# Kingdom of Saudi Arabia General Authority of Civil Aviation

## **GACA REGULATION**

Section 6
Operation of Aircraft

Volume I
Commercial
Air Transport — Airplanes

Edition 3.0

#### **FOREWORD**

The following Regulations governing Operation of Aircraft are based on Articles 1, 2, 3, 4, 5, 24 to 26, 85 to 106, 175 and 177 of the Civil Aviation Act that has been approved by the Council of Ministers Resolution No. 185 dated 17/07/1426H and issued by the Royal Decree No. M/44 dated 18/07/1426H. (23/08/2005G).

The promulgation of this regulation is based on the authority granted in Article 179 of the Civil Aviation Act, and is issued under the authority of the President, General Authority of Civil Aviation, as a duly delegated representative of the GACA Board of Directors, in accordance with Order No.T-41, dated 30/12/1429H (28/12/2008G).

The General Authority of Civil Aviation is responsible for the preparation and distribution of all regulations in sufficient quantities so that all service providers and aircraft operators based in the Kingdom of Saudi Arabia are able to obtain an authentic copy prior to the effective date of the Regulation.

**APPROVED:** 

Original Signed

Fahad Bin Abdullah M. Al Saud President, General Authority of Civil Aviation,

Effective Date: 13 November 2014

#### **CONTENT RULES**

#### 1) Organization Structure:

- a) GACA has established Flight Operations Division (FO) within the Aviation Standards Department (ASD) of the Safety and Air Transport Sector (S&AT). The responsibilities of the Division are carried out through two Subdivisions. One Subdivision is responsible for Commercial Air Carriers Operations, and the other Subdivision is responsible for General Aviation Operations. The activities of this GACA REGULATION Section 6 OPERATION OF AIRCRAFT Volume I Commercial Air Transport Airplanes will be performed by the Air Carrier Operations Subdivision with the following responsibilities:
  - 1. Ensure and enforce compliance with the applicable regulations and procedures of GACAR Section 6 including the identification of conditions and circumstances under which FO are allowed to deal with, and resolve events involving certain deviations internally, within the context of this regulation,
  - 2. Perform safety oversight functions including audits, inspections, investigations, and data analysis; on pre-established annual audit program and frequent inspections of areas of greater safety concern or need, as identified by the analysis of Data, or as instructed by Senior Management,
  - 3. Perform Certification functions on Air Carriers, Air Operators, Airmen and Training Centers in accordance with established regulations, policies and guidance materials.
  - 4. Administer a regular surveillance program that includes:
    - a) Ramp inspection
    - b) Record inspections
    - c) Cockpit en-route inspection
    - d) Cabin en-route inspection
    - e) Air carrier dispatch inspection
    - f) Air carrier station facilities inspection
    - g) Air carrier training program inspection
    - h) Air Carrier De-Icing Program
    - i) Training centers
    - j) Check airmen
    - k) Air Carrier Manuals
    - 1) Flight Simulation Training Devices
  - 5. Participate in incident and accident investigation

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#### **CONTENT RULES**

#### 2) Rules of Constructions:

- a) To avoid any misunderstanding within this regulation, certain words are to be interpreted as having specific meanings when they are used, unless the context requires otherwise:
  - 1. Words importing the singular include the plural;
  - 2. Words importing the plural include the singular; and
  - 3. Words importing the masculine gender include the feminine
- b) In this regulation, the following protocol is used:
  - 1. The words "Shall" and "must" indicate that compliance is compulsory.
  - 2. The word "should" indicates a recommendation. It does not means that compliance is optional but rather that, where insurmountable difficulties exist, the GACA-S&AT may accept an alternative means of compliance, provided that an acceptable safety assurance from the authority shows that the safety requirements will not be reduced below that intended by the requirement.
  - 3. The word "Can" or "May" is used in a permissive sense to state authority or permission to do the act prescribed, and the words "no person may \* \* \*" or "a person may not \* \* \*" mean that no person is required, authorized, or permitted to do the act prescribed;
  - 4. The word "will" is used to express the future; and
  - 5. The word "Includes" means "includes but is not limited to".

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#### AMENDMENT PROCEDURE

#### AMENDMENT PROCEDURE

The existing General Authority of Civil Aviation Regulations (GACAR) will be periodically reviewed to reflect the latest updates of International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs); it will be also amended to reflect the latest aviation safety provisions issued by GACA and other regional and international civil aviation organizations. A complete revised edition incorporating all amendments will be published every three years from the original effective date of this regulation. The amendment procedure shall be as follows;

- 1. When the General Authority of Civil Aviation (GACA) receives an amendment to any of the current ICAO Annexes that can affect the provisions of this regulation, it will be forwarded by the Vice President of International Organization Affairs to the Assistant Vice President, Safety and Air Transport (S&AT) who in turn will forward it to Aviation Regulation Department to coordinate with the concerned department to study and comments, taking into account the ICAO deadline for the reply.
- 2. When any GACA department or stakeholder proposes an amendment to this regulation, it will send a letter with the proposed amendment including a clear justification and argument for such amendment. Following the receipt of an amendment proposal, the S&AT will analyze this proposal and forward its comments and any proposed decision action to the S&AT Assistant Vice President.
- 3. An accepted amendment proposal will be prepared as draft amendment to the GACAR-Section 6 and forwarded to the originator of the amendment proposal and concerned GACA department (s) for further review and comment within a specified timeline.
- 4. All accepted amendments will be drafted in the form of Notices of Proposed Amendments (NPA) and forwarded to all concerned parties including stakeholders for comment within a two-month reply period. The NPA shall indicate the proposed Amendment's effective date.
- 5. Following the receipt of NPA replies, the S&AT will analyze the comments received and produce a new draft in consultation with the concerned GACA department. The final draft will be submitted to President of the General Authority of Civil Aviation for formal approval prior to publication.
- 6. The Amendment's effective date will take into account the comments of all the concerned parties and stakeholders.
- 7. Any differences between the GACAR Section 6 new amendment and ICAO Annex 6 Standards and Recommended Practices will be forwarded to ICAO as a Difference and published as it is in the Aeronautical Information Publication (AIP).
- 8. All concerned parties and stakeholders will be provided a copy of the new amendment and will be requested to update their copy of the GACAR Section 6 accordingly.
- 9. It is the responsibility of all concerned parties to keep their copy of GACAR-Section 6 and other GACA regulation publication up to date.

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#### SUPPLEMENTARY REGULATIONS

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From time to time it will be necessary to issue regulations which supplement or augment the GACAR Regulations. The following procedures will apply:

- 1. Supplementary regulations will be issued in the form of a GACA Regulation Circular (RC).
- 2. The GACA Regulation Circular will be approved by the President.
- 3. The process for preparation and publishing of the GACA Regulation Circular will be addressed in the GACA Quality System Manual.

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#### AMENDMENT RECORD

This edition reflects the Ninth Edition of ICAO Annex 6 Part I up to and including amendment 38

Amendment number	Amendment date	Affected pages	Effective date	Incorporated by	Incorporated on
Edition 1	May 2009	All	May 2009	S&ER	May 2009
Edition 2.0	14 Nov 2013	All pages reviewed	14 Nov 2013	S&ER	14 Nov 2013
Edition 3.0	13Nov 2014	All pages reviewed	13 Nov 2014	S&AT	13 Nov 2014

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#### LIST OF CURRENT DIFFERENCES TO ICAO SARPS

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The following is a list of differences with the GACA Regulation and the ICAO Standards and Recommended Practices (SARPS). Differences have been notified to ICAO and are also published in the KSA Aeronautical Information Publication (AIP-GEN 1.7).

	Aeroplanes – Amendment 38		T 1 6
SARP Identifier	SARP	Regulation Reference	Level of implementati on of SARP's
Chapter 1 Reference Definition	EDTO significant system. An aeroplane system whose failure or degradation could adversely affect the safety particular to an EDTO flight, or whose continued functioning is specifically important to the safe flight and landing of an aeroplane during an EDTO diversion.	GACA/FAA AC 120-42B	Different in character or other means of compliance
Chapter 1 Reference Definition	Flight operations officer/flight dispatcher. A person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with Annex 1, who supports, briefs, and/or assists the pilot-in-command in the safe conduct of the flight.	GACA/FAR Part 121.593 & 121.597	Different in character or other means of compliance
Chapter 1 Reference	Head-up display (HUD). A display system that presents flight information into the pilot's forward external field of view.	AC25-11A	Different in character or other means of compliance
Chapter 1 Reference	Landing distance available (LDA). The length of runway which is declared available and suitable for the ground run of an aeroplane landing.	PILOT CONTROLLER GLOSSARY	Different in character or other means of compliance
Chapter 1 Reference	Maximum diversion time. Maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome.	AC120-42B APPENDIX1	Different in character or other means of compliance
Chapter 1 Reference	<b>Rest period.</b> A continuous and defined period of time, subsequent to and/or prior to duty, during which flight or cabin crew members are free of all duties.	GACAR117.3GACA R 121.467	Different in character or other means of compliance
Chapter 1 Reference	Threshold time. The range, expressed in time, established by the State of the Operator to an en-route alternate aerodrome, whereby any time beyond requires an EDTO approval from the State of the Operator.	AC120-42B	Different in character or other means of compliance
Chapter 3 Reference 3.5 Note	Use of psychoactive substances Note.— Provisions concerning the use of psychoactive substances are contained in Annex, 1.2.7 and Annex 2, 2.5.	GACAR91.17GACA R PART 120GACAR P67	Different in character or other means of compliance
Chapter 4  Reference 4.3.7.1 Standard	" 4.3.7 In-flight fuel management  An operator shall establish policies and procedures, approved by the State of the Operator, to ensure that inflight fuel checks and fuel management are performed."	Ac120-42b	Different in character or other means of compliance
Chapter 4  Reference 4.3.7.2 Standard	The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing.	Ac120-42b	Different in character or Other means of compliance

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Chapter 5	In determining the length of the runway available, account	GACA/FAR Part	Different in
Reference	shall be taken of the loss, if any, of runway length due to	25.113, 25.109	character or
5.2.8.1	alignment of the aeroplane prior to take-off.	,	other means of
			compliance
Standard			1
Chapter 9	Each such pilot shall demonstrate to the operator	GACA/FAR Part	Different in
1	an adequate knowledge of:	121.443, 121,445.	character or
	a) the route to be flown, and the aerodromes which are to	, ,	other means of
Reference	be used. This shall include knowledge of:		compliance
9.4.3.2	1) the terrain and minimum safe altitudes;		• ompilane
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2) the seasonal meteorological conditions;		
	3) the meteorological, communication and air traffic		
Standard	facilities, services and procedures;		
Standard	4) the search and rescue procedures; and		
	5) the navigational facilities and procedures, including		
	any long-range navigation procedures, associated with the		
	route along which the flight is to take place; and		
	b) procedures applicable to flight paths over heavily		
	populated areas and areas of high air traffic density,	and the second second	
	obstructions, physical layout, lighting, approach aids and	and the second	
	arrival, departure, holding and instrument approach		
	procedures, and applicable operating minima.		
	Note.— That portion of the demonstration relating to		
	arrival, departure, holding and instrument approach		
	procedures may be accomplished in an appropriate		7
GI O	training device which is adequate for this purpose.	G L G L T L T T	70100
Chapter 9	9.4.4 Pilot proficiency checks	GACA/FAR Part	Different in
		121.440, 121.441.	character or
	An operator shall ensure that piloting technique and the		other means of
Reference	ability to execute emergency procedures is checked in		compliance
9.4.4.1	such a way as to demonstrate the pilot's competence on		
	each type or variant of type of aeroplane. Where the		
	operation may be conducted under instrument flight rules,		
Standard	an operator shall ensure that the pilot's competence to		
	comply with such rules is demonstrated to either a check		
	pilot of the operator or to a representative of the State of		
	the Operator. Such checks shall be performed twice within		
	any period of one year. Any two such checks which are		
	similar and which occur within a period of four		
	consecutive months shall not alone satisfy this		
	requirement.		
	N1.Flight simulation training devices approved by the		
	State of the Operator may be used for those parts of the		
	checks for which they are specifically approved.		
	N2. See the Manual of Criteria for the Qualification of		
	Flight Simulation Training Devices (Doc 9625).		
Chapter 4	An operator shall specify the method by which it is	GACA/FAR Parts	Less protective
	intended to determine minimum flight altitudes for	91.119, 121.555,	or partially
	operations conducted over routes for which minimum	121.657, 121.659,	implemented or
Reference	flight altitudes have not been established by the State	121.661, 135.203,	not implemented
4.2.7.2	flown over or the responsible State, and shall include this	135.215, 135.223,	
	method in the operations manual. The minimum flight	135.181, 135.183,	
	altitudes determined in accordance with the above method	Order 8900.1 For	
Standard	shall not be lower than specified in Annex 2.	request for	
	_	nonstandard	
		Operations	
		Specifiation	
Chapter 4	<b>Recommendation.</b> — The method for establishing the	GACA/FAR Part	Less protective
	minimum flight altitudes should be approved by the State	119.51 Order 8900.1	or partially
Reference	of the Operator.	For request for	implemented or
4.2.7.3		nonstandard	not implemented

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		Operations	
Recommendation		Specifiation	
	4.2.10 Fuel and oil records	GACA/FAR Part	Loss protective
Chapter 4 Reference	An operator shall maintain fuel records to enable the State	121.693(a), 135.63.	Less protective or partially implemented or
4.2.10.1	of the Operator to ascertain that, for each flight, the		not implemented
4.2.10.1	requirements of 4.3.6 and 4.3.7.1 have been complied		not implemented
Standard	with.		
Chapter 4	An operator shall maintain oil records to enable the State	GACAR/FAR121.69	Less protective
Reference	of the Operator to ascertain that trends for oil consumption	3121.695135.63	or partially
4.2.10.2		3121.093133.03	implemented or
Standard	are such that an aeroplane has sufficient oil to complete		
	each flight.	CACA/EAD Doort	not implemented
Chapter 4 Reference	Fuel and oil records shall be retained by the operator for a period of three months.	GACA/FAR Part 121.695,121.697, 135.63.	Less protective or partially implemented or
4.2.10.3		133.03.	not implemented
Standard			not implemented
Chapter 4	Completed flight preparation forms shall be kept by an	GACA/FAR Parts	Less protective
Reference	operator for a period of three months.	121.695, 121.697,	or partially
4.3.2	The state of the s	135.63, 135.79.	implemented or
			not implemented
Standard Chapter 4	The take-off alternate aerodrome shall be located	GACA/FAR Parts	Lass protections
Reference	within the following flight time from the aerodrome of		Less protective
		121.617, 135.217.	or partially
4.3.4.1.2	departure:		implemented or
G. 1 1	a) for aeroplanes with two engines, one hour of flight		not implemented
Standard	time at a one-engine-inoperative cruising speed,		
	determined from the aircraft operating manual, calculated		
	in ISA and still-air conditions using the actual take-off		
	mass; or		
	b) for aeroplanes with three or more engines, two hours		
1000	of flight time at an all engine operating cruising speed,		
	determined from the aircraft operating manual, calculated		
	in ISA and still-air conditions using the actual take-off		
	mass; or		
	c) for aeroplanes engaged in extended diversion time		
	operations (EDTO) where an alternate aerodrome meeting		
	the distance criteria of a) or b) is not available, the first		
	available alternate aerodrome located within the distance		
	of the operator's approved maximum diversion time		
	considering the actual take-off mass.		
Chapter 4	An aeroplane shall not be operated under the IFR	GACA/FAR Part	Less protective
- Chapter 1	or at night by a single pilot unless:	135.99 Part 135	or partially
	a) the flight manual does not require a flight crew of	Subparts B&C.	implemented or
Reference	more than one;	Suoparts Beec.	not implemented
4.9.2	b) the aeroplane is propeller-driven;		not implemented
4.9.2			
	c) the maximum approved passenger seating configuration is not more than nine;		
Standard	d) the maximum certificated take-off mass does not		
Stanuaru	exceed 5 700 kg;		
	e) the aeroplane is equipped as described in 6.22; and		
	f) the pilot-in-command has satisfied requirements of		
	experience, training, checking and recency described in		
	9.4.5.		
G1		GLGLETE III	
Chapter 5	5.4 Additional requirements for operations of	GACA/FAR Part 135	Less protective
	single-engine turbine-powered aeroplanes at night	Subpart (H) and (J),	or partially
D (	and/or in Instrument Meteorological Conditions (IMC)	Ops Spec.	implemented or
Reference			not implemented
5.4.1	In approving operations by single-engine turbine-powered		
	aeroplanes at night and/or in IMC, the State of the		

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			· · · · · · · · · · · · · · · · · · ·
Standard	Operator shall ensure that the airworthiness certification of the aeroplane is appropriate and that the overall level of safety intended by the provisions of Annexes 6 and 8 is provided by:  a) the reliability of the turbine engine; b) the operator's maintenance procedures, operating practices, flight dispatch procedures and crew training programmes; and c) equipment and other requirements provided in accordance with Appendix 3.		
Chapter 5	All single-engine turbine-powered aeroplanes operated at	GACA/FAR Part	Less protective
Reference 5.4.2	night and/or in IMC shall have an engine trend monitoring system, and those aeroplanes for which the individual certificate of airworthiness is first issued on or after 1	135.421.	or partially implemented or not implemented
Standard	January 2005 shall have an automatic trend monitoring system.		
Chapter 6 Reference	All aeroplanes operated by a single pilot under the instrument flight rules (IFR) or at night For approval in accordance with 4.9.1, all aeroplanes operated by a single pilot under the IFR or at night shall be	GACA/FAR Part 135.105	Less protective or partially implemented or not implemented
6.22	equipped with:  a) serviceable autopilot that has at least altitude hold and heading select modes;		not implemented
Standard	b) a headset with a boom microphone or equivalent; and c) means of displaying charts that enables them to be readable in all ambient light conditions.		
Chapter 9	9.4.2 Recent experience — cruise relief pilot  An operator shall not assign a pilot to act in the capacity of	The GACA has no specific state legislation	Less protective or partially implemented or
Reference	cruise relief pilot in a type or variant of a type of an	act/Regulation or	not implemented
9.4.2.1	aeroplane unless, within the preceding 90 days that pilot	document reference.	
<i>/</i>	has either: a) operated as a pilot-in-command, co-pilot or cruise relief pilot on the same type of aeroplane; or		
Standard	b) carried out flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aeroplane or in a flight simulator approved for the purpose, and has practised approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane.		
Chapter 9	When a cruise relief pilot is flying several variants of the same type of aeroplane or different types of aeroplane with similar characteristics in terms of operating procedures,		Less protective or partially implemented or
Reference 9.4.2.2	systems and handling, the State shall decide under which conditions the requirements of 9.4.2.1 for each variant or each type of aeroplane can be combined.	N/A	not implemented
Standard			
Chapter 9  Reference 9.4.3.5	An operator shall not continue to utilize a pilot as a pilot-in-command on a route or within an area specified by the operator and approved by the State of the Operator unless, within the preceding 12 months, that pilot has made at least one trip as a pilot member of the flight crew, or as a check pilot, or as an observer in the flight crew compartment:	GACA/FAR Part 121.445	Less protective or partially implemented or not implemented
G. 3.3	a) within that specified area; and		
Standard	b) if appropriate, on any route where procedures		

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#### LIST OF CURRENT DIFFERENCES TO ICAO SARPS

	associated with that route or with any aerodromes intended to be used for take-off or landing require the application of special skills or knowledge.		
Chapter 9	In the event that more than 12 months elapse in which a pilot-in-command has not made such a trip on a route in close proximity and over similar terrain, within such a		Less protective
Reference <b>9.4.3.6</b>	specified area, route or aerodrome, and has not practised such procedures in a training device which is adequate for this purpose, prior to again serving as a pilot-in-command within that area or on that route, that pilot must requalify in accordance with 9.4.3.2 and 9.4.3.3.	GACA/FAR Part 121.445	or partially implemented or not implemented
Standard			
Chapter 9	<b>Recommendation.</b> — The pilot-in-command	GACA/FAR Part	Less protective
Reference	should:	135.247,Part 135	or partially
9.4.5.2	a) for operations under the IFR or at night, have accumulated at least 50 hours flight time on the class of aeroplane, of which at least 10 hours shall be as pilot-incommand;	Subpart "H"	implemented or not implemented
Recommendation	b) for operations under the IFR, have accumulated at least 25 hours flight time under the IFR on the class of aeroplane, which may form part of the 50 hours flight time in sub-paragraph a); c) for operations at night, have accumulated at least 15 hours flight time at night, which may form part of the 50		
	hours flight time in sub-paragraph a); d) for operations under the IFR, have acquired recent experience as a pilot engaged in a single pilot operation under the IFR of: i) at least five IFR flight, including three instrument approaches carried out during the preceding 90 days on		
	the class of aeroplane in the single pilot role; or ii) an IFR instrument approach check carried out on such an aeroplane during the preceding 90 days; e) for operations at night, have made at least three take- offs and landings at night on the class of aeroplane in the single pilot role in the preceding 90 days; and f) have successfully completed training programmes that		
	include, in addition to the requirements of 9.3, passenger briefing with respect to emergency evacuation; autopilot management; and the use of simplified in-flight documentation.		
Reference	Recommendation.— Completed journey log book should	GACA Regulations	Less protective
11.4.3  Recommendation	be retained to provide a continuous record of the last six months' operations.	Section 6: GACAR/FAR Parts 121.683, 121.695, 135.63	or partially implemented or not implemented
Chapter 4	Notwithstanding the provisions in 4.3.4.1, 4.3.4.2		Less protective
•	and 4.3.4.3, the State of the Operator may, based on the results of a specific safety risk assessment conducted by		or partially implemented or
Reference 4.3.4.4	the operator which demonstrates how an equivalent level of safety will be maintained, approve operational variations to alternate aerodrome selection criteria. The specific safety risk assessment shall include at least the:  a) capabilities of the operator;		not implemented
Standard	<ul> <li>b) overall capability of the aeroplane and its systems;</li> <li>c) available aerodrome technologies, capabilities and infrastructure;</li> <li>d) quality and reliability of meteorological information;</li> <li>e) identified hazards and safety risks associated with</li> </ul>		
	each alternate aerodrome variation; and		

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	f) analific mitigation massures		
	f) specific mitigation measures.		
	Note.— Guidance on performing a safety risk assessment		
	and on determining variations, including examples of		
	variations, is contained in the Flight Planning and Fuel		
	Management Manual (Doc 9976) and the Safety		
G1 4	Management Manual (SMM) (Doc 9859).	G L G L D E L D 121 C L	3.6 F
Chapter 4	The pre-flight calculation of usable fuel required	GACAR/FAR121.64	More Exacting
Reference	shall include:	5121.647	or Exceeds
4.3.6.3	a) taxi fuel, which shall be the amount of fuel expected		
	to be consumed before take-off;		
	b) <i>trip fuel</i> , which shall be the amount of fuel required to		
G. 1 1	enable the aeroplane to fly from take-off or the point of in-		
Standard	flight re-planning, until landing at the destination		
	aerodrome taking into account the operating conditions of		
	4.3.6.2 b);		
	c) contingency fuel, which shall be the amount of fuel		
	required to compensate for unforeseen factors. It shall be 5		
	per cent of the planned trip fuel or of the fuel required		
	from the point of in-flight re-planning based on the	and the second s	
	consumption rate used to plan the trip fuel but, in any case,		
	shall not be lower than the amount required to fly for five		
	minutes at holding speed at 450 m (1 500 ft) above the		
	destination aerodrome in standard conditions;		
	Note.— Unforeseen factors are those which could have an		
	influence on the fuel consumption to the destination		7
	aerodrome, such as deviations of an individual aeroplane		
	from the expected fuel consumption data, deviations from		
	forecast meteorological conditi <mark>ons, ext</mark> ended taxi times		
	before take-off, and deviations from planned routings		
	and/or cruising levels.		
	d) destination alternate fuel, which shall be:		
	1) where a destination alternate aerodrome is required,		
	the amount of fuel required to enable the aeroplane to: i) perform a missed approach at the destination		
	aerodrome;		
	ii) climb to the expected cruising altitude;		
	iii) fly the expected routing;		
	iv) descend to the point where the expected approach is		
	initiated; and		
	v) conduct the approach and landing at the destination		
	alternate aerodrome; or		
	2) where two destination alternate aerodromes are		
Chapter 4	Notwithstanding the provisions in 4.3.6.3 a), b), c),	GACAR/FAR121.63	
Shaptor 1	d), and f); the State of the Operator may, based on the	9121.641121.643121.	
	results of a specific safety risk assessment conducted by	645121.647	
Reference	the operator which demonstrates how an equivalent level		
4.3.6.6	of safety will be maintained, approve variations to the pre-		
	flight fuel calculation of taxi fuel, trip fuel, contingency		
	fuel, destination alternate fuel, and additional fuel. The		
	specific safety risk assessment shall include at least the:		Ŧ
Standard	a) flight fuel calculations;		Less protective
	b) capabilities of the operator to include:		or partially
	i) a data-driven method that includes a fuel consumption		implemented or
	monitoring programme; and/or		not implemented
	ii) the advanced use of alternate aerodromes; and		
	c) specific mitigation measures.		
	Note.— Guidance for the specific safety risk assessment,		
	fuel consumption monitoring programmes and the		
	advanced use of alternate aerodromes is contained in the		
	Flight Planning and Fuel Management Manual (Doc		
	9976).		

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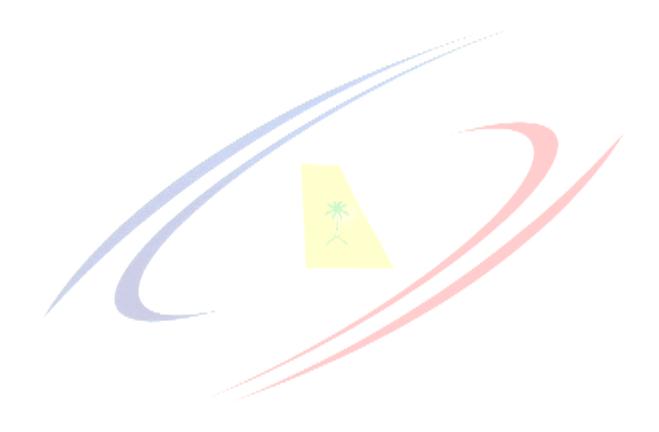
#### LIST OF CURRENT DIFFERENCES TO ICAO SARPS

Chapter 4 Reference 4.7.1.1	4.7 Additional requirements for operations by aeroplanes with turbine engines beyond 60 minutes to an en-route alternate aerodrome including extended diversion time operations (EDTO)	GACR/FAR121.6241 21.631121.633121.97 AC120-42BAPP P TO PART 121APP G TO PART 135	
Standard	4.7.1 Requirements for operations beyond 60 minutes to an en-route alternate aerodrome		
	Operators conducting operations beyond 60 minutes, from a point on a route to an en-route alternate aerodrome shall ensure that:  a) for all aeroplanes:  1) en-route alternate aerodromes are identified; and  2) the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including operational status and meteorological conditions;  b) for aeroplanes with two turbine engines, the most up-to-date information provided to the flight crew indicates that conditions at identified en-route alternate aerodromes will be at or above the operator's established aerodrome operating minima for the operation at the estimated time of use.  Note.— Guidance on compliance with the requirements of these provisions is contained in Attachment D.		More Exacting or Exceeds
Chapter 4	In addition to the requirements in 4.7.1.1, all	GACR/FAR121.6241	/
	operators shall ensure that the following are taken into	21.63	
Reference 4.7.1.2	account and provide the overall level of safety intended by the provisions of Annex 6, Part I:  a) operational control and flight dispatch procedures; b) operating procedures; and c) training programmes.	1121.633121.97AC1 20-42B APP P TO PART 121APP G TO PART 135	More Exacting or Exceeds
Standard			
Chapter 4  Reference 4.7.2.2	The maximum diversion time, for an operator of a particular aeroplane type engaged in extended diversion time operations shall be approved by the State of the Operator.  Note.— Guidance on the conditions to be used when converting diversion times to distances is contained in	GACR/FAR121.6241 21.63 1121.633121.97AC1 20-42B APP P TO PART 121APP	More Exacting or Exceeds
	Attachment D.	G TO PART 135	
Standard	and the second second		
Chapter 4  Reference 4.7.2.3  Standard	When approving the appropriate maximum diversion time for an operator of a particular aeroplane type engaged in extended diversion time operations, the State of the Operator shall ensure that:  a) for all aeroplanes: the most limiting EDTO significant system time limitation, if any, indicated in the aeroplane flight manual (directly or by reference) and relevant to that particular operation is not exceeded; and b) for aeroplanes with two turbine engines: the aeroplane is EDTO certified.  N1.EDTO may be referred to as ETOPS in some documents.  N2.Guidance on compliance with the requirements of this provision is contained in Attachment D.	GACR/FAR121.6241 21.63 1121.633121.97AC1 20-42B APP P TO PART 121APP G TO PART 135	More Exacting or Exceeds
Chapter 6	Microphones	GACAR/FAR	
Reference	All flight crew members required to be on flight deck duty shall communicate through boom or throat microphones below the transition level/altitude.	121.227(e)	More Exacting or Exceeds

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#### LIST OF CURRENT DIFFERENCES TO ICAO SARPS

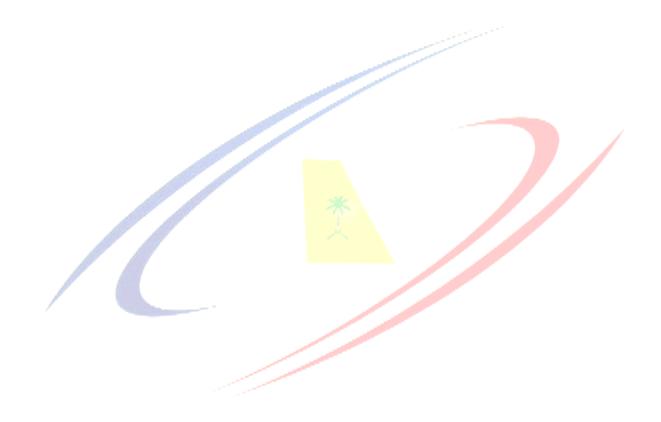
6.20			
Standard			
Chapter 8	The records in 8.4.1 a) to e) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records	GACA Regulations Section 6: GACAR/FAR Parts	More Exacting
Reference 8.4.2	in 8.4.1 f) for a minimum period of one year after the signing of the maintenance release.	121.380, 121.389(a)(1)	or Exceeds
Standard			



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#### CHAPTER -1 OPERATION OF AIRCRAFT

#### **Commercial Air Transport - Airplanes**

- 1) The General Authority of Civil Aviation (GACA) adopted the United States of America Aircraft Operation Regulations through the 14 CFR, and its supporting handbooks, manuals, Advisory Circulars(ACs), Directives, policy, guidance material, Orders, Notices, and specific GACA requirements as amended, to be GACA Regulation Section 6 Operation of Aircraft, Volume I –Commercial Air Transport Airplanes.
- 2) The adoption of the United States Aircraft Operation Regulation is based on GACA Board of Directors Order No. T- 4-26, dated 28/08/1428H (10/09/2007G). Based on this Order, GACA also adopted the United States Aviation Safety Regulations regarding Personnel Licensing, Airworthiness of Aircraft, and Environmental Protection to be part of GACA Regulations until GACA develops its own regulations for these areas.
- 3) GACA promulgated civil aviation safety regulations that comprise the following sections:
  - Section 1 Personnel Licensing (GACAR /FAR)
  - Section 2 Rules of the Air
  - Section 3 Meteorological Service for Air Navigation
  - Section 4 Aeronautical Charts
  - Section 5 Units of Measurement to be used in Air and Ground Operations
  - Section 6 Operation of Aircraft (GACAR /FAR)
  - Section 7 Aircraft Nationality and Registration Marks
  - Section 8 Airworthiness of Aircraft (GACAR /FAR)
  - Section 9 Facilitation (RESERVED)
  - Section 10 Aeronautical Telecommunications
  - Section 11 Air Traffic Services
  - Section 12 Search and Rescue
  - Section 13 Aircraft Accident and Incident Investigation
  - Section 14 Aerodromes
  - Section 15 Aeronautical Information Services
  - Section 16 Environmental Protection (GACAR /FAR)
  - Section 17 Aviation Security (RESERVED)
  - Section 18 The Safe Transportation of Dangerous Goods by Air
  - Section 19 Safety Management
  - Section 21 Safety Management System
- 4) Any differences between GACAR Section 6/14 CFR Parts and ICAO Annex 6 Standards and Recommended Practices (SARP's) will be reported to ICAO and reflected in Kingdom of Saudi Arabia (KSA) Aeronautical Information Publications (AIP's).
- 5) GACAR Section 6/14 CFR Parts provisions related to aircraft operation are addressed in 14 CFR Parts, supported by handbooks, manuals, Advisory Circulars (ACs), Directives, policy, guidance materials, Orders and Notices. and more specifically through the following 14 CFR Parts:
  - a) Part 91 General Operating and Flight Rules;
  - b) Part 117—Flight And Duty Limitations And Rest Requirements: Flightcrew Members
  - c) Part 119 Certification of Air Carriers and Commercial Operators; and
  - d) Part 121 Operating Requirements: Domestic, Flag and Supplemental Operations;

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#### CHAPTER -1 OPERATION OF AIRCRAFT

- e) Part 125 Certification and Operations: Airplanes Having a Seating Capacity of 20
  or more Passengers or a Maximum Payload Capacity of 6,000 Pounds or more; and
  Rules Governing Persons On Board Such Aircraft.; and
- f) Part 129 Operation: Foreign Air Carriers and Foreign Operators of Saudi Arabian Registered Aircraft engaged in common carriage; and
- g) Part 133 Rotorcraft External Load Operations;
- h) Part 135 Operating Requirements: Commuter and On Demand Operations and Rules Governing Persons On Board Such Aircraft and
- i) Part 137 Agricultural Aircraft Operations

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#### **CHAPTER 2 - ADDITIONAL GAGA REGULATION**

### 2.1 CFIT Training Programme

- **a.** This CFIT training programme can be structured to stand alone, but it may also be integrated into existing initial, transition, and recurrent training and check programs. The ground-training programme is designed to improve awareness by increasing the flight crew's ability to recognize and avoid impending CFIT situations. The simulator training programme is designed to apply this knowledge, as well as develop proficiency in an escape maneuver that must be used as a last resort for survival. Air operators should provide this training during initial/transition training and as part of recurrent training.
- **b.** The objectives of the Training Programme are to provide the pilot with the ability to:
  - Recognize the factors that may lead to CFIT accidents and incidents.
  - Know the prevention strategies that will ensure a safe flight.
  - Improve situational awareness in order to avoid CFIT.
  - Learn an escape maneuver and techniques designed to enhance the possibility of survival.
- c. A "Controlled Flight into Terrain Education and Training Aid" has been widely distributed by ICAO, manufactures and CAAs to many air operators. More recently the Flight Safety Foundation (FSF) has produced the Approach and Landing Accident Reduction (ALAR) Tool Kit, which in addition to information concerning ALAR, includes an updated and more user-friendly Version of the Controlled Flight into Terrain Education and Training Aid. In addition the CFIT Training Aid is available at the FAA's public website, Flight Standards Service-Air Transportation Division Air Carrier Training and 142 Training Center Branch-Training Aids:

http://www.faa.gov/training\_testing/training/media/cfit/volume1/titlepg.pdf

The CFIT Training material contained in the FSF ALAR Tool Kit includes detailed information concerning CFIT, information for the avoidance of CFIT, and CFIT training programme material and a safety alert containing the ground proximity escape maneuver recommended for many of the specific airplane makes and models flown by most air operators. A generic ground proximity escape maneuver is provided for use in respect to airplanes that do not have a specific maneuver. It is recommended that air operators utilize the FSF ALAR Tool Kit as a basis for developing their training programme.

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#### **CHAPTER 2 - ADDITIONAL GAGA REGULATION**

### **2.1.1** ALAR Training Programme

- **a.** This ALAR training programme should be integrated into existing initial, transition, and recurrent training and check programs. The ground training programme is designed to improve awareness by increasing the flight crew's ability to recognize and avoid situations to help prevent approach and landing accidents (ALAs). Air operators should provide this training during initial/transition training and at least once every two years as part of recurrent training.
- **b.** The objectives of the Training Programme are to provide the pilot with the ability to:
- Be aware of the high risk involved in the approach and landing phase of flight;
- Know the available interventions to address this risk (e.g. SOP's, stabilized approach criteria, no fault go around policy, etc.);
- Increase awareness of ALA pre-cursors;
- Learn and apply risk reduction interventions to reduce the risk of approach and landing accidents.
- c. The Flight Safety Foundation (FSF) has produced the Approach and Landing Accident Reduction (ALAR) Tool Kit, which includes a variety of information to help prevent approach and landing accidents. In addition to providing training material to help prevent ALAs, there are many other tools and educational material contained in the FSF Tool Kit that air operators may wish to utilize to reduce their risk of approach and landing accidents.

### 2.2 Upset Prevention and Recovery Training Programme

By 31 Dec 2015, All operators shall include upset prevention and recovery training to their training program which ensures that all flight crew members are adequately trained to perform their assigned duties.

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