.0	1.464	1.464	1.462	1.460	1.457	1.454	1.451	1.448	1.445	1.441	1.440				
40.0	1.454	1.453	1.451	1.450	1.447	1.444	1.441	1.438	1.434	1.431	1.429				
42.0	1.444	1.442	1.441	1.440	1.437	1.434	1.431	1.427	1.424	1.420					
44.0	1.433	1.432	1.431	1.429	1.427	1.424	1.420	1.417	1.413						
46.0	1.423	1.422	1.421	1.419	1.416	1.413	1.410	1.406							
48.0	1.413	1.412	1.411	1.409	1.406	1.403	1.400								
50.0	1.403	1.402	1.401	1.399	1.396	1.393									
52.0	1.393	1.392	1.391	1.389	1.386										
54.0	1.383	1.382	1.381	1.379											
56.0	1.374	1.372	1.371												
58.0	1.364	1.363													
DATA GIVEN ABOVE ISA+40 ARE TO BE USED FOR FLEX TAKEOFF ONLY															



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
ENGINE MANAGEMENT

MAXIMUM CONTINUOUS THRUST

Ident.: PERF-ENG-00007420.0011001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-232 or 320-233) and 34221)

V2527-A5/V2527E-A5 - MAXIMUM CONTINUOUS - VC = 230 kt

V2527-A5 V2527E-A5		MAXIMUM CONTINUOUS EPR				AIR COND ON *				VC=230KT			
EPR CORRECTIONS FOR AIR BLEED													
AIR CONDITIONING OFF					.017								
WACELLE ANTI-ICE ON					-.017								
WACELLE AND WING ANTI-ICE ON					-.037								
TAT (C)	PRESSURE ALTITUDE (FT)												
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.		
-50.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.505	1.494		
-46.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.505	1.494		
-42.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.505	1.494		
-38.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.505	1.494		
-34.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.505	1.494		
-30.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.505	1.494		
-26.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.505	1.494		
-22.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.502	1.494		
-18.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.492	1.482	1.477		
-14.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.471	1.462	1.455		
-10.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.591	1.448	1.440	1.433		
-6.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.575	1.424	1.415	1.408		
-2.0	1.285	1.298	1.335	1.442	1.490	1.554	1.588	1.553	1.397	1.393	1.385		
2.0	1.285	1.298	1.335	1.442	1.490	1.554	1.569	1.532	1.375	1.370	1.362		
6.0	1.285	1.298	1.335	1.442	1.490	1.538	1.548	1.508	1.352	1.348	1.340		
10.0	1.285	1.298	1.335	1.442	1.490	1.513	1.526	1.483	1.330	1.325	1.317		
14.0	1.285	1.298	1.335	1.442	1.474	1.488	1.503	1.458	1.308				
18.0	1.285	1.298	1.335	1.442	1.449	1.483	1.478	1.432					
22.0	1.285	1.298	1.335	1.418	1.424	1.438	1.453	1.407					
26.0	1.285	1.298	1.327	1.393	1.399	1.413	1.428						
30.0	1.285	1.294	1.316	1.368	1.375	1.388	1.403						
34.0	1.279	1.282	1.305	1.345	1.352	1.362							
38.0	1.265	1.269	1.296	1.325	1.329								
42.0	1.251	1.259	1.285	1.306	1.306								
46.0	1.239	1.249	1.274	1.287									
50.0	1.229	1.239	1.263										
54.0	1.220	1.229	1.252										
58.0	1.211	1.219											
62.0	1.201												
66.0													



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
ENGINE MANAGEMENT

* One pack operative.



A320
AIRPLANE FLIGHT MANUAL

PERFORMANCE
ENGINE MANAGEMENT

GO-AROUND THRUST

Ident.: PERF-ENG-00007455.0006001 / 23 NOV 09

EASA APPROVED

Criteria: 320-232

V2527 - GO-AROUND M = .225

V2527-A5		GO-AROUND EPR						AIR COND ON		MACH=.225	
CORRECTIONS FOR AIR BLEED											
AIR CONDITIONING OFF					ADD 0.010 TO EPR						
NACELLE ANTI-ICE ON					READ AT TAT +5.(C)						
NACELLE ANTI-ICE AND WING ANTI-ICE ON					READ AT TAT +5.(C) AND ADD -0.007 TO EPR						
	PRESSURE ALTITUDE (FT)										
TAT(C)	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
-40.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
-20.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
0.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
10.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
20.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
22.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
24.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
26.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.507	1.509
28.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.496	1.502	1.500
30.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.485	1.492	1.492	1.491
32.	1.391	1.411	1.428	1.446	1.457	1.466	1.475	1.482	1.482	1.482	1.480
34.	1.391	1.411	1.428	1.446	1.457	1.466	1.471	1.472	1.472	1.471	1.470
36.	1.391	1.411	1.428	1.446	1.457	1.466	1.462	1.463	1.462	1.460	1.459
38.	1.391	1.411	1.428	1.446	1.457	1.458	1.453	1.452	1.451	1.450	1.448
40.	1.391	1.411	1.428	1.446	1.455	1.449	1.443	1.442	1.440	1.439	1.438
42.	1.391	1.411	1.428	1.446	1.444	1.438	1.433	1.431	1.430	1.429	
44.	1.391	1.411	1.428	1.439	1.433	1.427	1.422	1.421	1.420		
46.	1.391	1.411	1.428	1.428	1.422	1.416	1.411	1.410			
48.	1.391	1.411	1.417	1.416	1.411	1.406	1.401				
50.	1.391	1.407	1.406	1.405	1.400	1.395					
52.	1.391	1.396	1.396	1.395	1.390						
54.	1.388	1.386	1.386	1.385							
56.	1.377	1.377	1.376								
58.	1.368	1.367									
60.	1.359										



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AIRPLANE FLIGHT MANUAL

PERFORMANCE
ENGINE MANAGEMENT

V2527 - GO-AROUND M = .225

V2527-A5		GO-AROUND EPR				AIR COND ON				MACH=.225			
CORRECTIONS FOR AIR BLEED													
AIR CONDITIONING OFF					ADD 0.015 TO EPR								
NACELLE ANTI-ICE ON					READ AT TAT +5.(C)								
NACELLE ANTI-ICE AND WING ANTI-ICE ON					READ AT TAT +5.(C) AND ADD -0.010 TO EPR								
PRESSURE ALTITUDE (FT)													
TAT(C)	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.		
-60.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
-40.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
-20.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
0.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
5.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
10.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
12.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
14.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.539	1.542		
16.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.534	1.537	1.538		
18.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.529	1.532	1.533	1.534		
20.	1.475	1.485	1.496	1.507	1.512	1.518	1.523	1.528	1.528	1.529	1.528		
22.	1.475	1.485	1.496	1.507	1.512	1.518	1.520	1.520	1.521	1.518	1.518		
24.	1.475	1.485	1.496	1.507	1.512	1.515	1.513	1.513	1.510	1.508	1.504		
26.	1.475	1.485	1.496	1.507	1.509	1.508	1.508	1.502	1.499	1.494	1.492		
28.	1.475	1.485	1.496	1.502	1.498	1.498	1.495	1.491	1.487	1.483	1.480		
30.	1.475	1.485	1.492	1.492	1.490	1.487	1.484	1.480	1.476	1.471			
32.	1.475	1.482	1.482	1.482	1.479	1.476	1.473	1.469	1.464				
34.	1.471	1.472	1.472	1.471	1.468	1.465	1.462	1.458					
36.	1.462	1.463	1.462	1.460	1.457	1.455	1.451						
38.	1.453	1.452	1.451	1.450	1.447	1.444							
40.	1.443	1.442	1.440	1.439	1.437								
42.	1.433	1.431	1.430	1.429									
44.	1.422	1.421	1.420										
46.	1.411	1.410											
48.	1.401												

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APPENDICES AND SUPPLEMENTS

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APPENDICES AND SUPPLEMENTS

EXTERNAL NOISE

GENERAL

Ident.: APP-NOI-00007036.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (321-111 or 321-112 or 321-131 or 321-231 or 321-232 or A318 or A319 or A320)

NOISE CHARACTERISTICS

No determination has been made by the EASA that the noise levels of this aircraft are or should be acceptable for operation at, into, or out of, any airport.

NOISE LEVELS

Noise levels shown in this supplement comply with EASA CS-36, JAR 36, 14 CFR (FAR) Part 36 Stage 4, and ICAO Annex 16 Chapter 4, noise requirements and were obtained by analysis of approved data from approved noise tests.

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 $V_2 + 10$ kt and not greater than $V_2 + 20$ 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 $V_{REF} + 10$ kt, was used with APU on, air conditioning system on, forward center of gravity, landing gear extended and configuration FULL.



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APPENDICES AND SUPPLEMENTS

EXTERNAL NOISE

EXTERNAL NOISE

Ident.: APP-NOI-00006882.0009001 / 23 NOV 09

EASA APPROVED

Criteria: (320-232 or 320-233)

CONFIGURATION

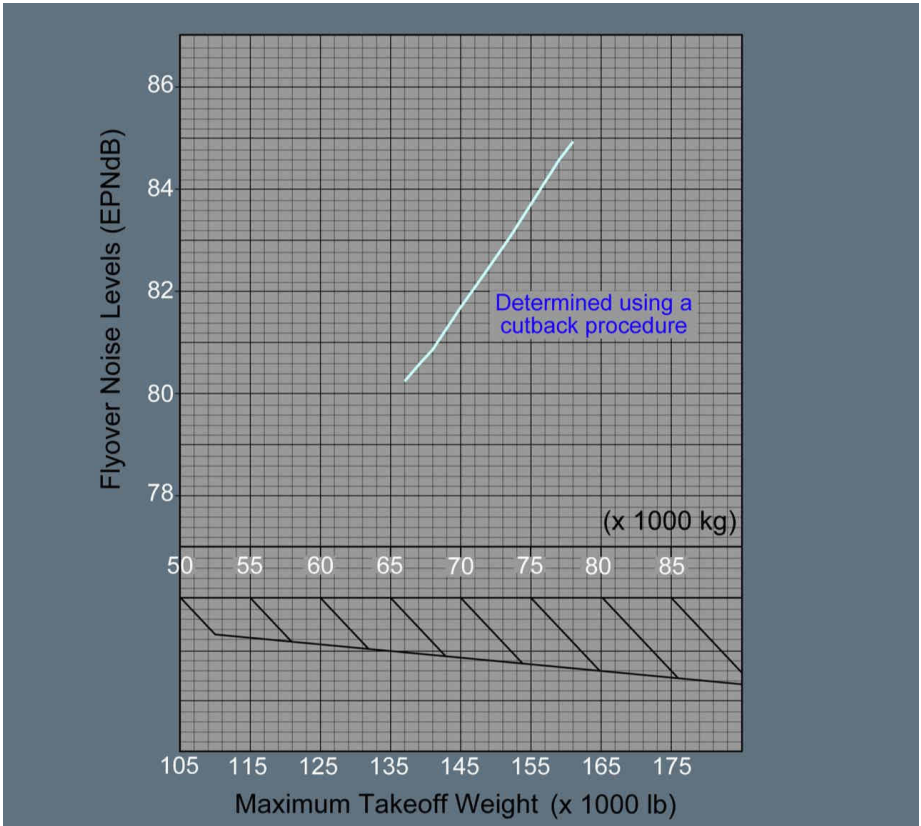
Engines: IAE V2527-A5 or IAE V2527E-A5 - 26 500 lb ideal sea level static thrust.

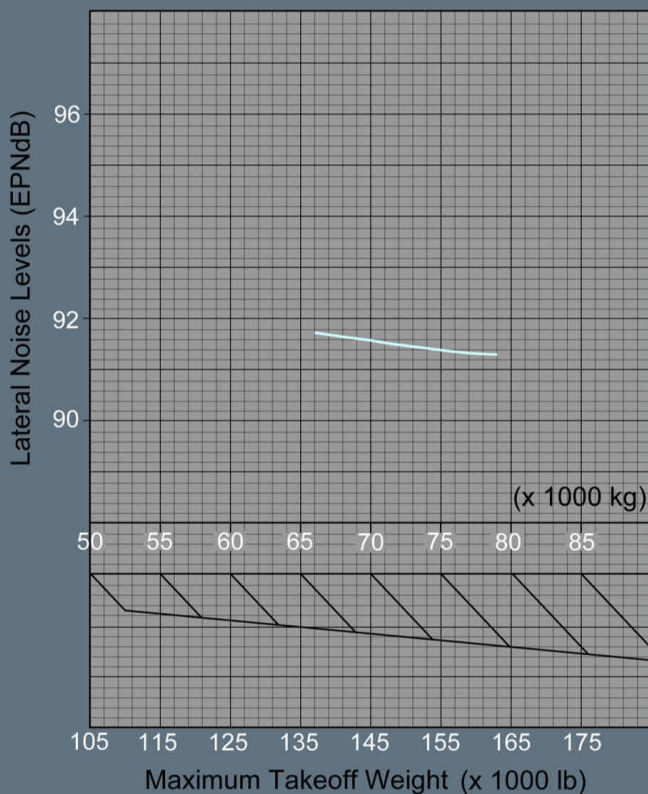
Model: A320-232 and A320-233

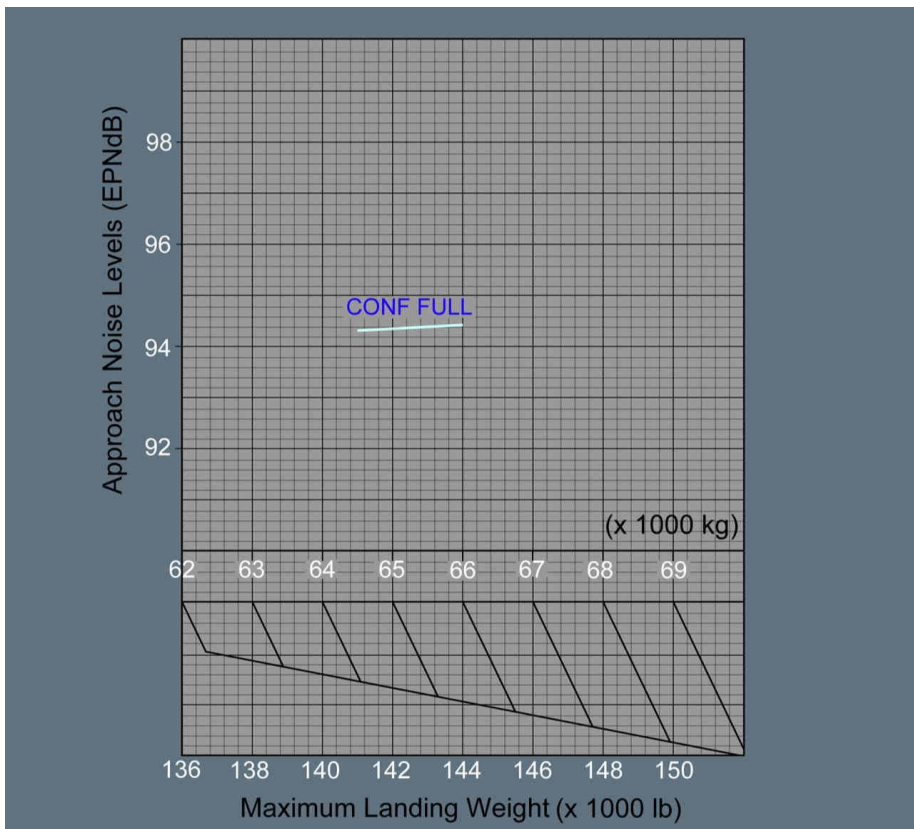
Nacelle treatment: Basic configuration including inlet and fan duct treatments.

CERTIFICATED NOISE LEVELS

EASA CS-36, ICAO Annex 16 Chapter 4, JAR-36 and 14 CFR (FAR) Part 36 Stage 4 certificated noise levels are determined by entering these graphs at the maximum weights defined in the LIMITATIONS chapter of this AFM. *Refer to LIM-WGHT Weight Limitations.*

Flyover Noise Levels


Lateral Noise Levels


Approach Noise Levels




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APPENDICES AND SUPPLEMENTS

EXTERNAL NOISE

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GENERALIdent.: **APP-TCAS-00007060.0003001 / 23 NOV 09****EASA APPROVED**

Criteria: ((A319 or A320 or A321) and (26877 or 27698 or 27740 or 27753 or 28738 or 28739 or 30163))

This supplement is applicable to operations with the TCAS.

TCAS Traffic Advisory and Resolution Advisory modes can be used without any restriction when operating within the certified limits of the aircraft flight envelope.

Unless amended in this supplement, all the chapters of this AFM remain applicable.

PROCEDURESIdent.: **APP-TCAS-00007062.0002001 / 23 NOV 09****EASA APPROVED**

Criteria: (SA and (26877 or 27698 or 27740 or 27753 or 28738 or 28739 or 30163))

For normal TCAS operation, select :

- Transponder : ON or AUTO
- ALT report : ON
- TCAS : TA/RA

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 Resolution Advisory (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.



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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS
TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM

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APPENDICES AND SUPPLEMENTS

DISPATCH WITH INOPERATIVE ITEMS

GENERAL

Ident.: APP-INOP-00006946.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

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-00007064.0001001 / 23 NOV 09
Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

EASA APPROVED

For takeoff, en route net flight path and landing performance determination the Performance Engineer's Program / 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 pair of spoilers inoperative in the retracted position	- Accelerate Stop Distance (ASD) and decision speed - Landing distance <i>Note: In case only spoilers 5 are inop. on each wing, the effect on ASD, decision speed and landing distance is negligible.</i>
	Two pairs (surfaces 1 and 2) of spoilers inoperative in the retracted position	- Accelerate Stop Distance (ASD) and decision speed - Landing distance

Continued on the following page

APPENDICES AND SUPPLEMENTS

DISPATCH WITH INOPERATIVE ITEMS

Continued from the previous page

	Dispatch Case	Affected Performance
	All ground spoilers control system inoperative	- Accelerate Stop Distance (ASD) and decision speed - Landing distance
ATA 30	One or more engine de-icing valve in open position	- Takeoff Distance (TOD) - Takeoff Run (TOR) - Accelerate Stop Distance (ASD) - First and second segments - Takeoff flight path - Final takeoff gradient - En route net flight path - Approach and landing climb
ATA 32	One brake inoperative	- Accelerate Stop Distance (ASD) and decision speed - Landing distance
ATA 70	Ground idle system inoperative	- Accelerate Stop Distance (ASD) - Landing distance
	Dispatch in mode N1 (EPR Control mode inoperative)	- Takeoff Distance (TOD) - Takeoff Run (TOR) - Accelerate Stop Distance (ASD) - First and second segments - Final takeoff gradient - Approach and climb gradient - En route net flight path - Takeoff flight path



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APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

GENERAL

GENERAL

Ident.: APP-LGDN-GEN-00007074.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

This supplement is applicable to dispatch a revenue flight with the landing gear down and the landing gear doors closed.

Unless amended in this supplement, all the chapters of this AFM remain applicable.



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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

GENERAL

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APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

LIMITATIONS

LIMITATIONS

Ident.: APP-LGDN-LIM-00007075.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (A320 and 28160)

VMO/MMO : 235 kt/M 0.6

Flight in forecasted icing conditions is not permitted.

Ditching has not been demonstrated.

Managed vertical modes CLB and DES must not be used.

Managed speed (except in approach) must not be used.

The FMS fuel predictions must be disregarded.



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APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

LIMITATIONS

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

EMERGENCY PROCEDURES

ENG DUAL FAILURE

Ident.: APP-LGDN-EMER-00007079.0009001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-232 or 320-233) and 28160)

■ If APU running:

Perform an assisted relight

■ If APU not running:

Attempt an APU start

● If unsuccessful:

Accelerate to 260 kt to attempt a windmill relight. In that case, disregard VMO warning.

Flight controls are in direct law: Use "man pitch trim" as necessary.

● In approach:

Set CONF 1 above or at 200 kt.

Do not select flaps/slats below 200 kt.



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APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

EMERGENCY PROCEDURES

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

ABNORMAL PROCEDURES

F/CTL FLIGHT CONTROLS FAILURE

Ident.: APP-LGDN-ABN-00007078.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

A flight control failure case normally leading to ALTN LAW will lead to DIRECT LAW.



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APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

ABNORMAL PROCEDURES

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

NORMAL PROCEDURES

PREFLIGHT CHECK

Ident.: APP-LGDN-NORM-00007076.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

The L/G DOWN VMO/MMO switch located in the avionic bay on 188VU must be set on L/G DOWN position.



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APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

NORMAL PROCEDURES

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

PERFORMANCE

PERFORMANCE

Ident.: APP-LGDN-PERF-00007354.0002001 / 23 NOV 09

EASA APPROVED

Criteria: SA

For takeoff, en route net flight path and go-around performance determination the Performance Engineer's Programs/AFM_OCTO approved FM module at the latest approved revision given must be used. *Refer to PERF-OCTO Performance Database.*

Select the LANDING GEARS EXTENDED case in the SPECIAL CASES field of the input data for AFM performance calculation.



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APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

PERFORMANCE

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

FLIGHT WITH LANDING GEAR DOWN

APPENDICES AND SUPPLEMENTS

APPENDICES AND SUPPLEMENTS

Ident.: APP-LGDN-APP-00009236.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

The combination with the following supplement is not allowed:

- Extended Operations ETOPS (if applicable)



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FLIGHT WITH LANDING GEAR DOWN

APPENDICES AND SUPPLEMENTS

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APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

GENERAL

GENERAL

Ident.: **APP-N1-GEN-00007099.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

This supplement is applicable to dispatch the aircraft with both FADECs in rated N1 mode.
Unless amended in this supplement, all the chapters of this AFM remain applicable.



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AIRPLANE FLIGHT MANUAL

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DISPATCH IN RATED N1 MODE

GENERAL

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APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

LIMITATIONS

LIMITATIONS

Ident.: APP-N1-LIM-00007101.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

Reduced thrust takeoff is not allowed.

Dispatch in degraded N1 mode (unrated N1 mode) is not allowed.

Note: Autothrust is inoperative.

The N1 value is dependant upon ambient conditions, these may limit the N1 to a value lower than that given in LIMITATION chapter of this AFM. (*Refer to APP-N1-PERF Engine Management - Takeoff Thrust, Refer to APP-N1-PERF Engine Management - Maximum Continuous Thrust, Refer to APP-N1-PERF Engine Management - Go-Around Thrust*)



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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

LIMITATIONS

Intentionally left blank

TAKEOFF PROCEDURE

Ident.: APP-N1-NORM-00007090.0002001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-232 or 320-233) and 32656)

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.

Apply 50 % N1 on both engines with brakes on.

Note: Brakes may be released so as to perform a rolling takeoff.

■ **If crosswind at or below 20 kt and no tailwind:**

Release brakes with stick half forward.

Apply thrust up to TOGA thrust whilst maintaining stick half forward up to 80 kt.

■ **If crosswind above 20 kt or if tailwind:**

Release brakes with stick full forward.

Apply 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.

Note: The FADEC includes a Keep-Out Zone (KOZ) which prevents the engine from being stabilized between an approximate range of 60 % to 74 % N1 (limits are a function of the outside air temperature). Therefore, during engine acceleration on ground, the pilot may notice a non-linear thrust response to thrust lever movement.

Check takeoff N1 is set prior to reaching 80 kt.

● **At VR:**

Rotate the aircraft with a positive side stick input to achieve a normal and continuous rotation rate to the pitch attitude necessary to maintain an airspeed at or above $V_2 + 10$ 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:**

Accelerate up to at least 1.18 VS1G of configuration (1 + F) or "F" speed if CONF 2 or 3 in use.

Select slats/flaps position 1 and accelerate up to at least 1.23 VS1G of clean configuration ("S" speed).



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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

NORMAL PROCEDURES

Select slats/flaps position 0 and accelerate up to 1.36 VS1G ("green dot" speed).

- Note:
1. For takeoff in configuration 1 (1 + F), F speed is not displayed.
 2. If takeoff is performed with packs off, pack 1 should be selected ON after thrust reduction to CLB.



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APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

PERFORMANCE

Ident.: APP-N1-PERF-00007094.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

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.



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APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

ENGINE MANAGEMENT - TAKEOFF THRUST

Ident.: APP-N1-PERF-00006850.0002001 / 04 APR 11

Criteria: 320-232

EASA APPROVED

V2527-A5 - TAKEOFF N1 (%) - RATED N1 MODE

NO AIR BLEED MACH=.000

OAT (C)	PRESSURE ALTITUDE (FT)										
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.0	74.6	75.4	76.2	76.9	77.5	78.0	78.4	78.9	79.5	80.0	80.1
-40.0	78.0	78.9	79.6	80.5	81.0	81.5	82.0	82.6	83.1	83.7	83.8
-20.0	81.3	82.2	83.0	83.8	84.4	85.0	85.5	86.0	86.6	87.2	87.3
0.0	84.4	85.4	86.2	87.1	87.7	88.3	88.8	89.4	90.0	90.6	90.7
10.0	86.0	86.9	87.8	88.7	89.3	89.9	90.4	91.0	91.6	92.2	92.4
20.0	87.5	88.4	89.3	90.2	90.9	91.4	92.0	92.6	93.2	93.8	94.0
22.0	87.8	88.7	89.6	90.5	91.2	91.8	92.3	92.9	93.5	94.1	94.3
24.0	88.1	89.0	89.9	90.8	91.5	92.1	92.6	93.2	93.8	94.4	94.6
26.0	88.3	89.3	90.2	91.1	91.8	92.4	92.9	93.5	94.1	94.8	94.8
28.0	88.6	89.6	90.5	91.4	92.1	92.7	93.2	93.8	94.5	94.7	94.6
30.0	88.9	89.9	90.8	91.7	92.4	93.0	93.5	94.1	94.4	94.4	94.3
32.0	89.2	90.2	91.1	92.1	92.7	93.3	93.8	94.1	94.1	94.1	94.0
34.0	89.5	90.5	91.4	92.4	93.0	93.6	93.8	93.8	93.8	93.8	93.7
36.0	89.8	90.8	91.7	92.7	93.3	93.8	93.6	93.6	93.5	93.5	93.4
38.0	90.1	91.1	92.0	93.0	93.6	93.6	93.3	93.3	93.2	93.2	93.1
40.0	90.4	91.4	92.3	93.2	93.6	93.3	93.1	93.0	93.0		
42.0	90.7	91.7	92.6	93.5	93.3	93.1	92.8	92.8			
44.0	91.0	92.0	92.9	93.3	93.0	92.8	92.6				
46.0	91.3	92.3	93.0	93.0	92.8	92.6					
48.0	91.5	92.6	92.7	92.7	92.5						
50.0	91.8	92.5	92.5	92.5							
52.0	92.1	92.2	92.2								
54.0	92.0	92.0									
56.0	91.8										
58.0											

OAT < TREF

OAT > TREF

N1 CORRECTIONS FOR AIR BLEED

AIR CONDITIONING ON : ADD -0.4 TO N1

NACELLE ANTI ICE ON : ADD -0.7 TO N1 WHEN OAT > TREF

NACELLE AND WING ANTI ICE ON : ADD -0.3 TO N1 WHEN OAT < TREF AND -1.0 TO N1 WHEN OAT > TREF

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

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V2527-A5 - TAKEOFF N1 (%) - RATED N1 MODE											
NO AIR BLEED						MACH=.000					
OAT (C)	PRESSURE ALTITUDE (FT)										
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
OAT < TREF						OAT > TREF					
N1 CORRECTIONS FOR AIR BLEED											
AIR CONDITIONING ON : ADD -0.4 TO N1											
NACELLE ANTI ICE ON : ADD -0.7 TO N1 WHEN OAT > TREF											
NACELLE AND WING ANTI ICE ON : ADD -0.3 TO N1 WHEN OAT < TREF AND -1.0 TO N1 WHEN OAT > TREF											

V2527-A5 - TAKEOFF N1 (%) - RATED N1 MODE											
NO AIR BLEED						MACH=.000					
OAT (C)	PRESSURE ALTITUDE (FT)										
	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
-60.0	78.4	78.9	79.5	80.0	80.3	80.6	80.9	81.2	81.5	81.9	82.0
-40.0	82.0	82.6	83.1	83.7	84.0	84.3	84.6	84.9	85.3	85.6	85.8
-20.0	85.5	86.0	86.6	87.2	87.5	87.8	88.1	88.5	88.8	89.2	89.4
0.0	88.8	89.4	90.0	90.6	90.9	91.2	91.6	91.9	92.3	92.7	92.9
5.0	89.6	90.2	90.8	91.4	91.7	92.0	92.4	92.7	93.1	93.5	93.7
10.0	90.4	91.0	91.6	92.2	92.5	92.9	93.2	93.6	94.0	94.4	94.6
12.0	90.7	91.3	91.9	92.5	92.9	93.2	93.5	93.9	94.3	94.7	94.9
14.0	91.0	91.6	92.2	92.8	93.2	93.5	93.9	94.2	94.6	95.0	95.2
16.0	91.3	91.9	92.6	93.2	93.5	93.9	94.2	94.5	95.0	95.1	95.2
18.0	91.6	92.3	92.9	93.5	93.8	94.2	94.5	94.9	95.0	95.2	95.3
20.0	92.0	92.6	93.2	93.8	94.2	94.5	94.8	94.9	95.0	95.1	95.0
22.0	92.3	92.9	93.5	94.1	94.5	94.8	94.9	94.9	95.0	94.8	94.7
24.0	92.6	93.2	93.8	94.4	94.8	94.8	94.8	94.8	94.6	94.5	94.4
26.0	92.9	93.5	94.1	94.8	94.7	94.6	94.6	94.5	94.3	94.1	94.0
28.0	93.2	93.8	94.5	94.7	94.5	94.5	94.3	94.2	94.0		
30.0	93.5	94.1	94.4	94.4	94.3	94.1	94.0	93.8			
32.0	93.8	94.1	94.1	94.1	94.0	93.8	93.7				
OAT < TREF						OAT > TREF					
N1 CORRECTIONS FOR AIR BLEED											
AIR CONDITIONING ON : ADD -0.7 TO N1											
NACELLE ANTI ICE ON : ADD -1.0 TO N1 WHEN OAT > TREF											
NACELLE AND WING ANTI ICE ON : ADD -0.5 TO N1 WHEN OAT < TREF AND -1.5 TO N1 WHEN OAT > TREF											

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

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V2527-A5 - TAKEOFF N1 (%) - RATED N1 MODE

NO AIR BLEED						MACH=.000					
OAT (C)	PRESSURE ALTITUDE (FT)										
	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
34.0	93.8	93.8	93.8	93.8	93.7	93.5					
36.0	93.6	93.6	93.5	93.5	93.4						
38.0	93.3	93.3	93.2	93.2							
40.0	93.1	93.0	93.0								
42.0	92.8	92.8									
44.0	92.6										
46.0											
48.0											
OAT < TREF						OAT > TREF					
N1 CORRECTIONS FOR AIR BLEED											
AIR CONDITIONING ON : ADD -0.7 TO N1											
NACELLE ANTI ICE ON : ADD -1.0 TO N1 WHEN OAT > TREF											
NACELLE AND WING ANTI ICE ON : ADD -0.5 TO N1 WHEN OAT < TREF AND -1.5 TO N1 WHEN OAT > TREF											



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APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

ENGINE MANAGEMENT - MAXIMUM CONTINUOUS THRUST

Ident.: APP-N1-PERF-00006851.0004001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-232 or 320-233) and 34221)

V2527E-A5/V2527-A5 - MAXIMUM CONTINUOUS N1 (%) - RATED N1 MODE VC = 230 kt

V2527E-A5 V2527-A5		MAXIMUM CONTINUOUS N1										AIR COND ON *	
N1 CORRECTIONS FOR AIR BLEED													
AIR CONDITIONING OFF							.800						
NACELLE ANTI-ICE ON							-.800						
NACELLE AND WING ANTI-ICE ON							-1.700						
TAT (C)	PRESSURE ALTITUDE (FT)												
	0.	2000.	5000.	8000.	12000.	17000.	20000.	25000.	31000.	35000.	39000.		
-50.0	71.9	72.7	74.7	79.3	81.0	83.7	85.4	86.6	80.1	82.0	82.4		
-46.0	72.5	73.4	75.4	80.0	81.7	84.4	86.1	87.4	80.8	82.7	83.1		
-42.0	73.1	74.0	76.1	80.7	82.5	85.1	86.9	88.1	81.5	83.4	83.8		
-38.0	73.8	74.6	76.7	81.4	83.2	85.9	87.6	88.9	82.2	84.2	84.5		
-34.0	74.4	75.3	77.4	82.1	83.9	86.6	88.4	89.7	82.9	84.9	85.3		
-30.0	75.0	75.9	78.0	82.7	84.5	87.3	89.1	90.4	83.6	85.6	86.0		
-26.0	75.6	76.5	78.7	83.4	85.3	88.0	89.8	91.1	84.3	86.3	86.7		
-22.0	76.2	77.1	79.3	84.1	85.9	88.7	90.6	91.9	84.9	87.0	87.4		
-18.0	76.8	77.8	79.9	84.8	86.6	89.5	91.3	92.6	85.6	87.7	87.4		
-14.0	77.4	78.4	80.6	85.4	87.3	90.2	92.0	93.3	86.3	87.1	86.8		
-10.0	78.0	79.0	81.2	86.1	88.0	90.8	92.7	93.7	86.9	86.7	86.5		
-6.0	78.6	79.6	81.8	86.7	88.6	91.5	93.4	93.1	86.7	86.3	86.0		
-2.0	79.2	80.2	82.4	87.4	89.3	92.2	93.7	92.5	86.3	85.9	85.6		
2.0	79.8	80.7	83.0	88.0	90.0	92.7	93.1	92.1	85.8	85.5	85.3		
6.0	80.4	81.3	83.6	88.6	90.6	92.1	92.7	91.5	85.4	85.2	85.0		
10.0	80.9	81.9	84.2	89.3	91.2	91.5	92.2	90.9	85.0	84.8	84.6		
14.0	81.5	82.5	84.8	89.9	90.6	90.9	91.6	90.3	84.7				
18.0	82.1	83.1	85.4	90.2	90.0	90.3	91.0	89.9					
22.0	82.6	83.6	86.0	89.8	89.6	89.9	90.6	89.8					
26.0	83.2	84.2	86.9	89.3	89.2	89.5	90.2						
30.0	83.8	84.3	86.9	88.8	88.8	89.0	90.2						
34.0	83.6	84.1	86.8	88.4	88.3	88.8							
38.0	83.5	83.8	86.9	87.8	87.6								
42.0	82.8	83.5	86.7	87.3	87.3								
46.0	82.2	83.3	86.5	86.6									
50.0	82.0	83.0	86.3										
54.0	81.7	82.6	86.1										
58.0	81.4	82.3											
62.0	81.1												
66.0													



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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

* One pack operative.



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DISPATCH IN RATED N1 MODE

PERFORMANCE

ENGINE MANAGEMENT - GO-AROUND THRUST

Ident.: APP-N1-PERF-00006852.0002001 / 04 APR 11

EASA APPROVED

Criteria: 320-232

V2527-A5 - GO-AROUND N1 (%) - RATED N1 MODE M = 0.225

AIR COND ON						MACH=.225					
TAT (C)	PRESSURE ALTITUDE (FT)										
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.
-60.0	74.3	75.1	75.8	76.6	77.0	77.5	77.9	78.4	78.9	79.4	79.6
-40.0	77.7	78.5	79.3	80.1	80.6	81.1	81.5	82.0	82.5	83.1	83.2
-20.0	80.9	81.8	82.6	83.4	84.0	84.5	84.9	85.5	86.0	86.5	86.7
0.0	84.1	85.0	85.8	86.7	87.2	87.7	88.2	88.8	89.3	89.9	90.1
10.0	85.6	86.6	87.4	88.3	88.8	89.3	89.8	90.4	91.0	91.5	91.7
20.0	87.1	88.1	88.9	89.8	90.3	90.9	91.4	92.0	92.5	93.1	93.3
22.0	87.4	88.4	89.2	90.1	90.7	91.2	91.7	92.3	92.9	93.5	93.6
24.0	87.7	88.7	89.5	90.4	91.0	91.5	92.0	92.6	93.2	93.8	93.9
26.0	88.0	89.0	89.8	90.7	91.3	91.8	92.3	92.9	93.5	94.1	94.1
28.0	88.3	89.3	90.1	91.0	91.6	92.1	92.6	93.2	93.8	94.0	93.9
30.0	88.6	89.6	90.4	91.3	91.9	92.4	92.9	93.5	93.7	93.7	93.6
32.0	88.9	89.9	90.7	91.6	92.2	92.7	93.2	93.4	93.5	93.4	93.3
34.0	89.2	90.1	91.0	91.9	92.5	93.0	93.2	93.2	93.2	93.1	93.0
36.0	89.4	90.4	91.3	92.2	92.8	93.3	93.0	93.0	92.9	92.8	92.7
38.0	89.7	90.7	91.6	92.5	93.1	93.0	92.8	92.7	92.6	92.5	92.5
40.0	90.0	91.0	91.9	92.8	93.1	92.8	92.5	92.5	92.4	92.3	92.3
42.0	90.3	91.3	92.2	93.1	92.8	92.6	92.3	92.2	92.2	92.1	
44.0	90.6	91.6	92.5	92.9	92.6	92.3	92.1	92.0	91.9		
46.0	90.9	91.9	92.6	92.6	92.3	92.1	91.8	91.7			
48.0	91.2	92.2	92.3	92.3	92.0	91.8	91.5				
50.0	91.4	92.1	92.1	92.0	91.8	91.5					
52.0	91.7	91.8	91.8	91.8	91.5						
54.0	91.7	91.6	91.6	91.6							
56.0	91.4	91.4	91.4								
58.0	91.2	91.2									

OAT < TREF

OAT > TREF

N1 CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF : ADD .400 TO N1

NACELLE ANTI ICE ON : ADD -0.7 TO N1 WHEN OAT > TREF

NACELLE AND WING ANTI ICE ON : ADD -0.3 TO N1 WHEN OAT < TREF AND -1.0 TO N1 WHEN OAT > TREF

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APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

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V2527-A5 - GO-AROUND N1 (%) - RATED N1 MODE M = 0.225

AIR COND ON MACH=.225

TAT (C)	PRESSURE ALTITUDE (FT)										
	-1000.	0.	1000.	2000.	3000.	4000.	5000.	6000.	7000.	8000.	8500.

OAT < TREF OAT > TREF

N1 CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF : ADD .400 TO N1

NACELLE ANTI ICE ON : ADD -0.7 TO N1 WHEN OAT > TREF

NACELLE AND WING ANTI ICE ON : ADD -0.3 TO N1 WHEN OAT < TREF AND -1.0 TO N1 WHEN OAT > TREF

V2527-A5 - GO-AROUND N1 (%) - RATED N1 MODE M = 0.225

AIR COND ON MACH=.225

TAT (C)	PRESSURE ALTITUDE (FT)										
	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
-60.0	77.9	78.4	78.9	79.4	79.7	80.0	80.2	80.4	80.7	80.9	81.1
-40.0	81.5	82.0	82.5	83.1	83.3	83.6	83.9	84.1	84.4	84.6	84.8
-20.0	84.9	85.5	86.0	86.5	86.8	87.1	87.4	87.7	87.9	88.2	88.3
0.0	88.2	88.8	89.3	89.9	90.2	90.5	90.8	91.1	91.3	91.6	91.8
5.0	89.0	89.6	90.1	90.7	91.0	91.3	91.6	91.9	92.2	92.5	92.6
10.0	89.8	90.4	91.0	91.5	91.8	92.2	92.4	92.7	93.0	93.3	93.4
12.0	90.1	90.7	91.3	91.9	92.2	92.5	92.8	93.0	93.3	93.6	93.8
14.0	90.4	91.0	91.6	92.2	92.5	92.8	93.1	93.4	93.7	93.9	94.0
16.0	90.7	91.3	91.9	92.5	92.8	93.1	93.4	93.7	94.0	94.1	94.1
18.0	91.1	91.6	92.2	92.8	93.1	93.4	93.7	94.0	94.1	94.2	94.2
20.0	91.4	92.0	92.5	93.1	93.5	93.8	94.1	94.1	94.1	94.2	94.0
22.0	91.7	92.3	92.9	93.5	93.8	94.1	94.1	94.0	94.1	93.8	93.7
24.0	92.0	92.6	93.2	93.8	94.1	94.1	94.0	93.9	93.7	93.5	93.4
26.0	92.3	92.9	93.5	94.1	94.0	93.9	93.8	93.6	93.4	93.2	93.0
28.0	92.6	93.2	93.8	94.0	93.8	93.7	93.5	93.3	93.1	92.8	92.7
30.0	92.9	93.5	93.7	93.7	93.6	93.4	93.2	93.0	92.7	92.5	
32.0	93.2	93.4	93.5	93.4	93.3	93.1	92.9	92.6	92.4		

OAT < TREF OAT > TREF

N1 CORRECTIONS FOR AIR BLEED

AIR CONDITIONING OFF : ADD .700 TO N1

NACELLE ANTI ICE ON : ADD -1.0 TO N1 WHEN OAT > TREF

NACELLE AND WING ANTI ICE ON : ADD -0.5 TO N1 WHEN OAT < TREF AND -1.5 TO N1 WHEN OAT > TREF

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APPENDICES AND SUPPLEMENTS

DISPATCH IN RATED N1 MODE

PERFORMANCE

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V2527-A5 - GO-AROUND N1 (%) - RATED N1 MODE M = 0.225											
AIR COND ON						MACH=.225					
TAT (C)	PRESSURE ALTITUDE (FT)										
	5000.	6000.	7000.	8000.	9000.	10000.	11000.	12000.	13000.	14000.	14500.
34.0	93.2	93.2	93.2	93.1	92.9	92.8	92.6	92.3			
36.0	93.0	93.0	92.9	92.8	92.6	92.5	92.3				
38.0	92.8	92.7	92.6	92.5	92.4	92.3					
40.0	92.5	92.5	92.4	92.3	92.2						
42.0	92.3	92.2	92.2	92.1							
44.0	92.1	92.0	91.9								
46.0	91.8	91.7									
48.0	91.5										
OAT < TREF						OAT > TREF					
N1 CORRECTIONS FOR AIR BLEED											
AIR CONDITIONING OFF : ADD .700 TO N1											
NACELLE ANTI ICE ON : ADD -1.0 TO N1 WHEN OAT > TREF											
NACELLE AND WING ANTI ICE ON : ADD -0.5 TO N1 WHEN OAT < TREF AND -1.5 TO N1 WHEN OAT > TREF											

Note: These tables are valid for all aircraft speeds.



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DISPATCH IN RATED N1 MODE

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DISPATCH IN RATED N1 MODE

APPENDICES AND SUPPLEMENTS

APPENDICES AND SUPPLEMENTS

Ident.: **APP-N1-APP-00007166.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

The combination with the following supplement is not allowed:

- Derated Takeoff (if applicable)



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DISPATCH IN RATED N1 MODE

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APPENDICES AND SUPPLEMENTS

TAILWIND OPERATION

GENERAL

Ident.: **APP-TLWD-00007146.0004001 / 23 NOV 09**

EASA APPROVED

Criteria: ((A318 or A319 or A320-200 or 320-200) and ((23222 and 26398) or (26057 and 26398)))

This supplement is applicable to operations with tailwind greater than 10 kt.
Unless amended in this supplement, all the chapters of this AFM remain applicable.

LIMITATIONS

Ident.: **APP-TLWD-00007147.0007001 / 23 NOV 09**

EASA APPROVED

Criteria: ((A318 or A319 or 320-200 or 321-200) and ((23222 and 26398) or (26057 and 26398)))

Maximum tailwind for takeoff: 15 kt
Maximum tailwind for landing: 15 kt

Note: *Maximum tailwind for automatic landing and roll out remains 10 kt.*

NORMAL PROCEDURES

Ident.: **APP-TLWD-00009244.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: ((319-113 or 319-114 or 319-131 or 319-132 or 319-133 or 320-211 or 320-212 or 320-231 or 320-232 or 320-233 or A321) and 26398)

LANDING

Before beginning final descent it is recommended to stabilize speed around VREF + 5 kt.

Decelerated approaches are not allowed.

FLAPS FULL selection is recommended for landing.



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TAILWIND OPERATION

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APPENDICES AND SUPPLEMENTS

TAWS-GPWS

GENERAL

Ident.: **TDU / APP-TAWS-00015058.0001001 / 22 JAN 14**

EASA APPROVED

Criteria: (SA and (26526 or 28244 or 34637 or 39146))

Impacted DU: 00007228 General

Impacted by TR369 Issue 1.0

This supplement is applicable to aircraft fitted with 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 databases (excluding Performance database) are compliant with DO-200A DPAL2.

Unless amended in this supplement, all the chapters of this AFM remain applicable.

GENERAL

Ident.: **APP-TAWS-00007228.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (SA and (26526 or 28244))

Impacted by TDU: 00015058 General

This supplement is applicable to aircraft fitted 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.

Unless amended in this supplement, all the chapters of this AFM remain applicable.

LIMITATIONS

Ident.: **APP-TAWS-00007229.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (SA and (26526 or 28244))

Aircraft navigation is not to be predicated upon the use of the terrain display.

The terrain display is intended to serve as a situation awareness tool only, and may not provide the accuracy on which to solely base terrain avoidance maneuvering.

The EGPWS database, display, and alerting algorithms currently do not account for man made obstructions.

The EGPWS enhanced function should be inhibited (TERR pushbutton set to OFF on GPWS panel) when the aircraft position is less than 15 nm from the airfield:

- For operations from/to runways not incorporated into the EGPWS database
- For specific approach procedures which have previously been identified as potentially producing false terrain alerts.

NORMAL PROCEDURES

Ident.: APP-TAWS-00007231.0002001 / 23 NOV 09

Criteria: (SA and 28244)

EASA APPROVED

The following procedures replace the GPWS procedures published in the NORMAL PROCEDURES chapter of this AFM.

● **When a warning occurs:**

Pull up using full back stick.

Apply takeoff thrust and climb until the warning ceases.

For enhanced function, in addition to climbing, a turning maneuver can be initiated after verifying the aircraft position and if the crew concludes turning is the safest way of action.

Note: *The EGPWS does not take account of specific aircraft configuration and climb performance and a "pull up" maneuver on its own, for certain situations, may not ensure terrain clearance.*

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 caution alert ceases.

Climb and/or turn as necessary based on analysis of all available instruments and information.

During climb, descent, approach and go-around, when the FMS navigation accuracy check prevents the crew from using NAV mode in a phase of flight, the EGPWS enhanced function must be switched OFF through the TERR pushbutton located on the GPWS panel.



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NARROW RUNWAY

GENERAL

Ident.: APP-NRWY-00006985.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

The nominal runway width for operations of the aircraft is 45 m. Operations on runways with a width below 45 m are covered by modification 30397.

PERFORMANCE

Ident.: APP-NRWY-00006986.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

The performance for runways with a width below 45 m given in the approved datafiles or databases of the PERFORMANCE chapter of this AFM must not be used for aircraft not fitted with modification 30397.



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NARROW RUNWAY

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AIRPLANE FLIGHT MANUAL

APPENDICES AND SUPPLEMENTS

OPERATIONS ON WET GROOVED/PFC RUNWAYS

GENERAL

Ident.: APP-PFC-00007028.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or A320)

The nominal runway surface for performance calculation on wet runway is smooth.

The takeoff performance improvements on wet grooved or Porous Friction Course (PFC) runways are covered by modification 35075.

The landing performance improvements on wet grooved/PFC runways are covered by modification 37457.

PERFORMANCE

Ident.: APP-PFC-00007029.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or A320)

The takeoff performance (Accelerate Stop Distance, Complete Takeoff) on wet grooved/PFC runway given in the approved databases of the PERFORMANCE chapter must not be used for aircraft not fitted with modification 35075.

The landing performance (Landing Distance) on wet grooved/PFC runway given in the approved databases of the PERFORMANCE chapter must not be used for aircraft not fitted with modification 37457.



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SUMMARY OF HIGHLIGHTS

Localization Title	Toc Index	ID	Reason
MCDL-52-01 Toilet Servicing and Drainage Door	A	1	Documentation update: Addition of "Toilet Servicing and Drainage Door" documentary unit
MCDL-52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB	A	1	Documentation update: Addition of "Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB" documentary unit
MCDL-52-03 Access Door to Potable Water Filling and Drainage	A	1	Documentation update: Addition of "Access Door to Potable Water Filling and Drainage" documentary unit
MCDL-52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB	A	1	Documentation update: Addition of "Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB" documentary unit
MCDL-52-05 Access Door to Air Conditioning Ground Supply 191 CB	A	1	Documentation update: Addition of "Access Door to Air Conditioning Ground Supply 191 CB" documentary unit
MCDL-52-20 Access Door to HP Air Ground Connector 191 DB	A	1	Documentation update: Addition of "Access Door to HP Air Ground Connector 191 DB" documentary unit



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GENERAL

INTRODUCTION

INTRODUCTION

Ident.: MCDL-GEN-INTR-00006202.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

Operation of the aircraft without certain secondary airframe and engine parts is possible as indicated in this Master Configuration Deviation List. 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 airplane 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.

When a maintenance action requires high speed tape application, it is necessary, before each flight or at the specified interval, to check that the tape is still in position and in good condition.

It is the Operator's responsibility to define the tasksharing for their flight and maintenance crews, and to ensure that all maintenance procedures are correctly performed.

The MCDL maintenance procedures are published in the AMM. The MCDL item number may be used to find the associated task in the AMM via the dedicated function of AirN@v.

- Note:
1. The sign "-" in "Quantity installed" column indicates that the quantity is variable.
 2. The illustrations included in this Master Configuration Deviation List 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.



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GENERAL

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GENERAL

LIMITATIONS

LIMITATIONS

Ident.: MCDL-GEN-LIM-00006203.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 pilote'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.



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GENERAL

LIMITATIONS

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GENERAL

PERFORMANCE

PERFORMANCE DETERMINATION METHOD

Ident.: MCDL-GEN-PERF-00006204.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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-00006205.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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 (110 lb)
- En route performance limiting weight is reduced by 60 kg (132 lb) (i.e. corresponding to a 60 ft decrease of en-route net ceiling).



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GENERAL

PERFORMANCE

PERFORMANCE PENALTIES CALCULATED WITH AFM_OCTO SOFTWARE

Ident.: TDU / MCDL-GEN-PERF-00015363.0001001 / 18 FEB 14

EASA APPROVED

Criteria: SA

Impacted DU: 00006206 Performance Penalties calculated with AFM_OCTO Software

Impacted by TR394 Issue 1.0

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 CDLA320F.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.

PERFORMANCE PENALTIES CALCULATED WITH AFM_OCTO SOFTWARE

Ident.: MCDL-GEN-PERF-00006206.0001001 / 04 APR 11

EASA APPROVED

Criteria: SA

Impacted by TDU: 00015363 Performance Penalties calculated with AFM_OCTO Software

The takeoff, approach climb, en route and landing performance with MCDL items missing can be determined by selecting the missing items in the “CDL item...” menu of the AFM_OCTO interface, using database given in PERFORMANCE chapter (*Refer to PERF-OCTO Performance Database*) of this manual associated to CDL DATA file at issue 6.0 or higher, using AFM_OCTO approved FM module at revision 26 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.

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST AIR CONDITIONING RAM AIR INLET FLAP

21-01	Ram Air Inlet Flap

Ident.: MCDL-21-01-00006207.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and ((26363 and A319) or (26363 and A320) or (26363 and A321) or A318))

21-01 RAM AIR INLET FLAP	Quantity installed 2

All may be missing.

Note: System performance in heating mode will be decreased.

- **Performance:**

The following performance penalties are applicable per missing flap:

- Takeoff and approach climb performance limiting weights are reduced by 190 kg (418 lb)
- En route performance limiting weight is reduced by 216 kg (476 lb)
- Fuel consumption is increased by 0.53 %.

Refer to MCDL-21-01 Illustration Ram Air Inlet Flap

MASTER CONFIGURATION DEVIATION LIST

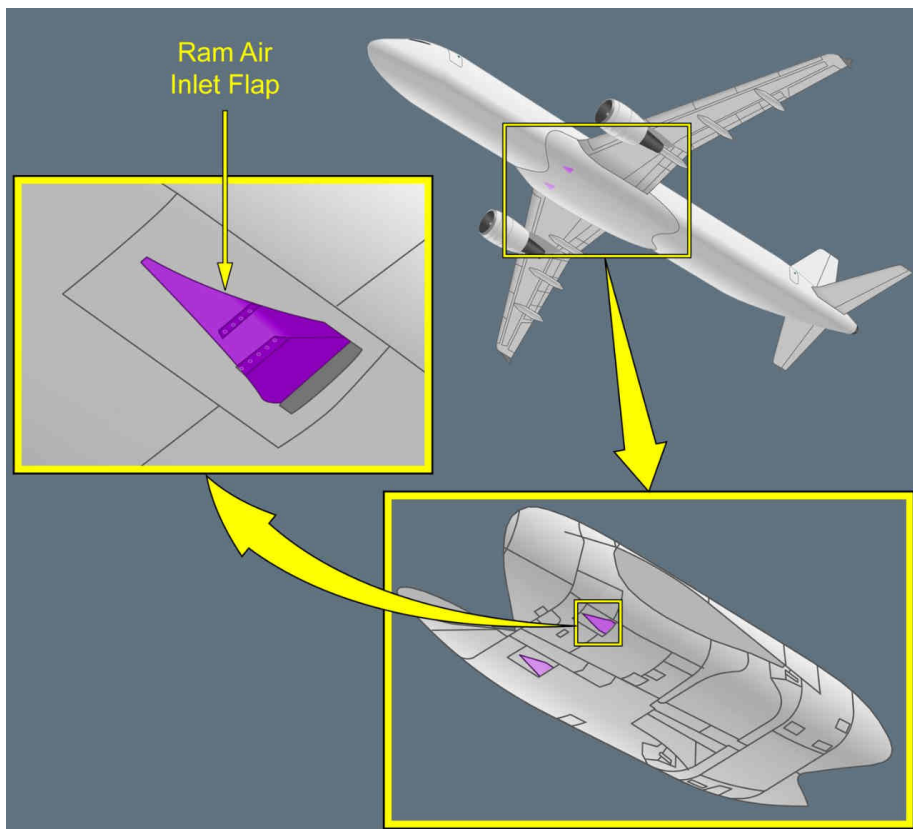
AIR CONDITIONING

RAM AIR INLET FLAP

ILLUSTRATION RAM AIR INLET FLAP

Ident.: MCDL-21-01-00006213.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 21-01 Ram Air Inlet Flap*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST AIR CONDITIONING RAM AIR INLET LEADING EDGE

21-03	Ram Air Inlet Leading Edge

Ident.: MCDL-21-03-00006216.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

21-03 RAM AIR INLET LEADING EDGE	Quantity installed 2

One may be missing provided the associated pack is turned off (*Refer to MMEL/MI-21-52 Air Conditioning Pack*).

Refer to MCDL-21-03 Illustration Ram Air Inlet Leading Edge

MASTER CONFIGURATION DEVIATION LIST

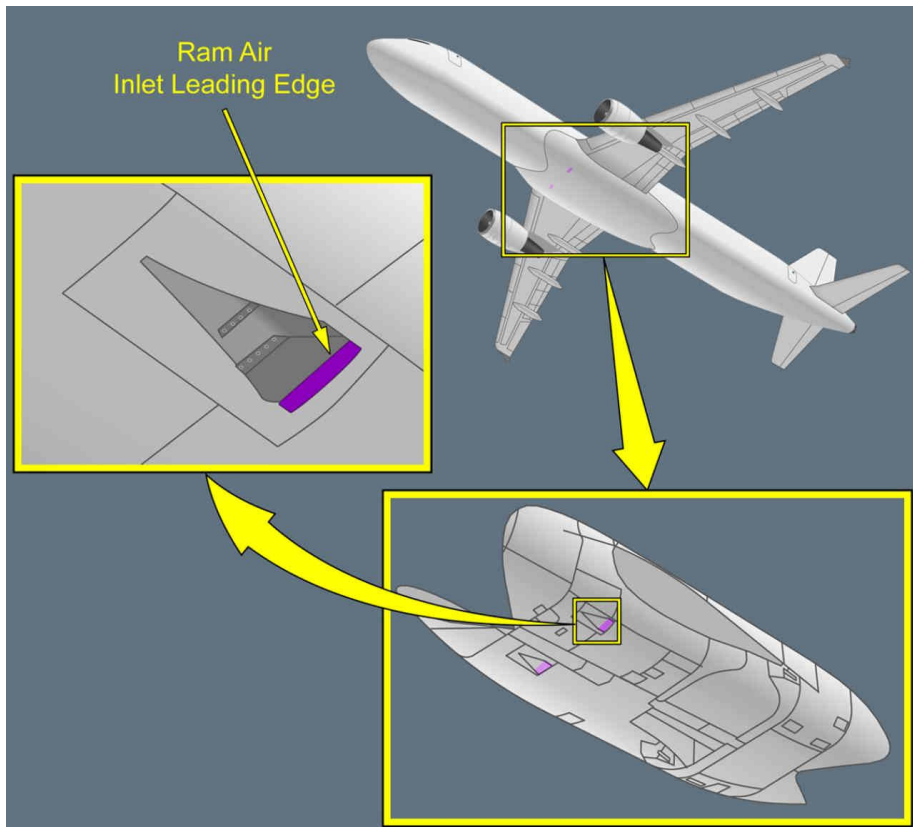
AIR CONDITIONING

RAM AIR INLET LEADING EDGE

ILLUSTRATION RAM AIR INLET LEADING EDGE

Ident.: MCDL-21-03-00006219.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 21-03 Ram Air Inlet Leading Edge*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST COMMUNICATION STATIC DISCHARGER

23-01	Static Discharger

Ident.: MCDL-23-01-00006220.0001001 / 02 DEC 13 Criteria: SA	EASA APPROVED

23-01 STATIC DISCHARGER	Quantity installed –

20 % of static dischargers may be missing or inoperative on each the following areas:

- RIGHT wing
- LEFT wing
- Vertical stabilizer (including rudder)
- RIGHT horizontal stabilizer (including elevator)
- LEFT horizontal stabilizer (including elevator).

Note: 1. If a static discharger is missing or inoperative on a flap track fairing, the VHF and HF sound quality may be slightly degraded.

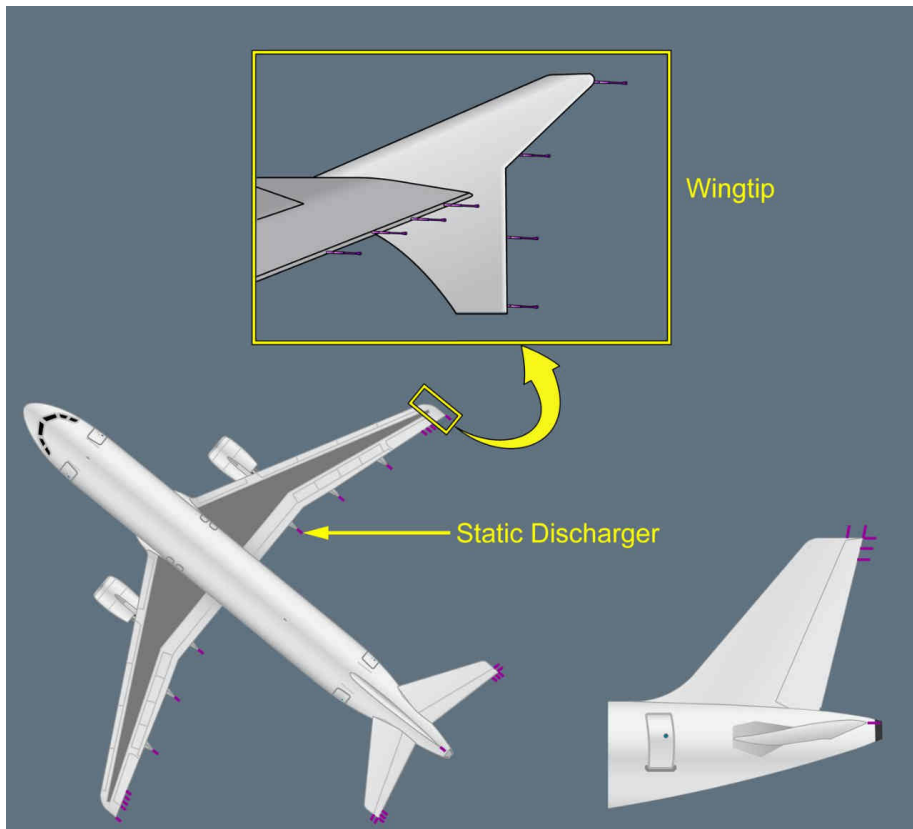
 2. When combined with the case of dispatch with a wing tip fence missing, 20 % of the remaining static dischargers of the affected wing are allowed to be inoperative or missing (Refer to 57-01 Wing Tip Fence).

Refer to MCDL-23-01 Illustration Static Discharger

ILLUSTRATION STATIC DISCHARGER

Ident.: MCDL-23-01-00006221.0001001 / 02 DEC 13

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 23-01 Static Discharger

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL FLAP TRACK FAIRING

27-01	Flap Track Fairing

Ident.: MCDL-27-01-00006235.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320)

27-01 FLAP TRACK FAIRING	Quantity installed 6

(m) *Refer to AMM Task 57-55-00-040-001*

One fairing may be partly or completely missing.

Note: 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.

- **Performance:**

The following performance penalties are applicable:

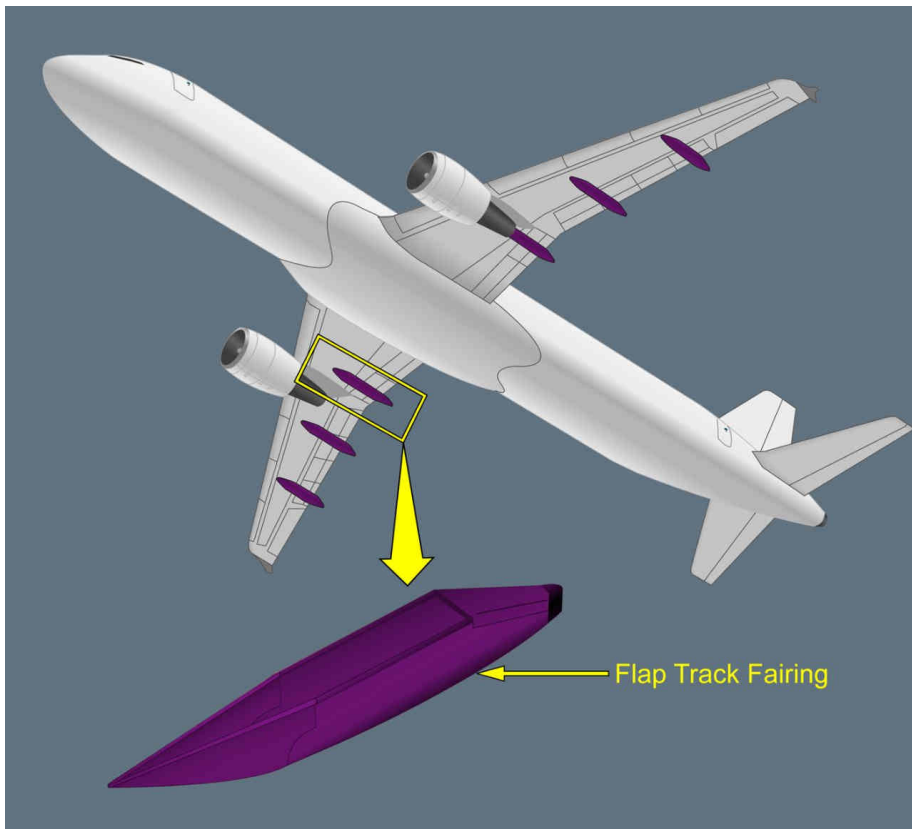
- Takeoff and approach climb performance limiting weights are reduced by 1 180 kg (2 601 lb)
- En route performance limiting weight is reduced by 1 620 kg (3 571 lb)
- Fuel consumption is increased by 3.14 %.

Refer to MCDL-27-01 Illustration Flap Track Fairing

MASTER CONFIGURATION DEVIATION LIST**FLIGHT CONTROL****FLAP TRACK FAIRING****ILLUSTRATION FLAP TRACK FAIRING**

Ident.: MCDL-27-01-00006236.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 27-01 Flap Track Fairing*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL SLAT TRACK CLOSING PLATE

27-03	Slat Track Closing Plate

Ident.: MCDL-27-03-00006239.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

27-03 SLAT TRACK CLOSING PLATE	Quantity installed 24

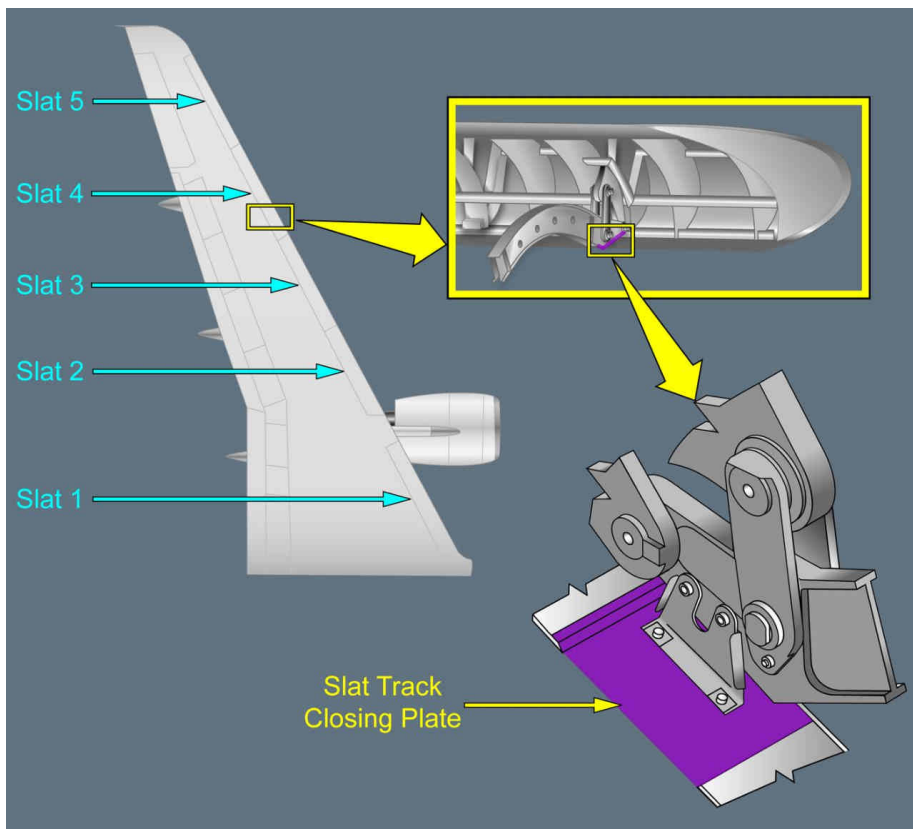
Two may be missing.

Refer to MCDL-27-03 Illustration Slat Track Closing Plate

ILLUSTRATION SLAT TRACK CLOSING PLATE

Ident.: MCDL-27-03-00006240.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 27-03 Slat Track Closing Plate*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL ACCESS PANEL FOR BEARINGS AT ELEVATOR

27-05	Access Panel for Bearings at Elevator

Ident.: MCDL-27-05-00006243.0001001 / 23 NOV 09

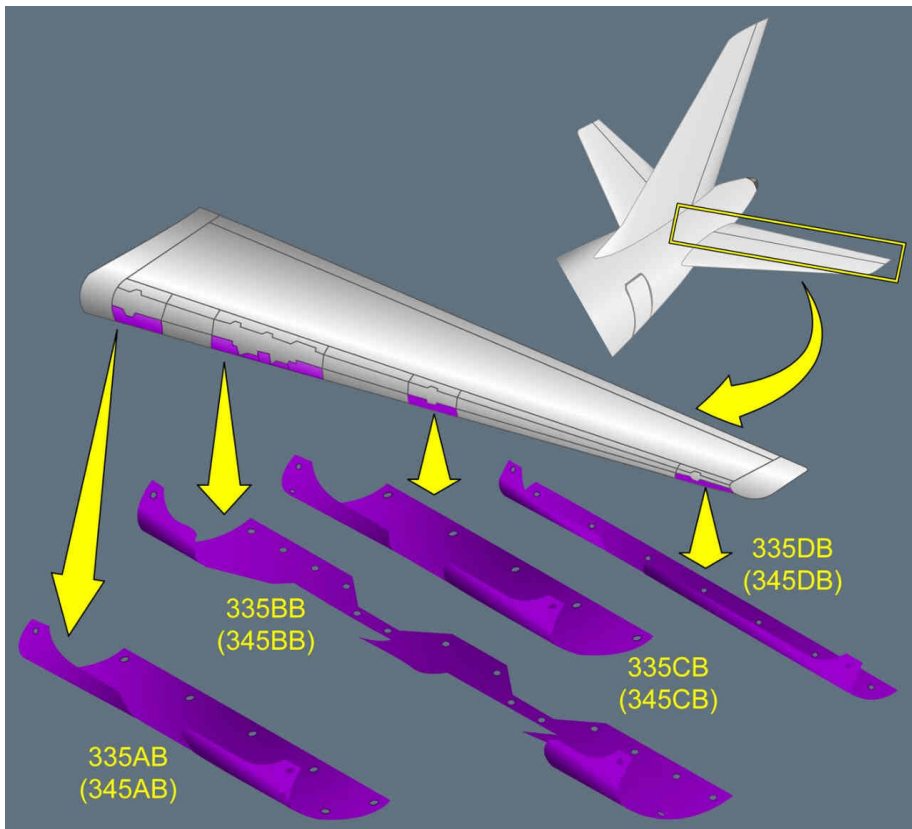
EASA APPROVED

Criteria: SA

27-05 ACCESS PANEL FOR BEARINGS AT ELEVATOR	Quantity installed 8

Two may be missing.

Refer to MCDL-27-05 Illustration Access Panel for Bearings at Elevator

ILLUSTRATION ACCESS PANEL FOR BEARINGS AT ELEVATORIdent.: MCDL-27-05-00006244.0001001 / 23 NOV 09
Criteria: SAFOR INFORMATION ONLYFor dispatch conditions: *Refer to 27-05 Access Panel for Bearings at Elevator*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL FLAP TRACK FAIRING REAR TOP COVER AND TAIL CONE

27-06	Flap Track Fairing Rear Top Cover and Tail Cone

Ident.: MCDL-27-06-00006245.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

27-06 FLAP TRACK FAIRING REAR TOP COVER AND TAIL CONE	Quantity installed –

(m) *Refer to AMM Task 57-55-00-040-002*
Both may be missing on two flap track fairings.

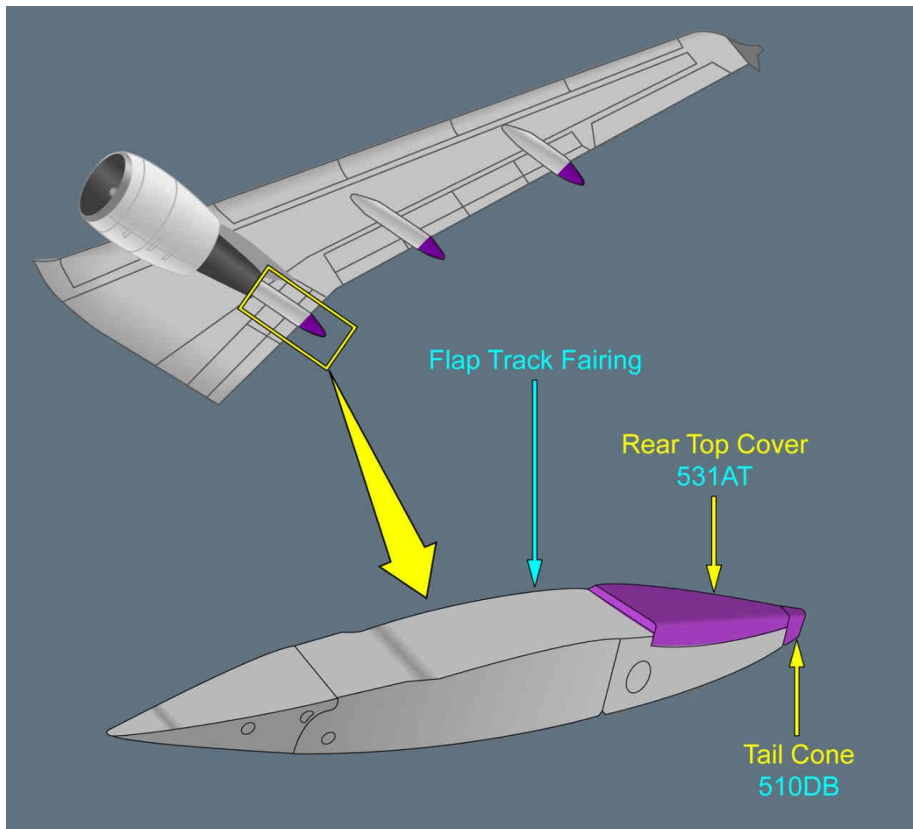
Note: 1. *When the tail cone is missing, the rear top cover may remain installed.*
 2. *When the rear top cover is missing, the associated tail cone must be removed.*

Refer to MCDL-27-06 Illustration Flap Track Fairing Rear Top Cover and Tail Cone

ILLUSTRATION FLAP TRACK FAIRING REAR TOP COVER AND TAIL CONE

Ident.: MCDL-27-06-00006246.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 27-06 Flap Track Fairing Rear Top Cover and Tail Cone*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL RUBBER SEAL UNDER SLAT

27-07	Rubber Seal under Slat

Ident.: MCDL-27-07-00006247.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

27-07 RUBBER SEAL UNDER SLAT	Quantity installed –

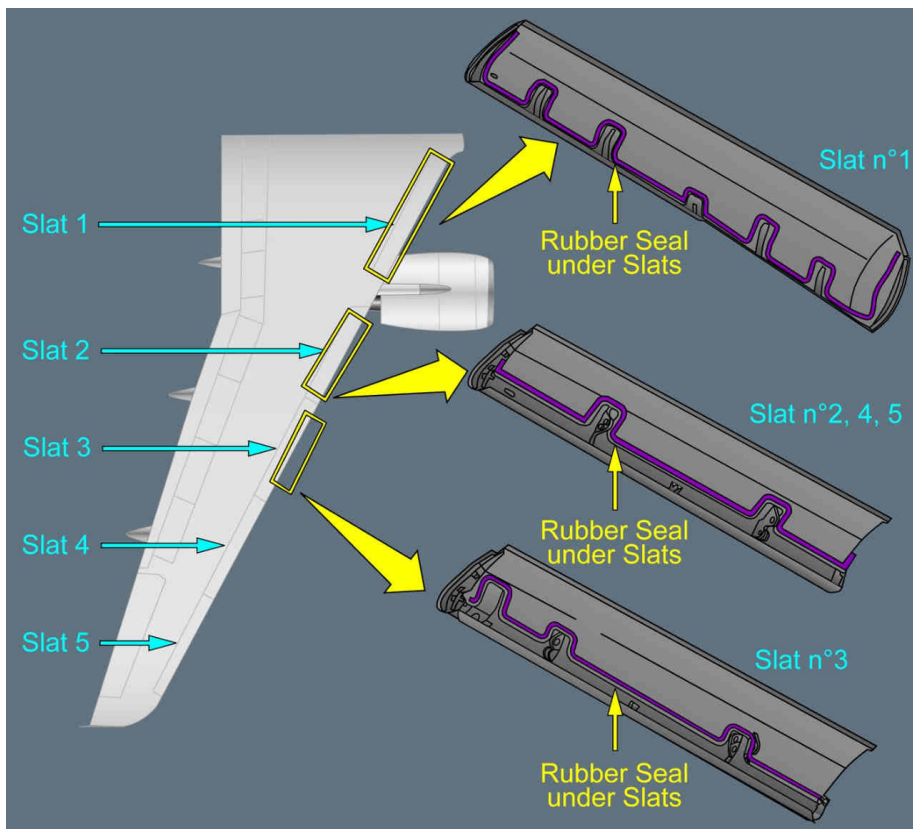
(m) *Refer to AMM Task 57-40-00-040-001*
1 m (39.3 in) per slat may be missing.

Refer to MCDL-27-07 Illustration Rubber Seal under Slat

ILLUSTRATION RUBBER SEAL UNDER SLAT

Ident.: MCDL-27-07-00006248.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

 For dispatch conditions: *Refer to 27-07 Rubber Seal under Slat*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL SEAL BETWEEN INBOARD AND OUTBOARD FLAP

27-08	Seal Between Inboard and Outboard Flap

Ident.: MCDL-27-08-00006250.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A319 or A320 or A321)

27-08 SEAL BETWEEN INBOARD AND OUTBOARD FLAP	Quantity installed 6

Three may be missing.

Note: For dispatch with inter-flap cushion seal missing, Refer to 27-13 Inter-flap Cushion Seal.

- **Performance:**

The following performance penalties are applicable:

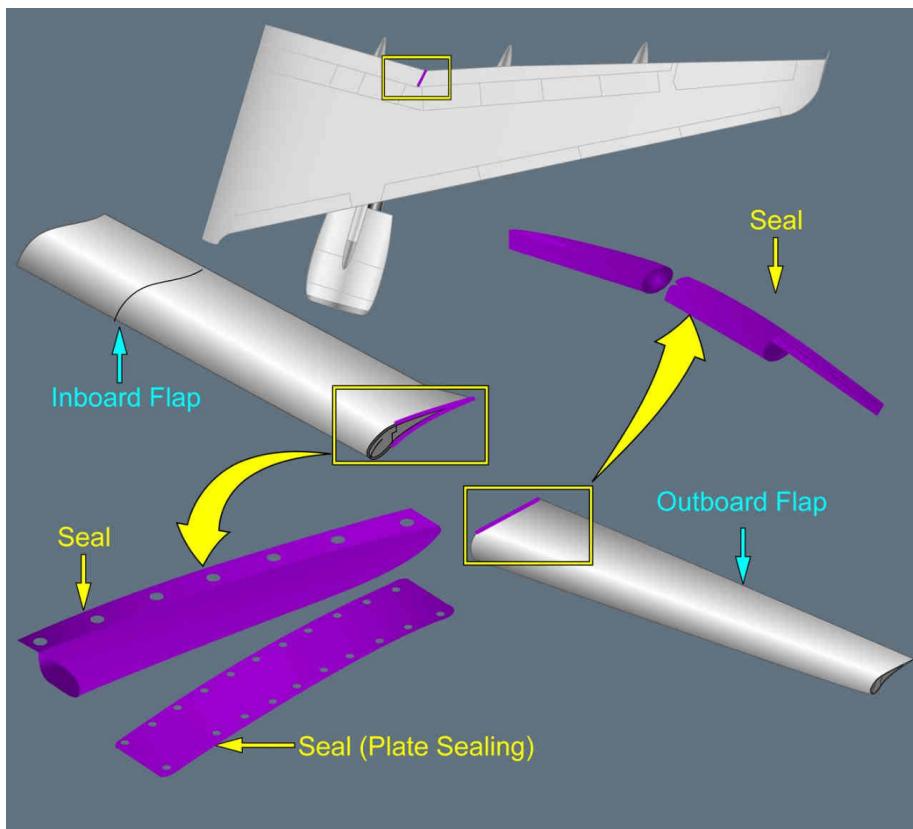
- Takeoff and approach climb performance limiting weights are reduced by 63 kg (139 lb) per missing seal
- En route performance limiting weight is reduced by 72 kg (159 lb) per missing seal
- If two or more seals are missing, fuel consumption is increased by 0.16 % per missing seal.

Refer to MCDL-27-08 Illustration Seal between Inboard and Outboard Flap

ILLUSTRATION SEAL BETWEEN INBOARD AND OUTBOARD FLAP

Ident.: MCDL-27-08-00006251.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 27-08 Seal Between Inboard and Outboard Flap

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL INBOARD AILERON EDGE TO WING SEAL

27-09	Inboard Aileron Edge to Wing Seal

Ident.: MCDL-27-09-00006252.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

27-09 INBOARD AILERON EDGE TO WING SEAL	Quantity installed 4

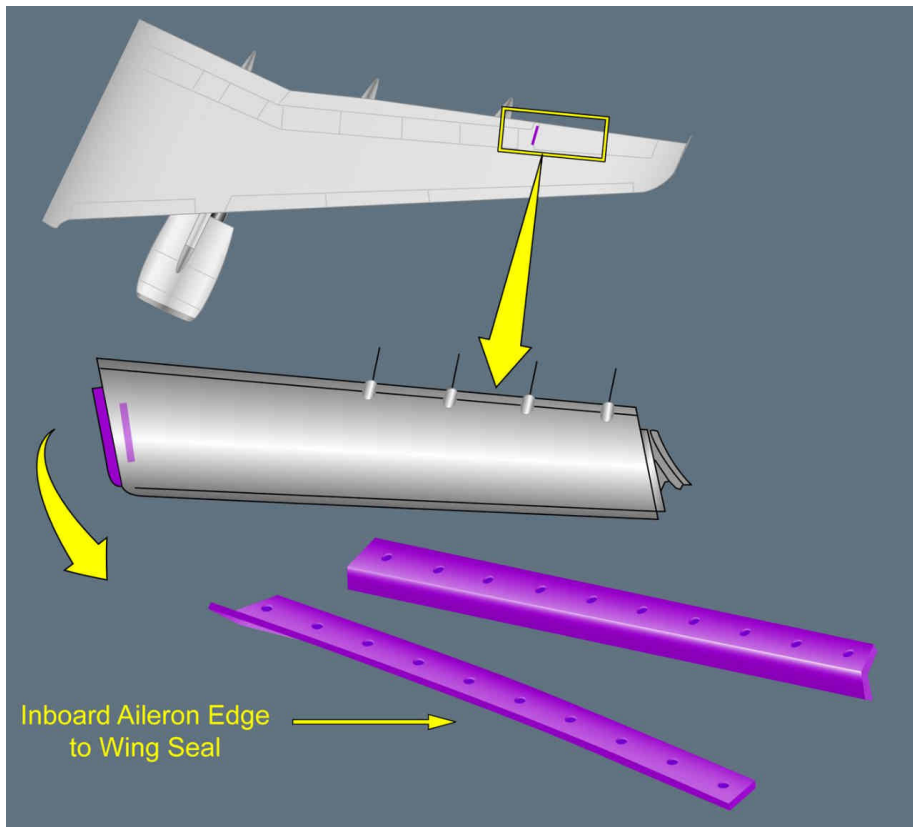
One seal per aileron may be partially or completely missing provided that any loose or flapping seal material is cut off.

Refer to MCDL-27-09 Illustration Inboard Aileron to Wing Seal

ILLUSTRATION INBOARD AILERON TO WING SEAL

Ident.: MCDL-27-09-00006253.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: *Refer to 27-09 Inboard Aileron Edge to Wing Seal*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL SLAT END SEAL AND WEATHER SEAL

27-10	Slat End Seal and Weather Seal

Ident.: MCDL-27-10-00006254.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

27-10 SLAT END SEAL AND WEATHER SEAL	Quantity installed 12

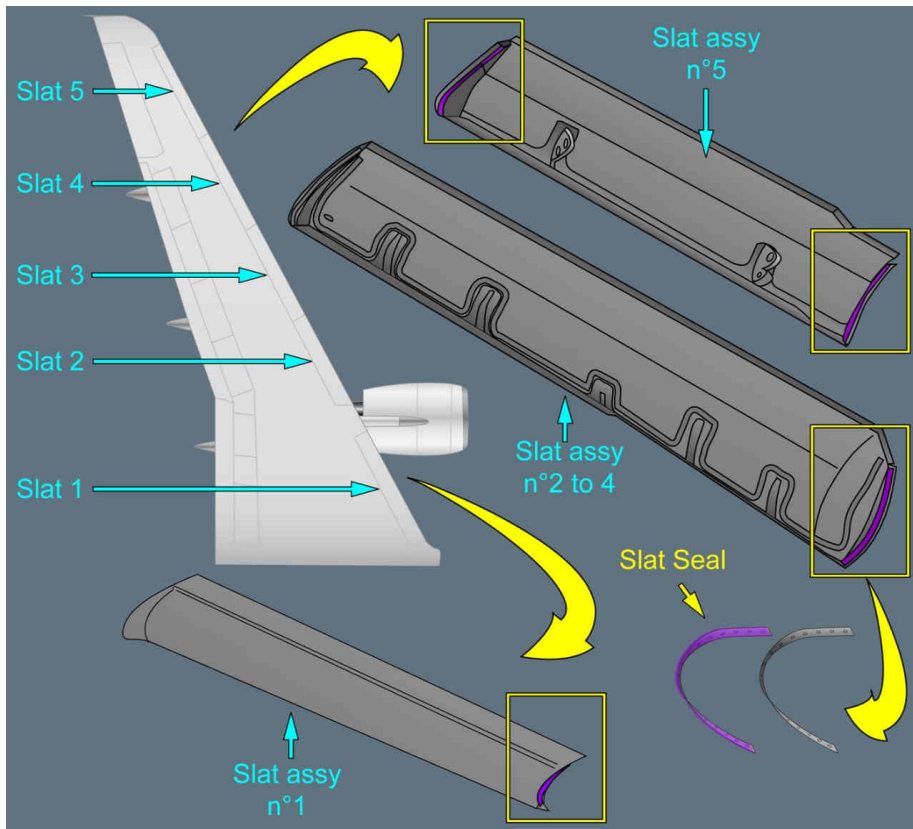
One seal per wing may be partially or completely missing provided any loose or flapping seal material is cut off.

Refer to MCDL-27-10 Illustration Slat End Seal and Weather Seal

ILLUSTRATION SLAT END SEAL AND WEATHER SEAL

Ident.: MCDL-27-10-00006255.0001001 / 19 FEB 10

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 27-10 Slat End Seal and Weather Seal

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL SLAT TRACK FILLER BLOCK

27-11	Slat Track Filler Block

Ident.: MCDL-27-11-00006256.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

27-11 SLAT TRACK FILLER BLOCK	Quantity installed 6

All may be missing.

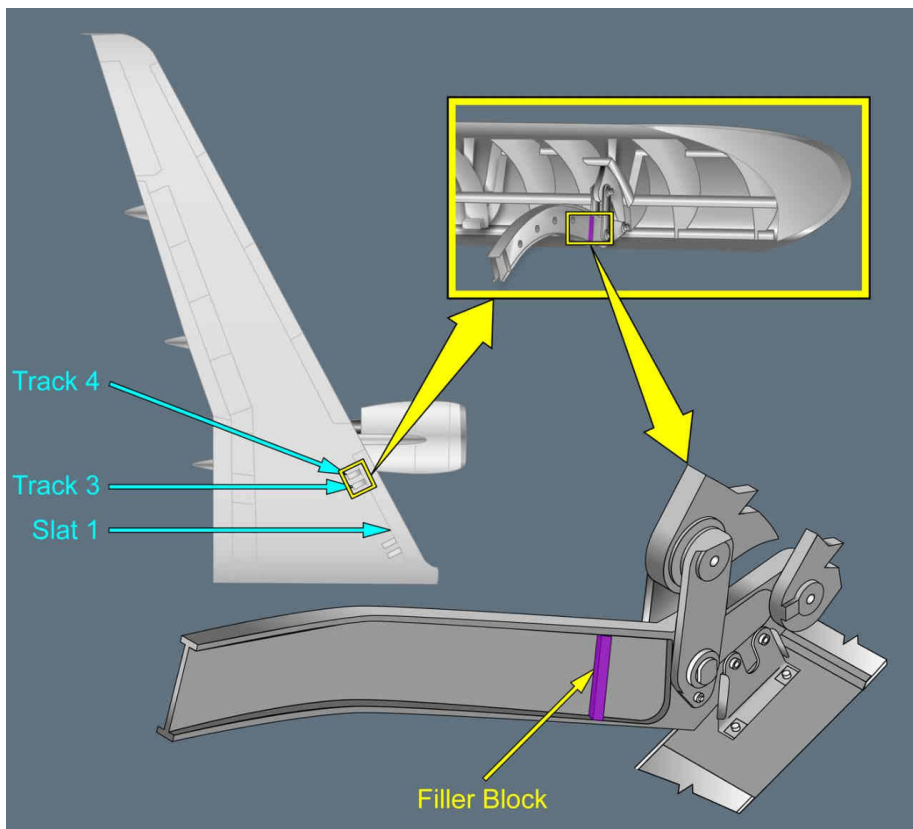
Note: May be combined with MCDL item 27-12 (Refer to 27-12 Slat Track Sealing Packer).

Refer to MCDL-27-11 Illustration Slat Track Filler Block

ILLUSTRATION SLAT TRACK FILLER BLOCK

Ident.: MCDL-27-11-00006257.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 27-11 Slat Track Filler Block

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL SLAT TRACK SEALING PACKER

27-12	Slat Track Sealing Packer

Ident.: MCDL-27-12-00006258.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

27-12 SLAT TRACK SEALING PACKER	Quantity installed 4

All may be missing.

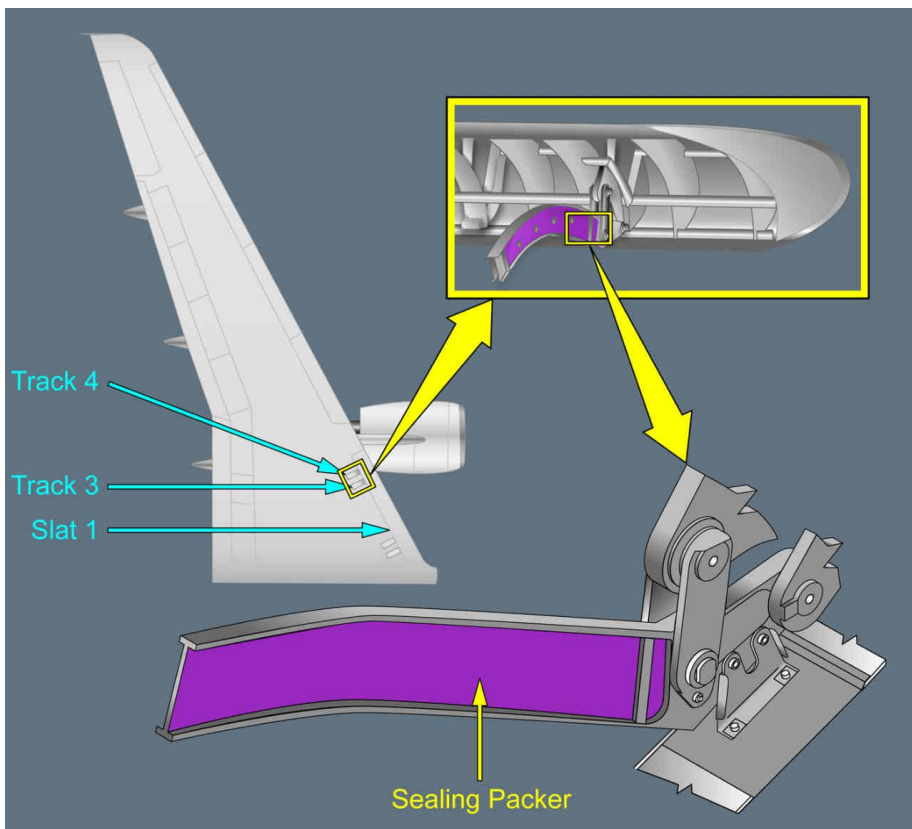
Note: May be combined with MCDL item 27-11 (Refer to 27-11 Slat Track Filler Block).

Refer to MCDL-27-12 Illustration Slat Track Sealing Packer

ILLUSTRATION SLAT TRACK SEALING PACKER

Ident.: MCDL-27-12-00006259.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 27-12 Slat Track Sealing Packer

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL INTER-FLAP CUSHION SEAL

27-13	Inter-flap Cushion Seal

Ident.: MCDL-27-13-00006249.0001001 / 23 NOV 09
EASA APPROVED

Criteria: SA

27-13 INTER-FLAP CUSHION SEAL	Quantity installed 4

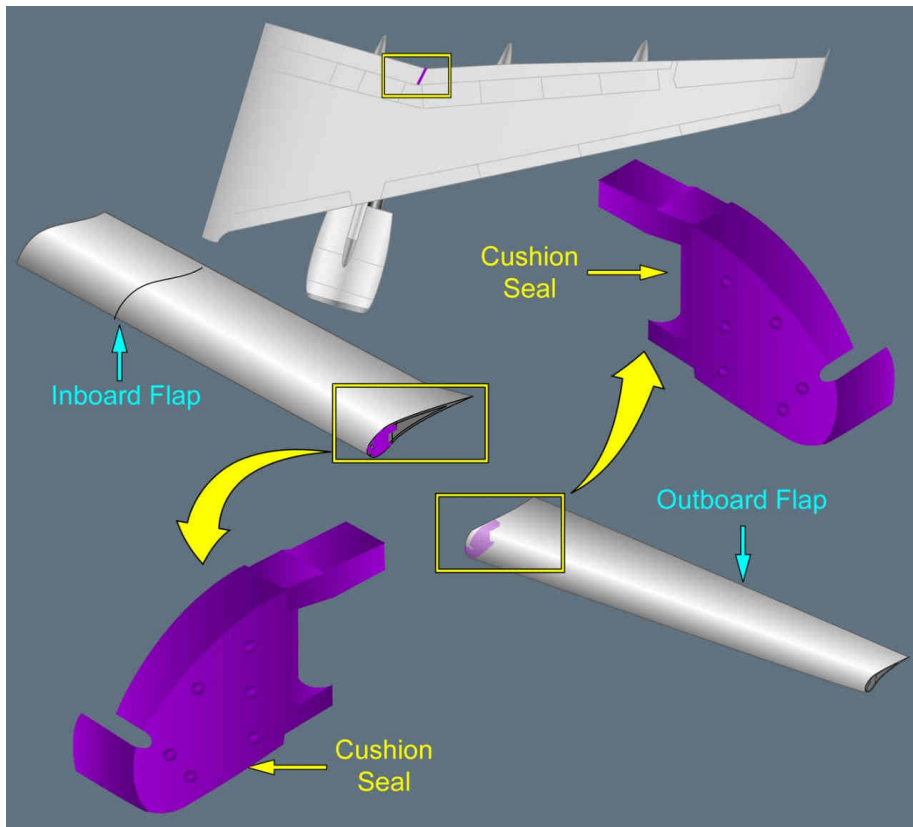
One cushion seal may be missing per wing.

Refer to MCDL-27-13 Illustration Inter-Flap Cushion Seal

ILLUSTRATION INTER-FLAP CUSHION SEAL

Ident.: MCDL-27-13-00006260.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 27-13 Inter-flap Cushion Seal

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL FLAP TRACK MOVEABLE FAIRING SEAL

27-14	Flap Track Moveable Fairing Seal

Ident.: MCDL-27-14-00006261.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

27-14 FLAP TRACK MOVEABLE FAIRING SEAL	Quantity installed 12

(m) *Refer to AMM Task 57-55-00-040-004*

50 % of the seal length may be missing on each side of the flap track fairing for 100 flight hours provided that a visual inspection is performed before each flight to ensure there is no flapping seal on the aircraft.

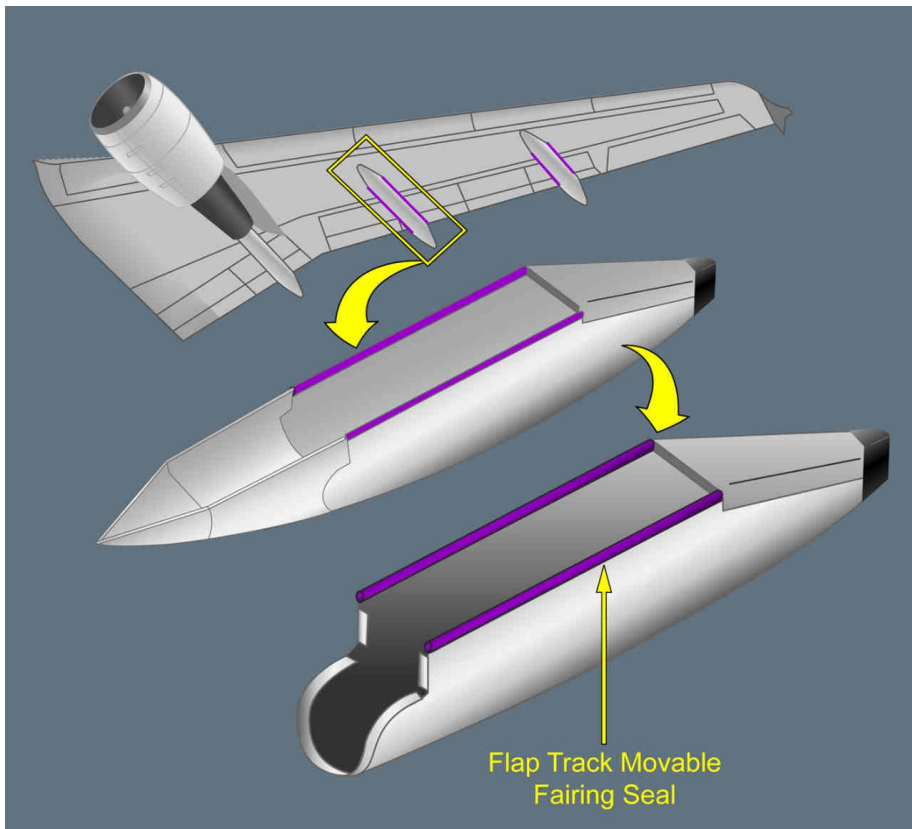
Note: *May be combined with MCDL item 27-15 (Refer to 27-15 Flap Track Fixed Fairing Seal).*

Refer to MCDL-27-14 Illustration Flap Track Moveable Fairing Seal

ILLUSTRATION MOVEABLE FLAP TRACK FAIRING SEAL

Ident.: MCDL-27-14-00006262.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 27-14 Flap Track Moveable Fairing Seal

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL FLAP TRACK FIXED FAIRING SEAL

27-15	Flap Track Fixed Fairing seal

Ident.: MCDL-27-15-00006263.0001001 / 02 DEC 13 Criteria: (A318 or A319 or A320)	EASA APPROVED

27-15 FLAP TRACK FIXED FAIRING SEAL	Quantity installed 18

(m) *Refer to AMM Task 57-55-00-040-004*

All may be missing for 100 flight hours provided that the hole is covered with high speed tape and a visual inspection is performed before each flight.

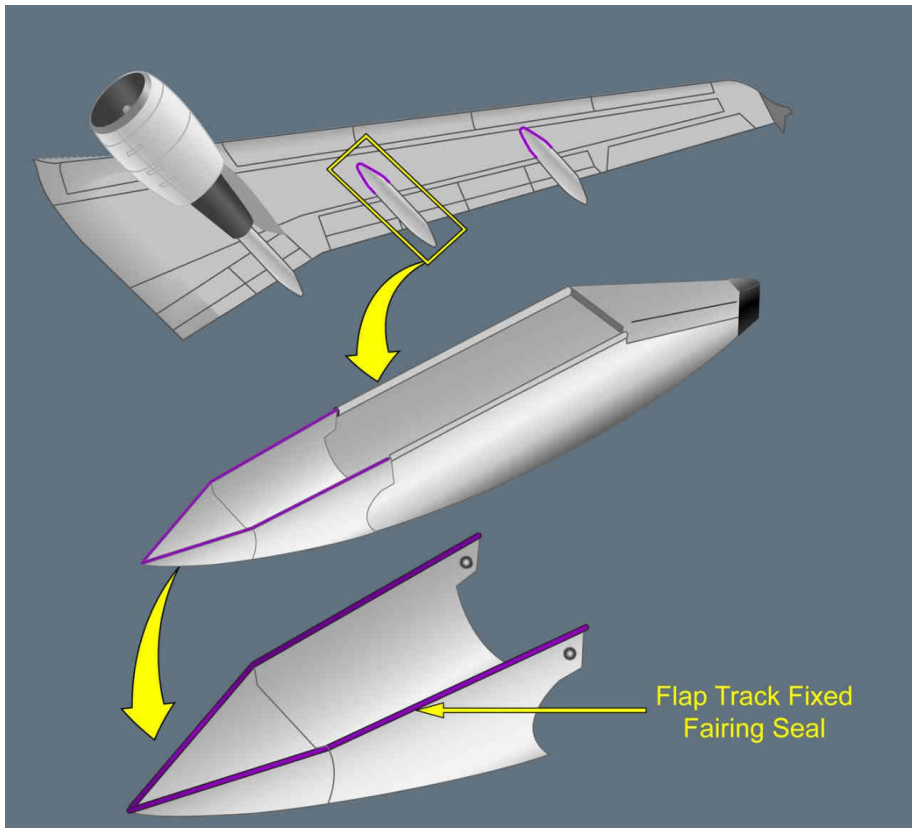
Note: *May be combined with MCDL item 27-14 (Refer to 27-14 Flap Track Moveable Fairing Seal).*

Refer to MCDL-27-15 Illustration Flap Track Fixed Fairing Seal

ILLUSTRATION FIXED FLAP TRACK FAIRING SEAL

Ident.: MCDL-27-15-00006264.0001001 / 23 NOV 09

Criteria: (A318 or A319 or A320)

FOR INFORMATION ONLY

For dispatch conditions: *Refer to 27-15 Flap Track Fixed Fairing Seal*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FLIGHT CONTROL FLAP TRACK MOVEABLE FAIRING PIVOT COVER

27-16	Flap Track Moveable Fairing Pivot Cover

Ident.: MCDL-27-16-00006265.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

27-16 FLAP TRACK MOVEABLE FAIRING PIVOT COVER	Quantity installed 12

(m) *Refer to AMM Task 57-55-00-040-005*

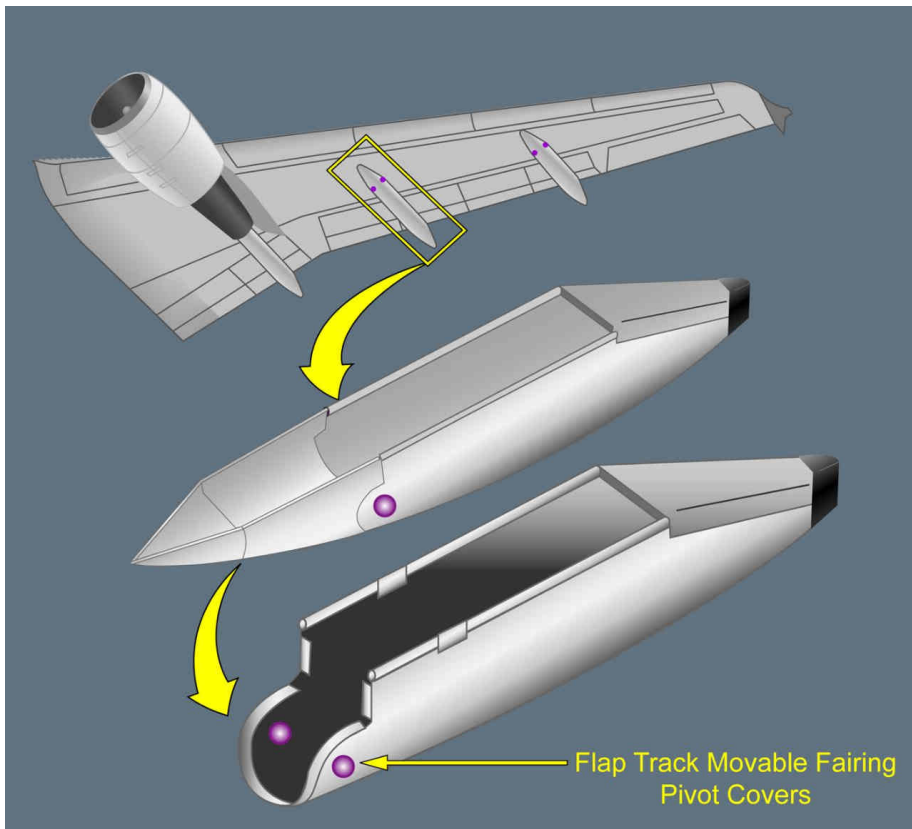
All may be missing provided the hole is covered with high speed tape.

Refer to MCDL-27-16 Illustration Flap Track Moveable Fairing Pivot Cover

ILLUSTRATION FLAP TRACK MOVEABLE FAIRING PIVOT COVER

Ident.: MCDL-27-16-00006266.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 27-16 Flap Track Moveable Fairing Pivot Cover

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FUEL REFUEL/DEFUEL COUPLING CAP 101 QM OR 41 QM

28-01	Refuel/Defuel Coupling Cap 101 QM Or 41 QM

Ident.: MCDL-28-01-00006282.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

28-01 REFUEL/DEFUEL COUPLING CAP 101 QM OR 41 QM	Quantity installed –

(m) *Refer to AMM Task 28-25-00-040-003*

All may be missing provided seal integrity of coupling is positively confirmed (i.e. no fuel leak reported).

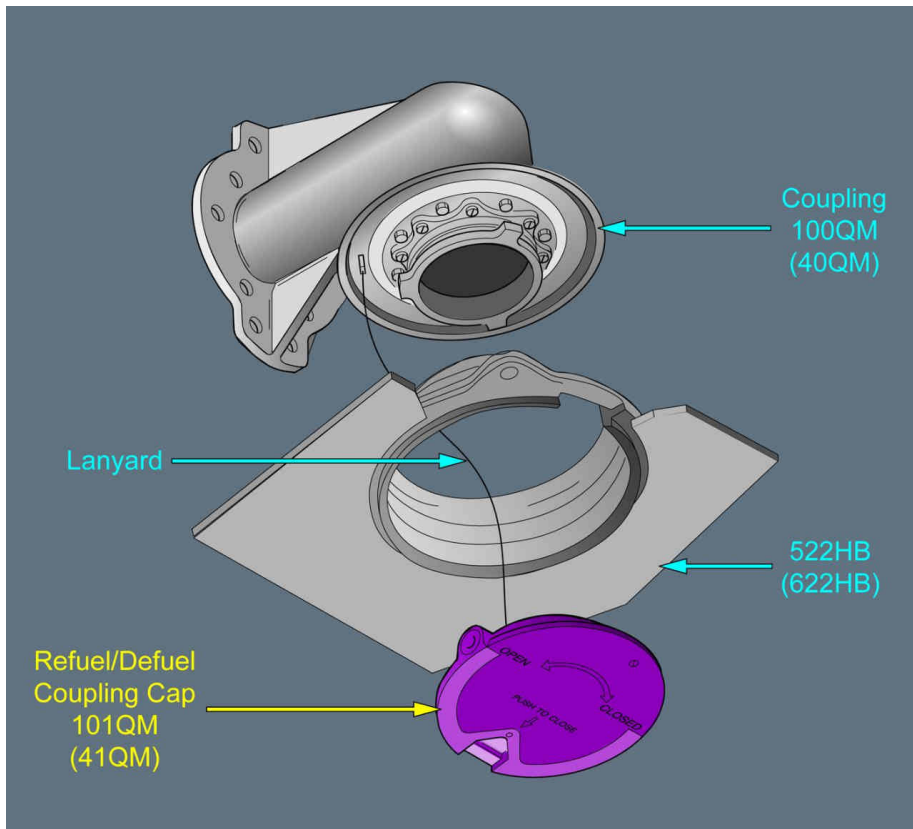
- Note:
1. *If the coupling or O-ring is damaged and the cap cannot be fitted, dispatch is permitted in accordance with this CDL item provided the cap is removed and coupling integrity is verified.*
 2. *If only the lanyard is missing, the removal of the cap is not necessary.*

Refer to MCDL-28-01 Illustration Refuel/Defuel Coupling Cap 101 QM or 41 QM

ILLUSTRATION REFUEL/DEFUEL COUPLING CAP 101 QM OR 41 QM

Ident.: MCDL-28-01-00006283.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 28-01 Refuel/Defuel Coupling Cap 101 QM Or 41 QM

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FUEL REFUEL PANEL DOOR 192MB

28-02	Refuel Panel Door

Ident.: MCDL-28-02-00006285.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

28-02 REFUEL PANEL DOOR	Quantity installed 1

(m) *Refer to AMM Task 52-42-00-040-001*

Belly fairing mounted refuel panel door 192 MB may be missing (if installed).

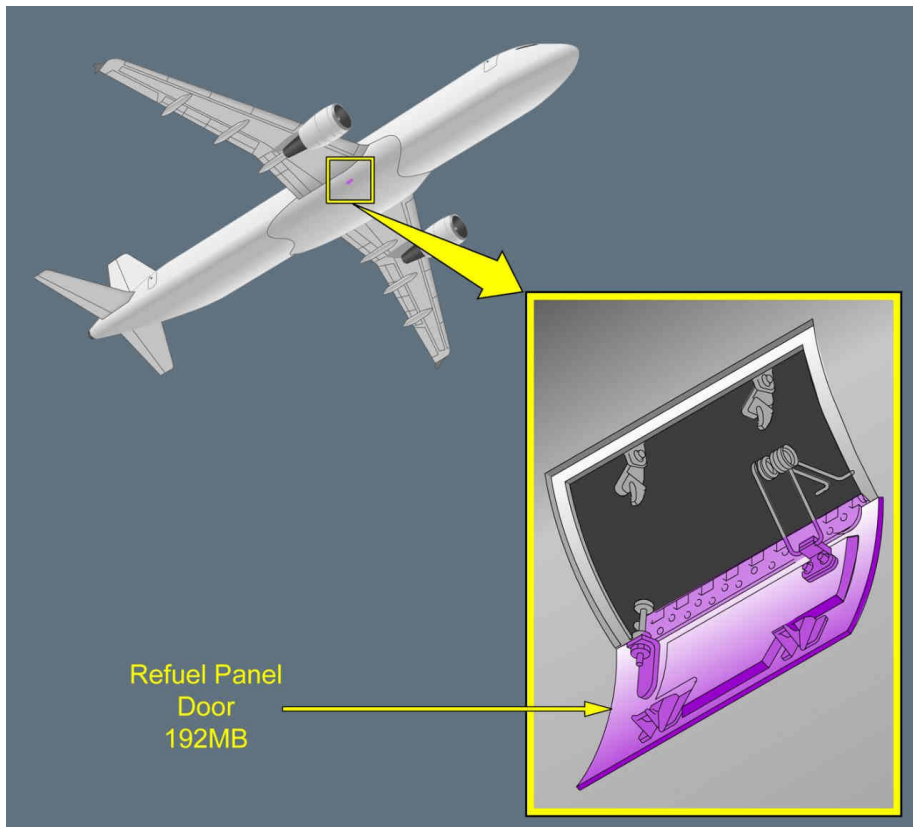
Note: *If belly fairing mounted refuel panel door 192 MB is not installed, underwing mounted refuel panel doors (622KB, 522KB) must not be missing.*

Refer to MCDL-28-02 Illustration Refuel Panel Door 192MB

ILLUSTRATION REFUEL PANEL DOOR 192MB

Ident.: MCDL-28-02-00006286.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 28-02 Refuel Panel Door 192MB*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST ICE AND RAIN PROTECTION ICING INDICATOR

30-01	Icing Indicator

Ident.: MCDL-30-01-00006287.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

30-01 ICING INDICATOR	Quantity installed 1

May be missing.

- **Procedures:**

- **If icing conditions expected:**

For icing conditions definition, *Refer to LIM-GEN Icing Conditions Definition.*

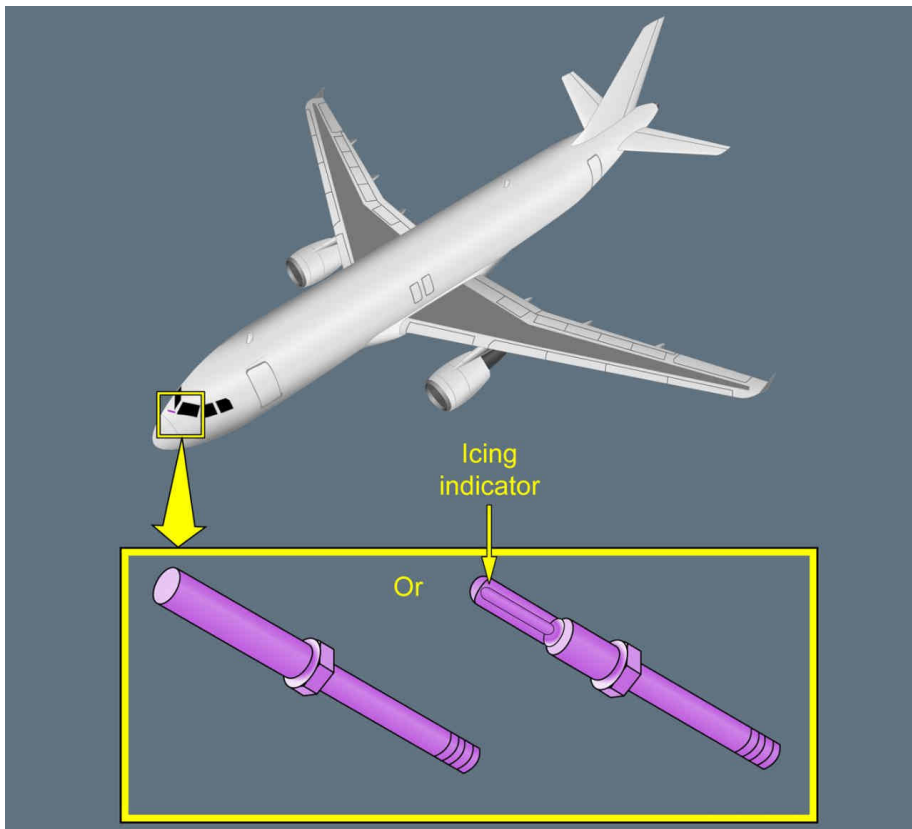
Turn on engine and wing anti-ice.

Refer to MCDL-30-01 Illustration Icing Indicator

ILLUSTRATION ICING INDICATOR

Ident.: MCDL-30-01-00006288.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 30-01 Icing Indicator*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LANDING GEAR NOSE WHEEL HUBCAP

32-03	Nose Wheel Hubcap

Ident.: MCDL-32-03-00006297.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

32-03 NOSE WHEEL HUBCAP	Quantity installed 2

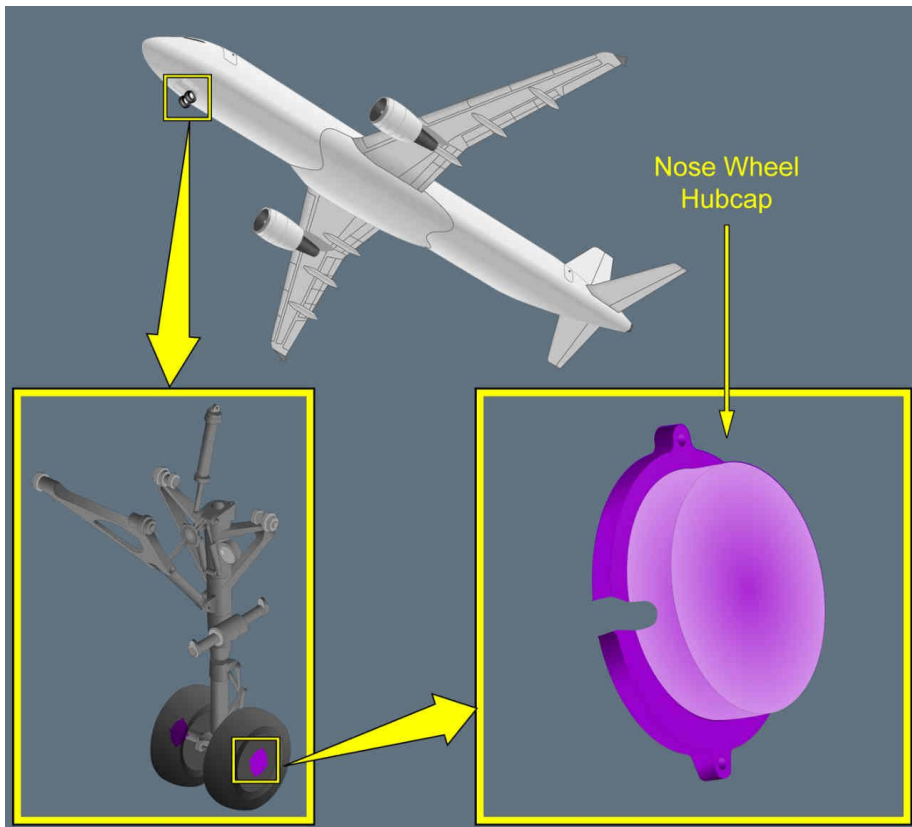
(m) *Refer to AMM Task 32-41-00-040-001*
One may be missing.

Refer to MCDL-32-03 Illustration Nose Wheel Hubcap

ILLUSTRATION NOSE WHEEL HUBCAP

Ident.: MCDL-32-03-00006298.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 32-03 Nose Wheel Hubcap

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LANDING GEAR NOSE FITTING TOWING

32-04	Nose Fitting Towing

Ident.: MCDL-32-04-00006299.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

32-04 NOSE FITTING TOWING	Quantity installed 1

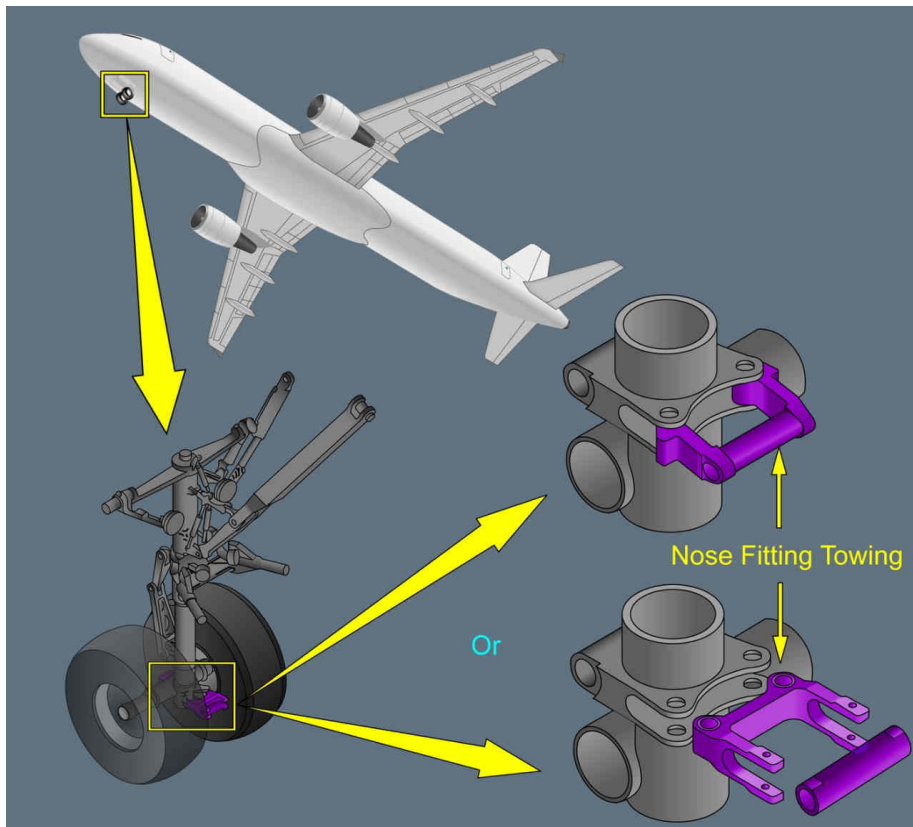
(m) Refer to AMM Task 32-21-00-040-001
May be missing.

Refer to MCDL-32-04 Illustration Nose Fitting Towing

ILLUSTRATION NOSE FITTING TOWING

Ident.: MCDL-32-04-00006300.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 32-04 Nose Fitting Towing

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS WING/ENGINE SCAN LIGHT COVER 3LX, 4LX

33-01	Wing/Engine Scan Light Cover 3LX, 4LX

Ident.: MCDL-33-01-00006301.0001001 / 02 DEC 13 Criteria: SA	EASA APPROVED

33-01 WING/ENGINE SCAN LIGHT COVER 3LX, 4LX	Quantity installed 2

(m) *Refer to AMM Task 33-49-00-040-001*
One may be missing provided the hole is covered with high speed tape.
Note: *If non transparent high speed tape is used, the affected light must be deactivated*
(Refer to MMEL/MI-33-40 Wing Scan light).

Refer to MCDL-33-01 Illustration Wing/Engine Scan Light Cover 3LX, 4LX

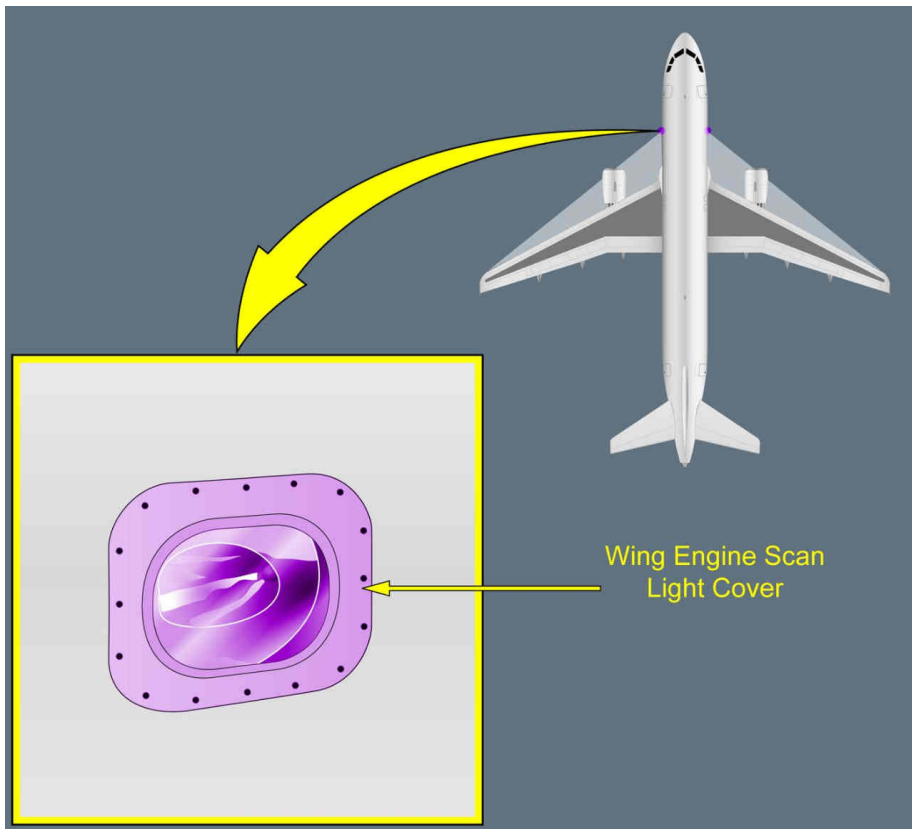
MASTER CONFIGURATION DEVIATION LIST**LIGHTS**

WING/ENGINE SCAN LIGHT COVER 3LX, 4LX

ILLUSTRATION WING/ENGINE SCAN LIGHT COVER 3LX, 4LX

Ident.: MCDL-33-01-00006302.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 33-01 Wing/Engine Scan light Cover 3LX, 4LX

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS TAXI LIGHT LAMP 8LR

33-02	Taxi Light Lamp 8LR

Ident.: MCDL-33-02-00006303.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

33-02 TAXI LIGHT LAMP 8LR	Quantity installed 1

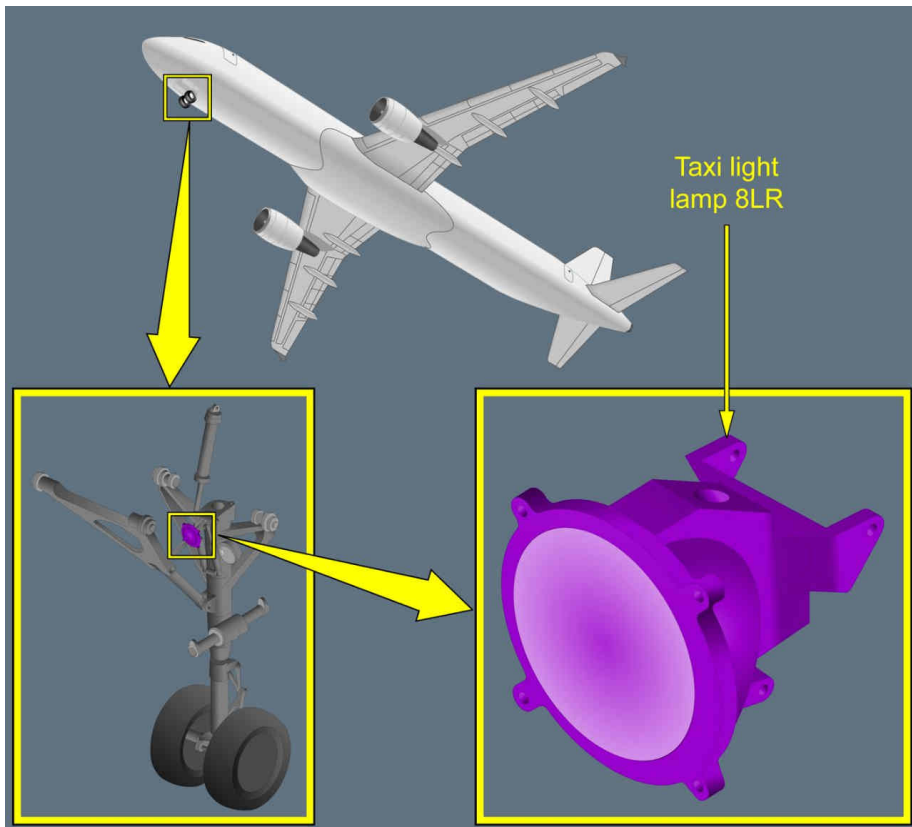
(m) *Refer to AMM Task 33-46-00-040-001*
May be missing provided the hole is covered with high speed tape and the affected light is deactivated (*Refer to MMEL/MI-33-40 Taxi and Takeoff light*).

Refer to MCDL-33-02 Illustration Taxi Light Lamp 8LR

ILLUSTRATION TAXI LIGHT LAMP 8LR

Ident.: MCDL-33-02-00006304.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 33-02 Taxi Light Lamp 8LR*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS REAR NAVIGATION LIGHT LENS 15LA

33-03	Rear Navigation Light Lens 15LA

Ident.: MCDL-33-03-00006305.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

33-03 REAR NAVIGATION LIGHT LENS 15LA	Quantity installed 1

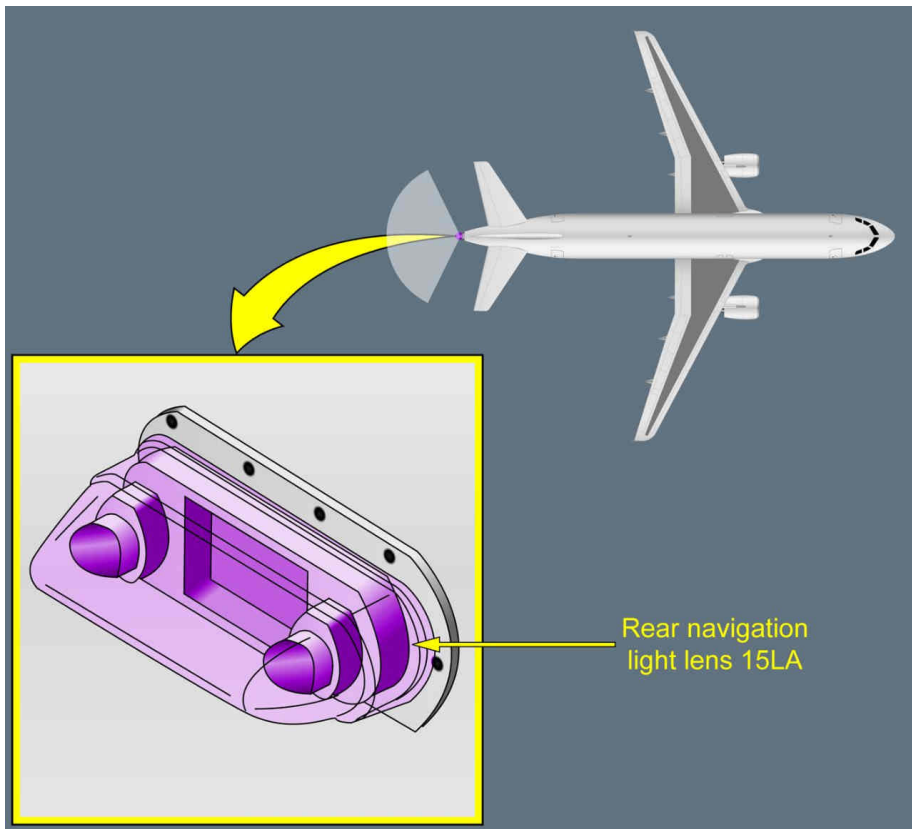
(m) *Refer to AMM Task 33-41-00-040-002*
May be missing for 10 flight cycles provided visual inspection is performed, before the first flight of the day only, to check that there is no structural buckling.

Refer to MCDL-33-03 Illustration Rear Navigation Light Lens 15LA

ILLUSTRATION REAR NAVIGATION LIGHT LENS 15LA

Ident.: MCDL-33-03-00006306.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 33-03 Rear Navigation Light Lens 15LA*

 A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS UPPER 7LV AND LOWER 6LV ANTI-COLLISION (BEACON) LIGHT COVER

33-04	Upper 7LV and Lower 6LV Anti-collision (Beacon) Light Cover

Ident.: MCDL-33-04-00006307.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

33-04 UPPER 7LV AND LOWER 6LV ANTI-COLLISION (BEACON) LIGHT COVER	Quantity installed 2

(m) *Refer to AMM Task 33-48-00-040-001*

All may be missing provided the lamp is covered with high speed tape and affected light is deactivated (*Refer to MMEL/MI-33-40 Beacon light*).

- **Performance:**

If upper and lower light covers are missing, the following performance penalties are applicable:

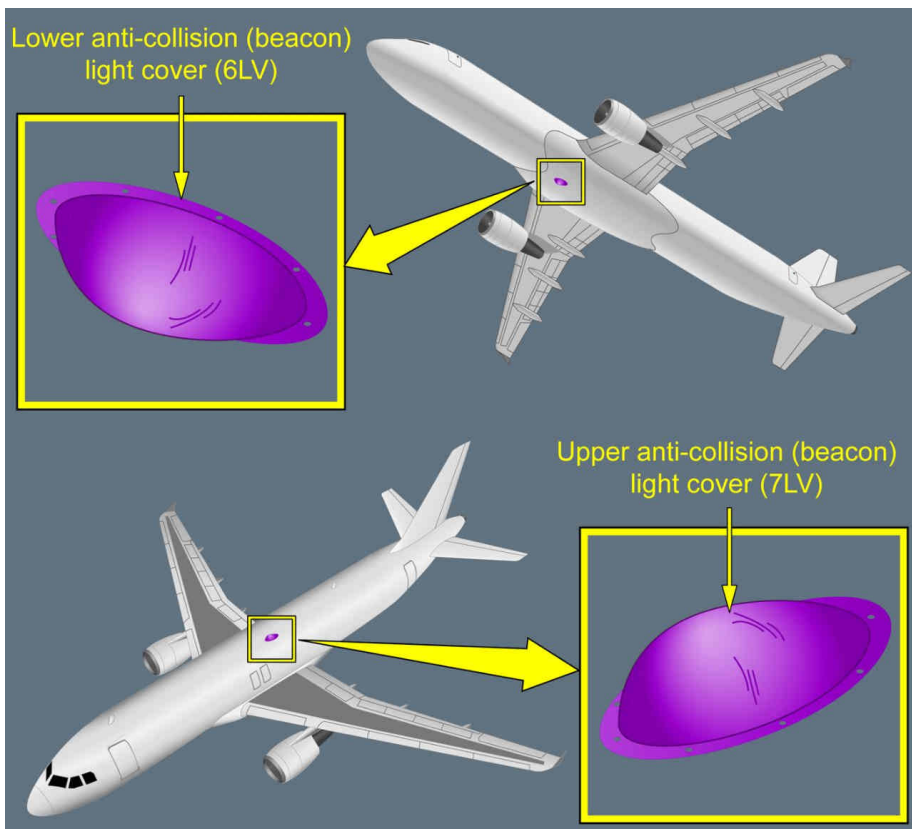
- Takeoff and approach climb performance limiting weights are reduced by 80 kg (177 lb)
- En route performance limiting weight is reduced by 90 kg (199 lb)
- Fuel consumption is increased by 0.22 %.

Refer to MCDL-33-04 Illustration Upper 7LV and Lower 6LV Anti-Collision (Beacon) Light Cover

ILLUSTRATION UPPER AND LOWER ANTI-COLLISION (BEACON) LIGHT COVER

Ident.: MCDL-33-04-00006308.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 33-04 Upper 7LV and Lower 6LV Anti-Collision (Beacon) Light Cover

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS LOGO LIGHT LENS (COVER) 3LY, 4LY

33-05	Logo Light Lens (Cover) 3LY, 4LY

Ident.: MCDL-33-05-00006309.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

33-05 LOGO LIGHT LENS (COVER) 3LY, 4LY	Quantity installed 2

(m) *Refer to AMM Task 33-47-00-040-001*

All may be missing provided the hole is covered with high speed tape.

Note: *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-33-05 Illustration Logo Light Lens (Cover) 3LY, 4LY

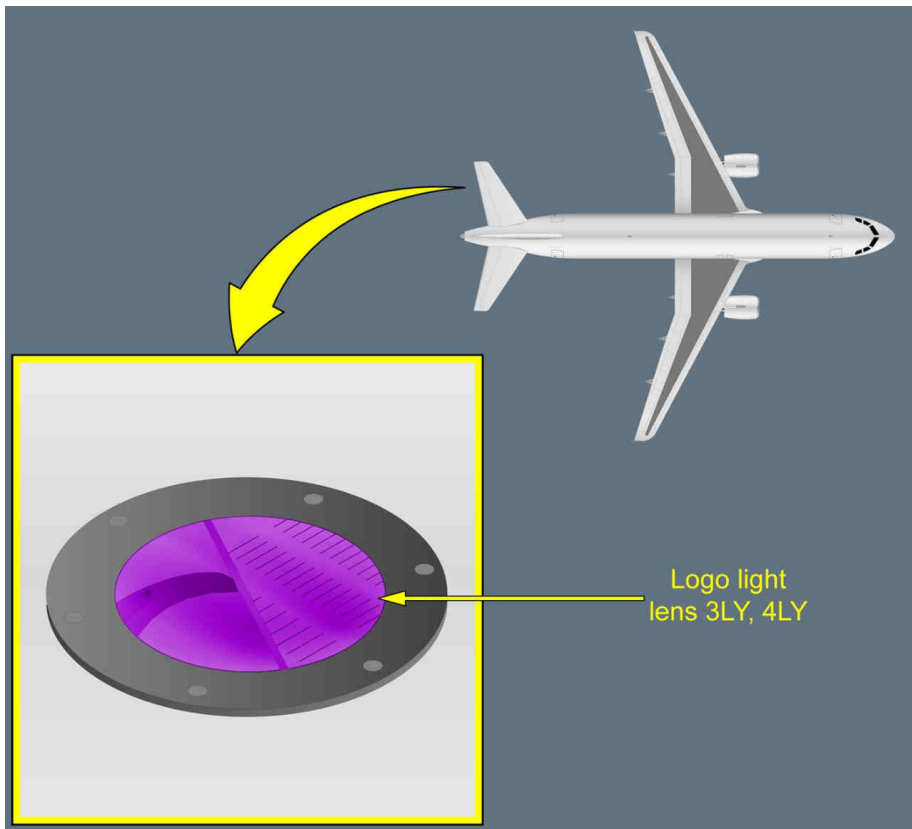
MASTER CONFIGURATION DEVIATION LIST**LIGHTS**

LOGO LIGHT LENS (COVER) 3LY, 4LY

ILLUSTRATION LOGO LIGHT LENS (COVER) 3LY, 4LY

Ident.: MCDL-33-05-00006310.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 33-05 Logo Light Lens (Cover) 3LY, 4LY

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS LANDING LIGHT LENS 7LB, 8LB

33-07	Landing Light Lens 7LB, 8LB

Ident.: MCDL-33-07-00006321.0001001 / 02 DEC 13 Criteria: SA	<u>EASA APPROVED</u>

33-07 LANDING LIGHT LENS 7LB, 8LB	Quantity installed 2

(m) *Refer to AMM Task 33-42-00-040-001*
One may be missing provided the associated light is retracted and deactivated and the hole is covered with high speed tape (*Refer to MMEL/MI-33-40 Landing light*).

Refer to MCDL-33-07 Illustration Landing Light Lens 7LB, 8LB

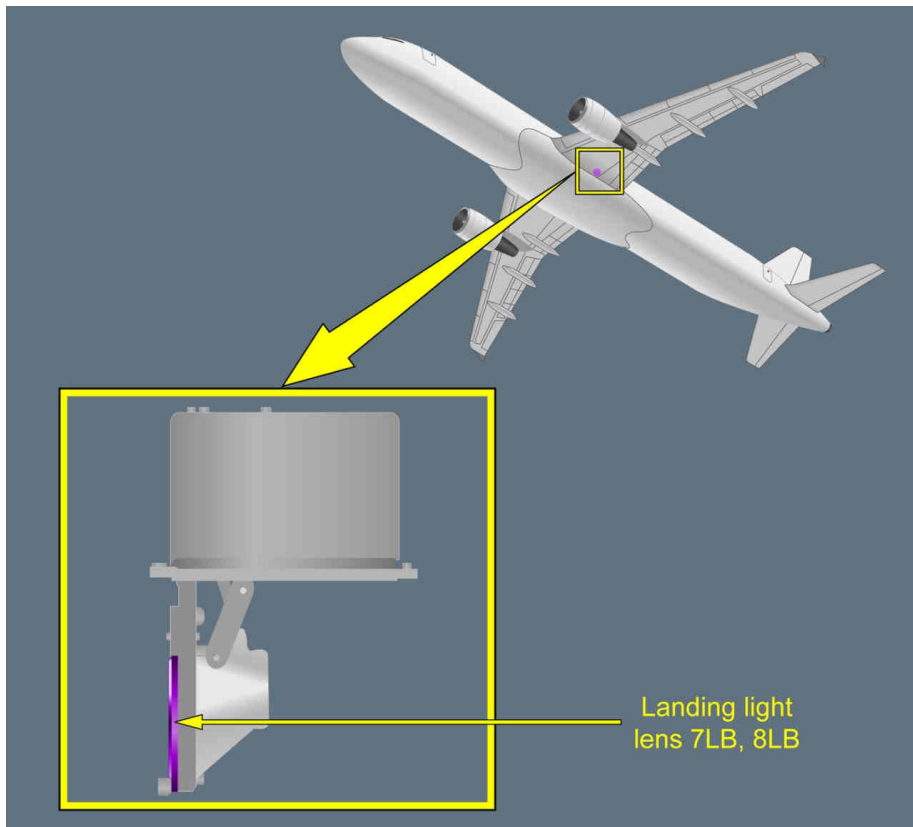
MASTER CONFIGURATION DEVIATION LIST**LIGHTS**

LANDING LIGHT LENS 7LB, 8LB

ILLUSTRATION LANDING LIGHT LENS 7LB, 8LB

Ident.: MCDL-33-07-00006322.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 33-07 Landing Light Lens 7LB, 8LB

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS TURN OFF LIGHT LAMP 3LC1, 3LC2

33-08	Turn OFF Light Lamp 3LC1, 3LC2

Ident.: MCDL-33-08-00006324.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

33-08 TURN OFF LIGHT LAMP 3LC1, 3LC2	Quantity installed 2

(m) Refer to AMM Task 33-43-00-040-002

All may be missing provided the hole is covered with high speed tape and the affected light is deactivated (*Refer to MMEL/MI-33-40 Runway Turnoff light*).

Refer to MCDL-33-08 Illustration Turn OFF Light Lamp 3LC1, 3LC2

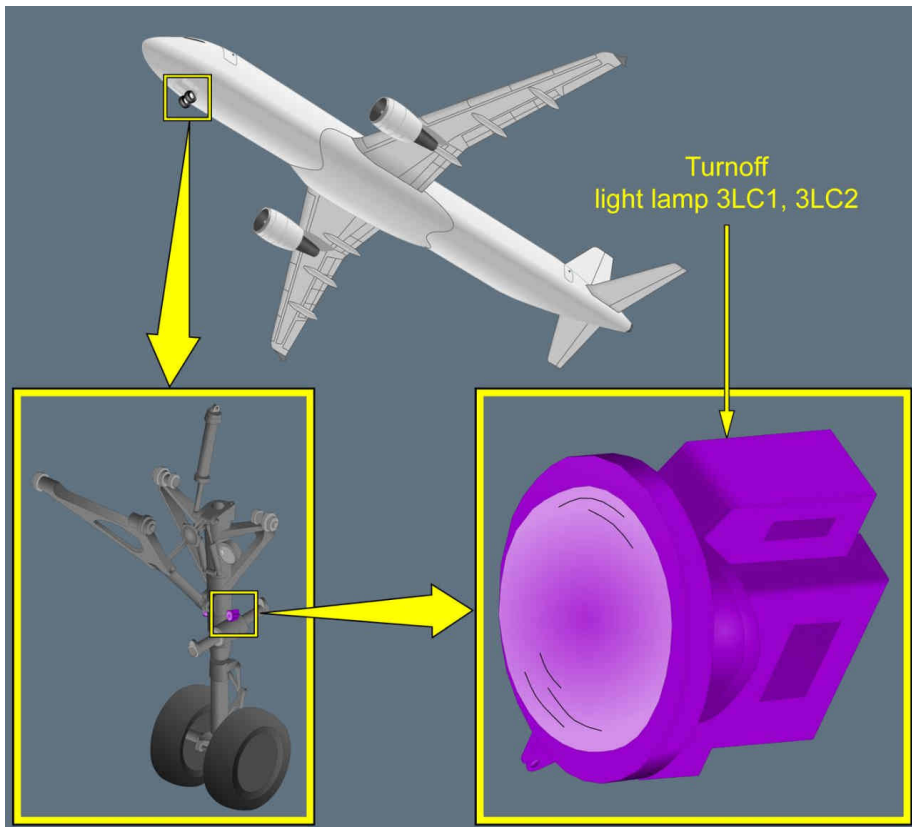
MASTER CONFIGURATION DEVIATION LIST**LIGHTS**

TURN OFF LIGHT LAMP 3LC1, 3LC2

ILLUSTRATION TURN OFF LIGHT LAMP 3LC1, 3LC2

Ident.: MCDL-33-08-00006325.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 33-08 Turn OFF Light Lamp 3LC1, 3LC2

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST LIGHTS TAKEOFF LIGHT LAMP 7LR

33-09	Takeoff light lamp 7LR

Ident.: MCDL-33-09-00006327.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

33-09 TAKEOFF LIGHT LAMP 7LR	Quantity installed 1

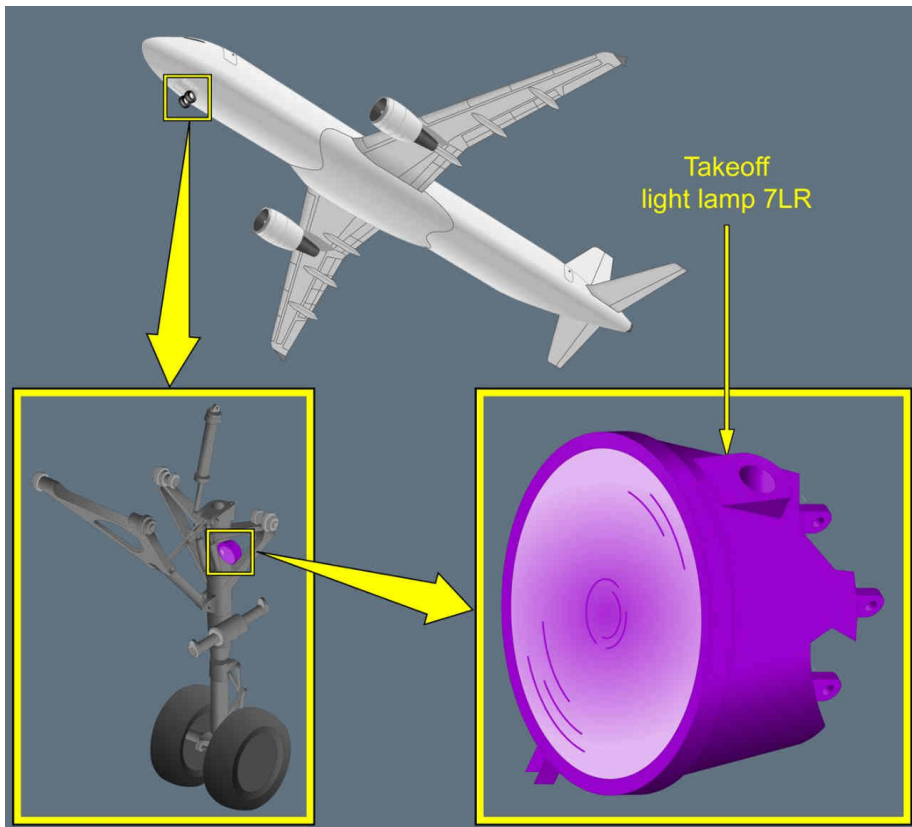
(m) Refer to AMM Task 33-46-00-040-002
May be missing provided the hole is covered with high speed tape and the affected light is deactivated (*Refer to MMEL/MI-33-40 Taxi and Takeoff light*).

Refer to MCDL-33-09 Illustration Takeoff Light Lamp 7LR

ILLUSTRATION TAKEOFF LIGHT LAMP 7LR

Ident.: MCDL-33-09-00006328.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 33-09 Takeoff Light Lamp 7LR*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST APU APU OVERPRESSURE RELEASE DOOR

49-01	APU Overpressure Release Door

Ident.: MCDL-49-01-00006329.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

49-01 APU OVERPRESSURE RELEASE DOOR	Quantity installed 1

May be missing provided APU is not used in flight and on ground.

- **Limitations:**

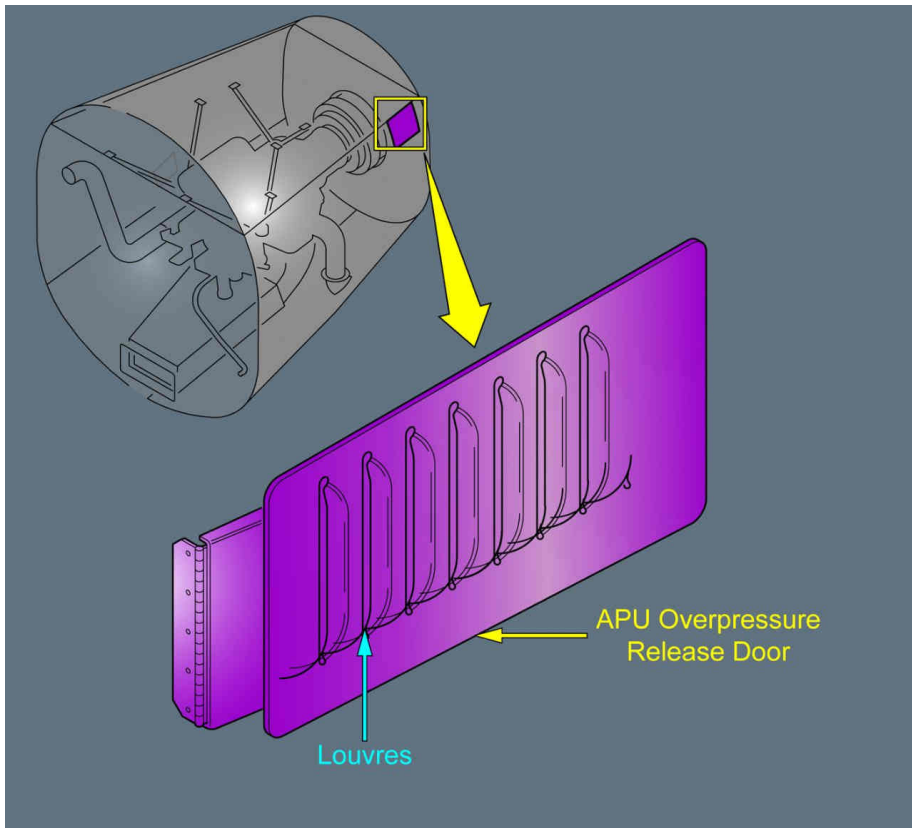
Flights for which APU is mandatory are not allowed.

Refer to MCDL-49-01 Illustration APU Overpressure Release Door

ILLUSTRATION APU OVERPRESSURE RELEASE DOOR

Ident.: MCDL-49-01-00006330.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 49-01 APU Overpressure Release Door*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST STRUCTURE RADOME CONDUCTIVE STRIP

51-01	Radome conductive strip

Ident.: MCDL-51-01-00006331.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

51-01 RADOME CONDUCTIVE STRIP	Quantity installed 8

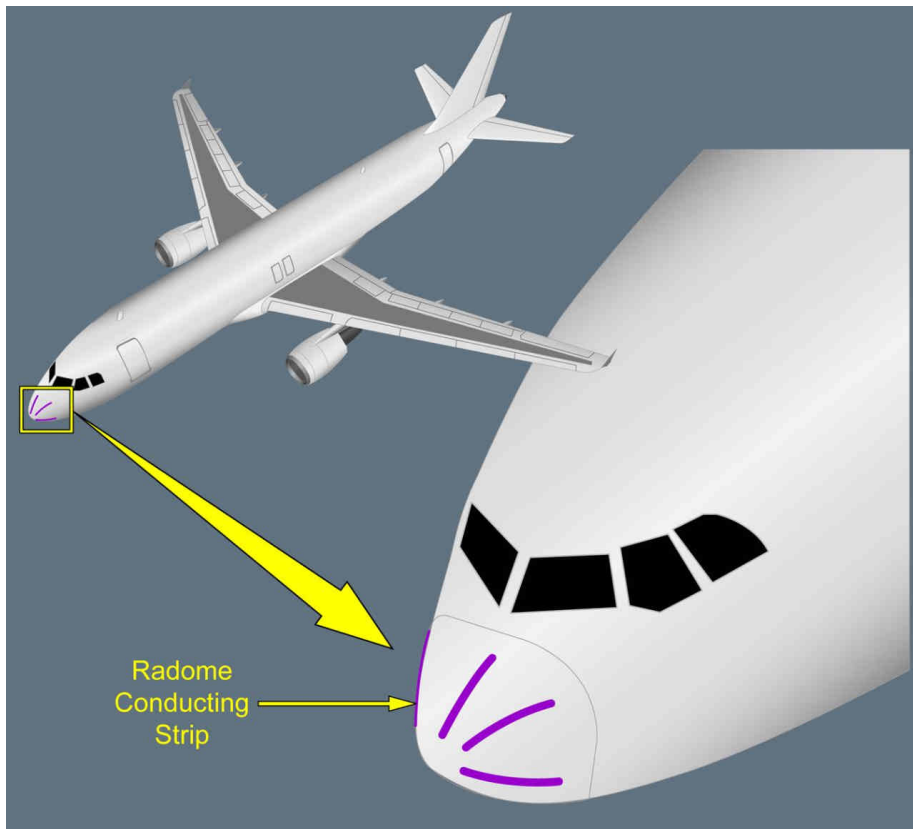
One may be missing.

Refer to MCDL-51-01 Illustration Radome Conductive Strip

ILLUSTRATION RADOME CONDUCTIVE STRIP

Ident.: MCDL-51-01-00006332.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 51-01 Radome Conductive Strip*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST STRUCTURE PASSENGER DOOR SCUFF PLATE

51-02	Passenger Door Scuff Plate

Ident.: MCDL-51-02-00006333.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

51-02 PASSENGER DOOR SCUFF PLATE	Quantity installed –

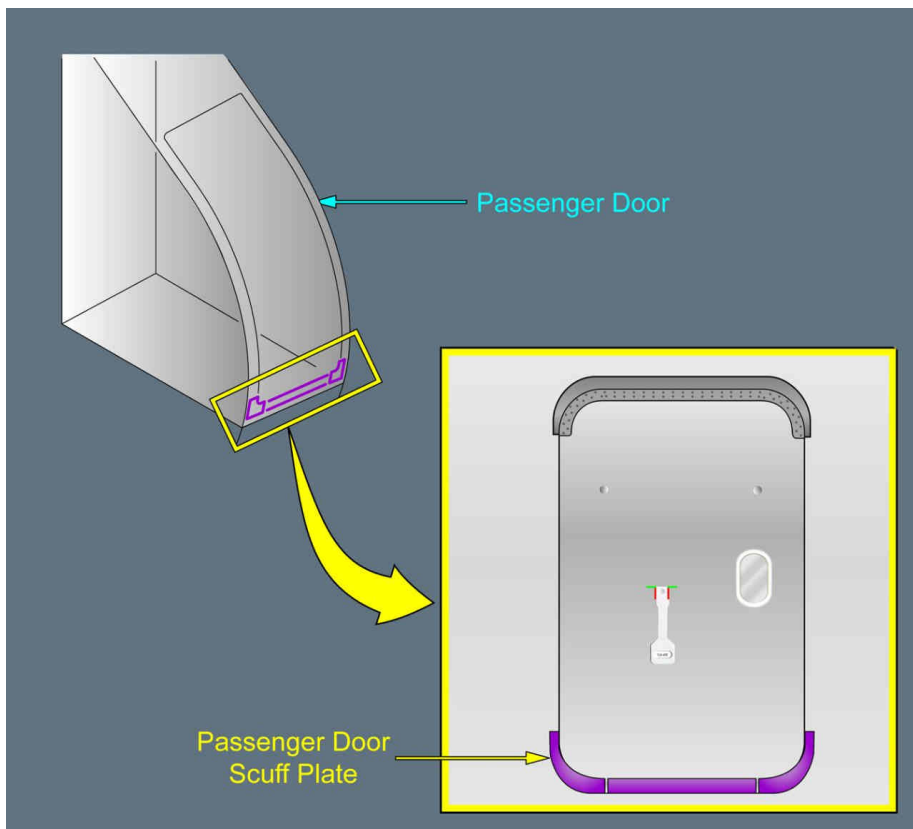
All may be missing.

Refer to MCDL-51-02 Illustration Passenger Door Scuff Plate

ILLUSTRATION PASSENGER DOOR SCUFF PLATE

Ident.: MCDL-51-02-00006334.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 51-02 Passenger Door Scuff Plate*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST STRUCTURE BULK CARGO DOOR SCUFF PLATE

51-03	Bulk Cargo Door Scuff Plate

Ident.: MCDL-51-03-00006335.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: ((A320 or A321) and 20029)	

51-03 BULK CARGO DOOR SCUFF PLATE	Quantity installed 1

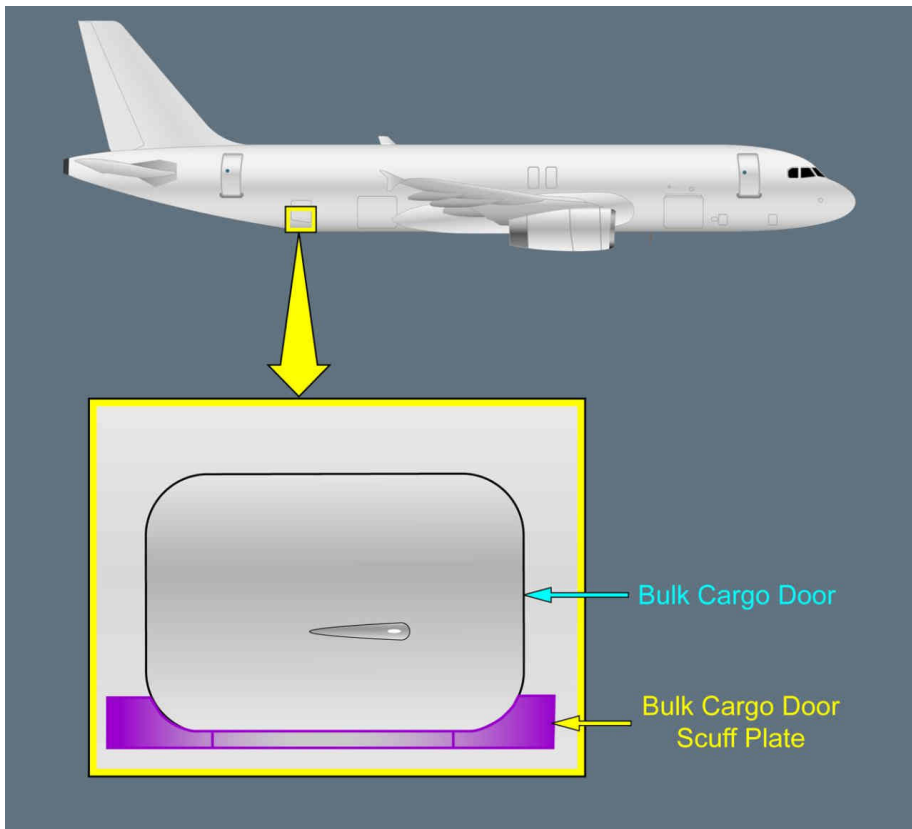
May be missing.

Refer to MCDL-51-03 Illustration Bulk Cargo Door Scuff Plate

MASTER CONFIGURATION DEVIATION LIST**STRUCTURE****BULK CARGO DOOR SCUFF PLATE****ILLUSTRATION BULK CARGO DOOR SCUFF PLATE**

Ident.: MCDL-51-03-00009710.0001001 / 23 NOV 09

Criteria: ((A320 or A321) and 20029)

FOR INFORMATION ONLY

For dispatch conditions: *Refer to 51-03 Bulk Cargo Door Scuff Plate*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST STRUCTURE FAIRING AFT SAFETY STAY POINT 311 AL

51-04	Fairing Aft Safety Stay Point 311 AL

Ident.: MCDL-51-04-00006338.0001001 / 23 NOV 09 Criteria: SA	<u>EASA APPROVED</u>

51-04 FAIRING AFT SAFETY STAY POINT 311 AL	Quantity installed 1

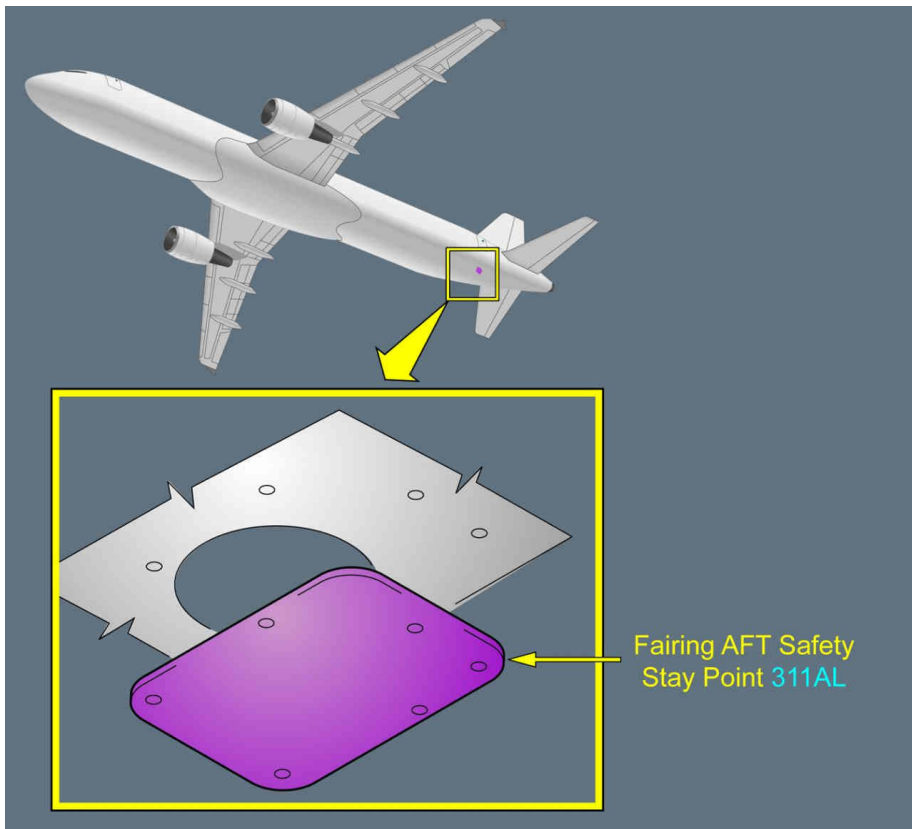
May be missing.

Refer to MCDL-51-04 Illustration Fairing Aft Safety Stay Point 311AL

ILLUSTRATION FAIRING AFT SAFETY STAY POINT 311AL

Ident.: MCDL-51-04-00006339.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 51-04 Fairing Aft Safety Stay Point 311 AL



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

TOILET SERVICING AND DRAINAGE DOOR

52-01

Toilet Servicing and Drainage Door

Ident.: TDU / MCDL-52-01-00015417.0003001 / 17 APR 14

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 20109)

Impacted DU: 00006441 Toilet Servicing and Drainage Door

Impacted by TR415 Issue 1.0

52-01

TOILET SERVICING AND DRAINAGE DOOR

Quantity installed

1

(m) Refer to AMM Task 52-42-00-040-002

May be missing.

Note: 1. Toilet system is inoperative on ground.

2. May be combined with MCDL items:

- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

• **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 63 kg (139 lb)
- En route performance limiting weight is reduced by 72 kg (159 lb).

Refer to MCDL-52-01 Illustration Toilet Servicing and Drainage Door

52-01

Toilet Servicing And Drainage Door 172 AR

Ident.: MCDL-52-01-00006441.0003001 / 02 DEC 13

EASA APPROVED

Criteria: ((A319 or A320 or A321) and 20109)

Impacted by TDU: 00015417 Toilet Servicing and Drainage Door

52-01

TOILET SERVICING AND DRAINAGE DOOR 172 AR

Quantity installed

1

(m) Refer to AMM Task 52-42-00-040-002

May be missing.

Continued on the following page

MASTER CONFIGURATION DEVIATION LIST**DOORS****TOILET SERVICING AND DRAINAGE DOOR**

Continued from the previous page Toilet Servicing And Drainage Door 172 AR

- Note:
1. Toilet system is inoperative on ground.
 2. May be combined with MCDL items:
 - 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
 - 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
 - 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
 - 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
 - 52-06 (Refer to MCDL-52-06 Forward Jacking Point Access Door)
 - 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 63 kg (139 lb)
- En route performance limiting weight is reduced by 72 kg (159 lb).

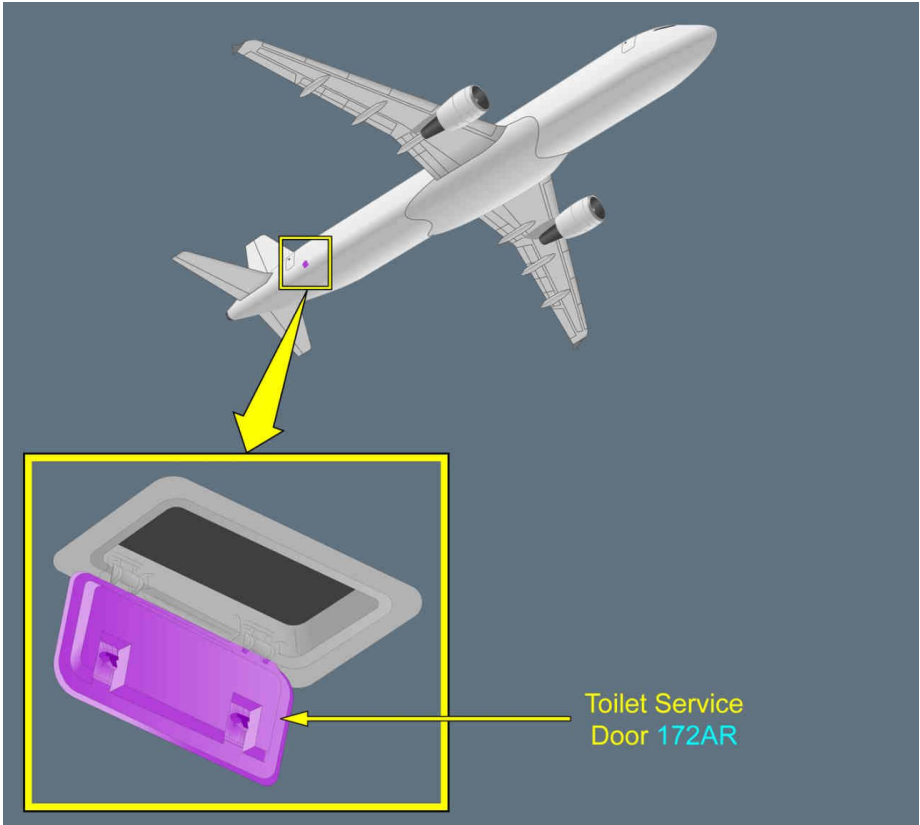
Refer to MCDL-52-01 Illustration Toilet Servicing and Drainage Door

ILLUSTRATION TOILET SERVICING AND DRAINAGE DOOR

Ident.: MCDL-52-01-00006442.0002001 / 23 NOV 09

FOR INFORMATION ONLY

Criteria: (SA and 20109)



for dispatch conditions: *Refer to 52-01 Toilet Servicing and Drainage Door*



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

TOILET SERVICING AND DRAINAGE DOOR

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A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO HYDRAULIC GROUND
CONNECTORS 197 CB - 197 EB - 198 CB

52-02

Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB

Ident.: TDU / MCDL-52-02-00015418.0001001 / 17 APR 14

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted DU: 00006447 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB

Impacted by TR413 Issue 1.0

52-02

**ACCESS DOOR TO HYDRAULIC GROUND CONNECTORS
197 CB - 197 EB - 198 CB**

Quantity installed

3

One may be missing.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 63 kg (139 lb)
- En route performance limiting weight is reduced by 72 kg (159 lb).

Refer to MCDL-52-02 Illustration Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB

52-02

Access Door To Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB

Ident.: MCDL-52-02-00006447.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted by TDU: 00015418 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB

52-02

**ACCESS DOOR TO HYDRAULIC GROUND CONNECTORS
197 CB - 197 EB - 198 CB**

Quantity installed

3

One may be missing.

Continued on the following page

MASTER CONFIGURATION DEVIATION LIST**DOORS**ACCESS DOOR TO HYDRAULIC GROUND
CONNECTORS 197 CB - 197 EB - 198 CB*Continued from the previous page Access Door To Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB*Note: May be combined with MCDL items:

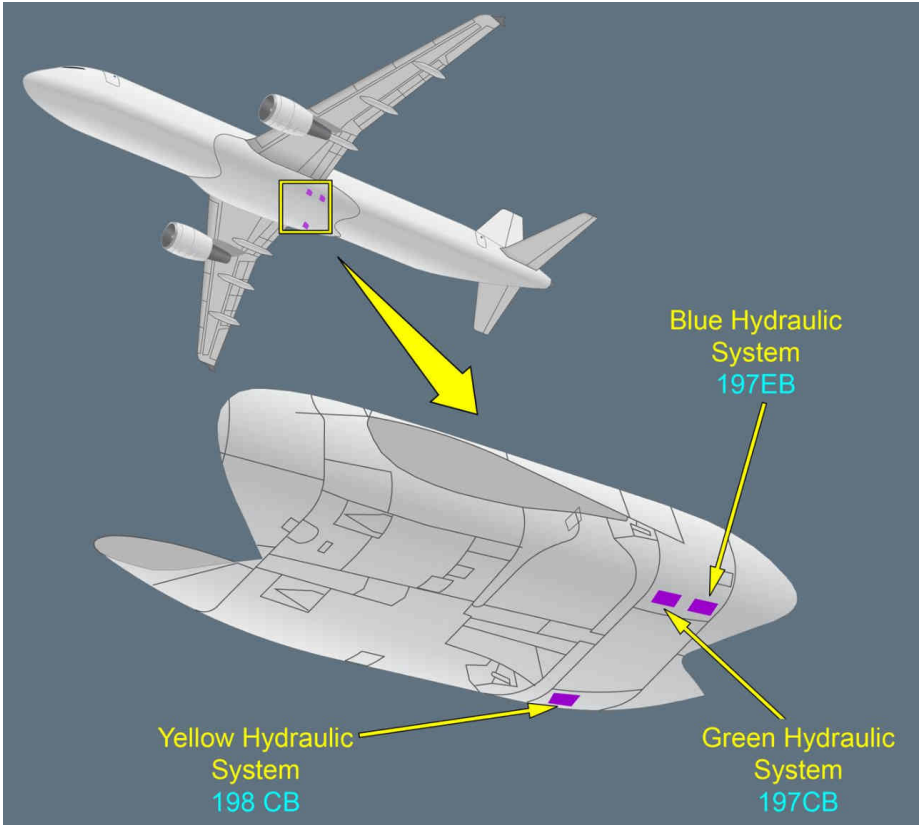
- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
- 52-06 (Refer to MCDL-52-06 Forward Jacking Point Access Door)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 63 kg (139 lb)
- En route performance limiting weight is reduced by 72 kg (159 lb).

Refer to MCDL-52-02 Illustration Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB

MASTER CONFIGURATION DEVIATION LIST**DOORS**ACCESS DOOR TO HYDRAULIC GROUND
CONNECTORS 197 CB - 197 EB - 198 CB**ILLUSTRATION ACCESS DOOR TO HYDRAULIC
GROUND CONNECTORS 197 CB - 197 EB - 198 CB**Ident.: MCDL-52-02-00006449.0001001 / 17 JUL 12
Criteria: SAFOR INFORMATION ONLY

For dispatch conditions: *Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB*



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO HYDRAULIC GROUND
CONNECTORS 197 CB - 197 EB - 198 CB

Intentionally left blank



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO POTABLE WATER FILLING AND DRAINAGE

52-03

Access Door to Potable Water Filling and Drainage

1 Ident.: TDU / MCDL-52-03-00015419.0001001 / 17 APR 14

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted DU: 00006452 Access Door to Potable Water Filling and Drainage

Impacted by TR413 Issue 1.0

52-03

ACCESS DOOR TO POTABLE WATER FILLING AND DRAINAGE

Quantity installed

3

One may be missing.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

Refer to MCDL-52-03 Illustration Access Door to Potable Water Filling and Drainage

52-03

Access Door To Potable Water Filling And Drainage 133 AL - 171 AL - 192 NB

Ident.: MCDL-52-03-00006452.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted by TDU: 00015419 Access Door to Potable Water Filling and Drainage

52-03

ACCESS DOOR TO POTABLE WATER FILLING AND DRAINAGE 133 AL - 171 AL - 192 NB

Quantity installed

3

One may be missing.

Continued on the following page

MASTER CONFIGURATION DEVIATION LIST**DOORS****ACCESS DOOR TO POTABLE WATER FILLING AND DRAINAGE**

Continued from the previous page Access Door To Potable Water Filling And Drainage 133 AL - 171 AL - 192 NB

Note: *May be combined with MCDL items:*

- *52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)*
- *52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)*
- *52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)*
- *52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)*
- *52-06 (Refer to MCDL-52-06 Forward Jacking Point Access Door)*
- *52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).*

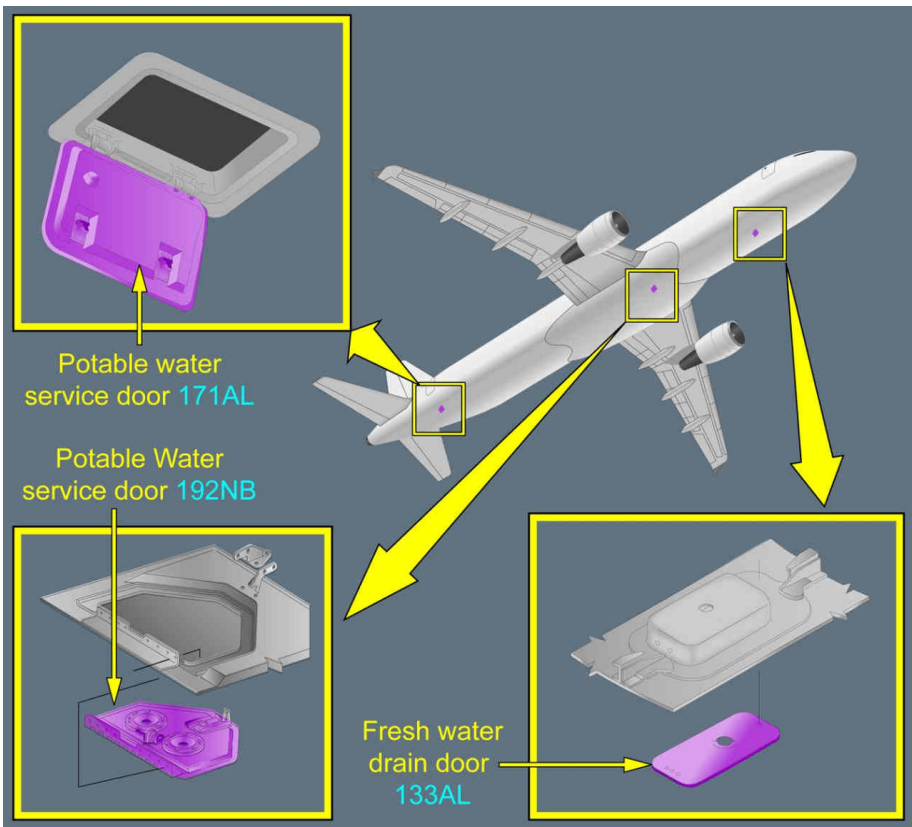
Refer to MCDL-52-03 Illustration Access Door to Potable Water Filling and Drainage

ILLUSTRATION ACCESS DOOR TO POTABLE WATER FILLING AND DRAINAGE

Ident.: MCDL-52-03-00006453.0001001 / 23 NOV 09

FOR INFORMATION ONLY

Criteria: (A319 or A320 or A321)

For dispatch conditions: *Refer to 52-03 Access Door to Potable Water Filling and Drainage*



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO POTABLE WATER FILLING AND DRAINAGE

Intentionally left blank



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO OPENING CONTROL OF LANDING
GEAR DOORS ON GROUND 195 BB - 196 BB

52-04

Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB

1 Ident.: TDU / MCDL-52-04-00015420.0001001 / 17 APR 14

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted DU: 00006455 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB

Impacted by TR413 Issue 1.0

52-04

ACCESS DOOR TO OPENING CONTROL OF LANDING GEAR DOORS ON GROUND 195 BB - 196 BB

Quantity installed

2

One may be missing for five flight cycles.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

- **Limitations:**

Flight in forecasted thunderstorm condition is not allowed.

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 63 kg (139 lb)
- En route performance limiting weight is reduced by 72 kg (159 lb).

Refer to MCDL-52-04 Illustration Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB

52-04

Access Door To Opening Control Of Landing Gear Doors On Ground 195 BB - 196 BB

Ident.: MCDL-52-04-00006455.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted by TDU: 00015420 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB

Continued on the following page



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO OPENING CONTROL OF LANDING
GEAR DOORS ON GROUND 195 BB - 196 BB

Continued from the previous page Access Door To Opening Control Of Landing Gear Doors On Ground 195 BB - 196 BB

52-04 ACCESS DOOR TO OPENING CONTROL OF LANDING GEAR DOORS ON GROUND 195 BB - 196 BB	Quantity installed 2

One may be missing for five flight cycles.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
- 52-06 (Refer to MCDL-52-06 Forward Jacking Point Access Door)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

- **Limitations:**

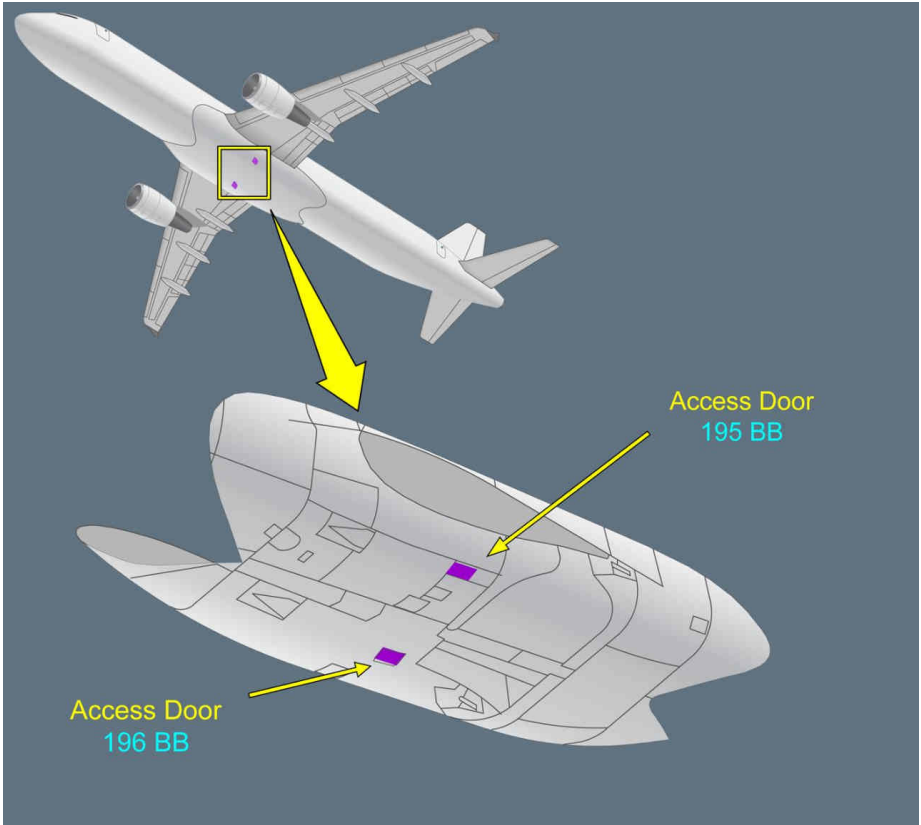
Flight in forecasted thunderstorm condition is not allowed.

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 63 kg (139 lb)
- En route performance limiting weight is reduced by 72 kg (159 lb).

Refer to MCDL-52-04 Illustration Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB

MASTER CONFIGURATION DEVIATION LIST**DOORS**ACCESS DOOR TO OPENING CONTROL OF LANDING
GEAR DOORS ON GROUND 195 BB - 196 BB**ILLUSTRATION ACCESS DOOR TO OPENING CONTROL
OF LANDING GEAR DOORS ON GROUND 195 BB - 196 BB**Ident.: MCDL-52-04-00006456.0001001 / 03 AUG 10
Criteria: SAFOR INFORMATION ONLY

For dispatch conditions: Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO OPENING CONTROL OF LANDING
GEAR DOORS ON GROUND 195 BB - 196 BB

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A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO AIR CONDITIONING GROUND SUPPLY 191 CB

52-05

Access Door to Air Conditioning Ground Supply 191 CB

1 Ident.: TDU / MCDL-52-05-00015421.0001001 / 17 APR 14

EASA APPROVED

Criteria: (A319 or A320 or A321)

Impacted DU: 00006457 Access Door to Air Conditioning Ground Supply 191 CB

Impacted by TR413 Issue 1.0

52-05

**ACCESS DOOR TO AIR CONDITIONING GROUND SUPPLY
191 CB**

Quantity installed

1

May be missing.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

Refer to MCDL-52-05 Illustration Access Door to Air Conditioning Ground Supply 191 CB

52-05

Access Door To Air Conditioning Ground Supply 191 CB

Ident.: MCDL-52-05-00006457.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Impacted by TDU: 00015421 Access Door to Air Conditioning Ground Supply 191 CB

52-05

**ACCESS DOOR TO AIR CONDITIONING GROUND SUPPLY
191 CB**

Quantity installed

1

May be missing.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-06 (Refer to MCDL-52-06 Forward Jacking Point Access Door)
- 52-20 (Refer to 52-20 Access Door to HP Air Ground Connector 191 DB).

Continued on the following page

MASTER CONFIGURATION DEVIATION LIST
DOORS
ACCESS DOOR TO AIR CONDITIONING GROUND SUPPLY 191 CB

Continued from the previous page Access Door To Air Conditioning Ground Supply 191 CB

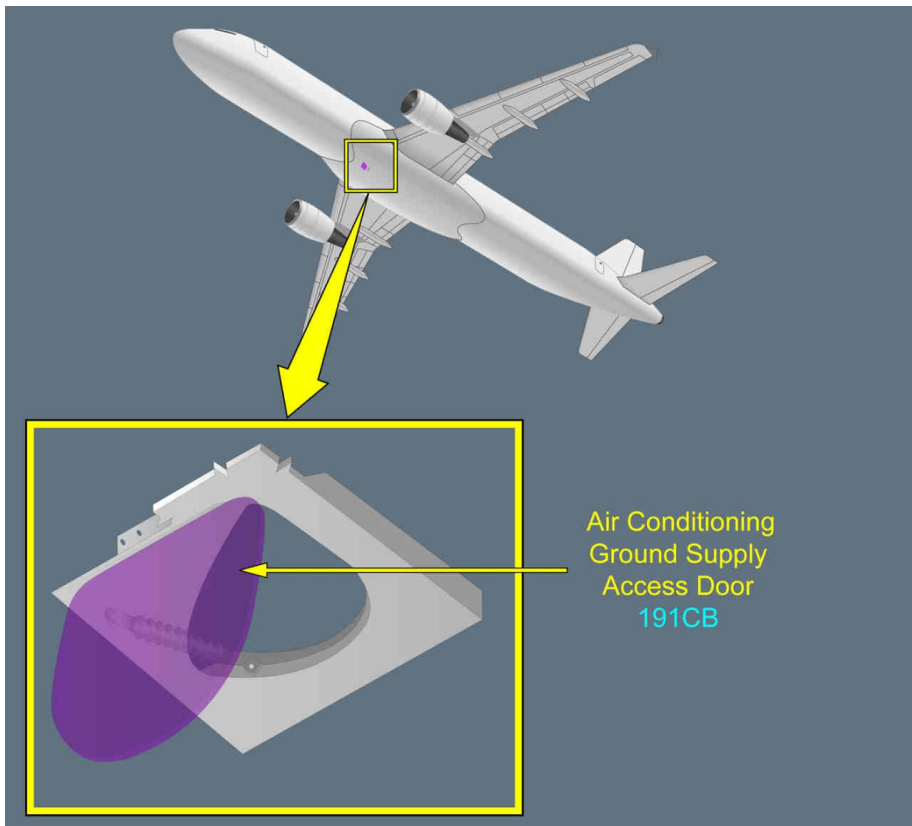
Refer to MCDL-52-05 Illustration Access Door to Air Conditioning Ground Supply 191 CB

ILLUSTRATION ACCESS DOOR TO AIR CONDITIONING GROUND SUPPLY 191 CB

Ident.: MCDL-52-05-00006458.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY



For dispatch conditions: *Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS EXTERNAL POWER GROUND CONNECTION ACCESS DOOR ASSY 121 AL

52-07	External Power Ground Connection Access Door Assy 121 AL

Ident.: MCDL-52-07-00006461.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

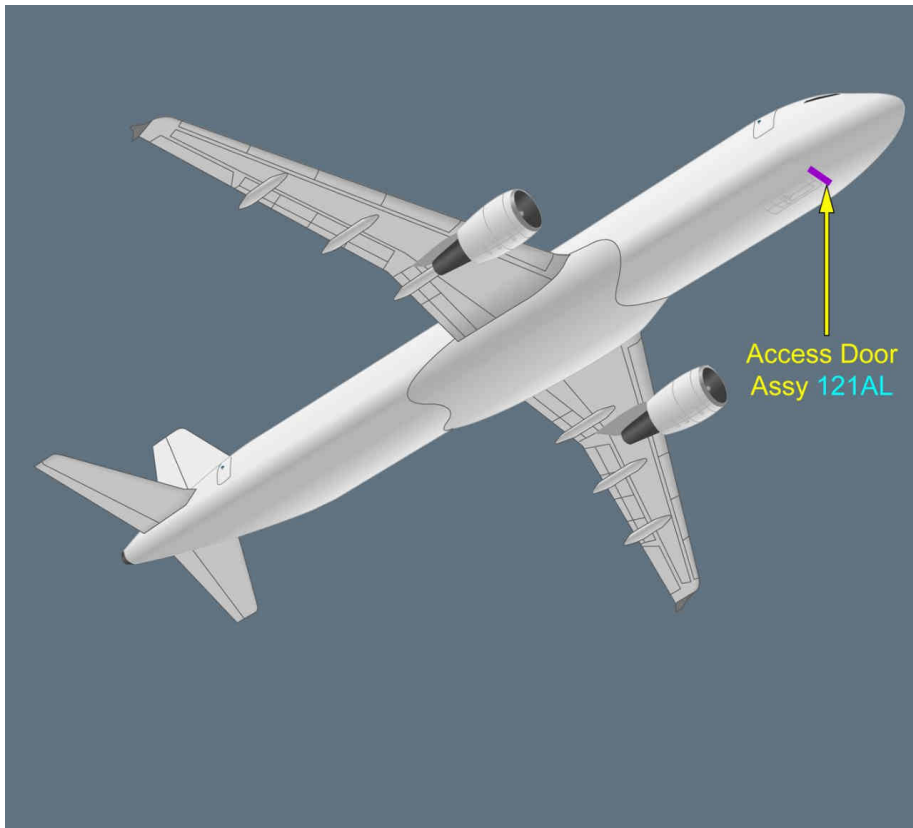
52-07 EXTERNAL POWER GROUND CONNECTION ACCESS DOOR ASSY 121 AL	Quantity installed 1

(m) *Refer to AMM Task 52-42-00-040-003*
May be missing for five flight cycles provided the hole is covered with high speed tape.

- **Limitations:**

Flight in forecasted thunderstorm condition is not allowed.

Refer to MCDL-52-07 Illustration External Power Ground Connection Access Door Assy 121 AL

MASTER CONFIGURATION DEVIATION LIST**DOORS**EXTERNAL POWER GROUND
CONNECTION ACCESS DOOR ASSY 121 AL**ILLUSTRATION EXTERNAL POWER GROUND CONNECTION ACCESS DOOR ASSY 121 AL**Ident.: MCDL-52-07-00006462.0001001 / 23 NOV 09
Criteria: SAFOR INFORMATION ONLY

For dispatch conditions: Refer to 52-07 External Power Ground Connection Access Door Assy 121 AL

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS ACCESS DOOR OF CARGO OPENING SYSTEM 134 AR - 154 AR

52-08	Access Door Of Cargo Opening System 134 AR - 154 AR

Ident.: MCDL-52-08-00006463.0001001 / 23 NOV 09 Criteria: (A318 or A319 or A320)	EASA APPROVED

52-08 ACCESS DOOR OF CARGO OPENING SYSTEM 134 AR - 154 AR	Quantity installed 2

All may be missing.

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 79 kg (175 lb) per missing access door
- En-route performance limiting weight is reduced by 108 kg (239 lb) per missing access door
- Fuel consumption is increased by 0.27 % per missing access door.

Refer to MCDL-52-08 Illustration Access Door of Cargo Opening System 134 AR - 154 AR

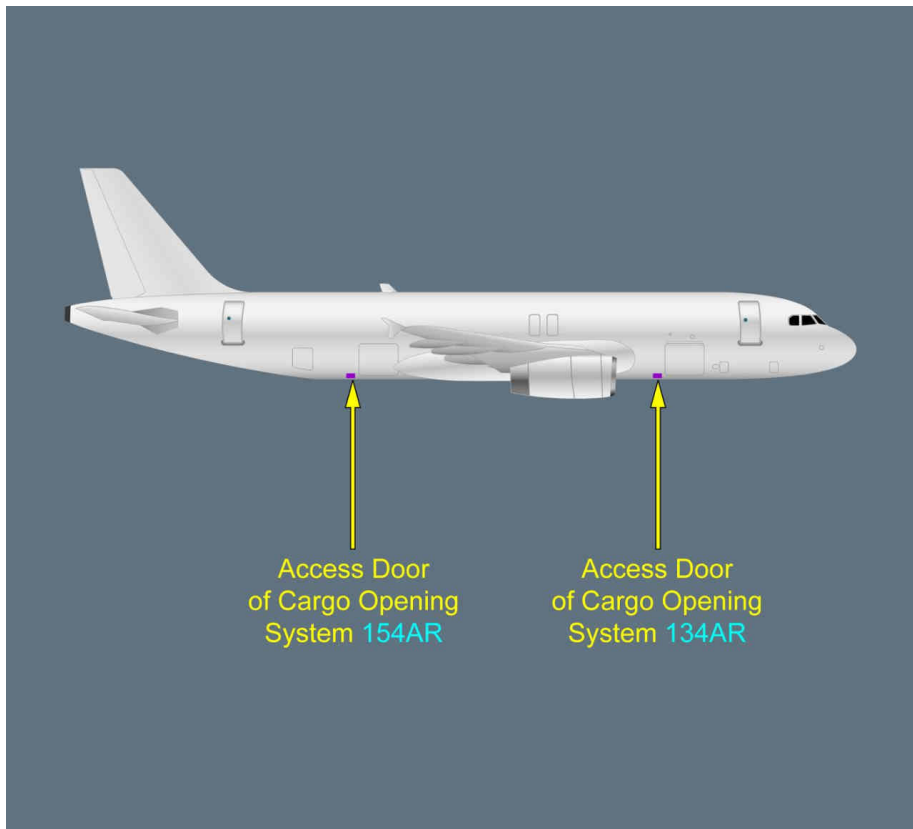
MASTER CONFIGURATION DEVIATION LIST**DOORS**

ACCESS DOOR OF CARGO OPENING SYSTEM 134 AR - 154 AR

ILLUSTRATION ACCESS DOOR OF CARGO OPENING SYSTEM 134 AR - 154 AR

Ident.: MCDL-52-08-00006464.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: *Refer to 52-08 Access Door of Cargo Opening System 134 AR - 154 AR*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS NOSE LANDING GEAR MAIN DOOR (713, 714)

52-09	Nose Landing Gear Main Door (713, 714)

Ident.: MCDL-52-09-00006465.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320)

52-09 NOSE LANDING GEAR MAIN DOOR (713, 714)	Quantity installed 2

(m) *Refer to AMM Task 32-22-00-040-001*

May be missing provided both main doors (713, 714) are removed and both aft doors (715, 716) (*Refer to 52-10 Nose Landing Gear Aft Door (715, 716)*) are removed.

Note: *May be combined with MCDL item 52-11 (Refer to 52-11 Nose Landing Gear Leg Door (712))*

Disregard the alert L/G DOORS NOT CLOSED displayed on the ECAM.

- **Limitations:**

Passengers transportation is not allowed.

Flight with landing gear down is required.

Refer to APP-LGDN-GEN General

Maximum speed: 220 kt IAS/ M 0.5

- **Performance:**

Note: *Reference performance for penalties computations are performance with landing gear down.*

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 918 kg (2 024 lb)
- En-route performance limiting weight is reduced by 1 000 kg (2 205 lb)
- Fuel consumption is increased by 2 %.

Refer to MCDL-52-09 Illustration Nose Landing Gear Main Door (713, 714)

MASTER CONFIGURATION DEVIATION LIST

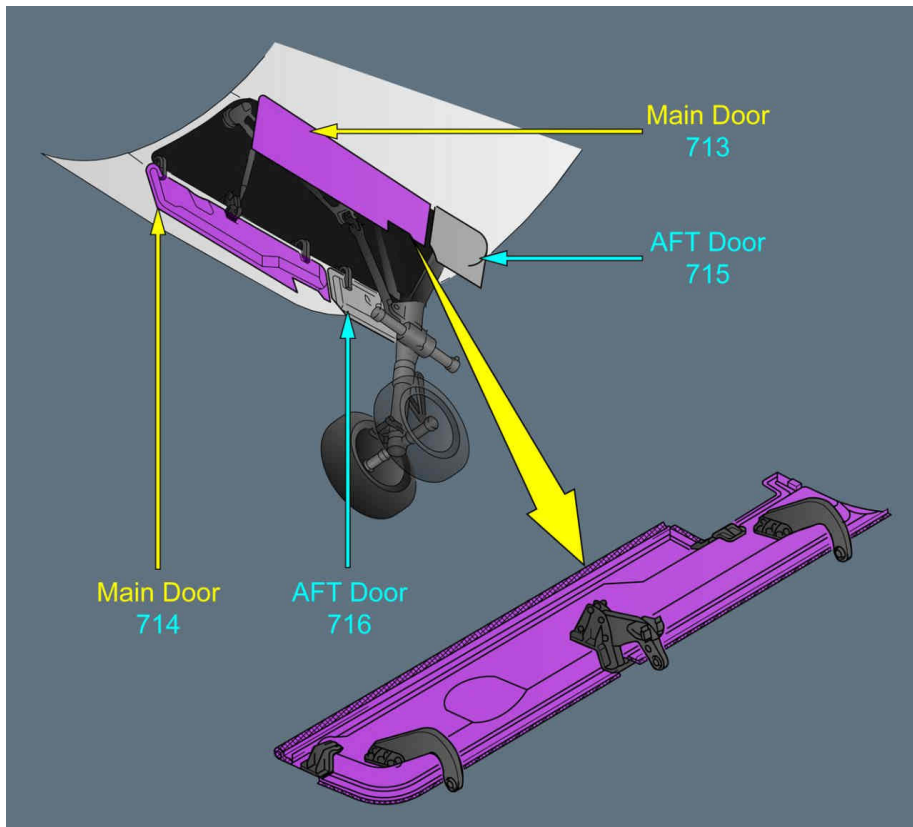
DOORS

NOSE LANDING GEAR MAIN DOOR (713, 714)

ILLUSTRATION NOSE LANDING GEAR MAIN DOOR (713, 714)

Ident.: MCDL-52-09-00006466.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-09 Nose Landing Gear Main Door (713, 714)

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS NOSE LANDING GEAR AFT DOOR (715, 716)

52-10	Nose Landing Gear Aft Door (715, 716)

Ident.: MCDL-52-10-00006467.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

52-10 NOSE LANDING GEAR AFT DOOR (715, 716)	Quantity installed 2

(m) *Refer to AMM Task 32-22-00-040-002*

All may be missing.

Note: *May be combined with MCDL item 52-11 (Refer to 52-11 Nose Landing Gear Leg Door (712))*

- **Limitations:**

Flight with landing gear down is required.

Refer to APP-LGDN-GEN General

- **Performance:**

Note: *Reference performance for penalties computations are performance with landing gear down.*

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 79 kg (175 lb)
- En-route performance limiting weight is reduced by 100 kg (221 lb)
- Fuel consumption is increased by 0.25 %.

When combined with MCDL item 52-09 (*Refer to 52-09 Nose Landing Gear Main Door (713, 714)*), the performance penalties published in 52-09 are applicable.

Refer to MCDL-52-10 Illustration Nose Landing Gear Aft Door (715, 716)

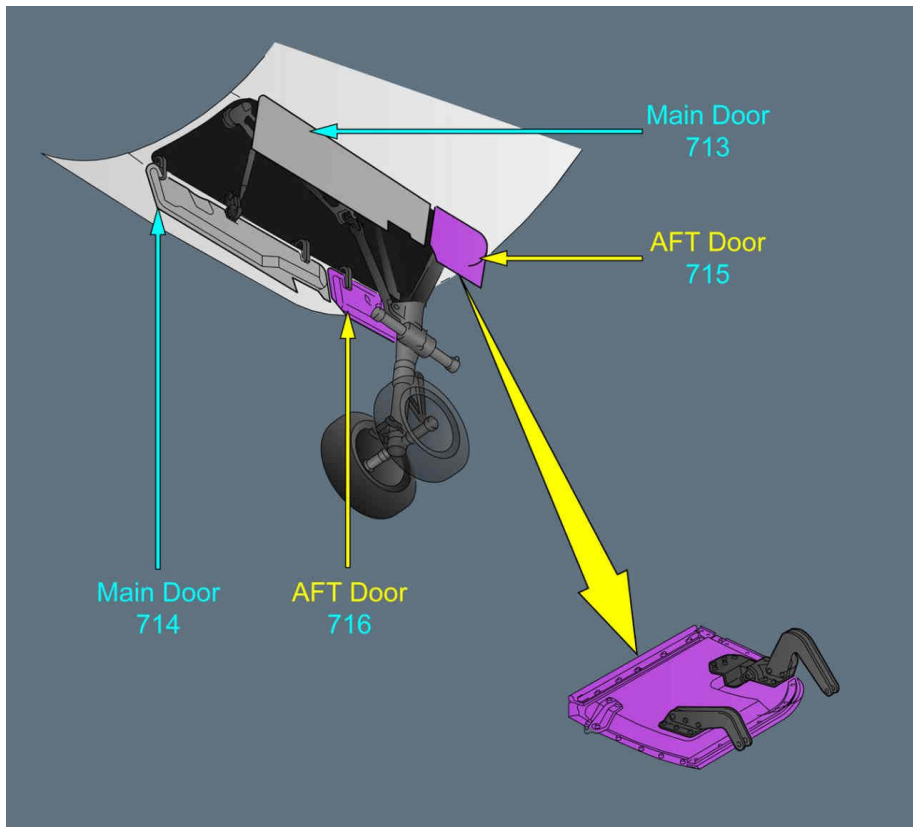
MASTER CONFIGURATION DEVIATION LIST**DOORS**

NOSE LANDING GEAR AFT DOOR (715, 716)

ILLUSTRATION NOSE LANDING GEAR AFT DOOR (715, 716)

Ident.: MCDL-52-10-00006468.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-10 Nose Landing Gear Aft Door (715, 716)

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS NOSE LANDING GEAR LEG DOOR (712)

52-11	Nose Landing Gear Leg Door (712)

Ident.: MCDL-52-11-00006471.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

52-11 NOSE LANDING GEAR LEG DOOR (712)	Quantity installed 1

(m) *Refer to AMM Task 32-22-00-040-003*

May be missing.

Note: *May be combined with MCDL items 52-09 (Refer to 52-09 Nose Landing Gear Main Door (713, 714)) and 52-10 (Refer to 52-10 Nose Landing Gear Aft Door (715, 716)).*

- **Limitations:**

Flight with landing gear down is required.

Refer to APP-LGDN-GEN General

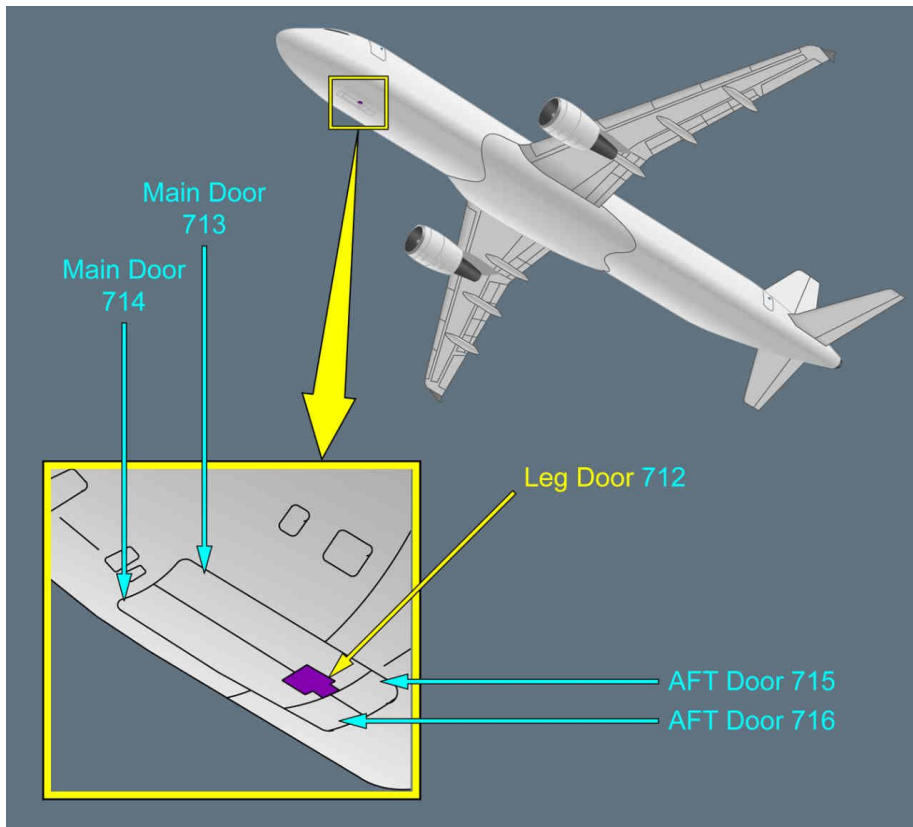
Refer to MCDL-52-11 Illustration Nose Landing Gear Leg Door (712)

ILLUSTRATION NOSE LANDING GEAR LEG DOOR (712)

Ident.: MCDL-52-11-00006472.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY



For dispatch conditions: *Refer to 52-11 Nose Landing Gear Leg Door (712)*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS MAIN LANDING GEAR DOOR (732, 742) (FLIGHT WITH GEAR UP)

52-12	Main Landing Gear Door (732, 742) (flight with gear up)

Ident.: MCDL-52-12-00006473.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A318 or A319 or A320)

52-12 MAIN LANDING GEAR DOOR (732, 742) (FLIGHT WITH GEAR UP)	Quantity installed 2

(m) *Refer to AMM Task 32-12-00-040-005*

One may be missing.

- **Limitations:**

Passengers transportation is not allowed.

Flight in forecasted icing conditions is not allowed.

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 394 kg (869 lb)
- En-route performance limiting weight is reduced by 540 kg (1 191 lb)
- Fuel consumption is increased by 1.22 %.

Refer to MCDL-52-12 Illustration Main Landing Gear Door (732, 742)

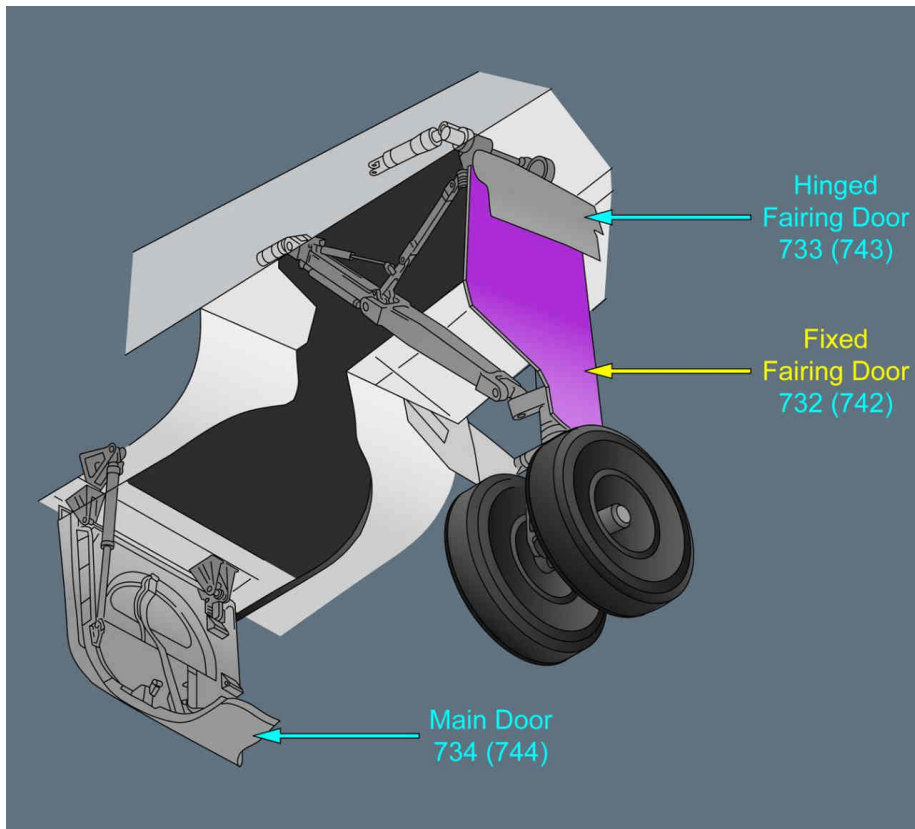
MASTER CONFIGURATION DEVIATION LIST**DOORS**

MAIN LANDING GEAR DOOR (732, 742) (FLIGHT WITH GEAR UP)

ILLUSTRATION MAIN LANDING GEAR DOOR (732, 742)

Ident.: MCDL-52-12-00006474.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-12 Main Landing Gear Door (732, 742) (flight with gear up)

 A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS MAIN LANDING GEAR DOOR (733, 743) (FLIGHT WITH GEAR UP)

52-13	Main Landing Gear Door (733, 743) (flight with gear up)

Ident.: MCDL-52-13-00006487.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: (A319 or A320 or A321)	

52-13 MAIN LANDING GEAR DOOR (733, 743) (FLIGHT WITH GEAR UP)	Quantity installed 2

(m) *Refer to AMM Task 32-12-00-040-005*
One may be missing.

- **Limitations:**

Passengers transportation is not allowed.
Flight in forecasted icing conditions is not allowed.

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 111 kg (245 lb)
- En-route performance limiting weight is reduced by 126 kg (278 lb)
- Fuel consumption is increased by 0.28 %.

Refer to MCDL-52-13 Illustration Main Landing Gear Door (733, 743)

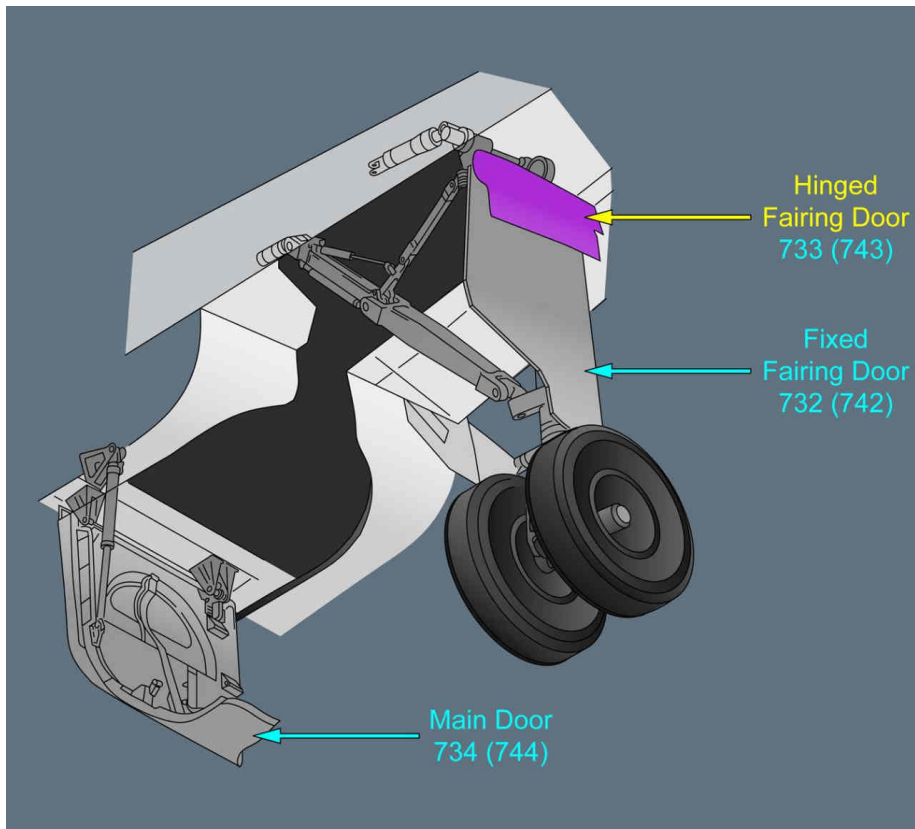
MASTER CONFIGURATION DEVIATION LIST**DOORS**

MAIN LANDING GEAR DOOR (733, 743) (FLIGHT WITH GEAR UP)

ILLUSTRATION MAIN LANDING GEAR DOOR (733, 743)

Ident.: MCDL-52-13-00006488.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-13 Main Landing Gear Door (733, 743) (flight with gear up)

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS MAIN LANDING GEAR DOOR (732, 742) (FLIGHT WITH GEAR DOWN)

52-14	Main Landing Gear Door (732, 742) (Flight with gear down)

Ident.: MCDL-52-14-00006475.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A318 or A319 or A320)

52-14 MAIN LANDING GEAR DOOR (732, 742) (FLIGHT WITH GEAR DOWN)	Quantity installed 2

(m) *Refer to AMM Task 32-12-00-040-001*

One may be missing.

Disregard the alert L/G DOORS NOT CLOSED displayed on the ECAM.

- **Limitations:**

Flight with landing gear down is required.

Refer to APP-LGDN-GEN General

- **Performance:**

Note: *Reference performance for penalties computations are performance with landing gear down.*

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 394 kg (869 lb)
- En-route performance limiting weight is reduced by 450 kg (993 lb)
- Fuel consumption is increased by 1.00 %.

Refer to MCDL-52-14 Illustration Main Landing Gear Door (732, 742)

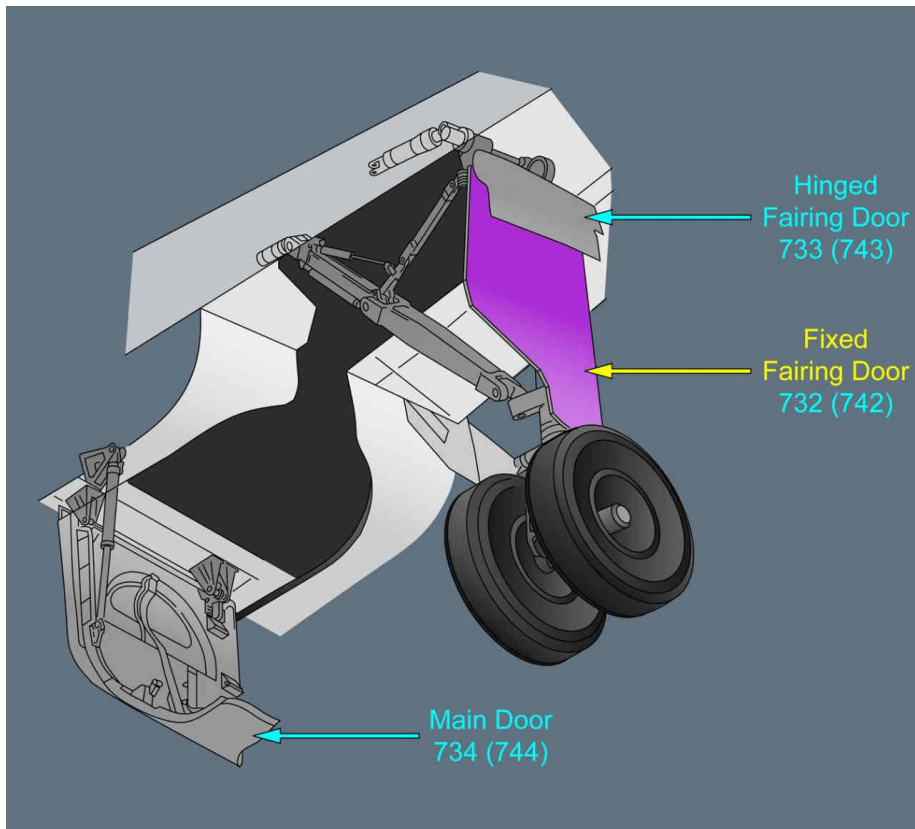
MASTER CONFIGURATION DEVIATION LIST**DOORS**

MAIN LANDING GEAR DOOR (732, 742) (FLIGHT WITH GEAR DOWN)

ILLUSTRATION MAIN LANDING GEAR DOOR (732, 742)

Ident.: MCDL-52-14-00006476.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-14 Main Landing Gear Door (732, 742) (flight with gear down)

 A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS MAIN LANDING GEAR DOOR (733, 743) (FLIGHT WITH GEAR DOWN)

52-15	Main Landing Gear Door (733, 743) (Flight with gear down)

Ident.: MCDL-52-15-00006489.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A319 or A320 or A321)

52-15 MAIN LANDING GEAR DOOR (733, 743) (FLIGHT WITH GEAR DOWN)	Quantity installed 2

(m) *Refer to AMM Task 32-12-00-040-001*

One may be missing.

Disregard the alert L/G DOORS NOT CLOSED displayed on the ECAM.

- **Limitations:**

Flight with landing gear down is required.

Refer to APP-LGDN-GEN General

- **Performance:**

Note: *Reference performance for penalties computations are performance with landing gear down.*

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 111 kg (245 lb)
- En-route performance limiting weight is reduced by 200 kg (441 lb)
- Fuel consumption is increased by 0.30 %.

Refer to MCDL-52-15 Illustration Main Landing Gear Door (733, 743)

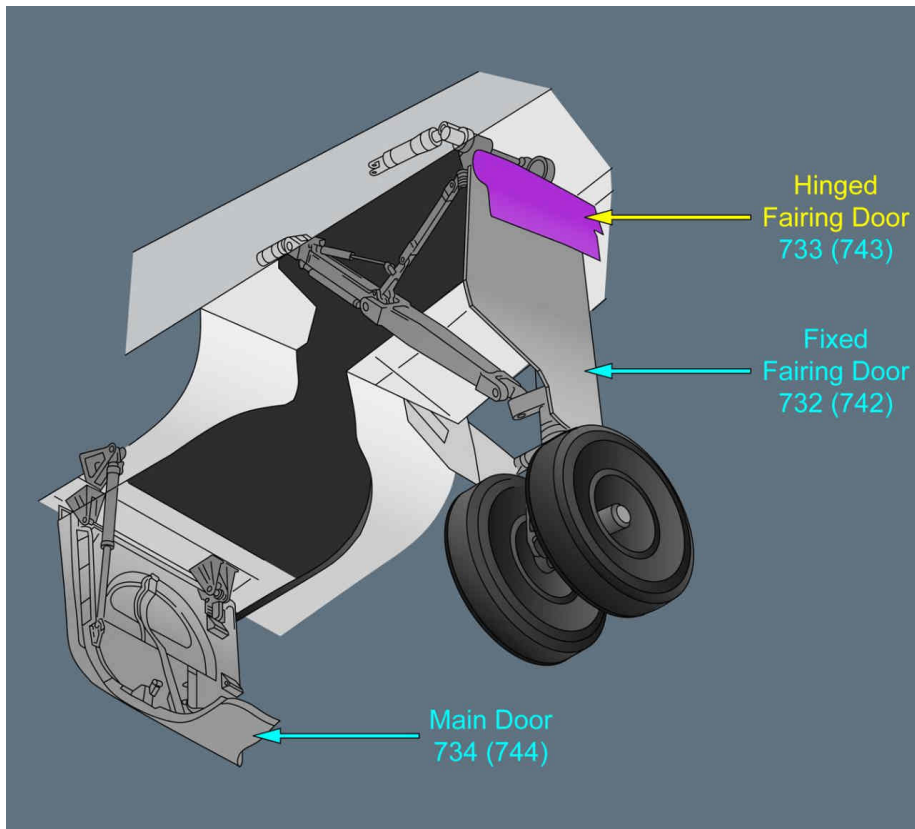
MASTER CONFIGURATION DEVIATION LIST**DOORS**

MAIN LANDING GEAR DOOR (733, 743) (FLIGHT WITH GEAR DOWN)

ILLUSTRATION MAIN LANDING GEAR DOOR (733, 743)

Ident.: MCDL-52-15-00006490.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-15 Main Landing Gear Door (733, 743) (Flight with gear down)

 A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS MAIN LANDING GEAR DOOR (734, 744) (FLIGHT WITH GEAR DOWN)

52-16	Main Landing Gear Door (734, 744) (Flight with gear down)

Ident.: MCDL-52-16-00006491.0001001 / 02 DEC 13

EASA APPROVED

Criteria: (A318 or A319 or A320)

52-16 MAIN LANDING GEAR DOOR (734, 744) (FLIGHT WITH GEAR DOWN)	Quantity installed 2

(m) *Refer to AMM Task 32-12-00-040-001*

One may be missing.

Disregard the alert L/G DOORS NOT CLOSED displayed on the ECAM.

- **Limitations:**

Flight with landing gear down is required.

Refer to APP-LGDN-GEN General

- **Performance:**

Note: *Reference performance for penalties computations are performance with landing gear down.*

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 623 kg (1 374 lb)
- En-route performance limiting weight is reduced by 700 kg (1 544 lb)
- Fuel consumption is increased by 1.50 %.

Refer to MCDL-52-16 Illustration Main Landing Gear Door (734, 744)

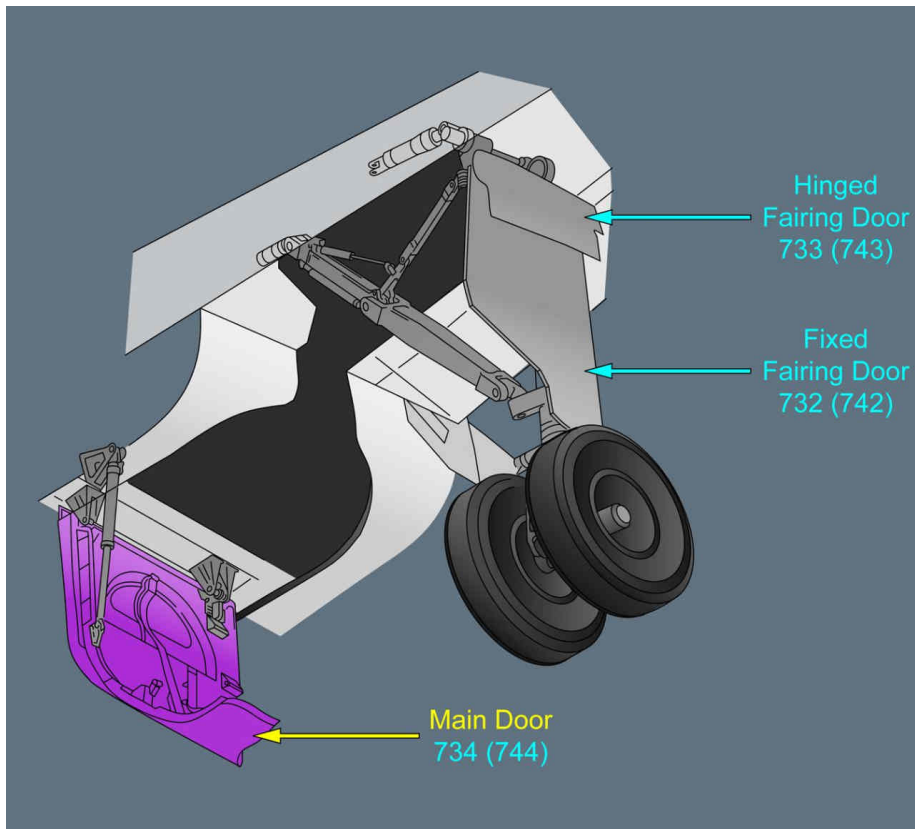
MASTER CONFIGURATION DEVIATION LIST**DOORS**

MAIN LANDING GEAR DOOR (734, 744) (FLIGHT WITH GEAR DOWN)

ILLUSTRATION MAIN LANDING GEAR DOOR (734, 744)

Ident.: MCDL-52-16-00006492.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYfor dispatch conditions: *Refer to 52-16 Main Landing Gear Door (734, 744) (Flight with gear down)*

 A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS MAIN LANDING GEAR DOOR : SEAL ON SECONDARY HINGED FAIRING

52-18	Main Landing Gear Door : Seal On Secondary Hinged Fairing

Ident.: MCDL-52-18-00006479.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

52-18 MAIN LANDING GEAR DOOR : SEAL ON SECONDARY HINGED FAIRING	Quantity installed 6

All may be missing.

- **Performance:**

If three or more seals are missing, the following performance penalties are applicable:

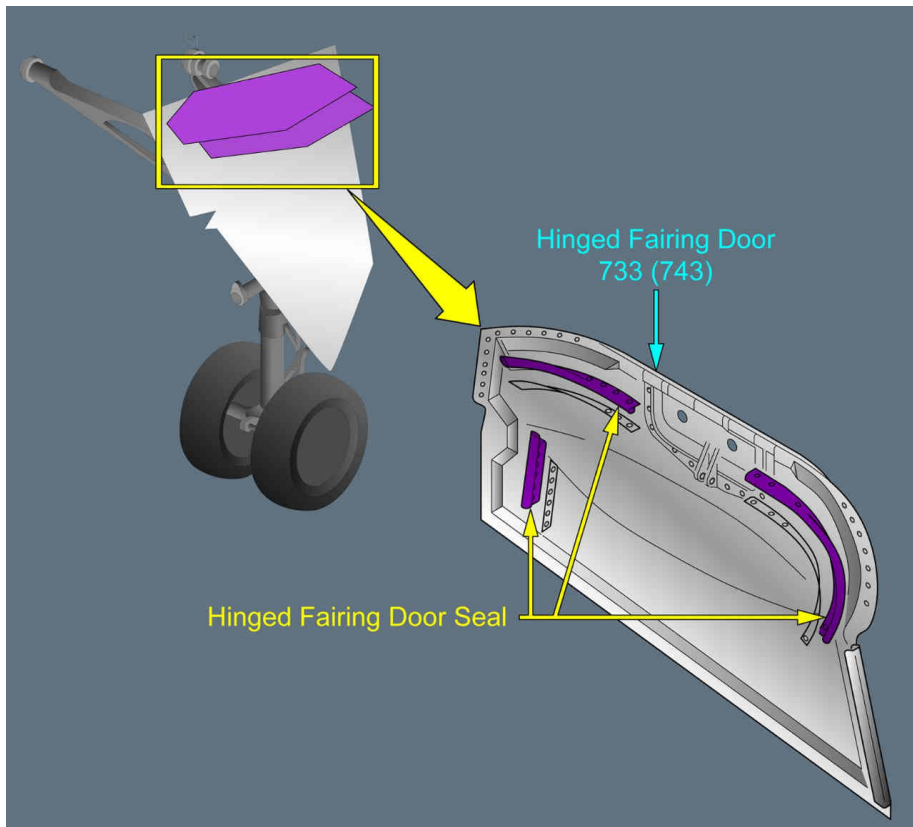
- Takeoff and approach climb performance limiting weights are reduced by 24 kg (53 lb) per missing seal
- En-route performance limiting weight is reduced by 27 kg (60 lb) per missing seal
- Fuel consumption is increased by 0.07 % per missing seal.

Refer to MCDL-52-18 Illustration Main Landing Gear Door : Seal on Secondary Hinged Fairing

ILLUSTRATION MAIN LANDING GEAR DOOR : SEAL ON SECONDARY HINGED FAIRING

Ident.: MCDL-52-18-00006480.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-18 Main Landing Gear Door : Seal on Secondary Hinged Fairing

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS PAX DOOR UPPER COVER PLATE

52-19	Pax Door Upper Cover Plate

Ident.: MCDL-52-19-00006481.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or A320)

52-19 PAX DOOR UPPER COVER PLATE	Quantity installed 4

All may be missing.

Note: The affected door must be considered as inoperative (Refer to MMEL/MI-52-10 Cabin Passenger Door).

- **Performance:**

The following performance penalties are applicable:

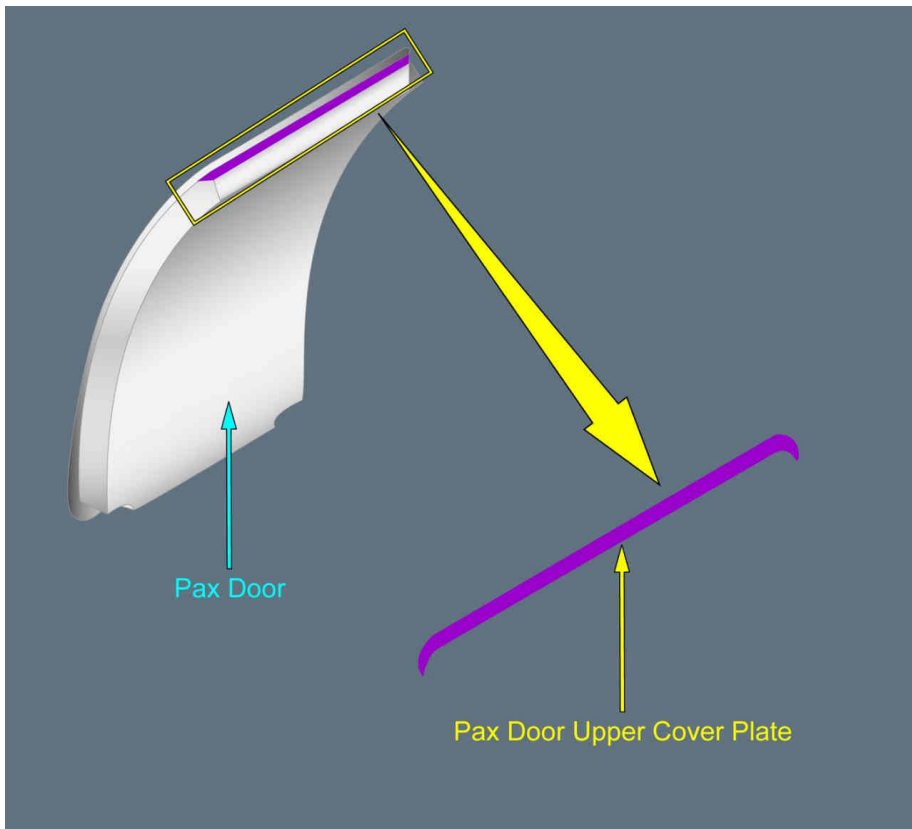
- Takeoff and approach climb performance limiting weights are reduced by 66 kg (146 lb) per missing plate
- En-route performance limiting weight is reduced by 90 kg (199 lb) per missing plate
- Fuel consumption is increased by 0.23 % per missing plate.

Refer to MCDL-52-19 Illustration Pax Door Upper Cover Plate

ILLUSTRATION PAX DOOR UPPER COVER PLATE

Ident.: MCDL-52-19-00006482.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 52-19 Pax Door Upper Cover Plate*



A320
AIRPLANE FLIGHT MANUAL

MASTER CONFIGURATION DEVIATION LIST

DOORS

ACCESS DOOR TO HP AIR GROUND CONNECTOR 191 DB

52-20

Access Door to HP Air Ground Connector 191 DB

1 Ident.: TDU / MCDL-52-20-00015422.0001001 / 17 APR 14

EASA APPROVED

Criteria: SA

Impacted DU: 00006483 Access Door to HP Air Ground Connector 191 DB

Impacted by TR419 Issue 1.0

52-20

ACCESS DOOR TO HP AIR GROUND CONNECTOR 191 DB

Quantity installed

1

May be missing.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)

Refer to MCDL-52-20 Illustration Access Door to HP Air Ground Connector 191 DB

52-20

Access Door To HP Air Ground Connector 191 DB

Ident.: MCDL-52-20-00006483.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

Impacted by TDU: 00015422 Access Door to HP Air Ground Connector 191 DB

52-20

ACCESS DOOR TO HP AIR GROUND CONNECTOR 191 DB

Quantity installed

1

May be missing.

Note: May be combined with MCDL items:

- 52-01 (Refer to 52-01 Toilet Servicing and Drainage Door)
- 52-02 (Refer to 52-02 Access Door to Hydraulic Ground Connectors 197 CB - 197 EB - 198 CB)
- 52-03 (Refer to 52-03 Access Door to Potable Water Filling and Drainage)
- 52-04 (Refer to 52-04 Access Door to Opening Control of Landing Gear Doors on Ground 195 BB - 196 BB)
- 52-05 (Refer to 52-05 Access Door to Air Conditioning Ground Supply 191 CB)
- 52-06 (Refer to MCDL-52-06 Forward Jacking Point Access Door).

Refer to MCDL-52-20 Illustration Access Door to HP Air Ground Connector 191 DB

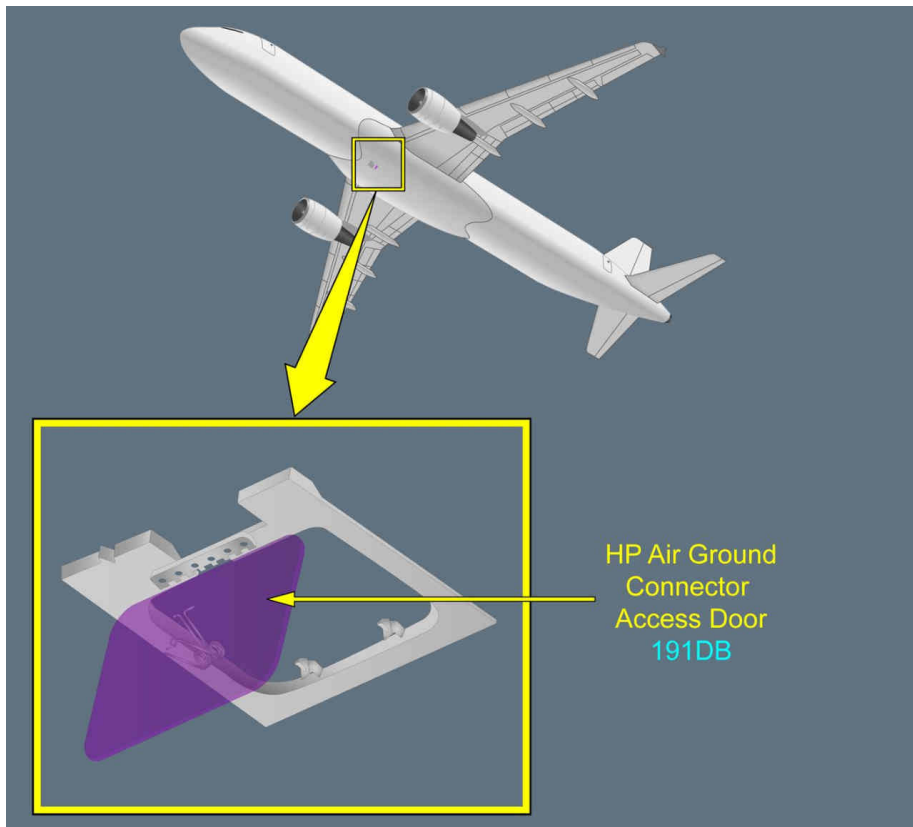
MASTER CONFIGURATION DEVIATION LIST**DOORS**

ACCESS DOOR TO HP AIR GROUND CONNECTOR 191 DB

ILLUSTRATION ACCESS DOOR TO HP AIR GROUND CONNECTOR 191 DB

Ident.: MCDL-52-20-00006484.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-20 Access Door to HP Air Ground Connector 191 DB

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS BLUE HYDRAULIC ACCESS DOOR 197 FB

52-21	Blue Hydraulic Access Door 197 FB

Ident.: MCDL-52-21-00007449.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

52-21 BLUE HYDRAULIC ACCESS DOOR 197 FB	Quantity installed 1

(m) *Refer to AMM Task 52-41-00-040-001*
May be missing.

Refer to MCDL-52-21 Illustration Blue Hydraulic Access Door 197 FB

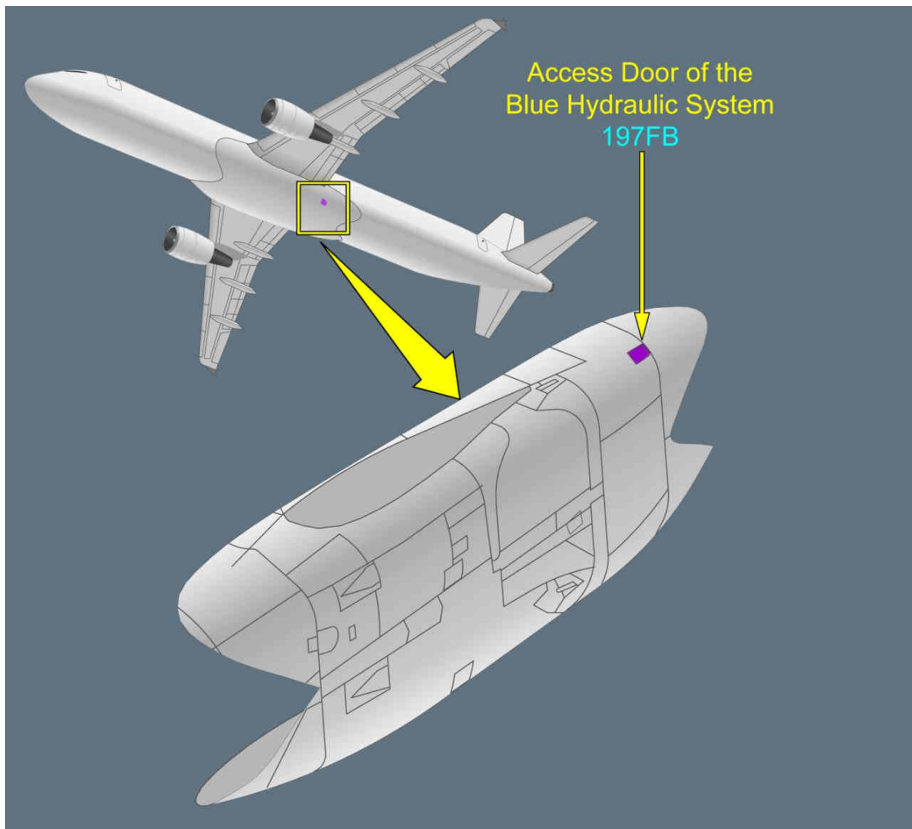
MASTER CONFIGURATION DEVIATION LIST**DOORS**

BLUE HYDRAULIC ACCESS DOOR 197 FB

ILLUSTRATION BLUE HYDRAULIC ACCESS DOOR 197 FB

Ident.: MCDL-52-21-00007450.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 52-21 Blue Hydraulic Access Door 197 FB

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS FORWARD CARGO DOOR ACCESS COVER PANEL 825 AR

52-22	Forward Cargo Door Access Cover Panel 825 AR

Ident.: MCDL-52-22-00007451.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

52-22 FORWARD CARGO DOOR ACCESS COVER PANEL 825 AR	Quantity installed 1

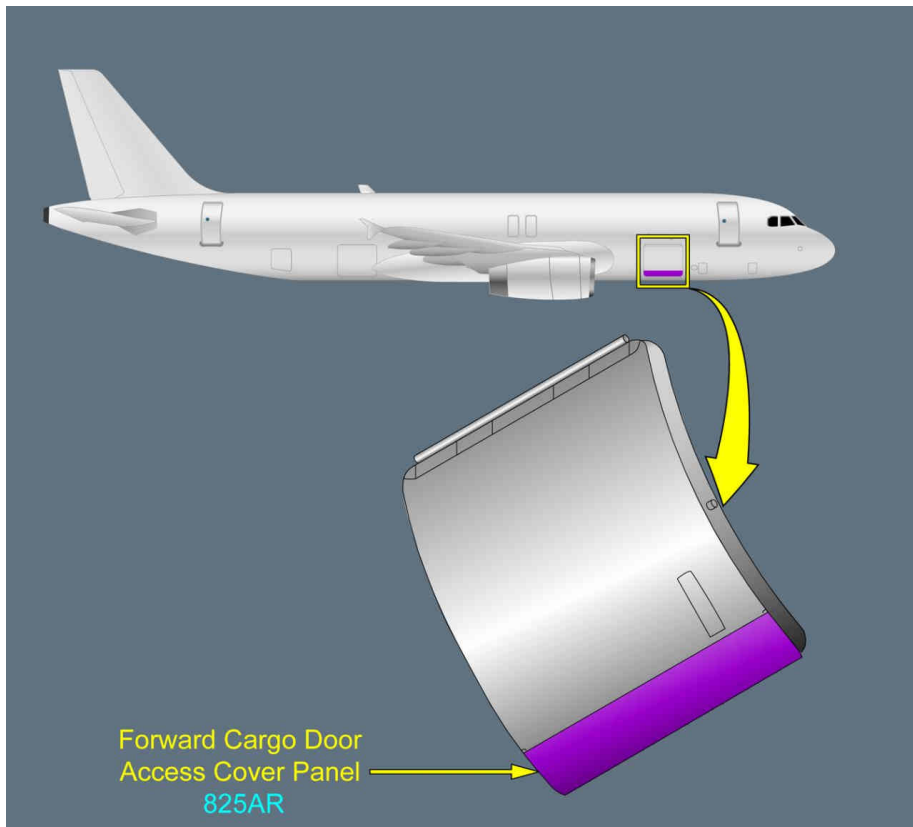
(m) *Refer to AMM Task 52-31-00-040-004*
May be missing provided all latching hooks are checked latched and locked before each flight.

- **Performance:**
The following performance penalties are applicable:
 - Takeoff and approach climb performance limiting weights are reduced by 234 kg (516 lb)
 - En-route performance limiting weight is reduced by 266 kg (587 lb)
 - Fuel consumption is increased by 0.64 %.

Refer to MCDL-52-22 Illustration Forward Cargo Door Access Cover Panel 825 AR

MASTER CONFIGURATION DEVIATION LIST**DOORS**

FORWARD CARGO DOOR ACCESS COVER PANEL 825 AR

ILLUSTRATION FORWARD CARGO DOOR ACCESS COVER PANEL 825 ARIdent.: MCDL-52-22-00007452.0001001 / 23 NOV 09
Criteria: SAFOR INFORMATION ONLY

For dispatch conditions: Refer to 52-22 Forward Cargo Door Access Cover Panel 825 AR

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST DOORS AFT CARGO DOOR ACCESS COVER PANEL 826 AR

52-23	Aft Cargo Door Access Cover Panel 826 AR

Ident.: MCDL-52-23-00007453.0001001 / 02 DEC 13

EASA APPROVED

Criteria: SA

52-23 AFT CARGO DOOR ACCESS COVER PANEL 826 AR	Quantity installed 1

(m) *Refer to AMM Task 52-32-00-040-004*

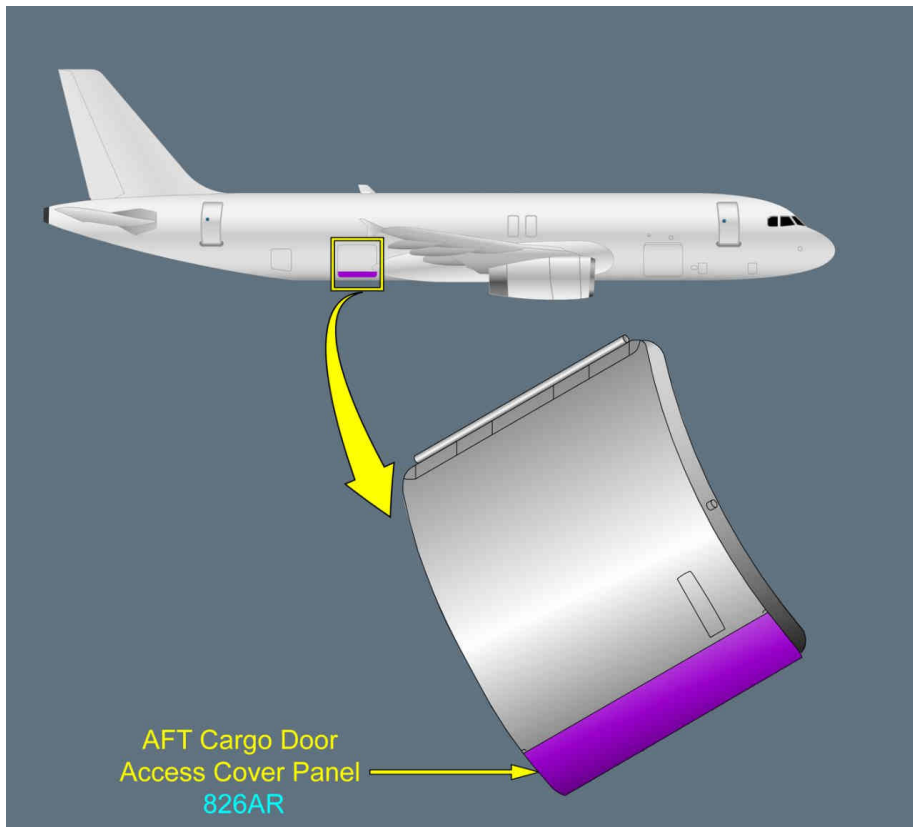
May be missing provided all latching hooks are checked latched and locked before each flight.

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 190 kg (419 lb)
- En-route performance limiting weight is reduced by 216 kg (477 lb)
- Fuel consumption is increased by 0.53 %.

Refer to MCDL-52-23 Illustration Aft Cargo Door Access Cover Panel 826 AR

ILLUSTRATION AFT CARGO DOOR ACCESS COVER PANEL 826 ARIdent.: MCDL-52-23-00007454.0001001 / 23 NOV 09
Criteria: SAFOR INFORMATION ONLYfor dispatch conditions: *Refer to 52-23 Aft Cargo Door Access Cover Panel 826 AR*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FUSELAGE BELLY FAIRING VENT LOUVER VANE

53-01	Belly Fairing Vent Louver Vane

Ident.: MCDL-53-01-00006512.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

53-01 BELLY FAIRING VENT LOUVER VANE	Quantity installed –

(m) *Refer to AMM Task 53-35-00-040-002*

Three may be missing per vent louver.

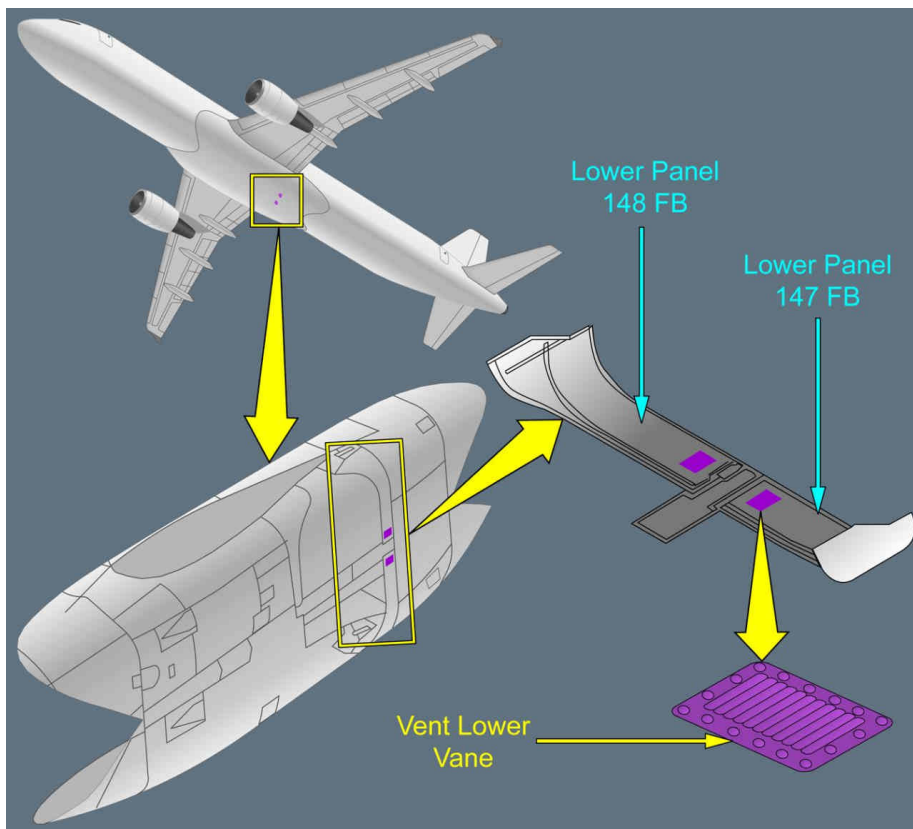
Note: *Vane with a crack length higher than 50 % must be removed before next flight.*

Refer to MCDL-53-01 Illustration Belly Fairing Vent Louver Vane

ILLUSTRATION BELLY FAIRING VENT LOUVER VANE

Ident.: MCDL-53-01-00006513.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 53-01 Belly Fairing Vent Louver Vane

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST FUSELAGE ROOT FILLET FAIRING

53-03	Root Fillet Fairing

Ident.: MCDL-53-03-00011063.0002001 / 02 DEC 13

EASA APPROVED

Criteria: (320-231 or 320-232 or 320-233)

53-03 ROOT FILLET FAIRING	Quantity installed 2

(m) *Refer to AMM Task 53-35-00-040-001*

All may be missing.

Note: *Must not be combined with MCDL item 54-01 (Refer to 54-01 Nacelle Strake) or MCDL item 54-03 (Refer to 54-03 Pylon Pressure Relief Door 413(423) BL - 414(424) BR).*

- **Performance:**

The following performance penalty is applicable:

- Takeoff performance limiting weight is reduced by 170 kg (375 lb).

Note: *The above performance penalty is not applicable if the flight crew can check V2 greater than 1.15 VS1G.*

Refer to MCDL-53-03 Illustration Root Fillet Fairing

MASTER CONFIGURATION DEVIATION LIST

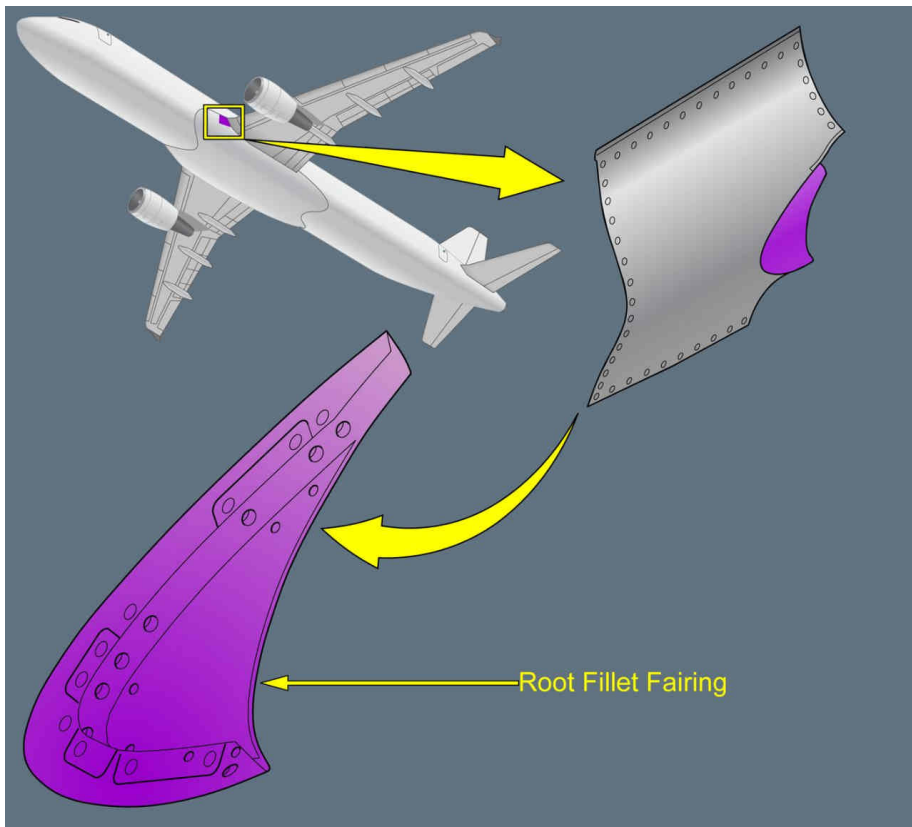
FUSELAGE

ROOT FILLET FAIRING

ILLUSTRATION ROOT FILLET FAIRING

Ident.: MCDL-53-03-00011064.0001001 / 03 AUG 10

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 53-03 Root Fillet Fairing*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST NACELLE / PYLON NACELLE STRAKE

54-01	Nacelle Strake

Ident.: MCDL-54-01-00006516.0002001 / 02 DEC 13

EASA APPROVED

Criteria: (320-231 or 320-232 or 320-233)

54-01 NACELLE STRAKE	Quantity installed 2

All may be missing.

Note: Must not be combined with MCDL item 53-03 (Refer to 53-03 Root Fillet Fairing).

- **Procedures:**

Approach speed: VAPP + 5 kt.

Landing distance: multiply by 1.08.

- **Performance:**

The following performance penalty is applicable:

- Takeoff performance limiting weight is reduced by 1 320 kg (2 911 lb).

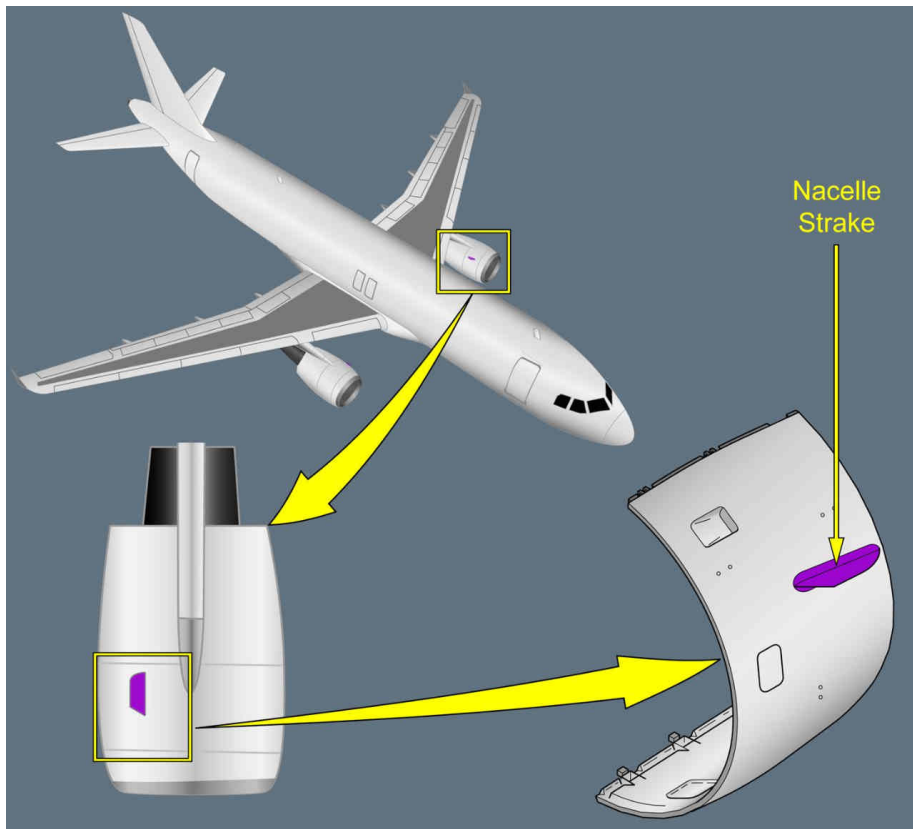
Note: The performance penalties are not applicable if the flight crew can check V2 greater than 1.16 VS1G.

Refer to MCDL-54-01 Illustration Nacelle Strake

ILLUSTRATION NACELLE STRAKE

Ident.: MCDL-54-01-00006517.0001001 / 23 NOV 09

Criteria: 320-200

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 54-01 Nacelle Strake*

 A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST NACELLE / PYLON PYLON PRESSURE RELIEF DOOR 413(423) BL - 414(424) BR

54-03	Pylon Pressure Relief Door 413(423) BL - 414(424) BR

Ident.: MCDL-54-03-00006540.0005001 / 02 DEC 13

EASA APPROVED

Criteria: (320-231 or 320-232 or 320-233)

54-03 PYLON PRESSURE RELIEF DOOR 413(423) BL - 414(424) BR	Quantity installed 4

(m) *Refer to AMM Task 54-52-00-040-001*

All may be missing for 5 flight cycles only.

Note: 1. *If one door is missing on a pylon, the other door on the same pylon must be removed.*

2. *Must not be combined with MCDL item 53-03 (Refer to 53-03 Root Fillet Fairing).*

- **Limitations:**

Maximum cruise speed: M 0.78.

- **Procedures:**

Approach speed: VAPP + 4 kt.

Landing distance: multiply by 1.07.

- **Performance:**

The following performance penalties are applicable:

- Takeoff performance limiting weight is reduced by 1 320 kg (2 911 lb)

Note: *The above performance penalty is not applicable if the flight crew can check V2 greater than 1.16 VS1G.*

- If two or more doors are missing, en route performance limiting weight is reduced by 40 kg (89 lb) per missing door
- If three or more doors are missing, fuel consumption is increased by 0.09 % per missing door.

Refer to MCDL-54-03 Illustration Pylon Pressure Relief Door 413(423) BL - 414(424) BR

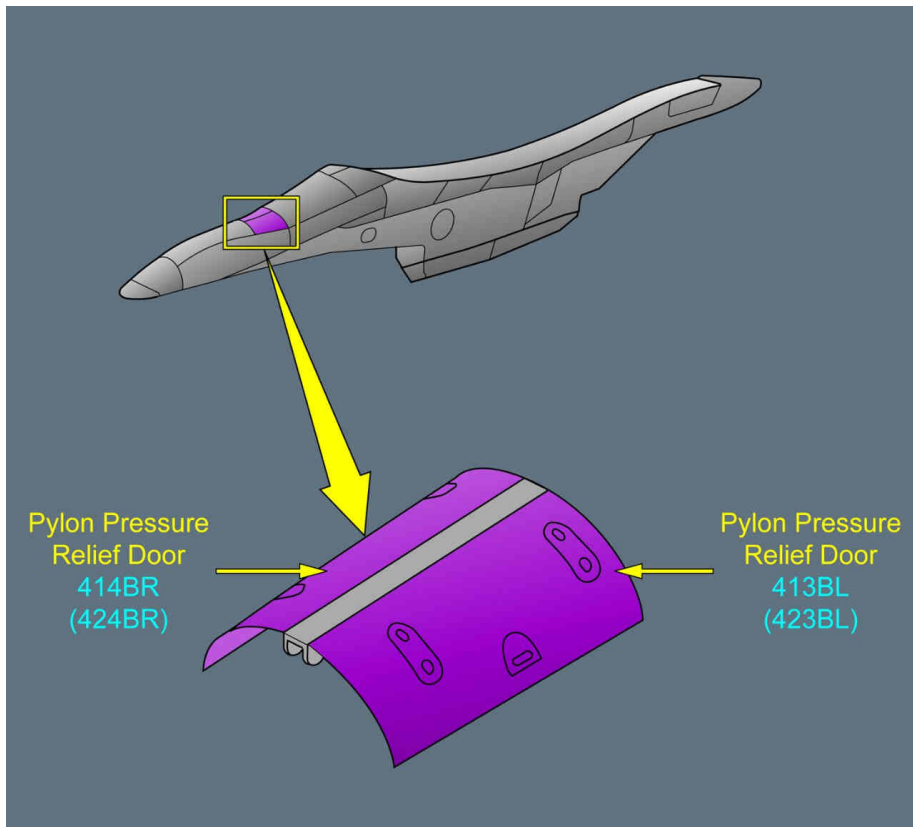
MASTER CONFIGURATION DEVIATION LIST**NACELLE / PYLON**

PYLON PRESSURE RELIEF DOOR 413(423) BL - 414(424) BR

ILLUSTRATION PYLON PRESSURE RELIEF DOOR 413(423) BL - 414(424) BR

Ident.: MCDL-54-03-00006541.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

For dispatch conditions: Refer to 54-03 Pylon Pressure Relief Door 413(423) BL - 414(424) BR

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST NACELLE / PYLON PYLON ACCESS DOOR 415(425) AL - 415(425) AR

54-04	Pylon Access Door 415(425) AL - 415(425) AR

Ident.: MCDL-54-04-00006543.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: SA	

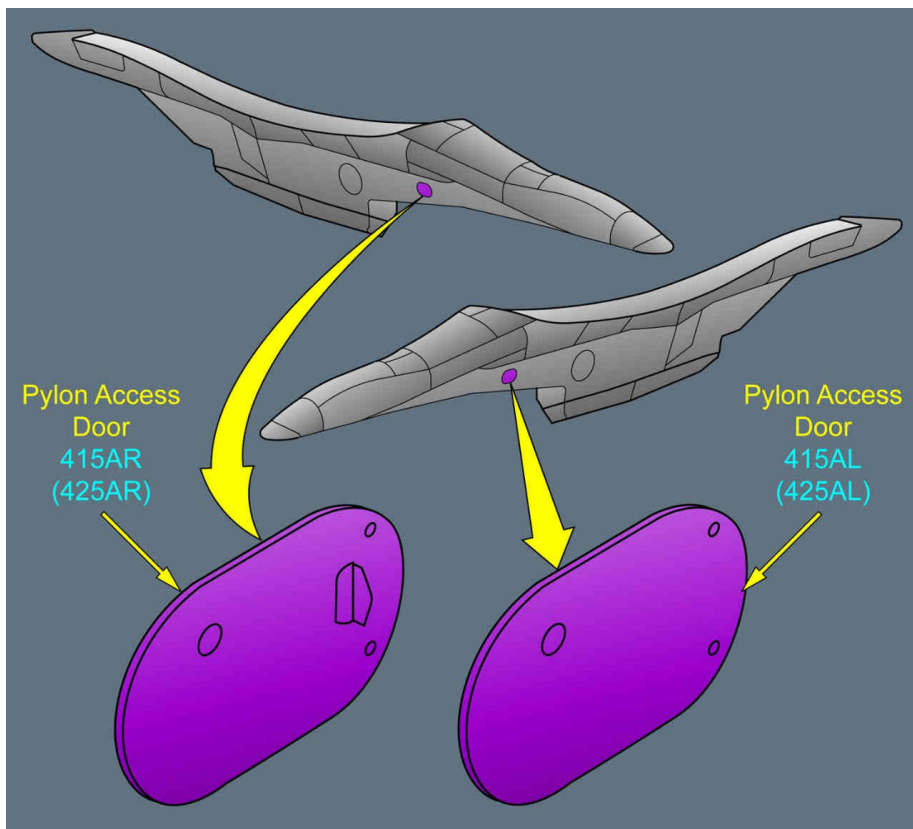
54-04 PYLON ACCESS DOOR 415(425) AL - 415(425) AR	Quantity installed –

- All may be missing for 5 flight cycles provided the hole is covered with high speed tape.
- Limitations:**
Flight in forecasted thunderstorm conditions is not allowed.
Refer to MCDL-54-04 Illustration Pylon Access Door 415(425) AL - 415(425) AR

ILLUSTRATION PYLON ACCESS DOOR 415(425) AL - 415(425) AR

Ident.: MCDL-54-04-00006544.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY


For dispatch conditions: Refer to 54-04 Pylon Access Door 415(425) AL - 415(425) AR

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST NACELLE / PYLON PYLON FAIRING SEAL

54-05	Pylon Fairing seal

Ident.: MCDL-54-05-00006545.0001001 / 23 NOV 09
Criteria: SA

EASA APPROVED

54-05 PYLON FAIRING SEAL	Quantity installed 4

One may be missing per pylon.

Refer to MCDL-54-05 Illustration Pylon Fairing Seal

MASTER CONFIGURATION DEVIATION LIST

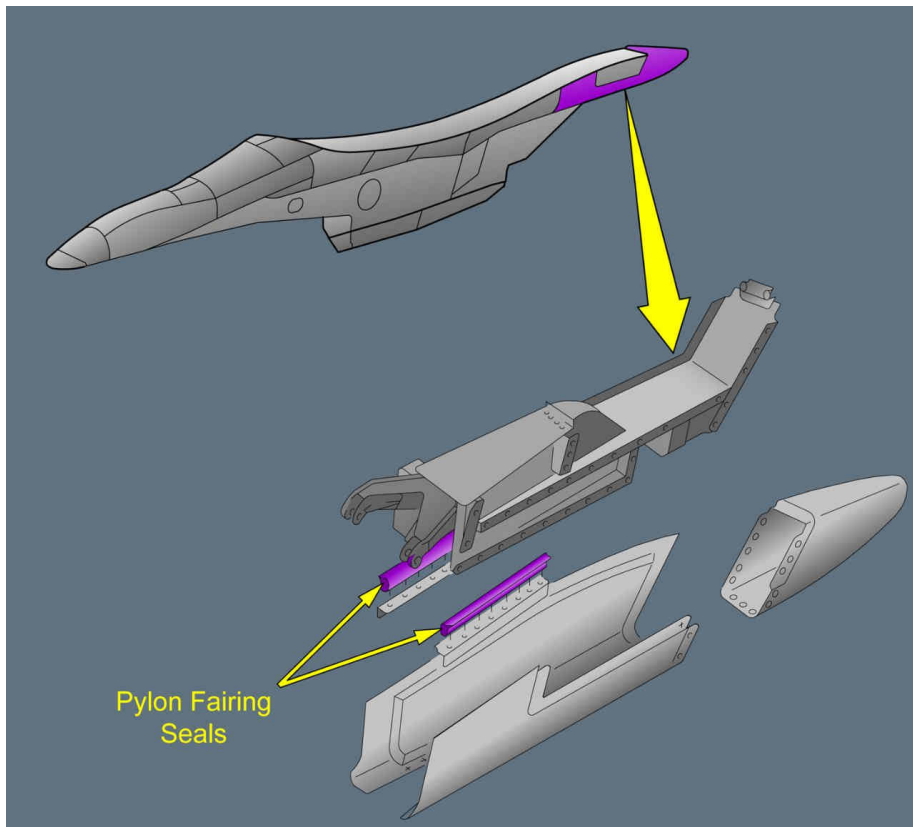
NACELLE / PYLON

PYLON FAIRING SEAL

ILLUSTRATION PYLON FAIRING SEAL

Ident.: MCDL-54-05-00006546.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 54-05 Pylon Fairing Seal*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST NACELLE / PYLON AERODYNAMIC SEAL

54-06	Aerodynamic Seal

Ident.: MCDL-54-06-00006547.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: SA	

54-06 AERODYNAMIC SEAL	Quantity installed 2

(m) Refer to AMM Task 54-53-00-040-001
All may be missing.

Refer to MCDL-54-06 Illustration Aerodynamic Seal

MASTER CONFIGURATION DEVIATION LIST

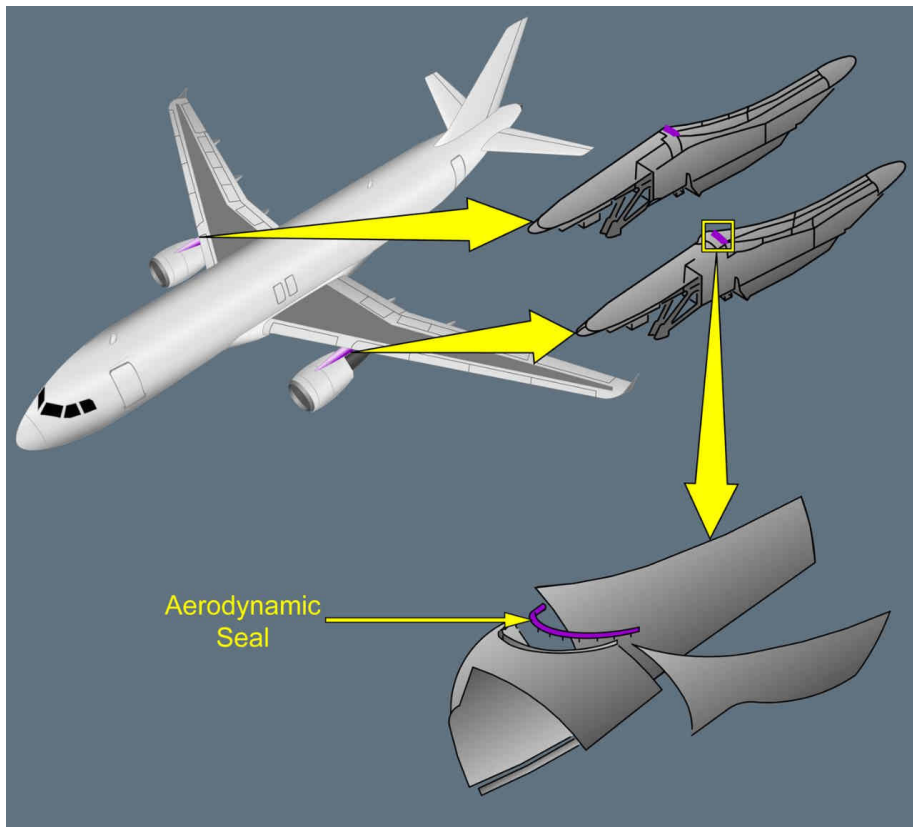
NACELLE / PYLON

AERODYNAMIC SEAL

ILLUSTRATION AERODYNAMIC SEAL

Ident.: MCDL-54-06-00006548.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLYFor dispatch conditions: *Refer to 54-06 Aerodynamic Seal*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST WINGS WING TIP FENCE

57-01	Wing Tip Fence

Ident.: MCDL-57-01-00006549.0002001 / 02 DEC 13

EASA APPROVED

Criteria: A320

a)

57-01 WING TIP FENCE	Quantity installed 2

(m) *Refer to AMM Task 57-31-00-040-001*

One lower part of a wing tip fence may be missing provided the broken part is removed and holes are covered.

- **Performance:**

The following performance penalties are applicable:

- Takeoff and approach climb performance limiting weights are reduced by 3 608 kg (7 955 lb)
- En-route performance limiting weight is reduced by 378 kg (834 lb)
- Fuel consumption is increased by 0.88 %.

– or –

b)

57-01 WING TIP FENCE	Quantity installed 2

(m) *Refer to AMM Task 57-31-00-040-001*

One complete wing tip fence may be missing provided exposed interior structure is covered, protective material is inspected before each flight and replaced if necessary.

- **Performance:**

The following performance penalties are applicable:

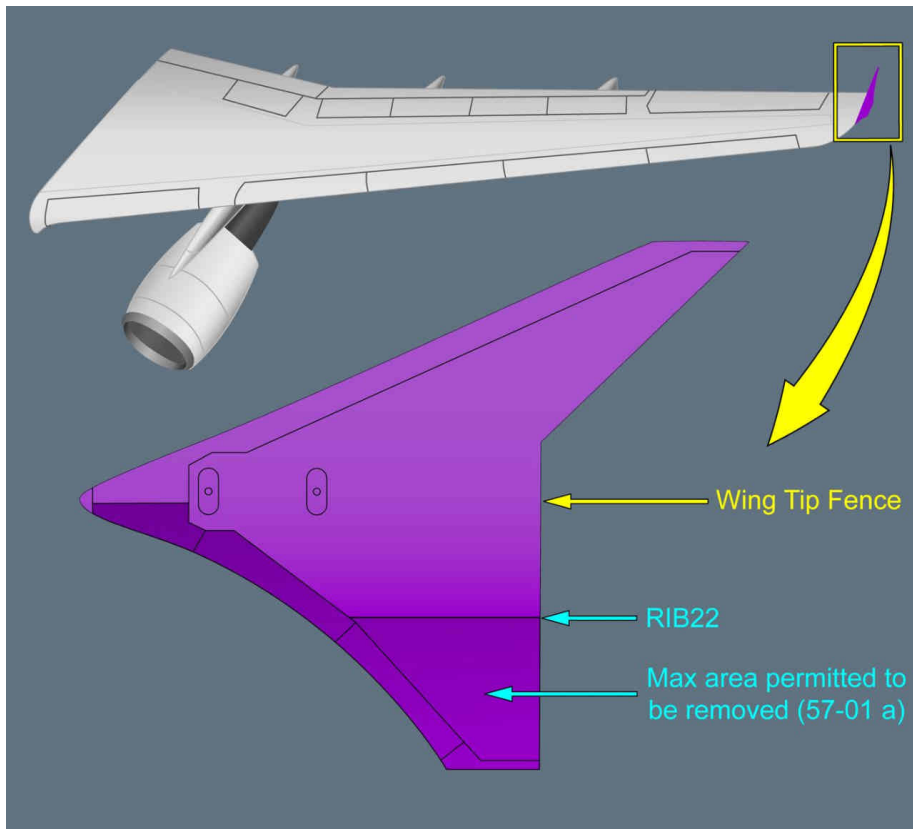
- Takeoff and approach climb performance limiting weights are reduced by 8 118 kg (17 898 lb)
- En-route performance limiting weight is reduced by 756 kg (1 667 lb)
- Fuel consumption is increased by 1.69 %.

Refer to MCDL-57-01 Illustration Wing Tip Fence

ILLUSTRATION WING TIP FENCE

Ident.: MCDL-57-01-00006550.0001001 / 23 NOV 09

Criteria: SA

FOR INFORMATION ONLY

 For dispatch conditions: *Refer to 57-01 Wing Tip Fence*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST WINGS BELLY FAIRING SLIDING PANEL

57-02	Belly Fairing Sliding Panel

Ident.: MCDL-57-02-00006551.0002001 / 23 NOV 09

EASA APPROVED

Criteria: (SA and 26495)

57-02 BELLY FAIRING SLIDING PANEL	Quantity installed 2

All may be missing.

- **Performance:**

If two panels are missing, the following performance penalties are applicable:

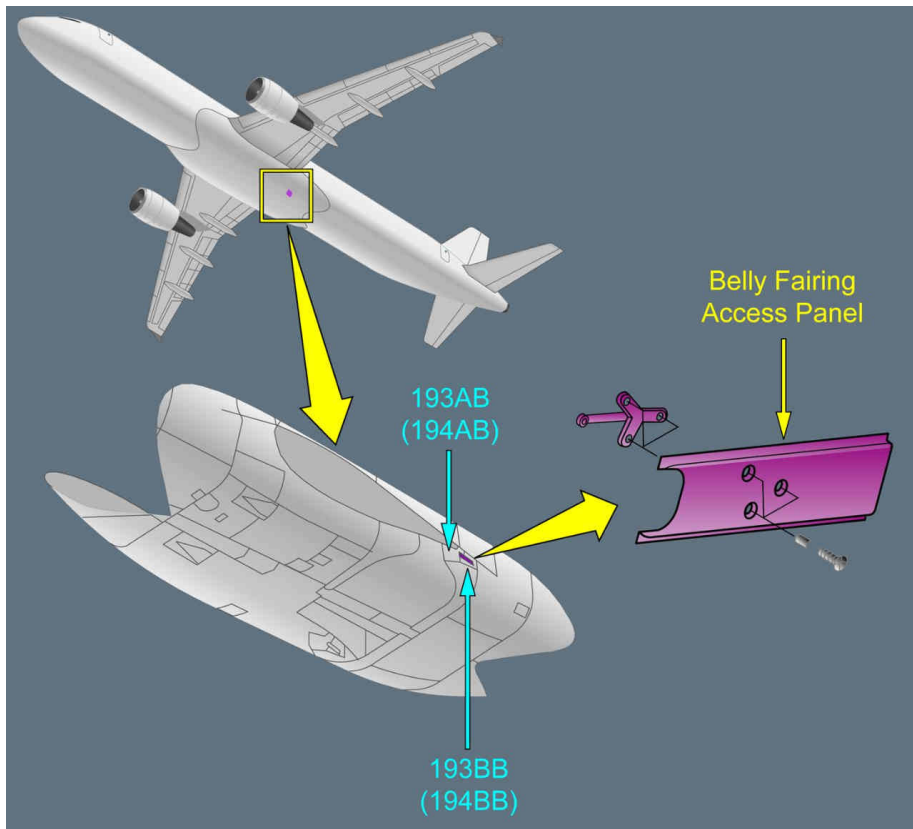
- Takeoff and approach climb performance limiting weights are reduced by 96 kg (212 lb)
- En route performance limiting weight is reduced by 108 kg (238 lb)
- Fuel consumption is increased by 0.28 %.

Refer to MCDL-57-02 Illustration Belly Fairing Sliding Panel

ILLUSTRATION BELLY FAIRING SLIDING PANEL

Ident.: MCDL-57-02-00006552.0003001 / 04 APR 11

Criteria: (SA and 38211)

FOR INFORMATION ONLY


For dispatch conditions: Refer to 57-02 Belly Fairing Sliding Panel

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST WINGS OUTBOARD FLAPS RUBBING STRIP

57-03	Outboard Flap Rubbing Strip Items 10, 15, 20, 40

Ident.: MCDL-57-03-00006564.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (A318 or A319 or A320)

57-03 OUTBOARD FLAP RUBBING STRIP ITEMS 10, 15, 20, 40	Quantity installed 12

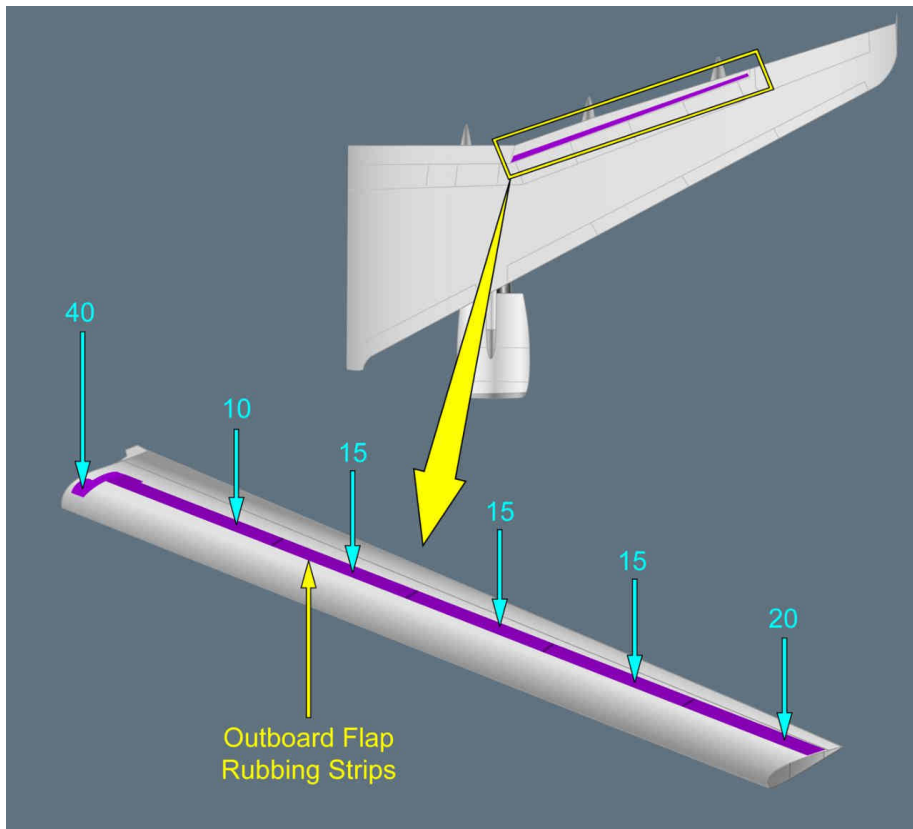
All may be missing.

Refer to MCDL-57-03 Illustration Outboard Flap Rubbing Strip

ILLUSTRATION OUTBOARD FLAP RUBBING STRIP

Ident.: MCDL-57-03-00006565.0001001 / 23 NOV 09

Criteria: (A318 or A319 or A320)

FOR INFORMATION ONLY


For dispatch conditions: Refer to 57-03 Outboard Flap Rubbing Strip

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST WINGS INBOARD FLAP RUBBING STRIP

57-04	Inboard Flap Rubbing Strip items 1, 5, 10, 30

Ident.: MCDL-57-04-00006567.0001001 / 23 NOV 09	<u>EASA APPROVED</u>
Criteria: (A318 or A319 or A320)	

57-04 INBOARD FLAP RUBBING STRIP ITEMS 1, 5, 10, 30	Quantity installed 8

All may be missing.

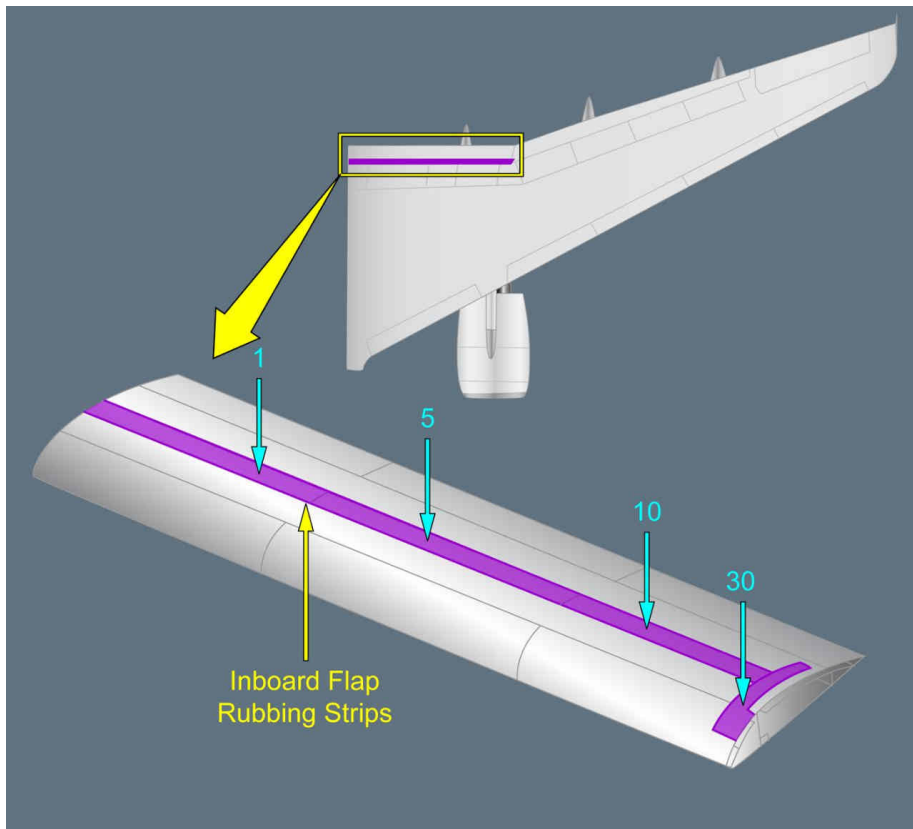
Refer to MCDL-57-04 Illustration Inboard Flap Rubbing Strip

ILLUSTRATION INBOARD FLAP RUBBING STRIP

Ident.: MCDL-57-04-00006568.0001001 / 02 DEC 13

FOR INFORMATION ONLY

Criteria: (A318 or A319 or A320)



For dispatch conditions: Refer to 57-04 Inboard Flap Rubbing Strip

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST POWER PLANT FAN COWL HOLD OPEN ROD

71-09	Fan Cowl Hold Open Rod

Ident.: MCDL-71-09-00006587.0003001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)	

71-09 FAN COWL HOLD OPEN ROD	Quantity installed 8

(m) *Refer to AMM Task 71-13-00-010-011*

All may be missing.

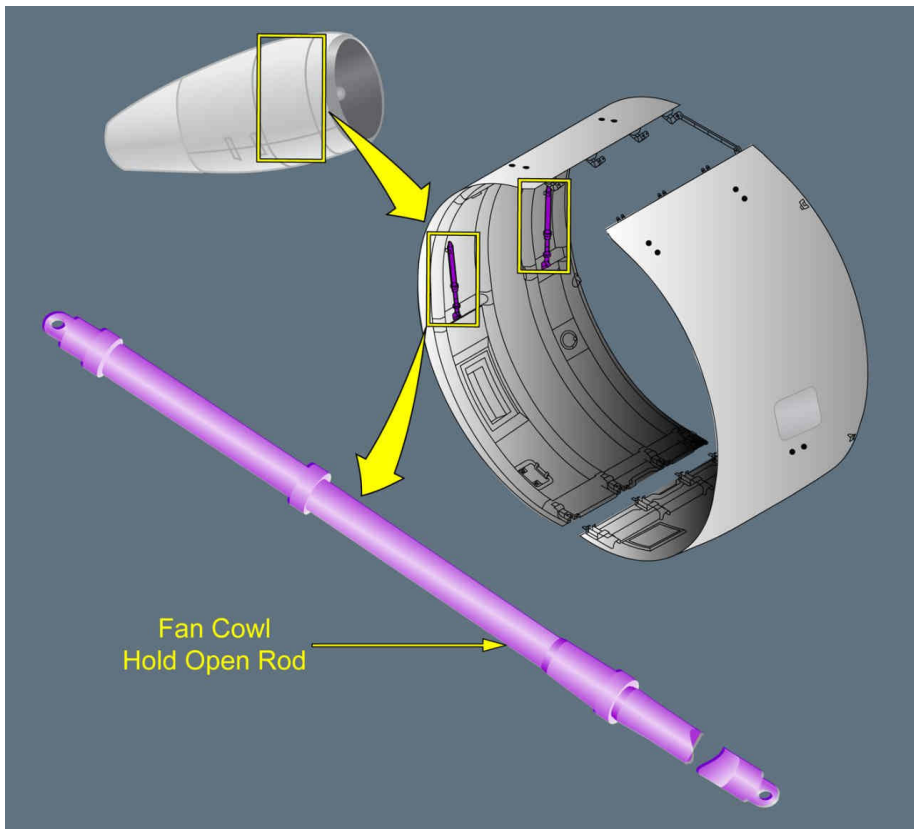
Refer to MCDL-71-09 Illustration Fan Cowl Hold Open Rod

ILLUSTRATION FAN COWL HOLD OPEN ROD

Ident.: MCDL-71-09-00006588.0001001 / 04 APR 11

Criteria: SA

FOR INFORMATION ONLY



For dispatch conditions: *Refer to 71-09 Fan Cowl Hold Open Rod*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST EXHAUST DUCT OPENING ACTUATOR

78-01	Duct Opening Actuator

Ident.: MCDL-78-01-00006592.0001001 / 23 NOV 09
EASA APPROVED

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

78-01 DUCT OPENING ACTUATOR	Quantity installed 4

All may be missing.

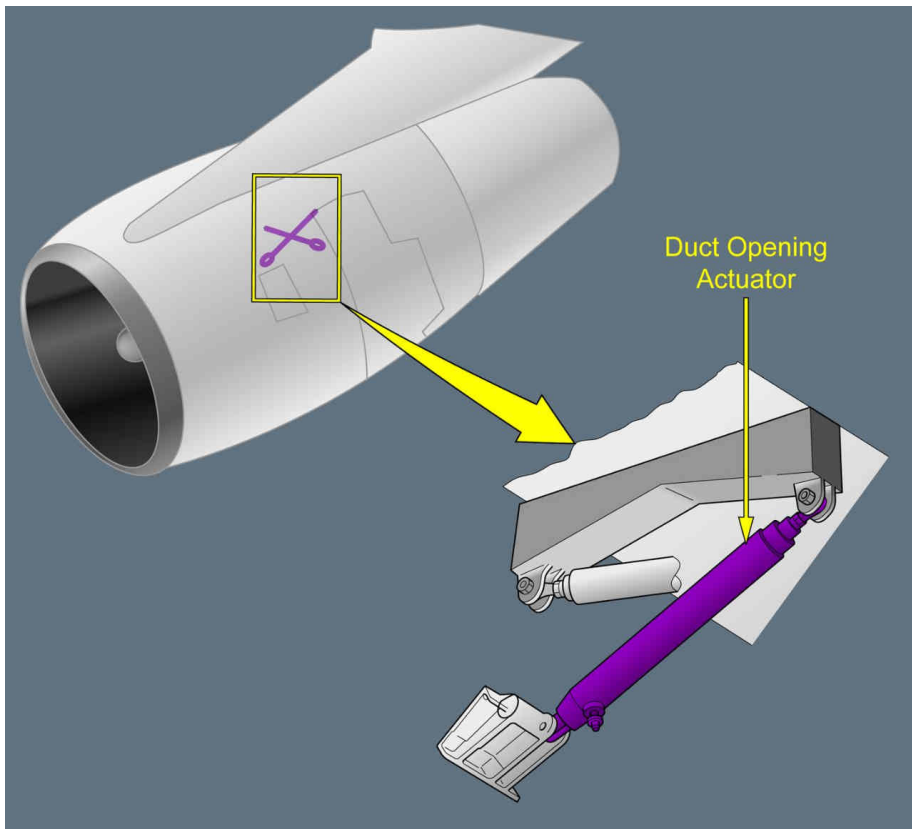
Refer to MCDL-78-01 Illustration Duct Opening Actuator

MASTER CONFIGURATION DEVIATION LIST**EXHAUST****DUCT OPENING ACTUATOR****ILLUSTRATION DUCT OPENING ACTUATOR**

Ident.: MCDL-78-01-00006593.0001001 / 23 NOV 09

FOR INFORMATION ONLY

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

For dispatch conditions: *Refer to 78-01 Duct Opening Actuator*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST EXHAUST THRUST REVERSER BLOCKER DOOR

78-03	Thrust Reverser Blocker Door

Ident.: MCDL-78-03-00006604.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)	

78-03 THRUST REVERSER BLOCKER DOOR	Quantity installed 20

(m) *Refer to AMM Task 78-32-00-040-011*
One may be missing provided the associated linkage is removed.
Note: *The associated thrust reverser must be deactivated (Refer to MMEL/MI-78-30 Thrust Reverser).*

- **Performance:**
The following performance penalties are applicable:
 - Takeoff and approach climb performance limiting weights are reduced by 249 kg (549 lb)
 - Enroute performance limiting weight is reduced by 166 kg (366 lb)
 - Fuel consumption is increased by 0.36 %.

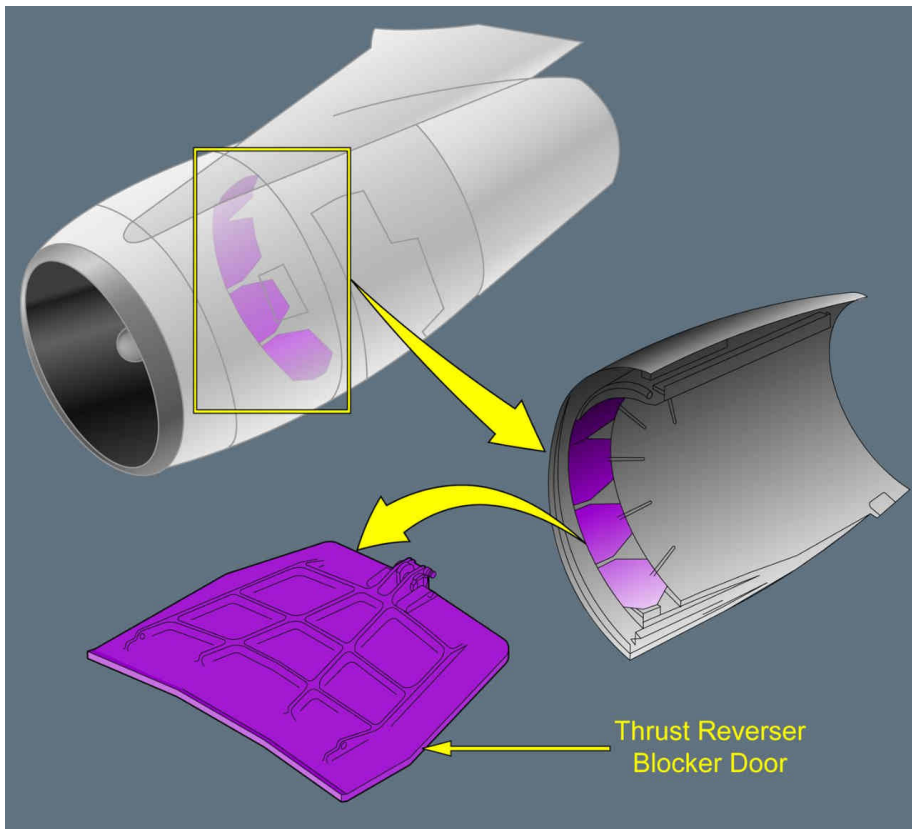
Refer to MCDL-78-03 Illustration Thrust Reverser Blocker Door

ILLUSTRATION THRUST REVERSER BLOCKER DOOR

Ident.: MCDL-78-03-00006605.0001001 / 23 NOV 09

FOR INFORMATION ONLY

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)

For dispatch conditions: *Refer to 78-03 Thrust Reverser Blocker Door*

 AIRBUS A320 AIRPLANE FLIGHT MANUAL	MASTER CONFIGURATION DEVIATION LIST EXHAUST LOCKOUT PIN

78-04	Lockout Pin

Ident.: MCDL-78-04-00006598.0001001 / 02 DEC 13	<u>EASA APPROVED</u>
Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)	

78-04 LOCKOUT PIN	Quantity installed 4

(m) *Refer to AMM Task 78-32-00-040-010*

All may be missing from stowage position provided the hole is covered with high speed tape.

Note: *Without lockout pin, the associated thrust reverser cannot be deactivated.*

Refer to MCDL-78-04 Illustration Lockout Pin

MASTER CONFIGURATION DEVIATION LIST

EXHAUST

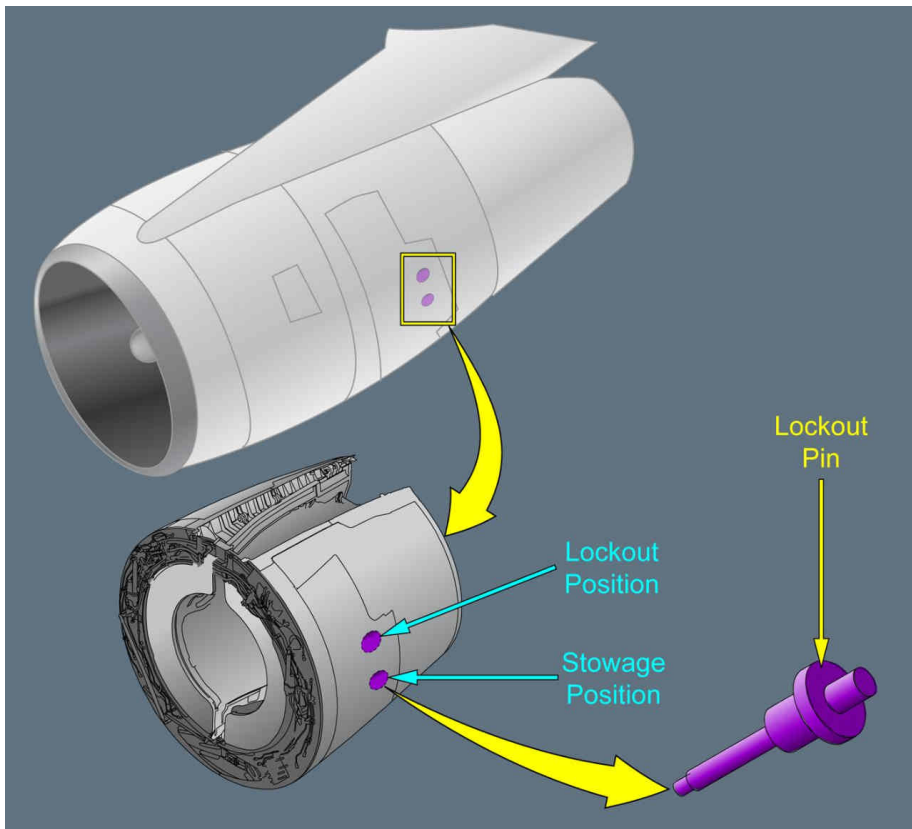
LOCKOUT PIN

ILLUSTRATION LOCKOUT PIN

Ident.: MCDL-78-04-00006599.0001001 / 13 FEB 14

FOR INFORMATION ONLY

Criteria: (319-131 or 319-132 or 319-133 or 320-231 or 320-232 or 320-233 or 321-131 or 321-231 or 321-232)



For dispatch conditions: Refer to 78-04 Lockout Pin

SUPPLEMENTARY PERFORMANCE

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SPERF-CONT CONTAMINATED RUNWAY

SPERF-CONT-GEN GENERAL

General.....A

SPERF-CONT-LIM LIMITATIONS

Limitations.....A

SPERF-CONT-PERF PERFORMANCE

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Aircraft Configuration.....B
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A320
AIRPLANE FLIGHT MANUAL

SUPPLEMENTARY PERFORMANCE

PRELIMINARY PAGES

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A320
AIRPLANE FLIGHT MANUAL

SUPPLEMENTARY PERFORMANCE

CONTAMINATED RUNWAY

GENERAL

GENERAL

Ident.: SPERF-CONT-GEN-00009415.0001001 / 23 NOV 09

EASA APPROVED

Criteria: SA

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.

This chapter of the AFM is approved by EASA according to JAR 25 contaminated runway performance requirements.

This chapter is not required by FAR 25 and is provided for guidance only for those aircraft certificated according to this requirement.



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AIRPLANE FLIGHT MANUAL

SUPPLEMENTARY PERFORMANCE

CONTAMINATED RUNWAY

GENERAL

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A320
AIRPLANE FLIGHT MANUAL

SUPPLEMENTARY PERFORMANCE

CONTAMINATED RUNWAY

LIMITATIONS

LIMITATIONS

Ident.: SPERF-CONT-LIM-00009416.0001001 / 04 APR 11

EASA APPROVED

Criteria: SA

Reduced thrust takeoff is not allowed on contaminated runways.

Takeoff on very low braking friction surface (icy runway) is not recommended.



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AIRPLANE FLIGHT MANUAL

SUPPLEMENTARY PERFORMANCE
CONTAMINATED RUNWAY
LIMITATIONS

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AIRPLANE FLIGHT MANUAL

SUPPLEMENTARY PERFORMANCE
CONTAMINATED RUNWAY
PERFORMANCE

INTRODUCTION

Ident.: **SPERF-CONT-PERF-00009417.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

The considered atmosphere is the international standard atmosphere.

Performance are related to VS1G.

Wind speed is measured at the height of 10 m.

AIRCRAFT CONFIGURATION

Ident.: **SPERF-CONT-PERF-00009441.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

TAKEOFF ON CONTAMINATED RUNWAY

The takeoff performance has been established for slats/flaps configuration 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

Advisory landing distance on very low braking friction surface such as icy runway has been established for slats/flaps configuration 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-00009429.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: SA

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.*



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GENERAL

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This supplement is applicable to aircraft operated under Commonwealth of Independent States (CIS) regulations.

This AFM has been approved by the Interstate Aviation Committee Aviation Register (IAC AR) based on EASA AFM.

Unless amended in this supplement, all the chapters of this AFM remain applicable.



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LIMITATIONS - OPERATIONAL PARAMETERS

ENVIRONMENTAL ENVELOPE

Ident.: **REG-CIS-LIM-OPS-00007297.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Refer to LIM-OPS Environmental Envelope

Minimum OAT at takeoff and landing: -40 °C

Maximum OAT at takeoff and landing: +45 °C

RUNWAY CONDITIONS

Ident.: **REG-CIS-LIM-OPS-00007293.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Allowable runway conditions:

- Runway paved and hard surfaced
- Runway covered with a layer of water, slush, or wet snow, no greater than 1/2 in (12.7 mm)
- Runway covered with a layer of dry snow no greater than 2 in (50 mm).

CROSSWIND

Ident.: REG-CIS-LIM-OPS-00007294.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Maximum crosswind under different runway conditions:

- Runway covered with a layer of 1/2 in (12.7 mm) of water, slush, or wet snow: 10 kt (5 m/s)
- Fluid contaminated runway:

To optimize directional control during the low speed phase of the takeoff and landing roll and, depending on the reported braking action given by the control tower, it is not recommended to take off or to land with a crosswind component higher than:

- For CIS airports:

Reported Braking Action	Reported Runway Friction coefficient	Maximum Crosswind (kt)	
		Takeoff	Landing
Good	0.60 - 0.50	29 ⁽¹⁾	33 ⁽¹⁾
Good/medium	0.49 - 0.45	29	29
Medium	0.44 - 0.40	25	
Medium/poor	0.39 - 0.35	20	
Poor	0.34 - 0.30	15	

⁽¹⁾ This is the maximum crosswind demonstrated for dry and wet runways

It is not permitted to operate on runways covered with ice, or with a friction coefficient of $\mu < 0.3$

- For other airports:

Reported Braking Action	Reported Runway Friction Coefficient	Maximum Crosswind (kt)		Equivalent Runway Condition ⁽²⁾
		Takeoff	Landing	
Good	≥ 0.4	29 ⁽¹⁾	33 ⁽¹⁾	1
Good/medium	0.39 - 0.36	29	29	1
Medium	0.35 - 0.30	25		2/3
Medium/poor	0.29 - 0.26	20		2/3
Poor	≤ 0.25	15		3/4
Unreliable		5		4/5

⁽¹⁾ This is the maximum crosswind demonstrated for dry and wet runways

⁽²⁾ Equivalent runway conditions (only valid for maximum crosswind determination):

1. Dry, damp or wet runway (less than 3 mm water depth)
2. Runway covered with slush
3. Runway covered with dry snow
4. Runway covered with standing water, with risk of hydroplaning, or wet snow
5. Icy runway, or high risk of hydroplaning



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LIMITATIONS - COMMUNICATIONS

VHF

Ident.: **REG-CIS-LIM-23-00007296.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

For flights where continuous VHF communication is not ensured, aircraft shall be equipped with:

- One HF radio if the interruption in VHF communication lasts less than one hour
- Two HF radios if the interruption in VHF communication exceeds one hour.

Flights in Polar Regions outside VHF radio coverage area are allowed only if HF radio waves propagation forecast is acceptable.



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LIMITATIONS - NAVIGATION

SECONDARY RADAR CONTROL

Ident.: **REG-CIS-LIM-34-00007292.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Flights are allowed in airspace where secondary radar control is provided using RBS mode.

WEATHER RADAR INFORMATION

Ident.: **REG-CIS-LIM-34-00007295.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

If thunderstorm conditions are expected, the flight crew should display the weather radar image on at least one ND. The ND should not be in PLAN mode for constantly displaying weather radar information.



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LIMITATIONS - NAVIGATION

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LIMITATIONS - AUXILIARY POWER UNIT

APU LIMITATIONS FROM CIS FOR AIRCRAFT FITTED WITH APU 131-9

Ident.: TDU / REG-CIS-LIM-49-00009654.0001001 / 23 NOV 09

EASA APPROVED

Criteria: ((320-111 or 320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 320-233 or A319 or A321) and (25888 or 37987))

Specific: CIS

Impacted DU: NONE

Impacted by TR30 Issue 1.0

For aircraft fitted with one Allied Signal APU 131-9[A] (MOD 25888), the following limitations apply:

- The use of APU is not allowed with RT fuel temperature below -40 °C
- The use of APU is not allowed with TS-1 fuel temperature below -44 °C.



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LIMITATIONS - AUXILIARY POWER UNIT

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EMERGENCY PROCEDURES

FORCED LANDING

Ident.: **REG-CIS-EMER-00015242.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Refer to EMER-90 FORCED LANDING.

Note: *Grab the portable ELT/Emergency Radio, and operate it according to the instructions attached after Emergency Evacuation.*

DITCHING

Ident.: **REG-CIS-EMER-00007298.0001001 / 02 DEC 13**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Refer to EMER-90 DITCHING.

Note: *Grab the portable ELT/Emergency Radio, and operate it according to the instructions attached after Emergency Evacuation.*



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ABNORMAL PROCEDURES

ELEC - IDG OIL LO PR

Ident.: **REG-CIS-ABN-00007299.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Turn off affected IDG.

APU must be started (*Refer to NORM-49 Auxiliary Power Unit (APU)*) and APU GEN must be used.

ELEC - IDG OIL OVHT

Ident.: **REG-CIS-ABN-00007300.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Turn off affected IDG.

APU must be started (*Refer to NORM-49 Auxiliary Power Unit (APU)*) and APU GEN must be used.

ELEC - GEN FAULT

Ident.: **REG-CIS-ABN-00007301.0001001 / 23 NOV 09**

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

Turn off then on affected GEN.

● **If unsuccessful:**

Turn off affected GEN.

APU must be started (*Refer to NORM-49 Auxiliary Power Unit (APU)*) and APU GEN must be used.



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ABNORMAL PROCEDURES

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COLD WEATHER OPERATIONS

Ident.: REG-CIS-APP-00009150.0001001 / 23 NOV 09

EASA APPROVED

Criteria: (320-211 or 320-212 or 320-214 or 320-231 or 320-232 or 321-211 or 321-231 or A319 or 321-100)

Specific: CIS

GENERAL

For the preparation and ground operation of an aircraft after it has been sitting idle in very low temperatures, the flight crew should use the following procedures, which complement the normal operating procedures.

EXTERIOR INSPECTION

Complete normal preliminary cockpit preparation.

Set probe and window heat to ON.

All the surfaces of the aircraft (critical surfaces: leading edge and upper surfaces of wings, vertical and horizontal stabilizers, all control surfaces, slats and flaps) must be clear of snow, frost and ice for takeoff.

- Thin hoarfrost is acceptable on the upper surface of the fuselage.
- On the underside of the wing tank area, a maximum layer of 3 mm (1/8 in) of frost will not penalize takeoff performance.

Check that the following equipment are free of frost, ice and snow:

- Landing gear assemblies (lever locks), tires and landing gear doors
- Engine inlets, inlet lips, fans (check for rotation), spinners, fan exhaust ducts, reversers assemblies
- Drains, bleeds, probes (pilots, static ports, TAT sensors, angle of attack sensors)
- Fuel tank ventilation
- Radome
- Verify that the commercial water supplies are not frozen and have been refilled (they should have been emptied prior to the cold soak).

After engine start, set PROBE/WINDOW to AUTO.

GROUND DEICING AND ANTI-ICING

It is the captain's responsibility to decide if the ground crew must deice/anti-ice the aircraft, and/or if additional deicing/anti-icing treatment is required.

CAUTION

If it is necessary for the ground crew to repeatedly anti-ice the aircraft, they must deice the surfaces with a hot fluid mixture before applying a new layer of anti-icing fluid.

The aircraft can be deiced or anti-iced when the APU and engines are either stopped or running. However, do not start the engines or APU when the ground crew is spraying fluid on the aircraft.

CAUTION

- The ground crew should take care when spraying deicing fluid, and make sure that the engine and APU do not ingest any fluid.
- Do not move flaps, slats, ailerons, spoilers, or elevators, if they are not free of ice.
- Always ensure that both the left and the right sides of the aircraft receive the same, complete, and symmetrical deicing/anti-icing treatment.

● Before fluid spraying:

Check that CAB PRESS MODE SEL is in AUTO position.

Turn off all bleeds (engines and APU).

Set EXTRACT to OVRD.

Set DITCHING to ON.

Set GROUND COOLING to OFF (if installed).

Check thrust levers are in IDLE position.

Inform ground crew when the aircraft is prepared for spraying.

● Upon completion of spraying operation:

Set DITCHING to OFF.

Set GROUND COOLING to AUTO (if installed).

Check the outflow valve is open.

Turn on both engines bleeds.

At least 60 s after APU start or the completion of spraying operation, turn on APU bleed.

After deicing or anti-icing report is received, resume normal procedure.

Note: Consider turning off APU bleed for takeoff to avoid deicing fluid ingestion by the APU air intake

SECURING THE AIRCRAFT FOR COLD SOAK**● After switching off all bleeds and before switching off AC power:**

Set DITCHING to ON.

Check chocks are in place and set parking brake to OFF.

● After switching off the batteries:

Set DITCHING to OFF.

Install protective covers.

WATER SYSTEM DRAINING

Drain the water system if the OAT requires it as shown below:



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Configuration			Exposure time	Water tank drain
Air conditioning	Cabin temperature	Outside Air Temperature		
ON	Above 10 °C	Between 0 °C and -15 °C	None	Not required
		Below -15 °C	1 h 15 min	
OFF		Between 0 °C and -7 °C	1 h 30 min	Required
		Between -7 °C and -15 °C	0 h 30 min	
		Below -15 °C	Any	



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