AERODROME SAFETY INSPECTOR TECHNICAL INSPECTION CHECKLIST

(GACAR PART 139)

(Information to be filled by Aerodrome Safety Inspector/CPM)			
Aerodrome Name			
Aerodrome Reference Code		Aerodrome Operator	
Inspection Type		Inspection Date	
Report Number		Report Date	
Name of Aerodrome Safety Inspector		Signature	
Name of Aerodrome Certification Manager		Signature	

GENERAL INSTRUCTION

1. This form of technical inspection must be filled with by GACA Aerodrome Safety Inspectors/Certificate Project Manager.

2. This form shall be used for the Technical Inspection during the aerodrome certification process and thereafter for audits, surveillance and un-Announced Inspections.

3. Aerodrome safety inspector, on completion of technical inspection for area of his/her expertise, shall complete this form and submit it to certificate project manager.

4. For any clarification, the General Manager (Aerodrome Standards) of General Authority of Civil Aviation, Kingdom of Saudi Arabia, may be contacted.

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GACA Regulations Reference	Items for Inspection	Compliance	Non-Compliance	Not Applicable	Notes/Remarks
RFF SERVICES (AIP PROMULGATION)					
LEVEL OF PROTECTION					
139.223(a)	Whether Level of protection is promulgated in the AIP	☐	☐	☐	
139.223(b)	Whether the aerodrome operator has a procedure to regularly reassess the traffic and update the level of protection including unavailability;	☐	☐	☐	
139.223 (c)	Whether the aerodrome operator has made arrangements with the aeronautical information services, including ATS, to provide up-to-date information in case of any change in the level of protection;	☐	☐	☐	
CERTIFICATION OF AERODROMES (SUBPART-B)					
139.141	Whether aerodrome operator has deployed the competent and experienced staff to operate and maintain the aerodrome properly?	☐	☐	☐	
AERODROME DATA (SUBPART-E)					
139.219 (d) (1)	Whether aerodrome operator has devised a training program for personnel assessing and reporting runway surface condition.	☐	☐	☐	
139.219 (d) (2)	Whether above training program is implemented .	☐	☐	☐	
139.219 (d) (3)	Whether records are available for implementation of the above training program.	☐	☐	☐	
PHYSICAL CHARACTERISTICS (SUBPART-F)					
1. Runway					
	Designation				
139.301(c)&(d)	Length m X Width m	☐	☐	☐	
139.301 (e)	Minimum distance between parallel RWYs, if any.	☐	☐	☐	
139.301 (f)	Slopes on RWYs.	☐	☐	☐	
139.301 (g)	Strength of RWYs pavement.	☐	☐	☐	

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139.301 (h)	Surface of RWYs.	☐	☐	☐	
2. Runways Shoulders					
139.303 (b)	Width of RWY Shoulders (m)	☐	☐	☐	
139.303 (c)	Slopes on RWY Shoulders	☐	☐	☐	
139.303 (d)	Strength of RWY Shoulders	☐	☐	☐	
3. Runway Turn Pads					
139.305	Dimensions of RWY Turn Pads.	☐	☐	☐	
139.305 (b)	Slopes on RWY Turn Pads.	☐	☐	☐	
139.305 (c)	Strength of RWY Turn Pads.	☐	☐	☐	
139.305 (d)	Surface of RWY Turn Pads.	☐	☐	☐	
139.305 (e)	Shoulders for RWY Turn Pads.	☐	☐	☐	
4. Runway Strips					
139.307 (b)	Length of RWY Strips.(m)	☐	☐	☐	
139.307 (c)	Width of RWY Strips.(m)	☐	☐	☐	
139.307 (d)	Objects on RWY Strips.	☐	☐	☐	
139.307 (e)	Grading of runway strips	☐	☐	☐	
139.307 (f)	Slopes on RWY Strips.	☐	☐	☐	
5. RESA					
139.309 (b)	Dimensions of RESA.(x m)	☐	☐	☐	
139.309 (d)	Clearing & Grading of RESA.	☐	☐	☐	
139.309 (e)	Slopes on RESA.	☐	☐	☐	
139.309 (f)	Strength of RESA.	☐	☐	☐	
6. Clearways					
139.311 (a)	Location of CWYs.	☐	☐	☐	
139.311 (b)	Length of CWYs.(m)	☐	☐	☐	
139.311 (c)	Width of CWYs.(m)	☐	☐	☐	
139.311 (d)	Slopes on CWYs.	☐	☐	☐	
139.311 (e)	Objects on CWYs.	☐	☐	☐	

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7. Stop way					
139.313 (a)	Width of SWYs.(m)	☐	☐	☐	
139.313 (b)	Slopes on SWYs.	☐	☐	☐	
139.313 (c)	Strength of SWYs.	☐	☐	☐	
139.313 (d)	Surface of SWYs.	☐	☐	☐	
8. Radio Altimeter Operating Area					
139.315 (b)	Length of area.	☐	☐	☐	
139.315 (c)	Width of area.	☐	☐	☐	
139.315 (d)	Longitudinal slope changes of the area.	☐	☐	☐	
9. Taxiways					
139.317 (b)	Width of TWYs.(m)	☐	☐	☐	
139.317 (c)	Taxiway curves.	☐	☐	☐	
139.317 (d)	Junctions & intersections.	☐	☐	☐	
139.317 (e)	Minimum separation distances.	☐	☐	☐	
139.317 (f)	Slopes on TWYs.	☐	☐	☐	
139.317 (g)	Strength of TWYs.	☐	☐	☐	
139.317 (h)	Surface of TWYs.	☐	☐	☐	
139.317 (i)	Rapid exit TWYs.	☐	☐	☐	
139.317 (j)	TWYs on bridges.	☐	☐	☐	
10. Taxiway Shoulders					
139.319	Width of TWY Shoulders(m)	☐	☐	☐	
11. Taxiway Strips					
139.321 (b)	Width of TWY Strips.(m)	☐	☐	☐	
139.321 (c)	Objects on TWY Strips.	☐	☐	☐	
139.321 (d)	Grading of TWY Strips.	☐	☐	☐	
139.321 (e)	Slopes of TWY Strips.	☐	☐	☐	
12. Holding Bays, (RWY, Intermediate, Road) Holding Position					
139.323	Location of the position.(m)	☐	☐	☐	

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13. Aprons					
139.325 (b)	Size of APRON.(X m)	☐	☐	☐	
139.325 (c)	Strength of APRON Pavement.	☐	☐	☐	
139.325 (d)	Slopes on APRON surface.	☐	☐	☐	
139.325 (e)	Clearance distances on aircraft stands.	☐	☐	☐	
14. Isolated Aircraft Parking Position					
139.327	Location of isolated position.	☐	☐	☐	
OBSTACLE RESTRICTION AND REMOVAL (SUBPART- G)					
15. Obstacle Limitation Surfaces					
139.403(a) (1) to (6)	Non-Instruments Runway: Whether Conical Surface, Inner Horizontal Surface, Approach Surface and Transitional Surfaces are established.	☐	☐	☐	
139.403(b) (1) to (6)	Non-Precision Runway: Whether Conical Surface, Inner Horizontal Surface, Approach Surface and Transitional Surfaces are established.	☐	☐	☐	
139.403(c) (1) to (2)	Precision App RWY Cat-I: Whether Conical Surface, Inner Horizontal Surface, Approach Surface and Transitional Surfaces are established.	☐	☐	☐	
139.403(c) (3) to (9)	Precision App RWY Cat-II&III: Whether Conical Surface, Inner Horizontal Surface, Approach Surface &Inner App surface, Transitional Surfaces & Inner transitional Surfaces and balked landing surface are established.	☐	☐	☐	
139.405	Objects outside OLS.	☐	☐	☐	
139.407	Other Objects	☐	☐	☐	
139.411	Restriction and removal of obstacles	☐	☐	☐	
139.413	Procedures to deal with obstacles in OLS	☐	☐	☐	
139.415	Objects that could become obstacles	☐	☐	☐	
139.417	Monitoring of obstacles	☐	☐	☐	
139.419	Training	☐	☐	☐	
VISUAL AIDS FOR NAVIGATION (SUBPART-H)					
1. Indicators & Signaling Devices					
139.501 (a)	Wind direction indicator.	☐	☐	☐	
139.501 (b)	Landing direction indicator.	☐	☐	☐	

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139.501 (c)	Signaling lamp.	☐	☐	☐	
139.501 (c)	Signal panels and signal area.	☐	☐	☐	
2. Markings					
139.503 (b)	Runway Designation marking.	☐	☐	☐	
139.503 (c)	Runway Centre line marking.	☐	☐	☐	
139.503 (d)	Threshold marking.	☐	☐	☐	
139.503 (e)	Aiming point marking.	☐	☐	☐	
139.503 (f)	Touchdown zone marking.	☐	☐	☐	
139.503 (g)	Runway side stripe marking.	☐	☐	☐	
139.503 (h)	Taxiway center line marking.	☐	☐	☐	
139.503 (i)	Runway turn pad marking.	☐	☐	☐	
139.503 (j)	Runway-holding position marking.	☐	☐	☐	
139.503 (k)	Intermediate holding position marking.	☐	☐	☐	
139.503 (l)	VOR aerodrome checkpoint marking.	☐	☐	☐	
139.503 (m)	Aircraft stand marking.	☐	☐	☐	
139.503 (n)	Apron safety lines.	☐	☐	☐	
139.503 (o)	Road-holding position marking.	☐	☐	☐	
139.503 (p)	Mandatory instruction marking.	☐	☐	☐	
139.503 (q)	Information marking.	☐	☐	☐	
3. Lights					
139.505 (a)	Whether protected zones have been established against the hazardous effects of laser emitters.	☐	☐	☐	
139.505 (b)	What measures are taken to extinguish or screen non aeronautical ground light which may cause confusion?	☐	☐	☐	
139.505 (c)	Whether suitable light intensity control mechanism has been provided for adjustment of intensities of the AGL.	☐	☐	☐	
139.505 (d)	Approach lighting systems.	☐	☐	☐	
139.505 (e)	Visual approach slope indicator systems.	☐	☐	☐	
139.505 (f)	Circling Guidance Light	☐	☐	☐	

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139.505 (g)	Runway Threshold identification lights	☐	☐	☐	
139.505 (h)	Runway edge lights.	☐	☐	☐	
139.505 (i)	Runway threshold and wing bar lights.	☐	☐	☐	
139.505 (j)	Runway end lights.	☐	☐	☐	
139.505 (k)	Runway Centre line lights.	☐	☐	☐	
139.505 (l)	Runway touchdown zone lights.	☐	☐	☐	
139.505 (m)	Rapid exit taxiway indicator lights.	☐	☐	☐	
139.505 (n)	Stop way lights.	☐	☐	☐	
139.505 (o)	Taxiway Centre line lights.	☐	☐	☐	
139.505 (p)	Taxiway edge lights.	☐	☐	☐	
139.505 (q)	Runway turn pad lights.	☐	☐	☐	
139.505 (r)	Whether stop bars meets the design characteristics ,interlocking requirements between TWY and Stop bars ad controlled by ATS.	☐	☐	☐	
139.505 (s)	Intermediate holding position lights.	☐	☐	☐	
139.505 (t)	Runway guard lights.	☐	☐	☐	
139.505 (u)	Apron floodlighting.	☐	☐	☐	
139.505 (v)	Visual docking guidance system.	☐	☐	☐	
139.505 (w)	Advanced visual docking guidance system.	☐	☐	☐	
139.505 (x)	Aircraft stand maneuvering guidance lights.	☐	☐	☐	
139.505 (y)	Road-holding position light.	☐	☐	☐	
4. Signs					
139.507 (b)	Mandatory instruction signs.	☐	☐	☐	
139.507 (c)	Information signs.	☐	☐	☐	
139.507 (d)	VOR aerodrome checkpoint sign	☐	☐	☐	
139.507 (e)	Road-holding position sign	☐	☐	☐	
5. Markers					
139.509	General	☐	☐	☐	
VISUAL AIDS FOR DENOTING OBSTACLES (SUBPART-I)					

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1. Objects to be marked and/or lighted					
139.601 (a)(1)	Vehicles & other mobile objects.	☐	☐	☐	
139.601 (a)(3)	Whether obstacles are marked and lighted.	☐	☐	☐	
139.601 (a)(4)	Whether Fixed obstacle are marked and lighted.	☐	☐	☐	
2. Marking and/or lighting of objects					
139.603 (b)	Marking/lighting of mobile objects	☐	☐	☐	
139.603 (c)	Marking/lighting of fixed objects	☐	☐	☐	
139.603 (d)	Marking/lighting of Wind Turbines.	☐	☐	☐	
139.603 (e)	Marking/lighting of overhead wires and towers etc.	☐	☐	☐	
VISUAL AIDS FOR DENOTING RESTRICTED USE AREAS (SUBPART-J)					
1. Closed runways and taxiways, or parts thereof:					
Location of a Closed Area ➡		☐ Runway	☐ Taxiway	☐ Both	☐ NIL
Type of the closure on Runways ➡		☐ Permanently	☐ Temporarily	☐ NIL	
Type of the closure on Taxiways ➡		☐ Permanently	☐ Temporarily	☐ NIL	
139.701 (b)	Locations of closed markings on RWYs or TWYs	☐	☐	☐	
139.701 (c)(1)	Dimension & color of closed marking. RWYs or TWYs	☐	☐	☐	
139.701 (c)(2)	Whether closed markings are obliteration RWYs or TWYs	☐	☐	☐	
139.701 (c)(3)	Whether Lights are in operation on a closed RWYs or TWYs.	☐	☐	☐	
2. Non-load-bearing surfaces					
139.703	Taxi side stripe marking.	☐	☐	☐	
3. Pre-threshold area					
139.705	Chevron marking.	☐	☐	☐	
4. Unserviceable areas					
139.707 (c)	Unserviceability markers.	☐	☐	☐	
139.707 (d)	Unserviceability lights.	☐	☐	☐	
139.707 (e)	Unserviceability cones	☐	☐	☐	
139.707 (f)	Unserviceability flags	☐	☐	☐	
139.707 (g)	Unserviceability marker boards.	☐	☐	☐	

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ELECTRICAL SYSTEMS (SUBPART –K)					
1. Electrical power supply systems for air navigation facilities					
139.801 (a)	Primary power supply.	☐	☐	☐	
139.801 (c)	Secondary power supply/Automatic switch-over.	☐	☐	☐	
139.801 (e)	Switch-over time	☐	☐	☐	
2. System Design					
139.803	System Design	☐	☐	☐	
193.803 (a)	Whether system designed will leave the pilot with inadequate visual guidance/information in case of equipment failure when the runway is used below RVR of 550 m.	☐	☐	☐	
3. Monitoring					
139.805	Efficiency of monitoring	☐	☐	☐	
139.805 (b)	Whether lighting system is capable of relaying automatic information/indicating to Air Traffic Services unit about any fault.	☐	☐	☐	
AERODROME OPERATIONAL SERVICES, EQUIPMENT AND INSTALLATIONS (SUBPART-L)					
1. AERODROME EMERGENCY PLANNING					
139.901(a) (1)	Whether aerodrome emergency plan is established.	☐	☐	☐	
139.901(a) (2)	Whether AEP Committee is established.	☐	☐	☐	
139.901(a) (3)	Whether medical services and supply Available.	☐	☐	☐	
139.901(a) (6)	Whether coordination and cooperation exist	☐	☐	☐	
139.901(a) (7)	Whether AEP has required documents	☐	☐	☐	
139.901(a) (8)	Whether AEP observe Human factor principles	☐	☐	☐	
139.901(b) (1)	Whether Fixed Operation center and a mobile command post exist.	☐	☐	☐	
139.901(b) (4)	Whether persons are assigned to man the Emergency operation center and command post	☐	☐	☐	
139.901(c)	Whether communication system exists	☐	☐	☐	
139.901(d)	Aerodrome Emergency Exercises	☐	☐	☐	
139.901(e)	Whether AEP can handle emergencies in difficult environments.	☐	☐	☐	
2. RESCUE AND FIRE FIGHTING					
139.903(a)(2)	Whether Aerodrome is located close to water/swampy area.	☐	☐	☐	

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139.903(b)(1)	Whether the level of protection provided is adequate	☐	☐	☐	
139.903(c)	Whether sufficient quantity of Principal and Complimentary agents available	☐	☐	☐	
139.903 (d)	Whether specific rescue equipment is provided in adequate number and type when the area to be covered by the RFF service includes water.	☐	☐	☐	
139.903 (e)(1)	Whether the response time complies with the applicable regulation and is regularly tested. This check should be formalized in the RFF procedures;	☐	☐	☐	
139.903 (e)(4)	Whether the RFF service has a procedure describing the maintenance of the RFF vehicles and ensuring that this maintenance is formally monitored;	☐	☐	☐	
139.903 (f)	Emergency access roads	☐	☐	☐	
139.903 (g)	Whether the RFF service is provided with an up-to-date map of its response area, including the access roads;	☐	☐	☐	
139.903 (h)	Whether a communication and alerting system is provided between the fire station, the control tower and the RFF vehicles;	☐	☐	☐	
139.903 (i)	Number of rescue and fire fighting vehicles	☐	☐	☐	
139.903 (j)	Whether the number of RFF vehicles is consistent with the applicable regulation;	☐	☐	☐	
139.903 (j)(1)	Whether the training of all RFF personnel is adequate and monitored;	☐	☐	☐	
139.903 (j)(1)	Whether the training facilities, which may include simulation equipment for training on aero plane fires, are available;	☐	☐	☐	
139.903 (j)(3)	Whether the number of RFF personnel is consistent with the level of protection appropriate to the aerodrome RFF category;	☐	☐	☐	
139.903 (j)(5)	Whether the protective clothing and respiratory equipment provided are consistent in quality and quantity in accordance with the applicable regulation, and the respiratory equipment is properly checked and their quantities formally monitored;	☐	☐	☐	
139.905(a)	Check whether the plan for the removal of disabled an aircraft established.	☐	☐	☐	
3. WILDLIFE HAZARD MANAGEMENT					
139.907(b)	Check as to how the reporting of wildlife incidents to GACA, filing and when the action is taken	☐	☐	☐	
139.907(c)	Check the monitoring action and conduct wildlife assessment	☐	☐	☐	
139.907(d)	Check aerodrome vicinity after taking discouraging action	☐	☐	☐	
139.915	Surface movement guidance and control systems	☐	☐	☐	
139.915 (a)	Whether selective switching of stop bars and taxiway center line lights is available ?	☐	☐	☐	

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139.917	Sitting of equipment and installations on operational areas	☐	☐	☐	
139.917 (a)	Whether equipment or installations located near or on a runway, on the non-graded portion of a runway strip, or on precision approach runways complies with frangibility requirements ?	☐	☐	☐	
139.919	Fencing	☐	☐	☐	
139.919 (1)	Whether suitable barriers to aerodromes and off-aerodrome ground installations and facilities, are available .	☐	☐	☐	
139.919 (2)	Whether lighting of security fences is available?	☐	☐	☐	
AERODROME MAINTENANCE (SUBPART-M)					
General					
139.1001	Whether maintenance program has been developed in the interests of safety, efficiency and regularity of aircraft operations?	☐	☐	☐	
1. Pavements					
139.1003 (a)	Avoiding and eliminating any FOD from surfaces of all movement areas.	☐	☐	☐	
139.1003 (b)	Whether maintenance program include taxiway and apron pavements and taxiway shoulders in relation to surface debris and harmful irregularity?	☐	☐	☐	
139.1003 (c)	Surface friction characteristics.	☐	☐	☐	
139.1003 (h)	the drainage characteristics of a runway.	☐	☐	☐	
2. Removal of Contaminants					
139.1005	Whether contaminants are removed from the surface of runways rapidly and completely?	☐	☐	☐	
3. Visual aids					
139.1009 (a)	Measurement of lights intensity.	☐	☐	☐	
139.1009 (b)	General condition of lighting and marking.	☐	☐	☐	
139.1009 (c)	The system of Preventive maintenance employed is capable to achieve the maintenance level as agreed in the aerodrome manual.	☐	☐	☐	
a. For precision approach category II & III RWY;					
139.1009 (c) (1)	Preventive maintenance system for approach & RWY lighting system.	☐	☐	☐	
139.1009 (c)(2)	Measurement of characteristics of electrical circuits of approach & RWY lighting system.	☐	☐	☐	
139.1009 (c)(3)	Light intensity control from ATC.	☐	☐	☐	

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GENERAL					
1	Whether training program has been developed for each employee in Operations, RFFS, Maintenance, and Safety.	☐	☐	☐	
2	Whether training program implemented is supported by the training records.	☐	☐	☐	
3	Whether the competence assessed of the operational and maintenance staff is satisfactory.	☐	☐	☐	

Remarks, if any:
(Aerodrome Safety Inspector shall write any additional information/findings observed during the technical inspection in the space given below.

DETAILS OF GACA AERODROME SAFETY INSPECTORS			
No.	Name	Signature	Date
1.			
2.			
3.			
4.			
5.			

DETAILS OF GACA CERTIFICATION PROJECT MANAGER			
No.	Name	Signature	Date
1.			