

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
Note 1.	GAR 1.G001	General	<i>The objectives of the specifications in this chapter are to define the airspace around aerodromes to be maintained free from obstacles so as to permit the intended aeroplane operations at the aerodromes to be conducted safely and to prevent the aerodromes from becoming unusable by the growth of obstacles around the aerodromes. This is achieved by establishing a series of obstacle limitation surfaces that define the limits to which objects may project into the airspace.</i>	(a) The objectives of the specifications in this Subpart are to define the airspace around aerodromes to be maintained free from obstacles, so as (1) to permit the intended aeroplane operations at the aerodromes to be conducted safely and regularly, (2) to prevent the aerodromes from becoming unusable by the growth of obstacles around the aerodromes, and (3) to define what object and terrain to be reported to the Aeronautical Information Service.	
	GAR 1.G001	General		(b) This subpart shall be used by national governments, local land use planning authorities, aerodrome operators and property owners to adopt and respect airport zoning limitations in order to gain objectives mentioned above.	
	GAR 1.G001	General			(c) Obstacle limitation surfaces, protection surfaces and areas shall be established around the aerodrome in order to define the limits to which objects may project into the airspace.

	GAR 1.G001	General	?		(d) National arrangements shall be made to enable the appropriate authority to be consulted concerning proposed construction within the limits of the obstacle limitation surfaces and protection surfaces in order to permit an aeronautical study of the effect of such construction on the operation of aeroplanes.	
	GAR 1.G005	Obstacle limitation requirements : general points	?		Obstacle limitation requirements have to be distinguished between: (1) Non instrumental runways; (2) Non precision approach runways; (3) Precision approach runways (4) Runways meant for take-off	
	GAR1.G006	Obstacles in the RWY vicinity			(a) No object shall be permitted, except equipment or installation required for air navigation purposes, less than 1) 30 m for code 1 non instrument approach runway centreline, 2) 40 m for code 2 non instrument approach runway centreline, 3) 75 m for code 3 or 4 non instrument approach runway centreline and for code 1 or 2 instrument approach runway centreline, 4) 150 m from code 3 and 4 instrument approach runway centreline 5) 60 m from runway end or stopway end when existing except for code 1 non-instrument runway where this distance is reduced to 30 m.	transposition of 3.4.6, 3.4.7 and 9.9 paragraphs
9.9.4	GAR1.G006	Obstacles in the RWY vicinity		<i>Any equipment or installation required for air navigation purposes which must be located on the non-graded portion of a runway strip should be regarded as an obstacle and should be frangible and mounted as low as possible.</i>	(b) Such equipment or installation required for air navigation purposes on this area shall be frangible and mounted as low as possible.	a recommendation becomes compulsory

5.3.5.41	GAR1.G007	Obstacle limitations in protection surfaces	An obstacle protection surface shall be established when it is intended to provide a visual approach slope indicator system	(a) An obstacle protection surface shall be established for each visual approach slope indicator system.	no difference
5.3.5.43	GAR1.G007	Obstacle limitations in protection surfaces	New objects or extensions of existing objects shall not be permitted above an obstacle protection surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	(b) New objects or extensions of existing objects shall be considered as an obstacle and not to be permitted above an obstacle protection surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	no difference
5.3.5.44	GAR1.G007	Obstacle limitations in protection surfaces	Existing objects above an obstacle protection surface shall be removed except when, in the opinion of the appropriate authority, the object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety of operations of aeroplanes.	(c) Existing objects above an obstacle protection surface shall be considered as an obstacle and shall be removed except when, in the opinion of the appropriate authority, the object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety of operations of aircraft.	used term "aircraft" instead of "aeroplane"
5.3.5.45	GAR1.G007	Obstacle limitations in protection surfaces	Where an aeronautical study indicates that an existing object extending above an obstacle protection surface could adversely affect the safety of operations of aeroplanes one or more of the following measures shall be taken:	(d) Where an aeronautical study indicates that an existing object extending above an obstacle protection surface could adversely affect the safety of operations of aircraft one or more of the following measures shall be taken:	no difference

5.3.5.45	GAR1.G007	Obstacle limitations in protection surfaces	<p>a) suitably raise the approach slope of the system;</p> <p>b) reduce the azimuth spread of the system so that the object is outside the confines of the beam;</p> <p>c) displace the axis of the system and its associated obstacle protection surface by no more than 5°;</p> <p>d) suitably displace the threshold; and</p> <p>e) where d) is found to be impracticable, suitably displace the system upwind of the threshold to provide an increase in threshold crossing height equal to the height of the object penetration.</p>	<p>1) Suitably raise the approach slope of the system;</p> <p>2) reduce the azimuth spread of the system so that the object is outside the confines of the beam;</p> <p>3) displace the axis of the system and its associated obstacle protection surface by no more than 5 degrees;</p> <p>4) suitably displace the threshold; and</p> <p>5) where d) is found to be impracticable, suitably displace the system upwind of the threshold to provide an increase in threshold crossing height equal to the height of the object penetration.</p>	no difference
4.2.1	GAR 1.G010	Obstacle limitation requirements for non-instrument runways	The following obstacle limitation surfaces shall be established for a non-instrument runway: — conical surface; — inner horizontal surface; — approach surface; and — transitional surfaces.	(a) The following obstacle limitation surfaces shall be established for a non-instrument runway: (1) conical surface; (2) inner horizontal surface; (3) approach surface; and (4) transitional surfaces.	no difference
4.2.2	GAR 1.G010	Obstacle limitation requirements for non-instrument runways	The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 4-1.	(b) The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 1.G010.	no difference
4.2.3	GAR 1.G010	Obstacle limitation requirements for non-instrument runways	New objects or extensions of existing objects shall not be permitted above an approach or transitional surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	(c) New objects or extensions of existing objects shall not be permitted above an approach or transitional surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object	no difference
Table 4-1.	GAR 1.G010	Obstacle limitation requirements for non-instrument runways	Table 4-1. Dimensions and slopes of obstacle limitation surfaces — Non-instrument approach runways	Table 1.G010. Dimensions and slopes of obstacle limitation surfaces – Non-instrument approach runways	no difference

4.2.4	GAR 1.G010	Obstacle limitation requirements for non-instrument runways	<i>New objects or extensions of existing objects should not be permitted above the conical surface or inner horizontal surface except when, in the opinion of the appropriate authority, the object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.</i>	(d) New objects or extensions of existing objects shall not be permitted above the conical surface or inner horizontal surface except when, in the opinion of the appropriate authority, the object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory, regularity is not involved
4.2.5	GAR 1.G010	Obstacle limitation requirements for non-instrument runways	<i>Existing objects above any of the surfaces required by 4.2.1 should as far as practicable be removed except when, in the opinion of the appropriate authority, the object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.</i>	(e) Existing objects above any of the surfaces required by GAR 1.G010 Obstacle limitation requirements for non-instrument runways (a) shall be removed except when, in the opinion of the appropriate authority, the object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory, regularity is not involved
4.2.6	–	Obstacle limitation requirements for non-instrument runways	<i>In considering proposed construction, account should be taken of the possible future development of an instrument runway and consequent requirement for more stringent obstacle limitation surfaces.</i>		it is not a safety issue
4.2.7	GAR 1.G015	Obstacle limitation requirements for non-precision approach runways	The following obstacle limitation surfaces shall be established for a non-precision approach runway: — conical surface; — inner horizontal surface; — approach surface; and — transitional surfaces.	(a) The following obstacle limitation surfaces shall be established for a non-precision approach runway: (1) Conical surface; (2) Inner horizontal surface; (3) Approach surface; and (4) Transitional surfaces.	no difference

4.2.8	GAR 1.G015	Obstacle limitation requirements for non-precision approach runways	The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 4-1, except in the case of the horizontal section of the approach surface.	(b) The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table GAR 1.G015, except in the case of the horizontal section of the approach surface .	no difference
Table 4-1.	Table GAR 1.G015		Table 4-1. Dimensions and slopes of obstacle limitation surfaces — Approach runways	Table GAR 1.G015	no difference
4.2.9	GAR 1.G015	Obstacle limitation requirements for non-precision approach runways	The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects: a) a horizontal plane 150 m above the threshold elevation; or b) the horizontal plane passing through the top of any object that governs the obstacle clearance altitude/height (OCA/H); whichever is the higher.	(c) The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects: (1) a horizontal plane 150 m above the threshold elevation; or (2) the horizontal plane passing through the top of any object that governs the obstacle clearance altitude/height (OCA/H); whichever is the higher.	no difference
4.2.10	GAR 1.G015	Obstacle limitation requirements for non-precision approach runways	New objects or extensions of existing objects shall not be permitted above an approach surface within 3 000 m of the inner edge or above a transitional surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	(d) New objects or extensions of existing objects shall not be permitted above an approach surface within 3000 m of the inner edge or above a transitional surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	no difference

4.2.11	GAR 1.G015	Obstacle limitation requirements for non-precision approach runways	<i>New objects or extensions of existing objects should not be permitted above the approach surface beyond 3 000 m from the inner edge, the conical surface or inner horizontal surface except when, in the opinion of the appropriate authority, the object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.</i>	(e) New objects or extensions of existing objects shall not be permitted above the approach surface beyond 3000 m from the inner edge, the conical surface or inner horizontal surface except when, in the opinion of the appropriate authority, the object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory, regularity is not involved
4.2.12	GAR 1.G015	Obstacle limitation requirements for non-precision approach runways	<i>Existing objects above any of the surfaces required by 4.2.7 should as far as practicable be removed except when, in the opinion of the appropriate authority, the object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.</i>	(f) Existing objects above any of the surfaces required by GAR 1.G015 (a) shall be removed except when, in the opinion of the appropriate authority, the object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory, regularity is not involved
4.2.13	GAR 1.G020	Obstacle limitation requirements for precision approach runways	The following obstacle limitation surfaces shall be established for a precision approach runway category I: — conical surface; — inner horizontal surface; — approach surface; and — transitional surfaces.	(a) The following obstacle limitation surfaces shall be established for precision approach runway categories I, II or III. (1) Conical surface; (2) Inner horizontal surface; (3) Approach surface and inner approach surface; (4) Transitional surfaces; (5) Inner transitional surfaces; and (6) Balked landing surface.	no difference
4.2.14		Obstacle limitation requirements for precision approach runways	<i>The following obstacle limitation surfaces should be established for a precision approach runway category I: — inner approach surface; — inner transitional surfaces; and balked landing surface.</i>		a recommendation becomes compulsory

4.2.15		Obstacle limitation requirements for precision approach runways	The following obstacle limitation surfaces shall be established for a precision approach runway category II or III: — conical surface; — inner horizontal surface; — approach surface and inner approach surface; — transitional surfaces; — inner transitional surfaces; and — balked landing surface.		no difference
4.2.16	GAR 1.G020	Obstacle limitation requirements for precision approach runways	The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 4-1, except in the case of the horizontal section of the approach surface.	(b) The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table GAR 1.G020, except in the case of the horizontal section of the approach surface (see GAR 1.G020 Obstacle limitation requirements for precision approach runways (c)).	no difference
4.2.17	GAR 1.G020	Obstacle limitation requirements for precision approach runways	The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects: a) a horizontal plane 150 m above the threshold elevation; or b) the horizontal plane passing through the top of any object that governs the obstacle clearance limit; whichever is the higher.	(c) The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects: 1) a horizontal plane 150 m above the threshold elevation; or (2) the horizontal plane passing through the top of any object that governs the obstacle clearance limit; whichever is the higher.	no difference
4.2.18	GAR 1.G020	Obstacle limitation requirements for precision approach runways	Fixed objects shall not be permitted above the inner approach surface, the inner transitional surface or the balked landing surface, except for frangible objects which because of their function must be located on the strip. Mobile objects shall not be permitted above these surfaces during the use of the runway for landing.	(d) Fixed objects shall not be permitted above the inner approach surface, the inner transitional surface or the balked landing surface, except for frangible objects which, because of their function, must be located on the strip. Mobile objects shall not be permitted above these surfaces during the use of the runway for landing.	no difference

4.2.19	GAR 1.G020	Obstacle limitation requirements for precision approach runways	New objects or extensions of existing objects shall not be permitted above an approach surface or a transitional surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	(e) New objects or extensions of existing objects shall not be permitted above an approach surface or a transitional surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	no difference
4.2.20	GAR 1.G020	Obstacle limitation requirements for precision approach runways	<i>New objects or extensions of existing objects should not be permitted above the conical surface and the inner horizontal surface except when, in the opinion of the appropriate authority, an object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.</i>	(f) New objects or extensions of existing objects shall not be permitted above the conical surface and the inner horizontal surface except when, in the opinion of the appropriate authority, an object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory
4.2.21	GAR 1.G020	Obstacle limitation requirements for precision approach runways	<i>Existing objects above an approach surface, a transitional surface, the conical surface and inner horizontal surface should as far as practicable be removed except when, in the opinion of the appropriate authority, an object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.</i>	(g) Existing objects above an approach surface, a transitional surface, the conical surface and inner horizontal surface shall be removed, except when, in the opinion of the appropriate authority, an object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory
Definitions	GAR 1.G020	Obstacle-Free Zone (OFZ)	–	(1) Together, the inner approach, inner transitional and balked landing surfaces define the obstacle-free zone (OFZ).	definition of OFZ moved from "Definitions" to standards

	GAR 1.G020	Obstacle-Free Zone (OFZ)	—	(2) This zone shall be kept free from fixed objects, other than lightweight frangible mounted aids to air navigation, which must be near the runway to perform their function, and from transient objects such as aircraft and vehicles when the runway is being used for category II, or III ILS approaches. When an OFZ is established for a precision approach runway category I, it shall be clear of such objects when the runway is used for category I approaches.	GAR clarifies restrictions within OFZ
4.2.22	GAR 1.G025	Obstacle limitation requirements for runways meant for take-off	The following obstacle limitation surface shall be established for a runway meant for take-off: — take-off climb surface.	(a) The following obstacle limitation surface shall be established for a runway meant for take-off: Take-off climb surface.	no difference
4.2.23	GAR 1.G025	Obstacle limitation requirements for runways meant for take-off	The dimensions of the surface shall be not less than the dimensions specified in Table 4-2, except that a lesser length may be adopted for the take-off climb surface where such lesser length would be consistent with procedural measures adopted to govern the outward flight of aeroplanes.	(b) The dimensions of the surface shall not be less than the dimensions specified in Table GAR 1.G025, except that a lesser length may be adopted for the take-off climb surface where such lesser length would be consistent with procedural measures adopted to govern the outward flight of aeroplanes.	no difference
4.2.24	GAR 1.G025	Obstacle limitation requirements for runways meant for take-off	<i>The operational characteristics of aeroplanes for which the runway is intended should be examined to see if it is desirable to reduce the slope specified in Table 4-2 when critical operating conditions are to be catered to. If the specified slope is reduced, corresponding adjustment in the length of take-off climb surface should be made so as to provide protection to a height of 300 m.</i>	(c) The operational characteristics of aeroplanes for which the runway is intended shall be examined to see if it is desirable to reduce the slope specified in Table GAR 1.G025 when critical operating conditions are to be catered to. If the specified slope is reduced, corresponding adjustment in the length of take-off climb surface shall be made so as to provide protection to a height of 300 m.	a recommendation becomes compulsory

4.2.25	GAR 1.G025	Obstacle limitation requirements for runways meant for take-off	New objects or extensions of existing objects shall not be permitted above a take-off climb surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	(d) New objects or extensions of existing objects shall not be permitted above a take-off climb surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.	no difference
4.2.27	GAR 1.G025	Obstacle limitation requirements for runways meant for take-off	<i>Existing objects that extend above a take-off climb surface should as far as practicable be removed except when, in the opinion of the appropriate authority, an object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.</i>	(e) Existing objects that extend above a take-off climb surface shall as far as practicable be removed except when, in the opinion of the appropriate authority, an object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety and regularity.	a recommendation becomes compulsory
4.2.26	GAR 1.G025	Obstacle limitation requirements for runways meant for take-off	<i>If no object reaches the 2 per cent (1:50) take-off climb surface, new objects should be limited to preserve the existing obstacle free surface or a surface down to a slope of 1.6 per cent (1:62.5).</i>	–	mentioned only in Section II
4.4.1	GAR 1.G030	Limitations of other objects	<i>Objects which do not project through the approach surface but which would nevertheless adversely affect the optimum siting or performance of visual or non-visual aids should, as far as practicable, be removed.</i>	(a) Objects which do not project through the approach surface but which would nevertheless adversely affect the optimum siting or performance of visual or non-visual aids shall, as far as practicable, be removed.	a recommendation becomes compulsory

4.4.2	GAR 1.G030	Limitations of other objects	<i>Anything which may, in the opinion of the appropriate authority after aeronautical study, endanger aeroplanes on the movement area or in the air within the limits of the inner horizontal and conical surfaces should be regarded as an obstacle and should be removed in so far as practicable.</i>	(b) Any other object below the vertical limits of obstacle limitation surfaces which may, in the opinion of the appropriate authority after aeronautical study, endanger aeroplanes on the movement area or in the air within the horizontal limits of the obstacle limitation surfaces and protection surfaces shall be regarded as an obstacle and shall be removed.	GAR is more precise
	GAR 1.G030	Limitations of other objects		(c) If it is of particular importance for safe operation on circuits, on arrival routes towards the airport or on departure or missed approach climb-paths, appropriate authority shall for non-precision approach runways and for precision approach runways establish outer horizontal surface.	regulation derived from ICAO recommendations
	GAR 1.G040	Inner horizontal surface	Inner horizontal surface. A surface located in a horizontal plane above an aerodrome and its environs.	(a) Description.- Inner horizontal surface. A surface located in a horizontal plane above an aerodrome and its environs.	no difference
	GAR 1.G040	Inner horizontal surface	The radius or outer limits of the inner horizontal surface shall be measured from a reference point or points established for such purpose.	(b) Characteristics.- The outer limits of the inner horizontal surface are defined by circular arcs centred on the intersection of the extended RWY centre line with the end of the RWY strip joined tangentially by straight lines.	GAR is more precise and more restrictive (no circular inner horizontal surface)
	GAR 1.G040	Inner horizontal surface	The height of the inner horizontal surface shall be measured above an elevation datum established for such purpose.	(c) The height of the inner horizontal surface shall be measured above an elevation datum established for such purpose.	no difference

4.1.1	GAR 1.G045	Conical surface	<i>Description.— Conical surface.</i> A surface sloping upwards and outwards from the periphery of the inner horizontal surface.	(a) <i>Description.-</i> Conical surface. A surface sloping upwards and outwards from the periphery of the inner horizontal surface.	no difference
4.1.2	GAR 1.G045	Conical surface	<i>Characteristics.—</i> The limits of the conical surface shall comprise: a) a lower edge coincident with the periphery of the inner horizontal surface; and b) an upper edge located at a specified height above the inner horizontal surface.	(b) <i>Characteristics.-</i> The limits of the conical surface shall comprise: (1) a lower edge coincident with the periphery of the inner horizontal surface; and (2) an upper edge located at a specified height above the inner horizontal surface.	no difference
4.1.3	GAR 1.G045	Conical surface	The slope of the conical surface shall be measured in a vertical plane perpendicular to the periphery of the inner horizontal surface.	(c) The slope of the conical surface shall be measured in a vertical plane perpendicular to the periphery of the inner horizontal surface.	no difference
Note in 4.1	GAR 1.G050	Outer horizontal surface	Reference to ICAO Airport Services Manual, Part 6	(a) <i>Characteristics:</i> Where an aeronautical study indicates that it is necessary to establish the outer horizontal surface, the appropriate authority shall define the outer limits of the surface.	regulation derived from ICAO recommendations
Note in 4.1	GAR 1.G050	Outer horizontal surface	Reference to ICAO Airport Services Manual, Part 6	(b) <i>Description:</i> A horizontal surface connected to the upper edge of conical surface and spreading/stretching outwards.	regulation derived from ICAO recommendations
4.1.7	GAR 1.G055	Approach surface	<i>Description.— Approach surface.</i> An inclined plane or combination of planes preceding the threshold.	(a) <i>Description.-</i> Approach surface. An inclined plane or combination of planes preceding the threshold.	no difference
4.1.8	GAR 1.G055	Approach surface	<i>Characteristics.—</i> The limits of the approach surface shall comprise:	(b) <i>Characteristics.-</i> The limits of the approach surface shall comprise:	no difference

4.1.8	GAR 1.G055	Approach surface	(a) an inner edge of specified length, horizontal and perpendicular to the extended centre line of the runway and located at a specified distance before the threshold;	(1) An inner edge of specified length, horizontal and perpendicular to the extended centre line of the runway and located at a specified distance before the threshold;	no difference
4.1.8	GAR 1.G055	Approach surface	b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the extended centre line of the runway;	(2) Two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the extended centre line of the runway; and	no difference
4.1.8	GAR 1.G055	Approach surface	c) an outer edge parallel to the inner edge; and	(3) An outer edge parallel to the inner edge.	no difference
4.1.8	GAR 1.G055	Approach surface	d) The above surfaces shall be varied when lateral offset, offset or curved approaches are utilized, specifically, two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the extended centre line of the lateral offset, offset or curved ground track.	The above surfaces shall be varied when lateral offset, offset or curved approaches are utilized, specifically, two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the extended centre line of the lateral offset, offset or curved ground track	no difference
4.1.9	GAR 1.G055	Approach surface	The elevation of the inner edge shall be equal to the elevation of the mid-point of the threshold.	(c) The elevation of the inner edge shall be equal to the elevation of the mid-point of the threshold.	no difference
4.1.10	GAR 1.G055	Approach surface	The slope(s) of the approach surface shall be measured in the vertical plane containing the centre line of the runway and shall continue containing the centre line of any lateral offset or curved ground track.	(d) The slope(s) of the approach surface shall be measured in the vertical plane containing the centre line of the runway and shall continue containing the centre line of any lateral offset or curved ground track.	no difference
4.1.11	GAR 1.G060	Inner approach surface	<i>Description.— Inner approach surface.</i> A rectangular portion of the approach surface immediately preceding the threshold	(a) <i>Description.- Inner approach surface.</i> A rectangular portion of the approach surface immediately preceding the threshold.	no difference
4.1.12	GAR 1.G060	Inner approach surface	<i>Characteristics.—</i> The limits of the inner approach surface shall comprise:	(b) <i>Characteristics.-</i> The limits of the inner approach surface shall comprise:	no difference
4.1.12	GAR 1.G060	Inner approach surface	a) an inner edge coincident with the location of the inner edge of the approach surface but of its own specified length;	(1) An inner edge coincident with the location of the inner edge of the approach surface but of its own specified length;	no difference

4.1.12	GAR 1.G060	Inner approach surface	b) two sides originating at the ends of the inner edge and extending parallel to the vertical plane containing the centre line of the runway; and	(2) Two sides originating at the ends of the inner edge and extending parallel to the vertical plane containing the centre line of the runway; and	no difference
4.1.12	GAR 1.G060	Inner approach surface	c) an outer edge parallel to the inner edge.	(3) An outer edge parallel to the inner edge.	no difference
4.1.13	GAR 1.G065	Transitional surface	<i>Description.— Transitional surface.</i> A complex surface along the side of the strip and part of the side of the approach surface, that slopes upwards and outwards to the inner horizontal surface.	(a) <i>Description.- Transitional surface.</i> A complex surface along the side of the strip and part of the side of the approach surface, that slopes upwards and outwards to the inner horizontal surface.	no difference
4.1.14	GAR 1.G065	Transitional surface	<i>Characteristics.—</i> The limits of a transitional surface shall comprise:	(b) <i>Characteristics.-</i> The limits of a transitional surface shall comprise:	no difference
4.1.14	GAR 1.G065	Transitional surface	a) a lower edge beginning at the intersection of the side of the approach surface with the inner horizontal surface and extending down the side of the approach surface to the inner edge of the approach surface and from there along the length of the strip parallel to the runway centre line; and	(1) a lower edge beginning at the intersection of the side of the approach surface with the inner horizontal surface and extending down the side of the approach surface to the inner edge of the approach surface and from there along the length of the strip parallel to the runway centre line; and	no difference
4.1.14	GAR 1.G065	Transitional surface	b) an upper edge located in the plane of the inner horizontal surface.	(2) An upper edge located in the plane of the inner horizontal surface.	no difference
4.1.15	GAR 1.G065	Transitional surface	The elevation of a point on the lower edge shall be:	(c) The elevation of a point on the lower edge shall be:	no difference
4.1.15	GAR 1.G065	Transitional surface	a) along the side of the approach surface — equal to the elevation of the approach surface at that point; and	(1) Along the side of the approach surface - equal to the elevation of the approach surface at that point; and	no difference
4.1.15	GAR 1.G065	Transitional surface	b) along the strip — equal to the elevation of the nearest point on the centre line of the runway or its extension.	(2) Along the strip - equal to the elevation of the nearest point on the centre line of the runway or its extension.	no difference
4.1.16	GAR 1.G065	Transitional surface	The slope of the transitional surface shall be measured in a vertical plane at right angles to the centre line of the runway.	(d) The slope of the transitional surface shall be measured in a vertical plane at right angles to the centre line of the runway.	no difference

4.1.17	GAR 1.G070	Inner transitional surface	4.1.17 <i>Description.</i> — <i>Inner transitional surface.</i> A surface similar to the transitional surface but closer to the runway.	(a) Description.- Inner transitional surface. A surface similar to the transitional surface but closer to the runway.	no difference
4.1.18	GAR 1.G070	Inner transitional surface	4.1.18 <i>Characteristics.</i> — The limits of an inner transitional surface shall comprise:	(b) Characteristics.- The limits of an inner transitional surface shall comprise:	no difference
4.1.18	GAR 1.G070	Inner transitional surface	a) a lower edge beginning at the end of the inner approach surface and extending down the side of the inner approach surface to the inner edge of that surface, from there along the strip parallel to the runway centre line to the inner edge of the balked landing surface and from there up the side of the balked landing surface to the point where the side intersects the inner horizontal surface; and	(1) A lower edge beginning at the end of the inner approach surface and extending down the side of the inner approach surface to the inner edge of that surface, from there along the strip parallel to the runway centre line to the inner edge of the balked landing surface and from there up the side of the balked landing surface to the point where the side intersects the inner horizontal surface; and	no difference
4.1.18	GAR 1.G070	Inner transitional surface	b) an upper edge located in the plane of the inner horizontal surface.	(2) An upper edge located in the plane of the inner horizontal surface.	no difference
4.1.19	GAR 1.G070	Inner transitional surface	4.1.19 The elevation of a point on the lower edge shall be:	(c) The elevation of a point on the lower edge shall be:	no difference
4.1.19	GAR 1.G070	Inner transitional surface	a) along the side of the inner approach surface and balked landing surface — equal to the elevation of the particular surface at that point; and	(1) along the side of the inner approach surface and balked landing surface - equal to the elevation of the particular surface at that point; and	no difference
4.1.19	GAR 1.G070	Inner transitional surface	b) along the strip — equal to the elevation of the nearest point on the centre line of the runway or its extension.	(2) along the strip - equal to the elevation of the nearest point on the centre line of the runway or its extension.	no difference
4.1.20	GAR 1.G070	Inner transitional surface	4.1.20 The slope of the inner transitional surface shall be measured in a vertical plane at right angles to the centre line of the runway.	(d) The slope of the inner transitional surface shall be measured in a vertical plane at right angles to the centre line of the runway.	no difference

4.1.21	GAR 1.G075	Balked landing surface	<i>Description.— Balked landing surface.</i> An inclined plane located at a specified distance after the threshold, extending between the inner transitional surface.	(a) Description.- Balked landing surface. An inclined plane located at a specified distance after the threshold, extending between the inner transitional surface.	no difference
4.1.22	GAR 1.G075	Balked landing surface	<i>Characteristics.—</i> The limits of the balked landing surface shall comprise:	(b) Characteristics.- The limits of the balked landing surface shall comprise:	no difference
4.1.22	GAR 1.G075	Balked landing surface	a) an inner edge horizontal and perpendicular to the centre line of the runway and located at a specified distance after the threshold;	(1) an inner edge horizontal and perpendicular to the centre line of the runway and located at a specified distance after the threshold;	no difference
4.1.22	GAR 1.G075	Balked landing surface	b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the vertical plane containing the centre line of the runway; and	(2) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the vertical plane containing the centre line of the runway; and	no difference
4.1.22	GAR 1.G075	Balked landing surface	c) an outer edge parallel to the inner edge and located in the plane of the inner horizontal surface.	(3) an outer edge parallel to the inner edge and located in the plane of the inner horizontal surface.	no difference
4.1.23	GAR 1.G075	Balked landing surface	The elevation of the inner edge shall be equal to the elevation of the runway centre line at the location of the inner edge.	(c) The elevation of the inner edge shall be equal to the elevation of the runway centre line at the location of the inner edge.	no difference
4.1.24	GAR 1.G075	Balked landing surface	The slope of the balked landing surface shall be measured in the vertical plane containing the centre line of the runway.	(d) The slope of the balked landing surface shall be measured in the vertical plane containing the centre line of the runway.	no difference
4.1.25	GAR 1.G080	Take-off climb surface	<i>Description.— Take-off climb surface.</i> An inclined plane or other specified surface beyond the end of a runway or clearway.	(a) (a) Description.- Take-off climb surface. An inclined plane or other specified surface beyond the end of a runway or clearway.	no difference

4.1.26	GAR 1.G080	Take-off climb surface	<i>Characteristics.</i> — The limits of the take-off climb surface shall comprise:	(b) Characteristics.- The limits of the take-off climb surface shall comprise:	no difference
4.1.26	GAR 1.G080	Take-off climb surface	a) an inner edge horizontal and perpendicular to the centre line of the runway and located either at a specified distance beyond the end of the runway or at the end of the clearway when such is provided and its length exceeds the specified distance;	(1) an inner edge horizontal and perpendicular to the centre line of the runway and located either at a specified distance beyond the end of the runway or at the end of the clearway when such is provided and its length exceeds the specified distance;	no difference
4.1.26	GAR 1.G080	Take-off climb surface	b) two sides originating at the ends of the inner edge, diverging uniformly at a specified rate from the take-off track to a specified final width and continuing thereafter at that width for the remainder of the length of the takeoff climb surface; and	(2) two sides originating at the ends of the inner edge, diverging uniformly at a specified rate from the take-off track to a specified final width and continuing thereafter at that width for the remainder of the length of the take-off climb surface; and	no difference
4.1.26	GAR 1.G080	Take-off climb surface	c) an outer edge horizontal and perpendicular to the specified take-off track.	(3) an outer edge horizontal and perpendicular to the specified take-off track.	no difference
4.1.27	GAR 1.G080	Take-off climb surface	The elevation of the inner edge shall be equal to the highest point on the extended runway centre line between the end of the runway and the inner edge, except that when a clearway is provided the elevation shall be equal to the highest point on the ground on the centre line of the clearway.	(c) The elevation of the inner edge shall be equal to the highest point on the extended runway centre line between the end of the runway and the inner edge, except that when a clearway is provided the elevation shall be equal to the highest point on the ground on the centre line of the clearway.	no difference
4.1.28	GAR 1.G080	Take-off climb surface	In the case of a straight take-off flight path, the slope of the take-off climb surface shall be measured in the vertical plane containing the centre line of the runway.	(d) In the case of a straight take-off flight path, the slope of the take-off climb surface shall be measured in the vertical plane containing the centre line of the runway.	no difference

4.1.29

GAR 1.G080

Take-off climb  
surface

In the case of a take-off flight path involving a turn, the take-off climb surface shall be a complex surface containing the horizontal normals to its centre line, and the slope of the centre line shall be the same as that for a straight take-off light path.

(e) In the case of a take-off flight path involving a turn, the take-off climb surface shall be a complex surface containing the horizontal normals to its centre line, and the slope of the centre line shall be the same as that for a straight take-off flight path.

no difference