

# Arab Republic of Egypt

## Ministry of Civil Aviation

### Egyptian Civil Aviation Authority

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# VIEW ON EGYPTIAN CIVIL AVIATION WILDLIFE MANAGEMENT

**PREPARED BY:  
ENG. ANGIE MOSTAFA**

Wildlife Workshop Sudan 10-12 December 2018

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# Agenda :

1- Introduction

Law and Regulation

Cases

**1. Introduction**

**2. Law and Regulations**

**3. Cases**

# 1 - Introduction :

Land Use Hazard

Bird Safeguarding  
Circle

Safeguarding  
Strategy

Land Scaping

Virtually all land types and land uses (including 'natural' habitats) attract birds in some way and, in theory, a case could be made to exclude virtually anything from the vicinity of an aerodrome.

The principle aims are primarily, to guard against new or increased hazards caused by developments and to encourage developments that reduce hazards.

In assessing the effect of a proposed development, current bird concentrations and movements must be taken into account because the development will modify existing patterns as well as create new ones.

# 1 - Introduction :

Land Use Hazard

Bird Safeguarding  
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Strategy

Land Scaping

At international level the matter is dealt with by the International Civil Aviation Organization (ICAO) of Annex 14 Volume 1, and in the ICAO Airport Services Manual (ICAO Doc. 9137) Volume 1 Part 3 ‘Bird Control and Reduction’, the purpose of which is ‘to provide assistance to states in ensuring that measures are taken to overcome potential bird hazards’.

In Chapter 6 of the Airport Services Manual it is stated that, “...although a distance of 13km between an aerodrome and a waste disposal site is recommended, this general rule must be carefully examined since a number of measures may overcome the bird hazard problem even if the waste site is located nearer to the aerodrome

# 1 - Introduction :

Land Use Hazard

Bird Safeguarding  
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Safeguarding  
Strategy

Land Scaping

Safeguarding maps define a circular area of 13km radius within which Local Planning Authorities (LPAs) are required to consult the aerodrome operator over planning applications for potential bird-attracting developments.

The 13km circle was based on a statistic that 99% of bird strikes occur below 2000', and that an aircraft on a normal approach would descend into this zone at approximately 13km from the runway.

An assumption was made that birds would remain overhead the attraction (at up to 2000') and that overflying aircraft would be at risk.

# 1 - Introduction :

Continue.

The important factors in assessing proposed developments are:

Land Use Hazard

Bird Safeguarding Circle

Safeguarding Strategy

Land Scaping

- Therefore developments beyond a few kilometers from the aerodrome are unlikely to be hazardous, except for very large plants.
- Where hazardous bird concentrations are predicted, netting enclosures are an obvious solution.
- They are simpler to install and less prone to breakdown on the relatively small and permanent structures of STPs than in the dynamic landfill environment.

# 1 - Introduction :

Land Use Hazard

Bird Safeguarding  
Circle

Safeguarding  
Strategy

Land Scaping

The important factors in assessing proposed developments are:

- Modern plants usually provide no opportunity for birds to feed.
- Because there are many variations on the basic treatment system, it may be necessary to identify and obtain data from a similar plant in operation elsewhere.
- Bird numbers are likely to be relatively modest, and concentrations and movements localised, in comparison with landfills.

# 1 - Introduction :

Land Use Hazard

Bird Safeguarding  
Circle

Safeguarding  
Strategy

Land Scaping

Landscaping may attract birds by providing feeding, nesting and roosting habitat.

Almost by definition, landscaping increases the availability for wildlife that, are exploited by larger numbers of more bird species for a wider range of activities.

However, in most cases, the effect is very localised on or close to the aerodrome.

Landscaping developments commonly include planting trees and shrubs, many of which provide food and shelter for nesting and roosting. Water features in landscaping plans create a wide range of exploitable habitats for water birds.

## 2 – Law and Regulation :

1- ECAR - 139

2- EAC

3-PPM&HB

4- LAW4-

Subpart D

Subpart L

### **Egyptian Civil Aviation Regulation (ECAR)part 139**

#### **“Certification and Operations of Land aerodromes”:**

- ◎ ECAR 139 is based on and reflects the provisions of ICAO Annex 14 Volume 1
- ◎ The purpose of this document is to state to Aerodrome operators the requirements to be met for the issue and continuation of an aerodrome certificate
- ◎ The requirements include provisions relating to operational management and the planning of aerodrome development

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

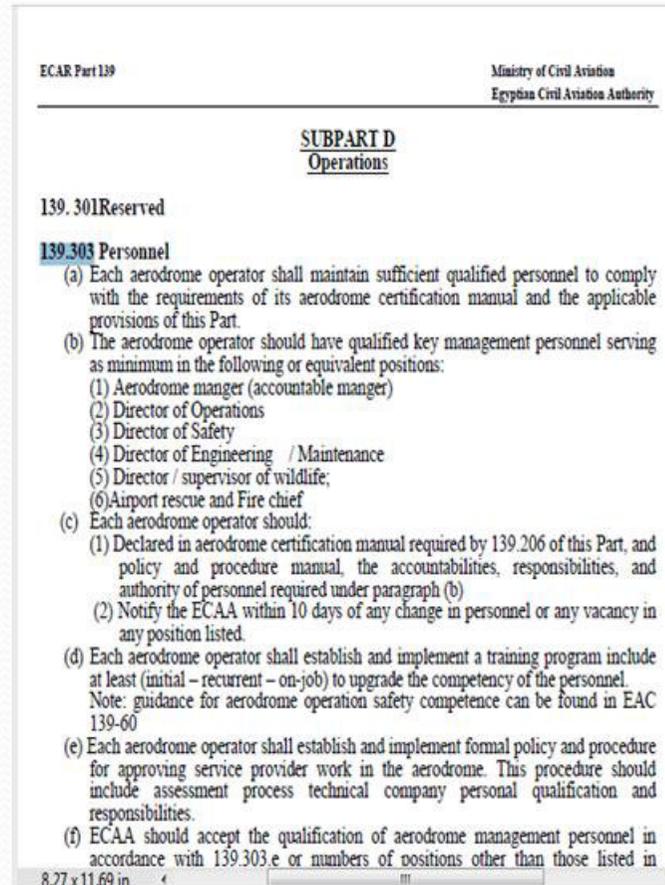
4- LAW4-

Subpart D

Operations

[139-D.docx](#)

Subpart L



## 2 – Law and Regulation :

1- ECAR - 139

2- EAC

3-PPM&HB

4- LAW4-

Subpart D

### ECAR 139 - Subpart D

Subpart L

- To serve as wildlife director/supervisor
- Experience in Airport Operations or other aviation knowledge is desirable
- Wildlife and/or animal control, handling experience
- . Knowledge of wildlife categorized

wildlife.  
Supervisor

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

Subpart D

Subpart L

Subpart L

Aerodrome operational services, equipment and Installations

139-335 aerodrome operational services, equipment and installation:

- Maintenance of an open-air storm water conveyance
- Wildlife strike hazard reduction
- Training provided to airport personnel

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

Subpart D

[139-L.docx](#)

Subpart L

### **139.335. (d) Wildlife strike hazard reduction:**

Note. The presence of wildlife (birds and animals) on and in the airport vicinity poses a serious threat to aircraft operational safety.

- (1) The wildlife strike hazard on, or in the vicinity of, an aerodrome shall be assessed through:
  - (i) The establishment of a national procedure for recording and reporting bird wildlife strikes to aircraft;
  - (ii) The collection of information from aircraft operators, airport personnel, and other sources, on the presence of wildlife on or around the aerodrome constituting a potential hazard to aircraft operations; and
  - (iii) An ongoing evaluation of the wildlife hazard by competent personnel.

Note: See ECAR Part 173.

- (2) Wildlife strike reports shall be collected and forwarded to ECAA for inclusion in the ICAO Bird Strike Information System (IBIS) data base.

Note: The ICAO Bird Strike Information System (IBIS) is designed to collect and disseminate information on bird strikes to aircraft. more Information refer is given in EAC 139-20.

- (3) Action shall to taken decrease the risk to aircraft operations by adopting measures to minimize the likelihood of collisions between wildlife and aircraft.

Note: Guidance on effective measures for establishing whether or not wildlife, on or near an aerodrome, constitute a potential hazard to aircraft operations, and on methods for discouraging their presence, is given in EAC 139-20.

- (4) Garbage disposal dumps or any such other source which may attracts wildlife to the aerodrome, or its vicinity, shall be eliminated or their establishment prevented, unless an appropriate wildlife assessment indicates that they are unlikely to create conditions conducive to a wildlife hazard problem.

Where the elimination of existing sites is not possible, the aerodrome operator shall ensure that any risk to aircraft posed by these sites is assessed and reduced to as low as reasonably practicable.

- (5) Aerodrome operator should give considerations to aviation safety concerns related to land development in the vicinity of the aerodrome that may attract wildlife.

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

Subpart D

Subpart L

Aerodrome operational services, equipment and Installations

- ◎ 139-345 wildlife hazard management:
  - It defines the obligation on the certificate holder of providing ecological study to be accepted by ECAA
    - Communication between the wildlife control personnel and any air traffic control tower in operation at airport
    - Periodic evaluation and review of wildlife hazard management plan
    - Training provided to airport personnel

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

Subpart D

Subpart L

[139-L.docx](#)

139-345 wildlife hazard management

### 139.345 Wildlife hazard management

(a) Each certificate holder should provide for the conduct of an ecological study, acceptable to the ECAA, when any of the following events occur on or near the airport:

- (1) An air carrier aircraft experiences a multiple bird strike or engine ingestion.
- (2) An air carrier aircraft experiences a damaging collision with wildlife other than birds.
- (3) Wildlife of a size or in numbers capable of causing an event described in paragraph (a) (1) or (2) of this section is observed to have access to any airport flight pattern or movement area.

(b) The study required in paragraph (a) of this section should contain at least the following:

- (1) Analysis of the event which prompted the study.
- (2) Identification of the species, numbers, locations, local movements, and daily and seasonal occurrences of wildlife observed.
- (3) Identification and location of features on and near the airport that attract wildlife.
- (4) Description of the wildlife hazard to air carrier operations.

(c) The study required by paragraph (a) of this section should be submitted to the ECAA, who determines whether or not there is a need for a wildlife hazard management plan. In reaching this determination, the ECAA considers:

- (1) The ecological study;
- (2) The aeronautical activity at the airport;
- (3) The views of the certificate holder;
- (4) The views of the airport users; and
- (5) Any other factors bearing on the matter of which the ECAA is aware.

(d) When the ECAA determines that a wildlife hazard management plan is needed, the certificate holder should formulate and implement a plan using the ecological study as a basis. The plan should:

- (1) Be submitted to, and approved by, the ECAA prior to implementation; and
- (2) Provide measures to alleviate or eliminate wildlife hazards to air carrier operations.

(e) The plan should include at least the following:

- (1) The persons who have authority and responsibility for implementing the

## 2 – Law and Regulation :

1- ECAR-139

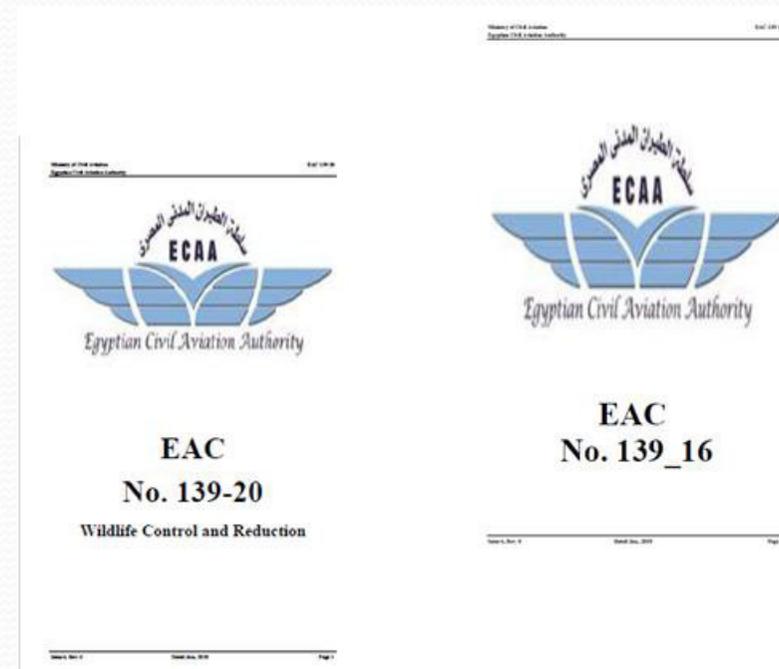
2- EAC

3-PPM&HB

4- LAW4-

### Egyptian Advisory Circulars

- EAC 139-16
- EAC 139-20
- EAC 139-25



## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-LAW

4- PPM&HB

EAC 139-16

EAC 139-16

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<u>TITLE</u>	<u>ITEM</u>
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EAC 139-20

EAC 139-25

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-LAW

4- PPM&HB

EAC 139-16

EAC 139-20

EAC 139-25

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EAC 139-16

Examples of compatible land uses or developments	ZONES		
	A	B	Outside
	Most land uses and developments	Some restriction on land uses and developments	Unrestricted land uses and developments
Agricultural Crop farming	unrestricted	unrestricted	unrestricted
Industrial Machine shop	unrestricted	unrestricted	unrestricted
Commercial Warehouse and shipping Offices and banking	unrestricted restricted	unrestricted restricted	unrestricted unrestricted
Residential			
Low-density housing	unrestricted	restricted	unrestricted
High-density housing	prohibited	restricted	unrestricted
Public facilities			
Schools and hospitals	restricted	restricted	unrestricted

Note 1- With respect to certain uses (e.g. housing and commercial), a development might be allowed in a zone of a higher restriction when other planning considerations indicate a need, and where suitable building techniques, sound insulation, etc. can reduce the aircraft noise exposure to an acceptable level

Note 2- in special case where activities depend on speech communication (eg. schools) or require more stringent standards (e.g. certain hospital activities), additional restrictions may be required to take into account absolute noise levels as well as total noise exposure, unless noise reduction can be ensured in the building construction.

Note 3-The zones will have to be defined against a noise exposure scale (e.g. noise contour mapping) and will have to take into account local and national needs when the zones are drawn up.

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-LAW

4- PPM&HB

EAC 139-16

EAC 139-20

EAC 139-25

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Egyptian Civil Aviation Authority

EAC 139-16

**APPENDIX 1**  
**Land-use guidelines for the avoidance of bird hazard & Bird hazard considerations only**

The land uses tabulated below should not be considered as an exhaustive listing, but merely as examples of how various land uses may be graded in two areas, Areas A and B, surrounding an airport. These areas are drawn up by describing two concentric circles (radii of 3 and 8 km).

**Land-use guidelines:**  
respectively around an airport, centred on the Airport Reference Point. Any land use that has the potential to attract birds to the airport vicinity should be the subject of a study to determine the likelihood of bird strikes to aircraft using the airport.

Land Use	Area A	Area B
Agriculture	YES	YES
landscape nurseries*	YES	YES
tree farming*	YES	YES
stock farming*	YES	YES
dairy farming*	YES	YES
sod farming	NO	YES
piggeries	NO	YES
fruit tree farming	NO	YES
Wildlife Sanctuaries		
bird sanctuaries	NO	NO
game reserves	NO	NO
Recreational		
golf courses*	YES	YES
parks*	YES	YES
playgrounds*	YES	YES
athletic fields*	YES	YES
riding walks*	YES	YES
tennis, lawn bowling*	YES	YES
gymns and campgrounds	YES	YES
riding academies	NO	YES
racetracks	NO	YES
fair grounds	NO	YES
outdoor theatres	NO	YES
Commercial*		
offices	YES	YES
retail sales	YES	YES
hotels and motels	YES	YES
restaurants	YES	YES
parking lots	YES	YES
indoor theatres	YES	YES
warehouses	YES	YES
shopping centres	YES	YES
Land Use	Area A	Area B
service stations	YES	YES
cemeteries	YES	YES
drive-in restaurants	NO	YES
food-processing plants	NO	YES
Municipal Utilities*		
water treatment	YES	YES
non-food garbage landfill	YES	YES
food garbage disposal	NO	NO

Source: Transport Canada, Land Use in the Vicinity Airports.

\* These are general guidelines for planning and land-use zoning only. The avoidance of bird hazards during airport operations is another subject that can involve special controls to keep land free from food and shelter for birds.

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## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-LAW

4- PPM&HB

EAC 139-16

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EAC 139-25

### ◎ Evaluation of Operational Services-wild Life Strike Management:

- References (ECAR 139, EAC139-20)
- Guidance and Procedures:
  - Checklist
  - Evaluation
    - Application of ecological study
    - Approval of ecological study
    - Approval of wildlife hazard management plan
    - Application for issue the building certificate

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

EAC 139-16

EAC 139-20

EAC 139-25

- ⦿ Chapter 1: General
- ⦿ Chapter 2: Establishment Of A National Committee
- ⦿ Chapter 3: Roles And Responsibilities Within A Bird/Wildlife Strike Control Program
- ⦿ Chapter 4: Organization Of An Airport Bird/Wildlife Strike Control Program
- ⦿ Chapter 5: Aircraft Operators
- ⦿ Chapter 6: Assessment Of The Risk Of Bird/Wildlife Strikes
- ⦿ Chapter 7: Habitat Management And Site Modification
- ⦿ Chapter 8: Repellent Techniques
- ⦿ Chapter 9: Best Practices For Bird/Wildlife Management Programs On Aerodromes
- ⦿ Chapter 10: Incompatible Land Use Around Airports
- ⦿ Chapter 11: Evaluating the Wildlife Control Program
- ⦿ Chapter 12: Emerging Technology And Communications

Procedures [EAC 139-20.pdf](#)

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

EAC 139-16

EAC 139-20

EAC 139-25

### Operational

#### Chapter 3 Airport Surface Inspections

#### 3.5 Grassed Area Inspections; points of observation:

- General state of ground vegetation
- .....
- Waterlogged grass should be noted and reported

3.5.2 The main object of grass cutting is to ensure that lights and markers are not obscured by tall vegetation. Vegetative growth should be managed in order to limit the attraction of birds and other wildlife (see Chapter 9). Grass cutting must be coordinated so as not to interfere with aircraft movements. Ensure that mounds of grass cuttings are not left on areas where engine ingestion is possible.

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

EAC 139-16

EAC 139-20

EAC 139-25

### Operational

## Chapter 9-Bird Hazard Reduction

9.1.2 Guidance on the method to be adopted to assess the bird hazard, and the organization necessary to deal with it, together with the methods which can be employed, and procedures for reporting bird strikes are detailed in the. EAC 139-11

9.2 Organization [EAC-25-Ch.9.docx](#)

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

PPM

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### Policy and Procedures

#### 5.11.9 Procedures for EVALUATION OF OPERATIONAL SERVICES- WILD LIFE STRIKE MANAGEMENT

##### 5.11.9.1 Purpose:

The purpose is to provide guidance and information to aerodrome inspectors to use when evaluating wildlife strike hazard management programmes at aerodromes

##### 5.11.9.2 Applicability:

- For all aerodromes operating under ECAR Part 139, or that regulated by the ECAA and are required to have a certificate.
- This procedure is applicable for all records keeping systems, manuals and procedures.

##### 5.11.9.3 Regulatory system:

- a- Egyptian Civil Aviation Law 28 ,2010.
- b- ECAR Part 139
- c- ACP Handbook, Doc. 2002-1 item 318

##### 5.11.9.4 Responsibilities:

- a- The Head of Central Administration of Aerodrome Safety & Standards (CAASS) assigns team inspection members and approves the report results.
- b- The airport safeguarde gm. With coordination with Aerodrome Safety General Director The Aerodrome Standard General Director reviews the results of the report.
- c- The Team Leader (Lead Aerodrome Certification and Surveillance Inspectors, (LACSI) prepares and initiates the inspection program.
- d- Team members (Aerodrome Certification and Surveillance Inspectors, (ACSI) conduct the inspection.

##### 5.11.9.5 Procedures:

###### Scope of Procedures includes

1. The role of the inspection team including the team leader and the General Directors.
2. during the inspection the team leader and team member should evaluate this item according to airport inspector handbook
3. the report should submit to the airport safeguarde gm. (with coordination with The Aerodrome Standard General Director and general manager of aerodrome safety for review and approval then submit to ecaa presindate through head of caass
- 4- evaluation procedure done according to acp doc 2002-1 item 318

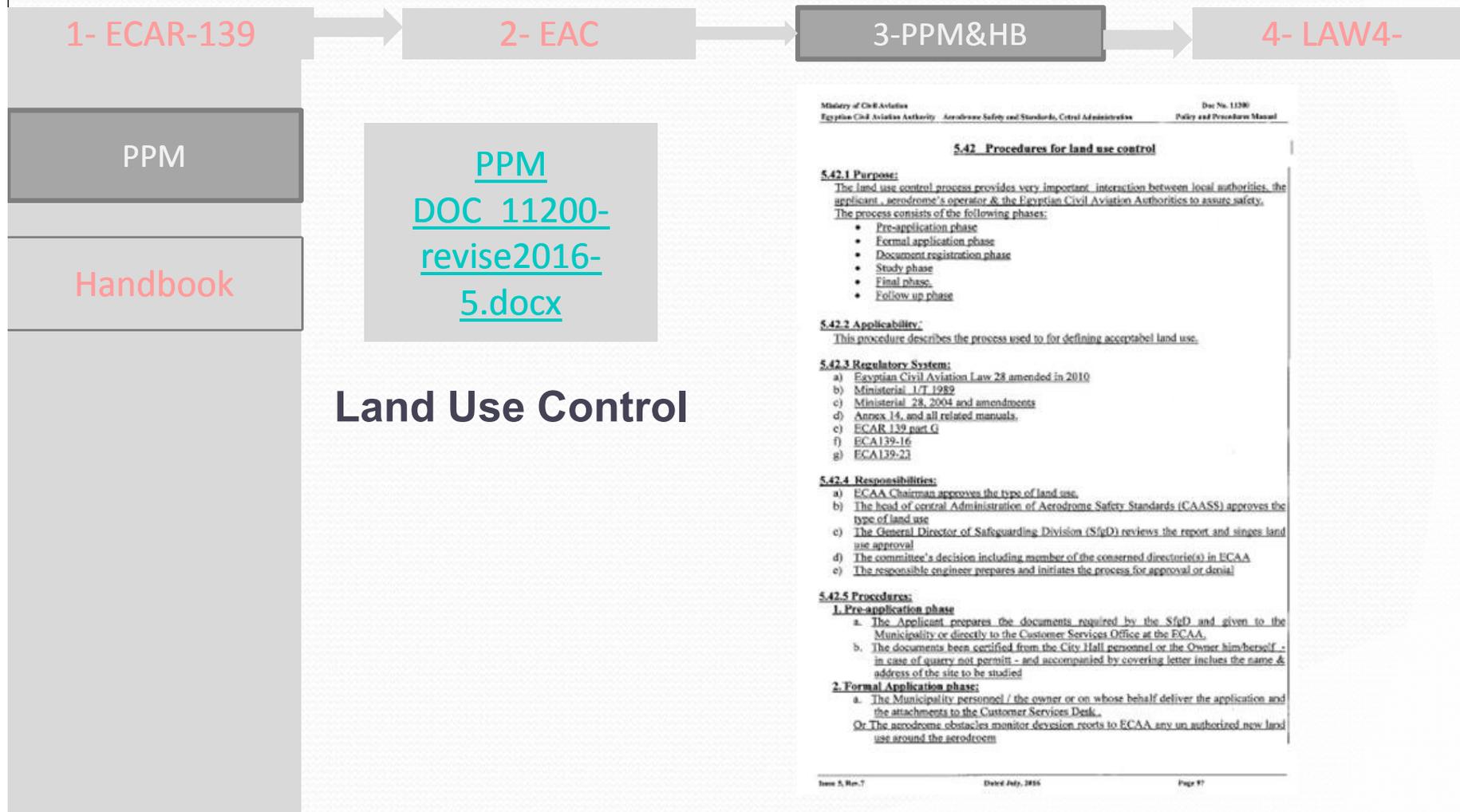
##### 5.11.9.6 Records:

Evaluation Forms and Correspondences are maintained in Aerodrome file.

##### 5.11.9.7 Initiate the appropriate follow-up activities, as required :

- a- Follow up of aerodrome operator's corrective action plan.
- b- The responsible administration(s) follow-up the action taken according to non complying conditions, review inspection report and ensures that they are carried out in accordance with ACM manuals, manufacture instructions and by authorized personnel. The followup status used for reporting is according to categorization of finding according to priorities

## 2 – Law and Regulation :



Ministry of Civil Aviation  
Egyptian Civil Aviation Authority - Aerodrome Safety and Standards, Central Administration  
Doc No. 11200  
Policy and Procedures Manual

**5.42. Procedures for land use control**

**5.42.1 Purpose:**  
The land use control process provides very important interaction between local authorities, the applicant, aerodrome's operator & the Egyptian Civil Aviation Authorities to assure safety. The process consists of the following phases:

- Pre-application phase
- Formal application phase
- Document registration phase
- Study phase
- Final phase
- Follow up phase

**5.42.2 Applicability:**  
This procedure describes the process used to for defining acceptable land use.

**5.42.3 Regulatory System:**

- a) Egyptian Civil Aviation Law 28 amended in 2010
- b) Ministerial 1/T 1989
- c) Ministerial 28, 2004 and amendments
- d) Annex 14, and all related manuals.
- e) ECAR 139 part G
- f) ECA139-16
- g) ECA139-23

**5.42.4 Responsibilities:**

- a) ECAA Chairman approves the type of land use.
- b) The head of central Administration of Aerodrome Safety Standards (CAASS) approves the type of land use
- c) The General Director of Safeguarding Division (SfD) reviews the report and signs land use approval
- d) The committee's decision including member of the concerned director(s) in ECAA
- e) The responsible engineer prepares and initiates the process for approval or denial

**5.42.5 Procedures:**

- 1. Pre-application phase**
  - a. The Applicant prepares the documents required by the SfD and given to the Municipality or directly to the Customer Services Office at the ECAA.
  - b. The documents been certified from the City Hall personnel or the Owner him/herself - in case of quarry not permit - and accompanied by covering letter includes the name & address of the site to be studied
- 2. Formal Application phase:**
  - a. The Municipality personnel / the owner or on whose behalf deliver the application and the attachments to the Customer Services Desk.

Or The aerodrome obstacles monitor division reports to ECAA any un authorized new land use around the aerodrome

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## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

PPM

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### Part 2 –Certification Procedures:

- Chapter 2 :regulatory authority and responsibilities of Directorates of Aerodrome Standards and Safety :

Function and responsibilities of the directorate of aerodrome standards and safety:

- Under duties and responsibility of the aerodrome inspector during the on-site verification and audit is to review “wildlife hazard management; control equipment and procedures

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

PPM

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### Directorates of Aerodromes Standards and Safety

#### CHAPTER 2. REGULATORY AUTHORITY AND RESPONSIBILITIES OF Directorates of Aerodrome Standards and Safety

##### 110. GENERAL

- A. This handbook contains information for safety audit processes to be adopted for aerodromes intended for air transport tolerations.
- B. The Organizational Chart of the Directorate of Aerodrome Standards and Safety according to ppm11200 chapter 3 and attachment A of these manual

##### 111. FUNCTIONS AND RESPONSIBILITIES OF THE DIRECTORATE OF AERODROME STANDARDS AND SAFETY

- A. The Directorate of Aerodrome Standards and Safety is entrusted with the following responsibilities:
  - Aerodrome Certification;
  - Notification to AIS and other organization; Safety audits;
  - Development of Aerodrome Standards; Compliance and Enforcement.
  - Safeguarding

##### B. Aerodrome Certification : these tasks and responsibilities include, but are not limited to:

- (a) receiving, recording, reviewing and processing in cooperation with the other ECAA sectors, the expressions of interest received from an intending applicant for an aerodrome certificate;
- (b) receiving, recording, reviewing and processing, in cooperation with the other ECAA sectors the formal application for an aerodrome certificate, including the initial inspection covering the review of the aerodrome manual, on-site verification, inspection and testing of aerodrome particulars, facilities and equipment, including aeronautical studies;
- (c) grant or refusal of an aerodrome certificate;
- (d) receiving, recording, reviewing and processing applications for the transfer of an aerodrome certificate;
- (e) grant or refusal of the transfer of an aerodrome certificate;
- (f) receiving, recording, reviewing and processing applications for the surrender of an aerodrome certificate;
- (g) cancelling or suspending an aerodrome certificate;
- (h) grant of an interim aerodrome certificate; and

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

PPM

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### AERODROME OPERATIONAL SERVICES, EQUIPMENT AND INSTALLATIONS

#### 317. AERODROME OPERATIONAL SERVICES, EQUIPMENT AND INSTALLATIONS

##### A, Purpose

The purpose is to provide guidance and information to aerodrome inspectors to use when evaluating aerodrome operational services equipment and installations including aerodrome rescue and firefighting service and aerodrome emergency planning apron management service and Aerodrome Fencing.

##### e- Approval of wildlife hazard management plan

- Step 1:  
Upon receipt of an application, the [assigned Team] shall conduct a preliminary check in order to establish if it is compliant with the relevant provisions of [139.345]
- Step 2:
- After the preliminary check, the [assigned Team] shall evaluate the content of the submitted application, in order to establish if the proposed procedure and hazard mitigation can be accepted.
  - The assessment can be obtained by using different methods, (the aim is to demonstrate that the proposed solution ensures the safety of the aircraft operation). By ensure the following:
    - Its effectiveness in dealing with the wildlife hazard.
    - Indications that the existence of the wildlife hazard, described in the ecological survey, should be reevaluated.
    - Procedures outlined in the Plan, such as inspections prior to air carrier operations, are carried out.
    - The reporting system are clear and applicable related to size of the aerodrome and the traffic density
    - Procedure to deal with the habitat modification projects or changes in land use identified in the Plan
    - Procedures are established by the aerodrome operator for the conduct of a wild life risk assessment
    - Implementation plan ( timeline ) be prioritized and respect the mitigation measure
    - For the purposes of the assessment - in addition to examining the submitted documents - [ECAA] may require to conduct audits or inspections as well as to participate in demonstrations or tests carried out by the operator, as deemed appropriate.
- Step 3:  
the [assigned Team] shall verify if the Aerodrome Operator has reported the related information in the appropriate sections of the Aerodrome Manual and has arranged with the AIS Provider for publishing the relevant data on the AIP ( if it's need to demonstrate the hazard to airplane )
- d- Application for issue the building certificate
1. the G.M of safeguarding shall coordinate with airport safety general director to assess any airport operate /public bldg certificate requests which will effect on the land-use in /around the airport
  2. in case of project with landscape : the airport g.m obligate the airport operator (located in area according to eac139-20 )throw the head of caass to conduct the wildlife assessment (ecological study )

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

PPM

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### 318. EVALUATION OF OPERATIONAL SERVICES- WILD LIFE STRIKE MANAGEMENT

#### A. Purpose

The purpose is to provide guidance and information to aerodrome inspectors to use when evaluating **wildlife** strike hazard management programmers at aerodromes

#### B. Reference

- (1) (ECAR 139.345)
- (2) EAC139-20

#### C. Guidance and Procedures

##### (1) General Information

It is required that aerodromes exposed to wildlife hazard analyze the level of risk posed by the existing hazards to enable a determination of the need for a wildlife hazard management plan. It is not anticipated that such a determination can always be reached before the commencement of initial operations at the aerodrome. Data collection on bird activity in the vicinity of the aerodrome and subsequent analysis may take sometime after aerodrome operations begin before meaningful conclusions can be drawn concerning wildlife management programmed to be implemented, where applicable. However it is anticipated that a procedure for monitoring bird activity and of recording and reporting bird strike be established and incorporated in the Aerodrome Manual before approval of the Manual is given by the Authority.

##### (2) Checklist

Subpart 4.12 of the Aerodrome Certification Checklist presented in Appendix 6 Ecaa form 2002-7 and relating to wildlife hazard management, would normally have to be completed during initial certification and certificate renewal inspections and surveillance. Checklist in Appendix 57 Ecaa form 2002-58 is to be used for other special purpose inspection relating to wild life hazard management.

##### (3) Evaluation

#### A- Application of ecological study

Aerodrome Operators are required to submit all the documents needed to demonstrate the the level of risk posed by the existing hazards to enable a determination of the need for a wildlife hazard management plan.

The application shall be accompanied by the following documentation at least

- (1) Hazard Analysis of the event which prompted the study.
- (2) Identification of the species, numbers, locations, local movements, and daily and seasonal

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

**\*Egyptian Law #28 issued 1981 amended by law 136 2010 Article 20 bis Responsibility for the Operation of the Aerodromes and Air Navigation Services:**

- A person authorized to operate any of the aerodromes, landing areas, airstrips or the facilities of air navigation services shall be responsible for their operation and the implementation of the requirements of the flight's security and safety under the supervision of the Civil Aviation Authority.**

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW4-

Law 136/2010

### الفصل الثاني : حقوق الإرتفاق الجوية

#### مادة ٢٢ : حقوق الإرتفاق الجوية :

تنتسأ حقوق ارتفاق خاصة تسمى حقوق ارتفاق جوية لتأمين سلامة الملاحة الجوية وحسن عمل أجهزتها ، وتشمل هذه الحقوق على الأخص ما يأتي :

- ١ - إزالة أو منع إقامة أية مبان أو إنشاءات أو أغراس أو أسلاك أو أية عقبة مهما كان نوعها أو تحديد ارتفاعها وذلك في المناطق المجاورة للمطارات ومنشآت الأجهزة الملاحية.
- ٢ - وضع علامات للإرتداد عن العوائق التي تشكل خطرا على سلامة الملاحة الجوية و يتحتم وجودها

#### مادة ٢٣ : حدود حقوق الإرتفاق:

يحدد وزير الطيران المدني نطاق ومدى حقوق الإرتفاق الجوية والمناطق التي تقرر فيها بما يكفل تأمين سلامة الملاحة الجوية وحماية الأشخاص والممتلكات ، وذلك كله طبقا للقواعد والأنظمة الدولية المقررة في هذا الشأن .

#### مادة (٢٤) المنشآت في المناطق الخاضعة للأرتفاق:

لا يجوز تشييد أى بناء أو منشأة أو إقامة أية عوائق في المناطق المشمولة بحقوق الأرتفاق أو إجراء تغيير في طبيعة أو جهة استعمال الأراضي الخاضعة للأرتفاق إلا بموجب ترخيص مسبق من سلطة الطيران المدني و طبقا للشروط المقررة فيه على أن يراعى عند إصداره موقع المنشأ وطبيعة أستغلاله ومدى تأثيره على الحركة الجوية و ارتفاعه الأقصى ، و ذلك كله مع عدم الإخلال بسلطات الجهات المعنية بالدولة في هذا الشأن .  
ولا يجوز للجهة الادارية المختصة بشئون التنظيم اصدار ترخيص بالبناء أو بالتعليق أو بالتعديل في مناطق الأرتفاق الجوى الا بعد صدور الترخيص المقار اليه في الفقرة السابقة مبينا به أقصى ارتفاع مسموح به منسوبا لمستوى سطح البحر واثباته في ترخيص البناء أو التعليق أو التعديل. ولا يجوز ادخال المرافق الى البناء الا بعد الحصول على شهادة من سلطة الطيران المدني بمطابقة البناء أو المنشأة للترخيص الصادر منها."

## 2 – Law and Regulation :

1- ECAR-139

2- EAC

3-PPM&HB

4- LAW

Law 136/2010

مادة (١٧٤) :  
يعاقب بالحبس مدة لا تقل عن سنة و بغرامة لا تقل عن عشرين ألف جنيه ولا تجاوز متلي قيمة الأعمال المخالفة كل من خالف أياً من أحكام المادتين ٢٥، ٢٤ من هذا القانون أو أستأنف أياً من الأعمال التي سبق وقفها بالطريق الإداري أو أمتنع عن تنفيذ الإزالة في المدة التي تحددها سلطة الطيران المدني . ويعاقب بذات العقوبة المقاول الذي يقوم بالتنفيذ متى كانت الأعمال قد أقيمت بدون ترخيص من سلطة الطيران المدني أو بالمخالفة له كما يعاقب بذات العقوبة مسئول الجهة الإدارية المختصة بمسئول التنظيم متى كان مشاركاً في ارتكاب تلك المخالفات . وفي جميع الأحوال يجب الحكم بإزالة الأعمال المخالفة علي نفقة المخالف .



# 3 – Cases:

1- Introduction

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تخطيط مطار التوسيع لمطار مطروح - أعمال التوسيع لمطار مطروح - قطعه (1) -  
والمصرح له من قبل سلطة الطيران المدني المصري.

- شريطة (1-1) : تقع خارج حدود المنطقة الجوية لأقرب مطار مدني
- شريطة (2-1) : يصرح بدمشوب كاتيفي 3000م (كثافة و خنساء و سيورن مكر القفا) فوق سطح البحر
- شريطة (3-1) : يصرح بدمشوب وتدرج من 2000م (مائلان و خنساء و سيورن مكر القفا) التي 3000م (كثافة و خنساء و سيورن مكر القفا فوق سطح البحر
- شريطة (4-1) : يصرح بدمشوب وتدرج من 3000م (كثافة و كثافة مكر القفا التي 3000م (كثافة و خنساء و سيورن مكر القفا فوق سطح البحر (تدابير) بناء على طلب من منطقة التطوير و التوثيق الناتجة عن معرفة المطارات)

مراجعة / .....  
مدير عام التخطيط الجوي / .....  
رئيس إدارة الترميم وإعادة تأهيل المطارات / .....  
مدير رئيس المنطقة لشؤون قيادات سلامة المطارات و سلامة التجربة

مهندس / هاني العسوي  
رئيس سلطة الطيران المدني المصري  
ecaa@civilaviation.gov.eg

Civil Aviation Complex, Airport Road, Cairo, Egypt  
Tel: 990 92 229 72 907 - Fax: 990 92 22 4 99 222

## 3 – Cases:

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### Cases

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### عرض لطبيعة الاشتراطات المتبعه عند الترخيص لمسطحات الاراضى ذات الاستعمالات الخاصه LANDUSES

- بالنسبة للمواقع التى تقع فى منطقة الاقتراب ، هى منطقة ضوضاء و تلوث جوى تؤثر على رياض الاطفال و المستشفيات و مراكز كبار السن . ممنوع بها الآتى:
  - ١- استخدام الاضواء المبهره و الليزر بكافة أنواعها.
  - ٢- اقامة محطات تموين وقود.
  - ٣- اقامة مسطحات مائية غير طبيعية، مسطحات خضراء، او مزارع جاذبة للطيور و الحياة البرية.
  - ٤- اقامة مداخن تنتج الدخان الذى يحد من الرؤية و يسبب خلل الهواء.
  - ٥- استخدام الاجهزة التى تسبب ذبذبات أو تدخل كهربائى مع الاتصالات اللاسلكية و المساعدات الملاحية، و ذلك الا بعد القيام بالدراسات الطيرانية اللازمة و موافقة سلطة الطيران المدني المصري.

- يلزم تقديم دراسة بيئية توضح تائير نوع الاستغلال علي الحياة البرية بالمنطقة المحيطة بالمطار قبل الترخيص بالبناء وذلك طبقا لأحكام القانون رقم ٢٨ لسنة ١٩٨١ وتعديلاته وقانون توجيه و تنظيم أعمال البناء رقم ١١٩ لسنة ٢٠٠٨ .

- تعتبر هذه المناسيب استرشادية فقط ولا يعتد به كترخيص بالإرتفاع ، ويلزم الرجوع لسلطة الطيران المدني بالمستندات اللازمة للدراسة لكل قطعة علي حدة

# 3 – Cases:

1- Introduction

Law and Regulation

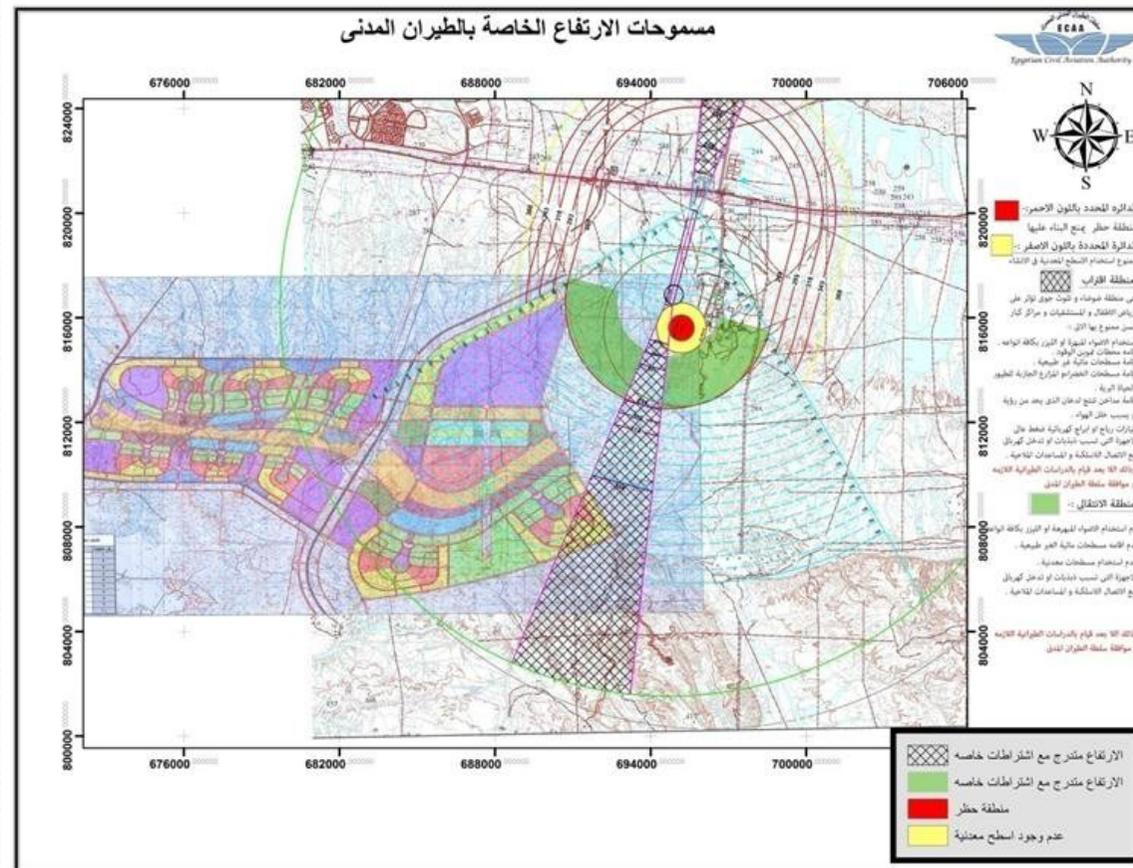
Cases

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Dumping area

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Arab Republic Of Egypt  
Ministry Of Civil Aviation  
Egyptian Civil Aviation Authority

جمهورية مصر العربية  
وزارة الطيران المدني  
سلطة الطيران المدني المصري

السيد / مدير مطار عام معالجة المستودرة  
تحية طيبة و بعد ، يومه ٢٢٤ تاريخه ٢٠١٤

بالإضافة في اتصال التفتيش الدوري على المواقع التي تتم من قبل جميع المطارات المصرية لتأمين سلامة الطيران المدني و التي فرز معالي السيد محافظ الاسكندرية رقم ٢٦٠ لسنة ٢٠١١ بشأن انشراح مساحة مناسبة لمشروع المطارات الصناعية الخترة بمنطقة قاصرية بحي القاسية .

تحيط سيادتكم علماً بأن موقع المشروع المذكور عالمي يقع ضمن المنطقة المشمولة بمقرق الاقتراق الدولي لمطار برج العرب الدولي مما يستلزم مراجعة سلطة الطيران المدني قبل أيه في هذا المشروع حيث تعين قانون الطيران المدني الصادر رقم ٢٨ لسنة ١٩٨١ و تعديلاته بالقانون رقم ١٣٦ لسنة ٢٠١٠ بالعدد رقم ٢٤ "به عني الإتي -

٧٠ بجزئ تشيد أي بناء أو منشأة أو إقامة في عراق في المناطق المشمولة بمقرق الاقتراق الجوي أو أجزاء تعبير في طبيعة أو جهة استعمال الأراضي الخاطبة للاقتراق الإيجوب ترخيص تسيير من سلطة الطيران المدني \*  
و لا يجوز تحية الإذابة المخصصة بشؤون التتظيم إسدالي ترخيص بالبناء أو التعديل أو بالتعديل في مناطق الاقتراق الدولي الا بعد حصول الترخيص المشار إليه في الفترة السابقة مبنياً به إفسى ارتفاع مسموح به بنسباً إفسى سطح البحر و إزائه في ترخيص البناء أو التعديل أو التسيير \*

لذا نرجو من سيادتكم التكرم بعودتنا بكافة البيانات التي تخص المشروع من حيث ( إحتياجات موقع المشروع - إفسى ارتفاعات - استعمال الداخن و ارتفاعاتها و مواضعها - المساحة بأكملها مخططاً أم جزء مطرطن و جزء مطرح - و أي بوغات أخرى تعيد في هذا الشأن ) و ذلك حتى يتسنى لنا اتخاذ اللازم نحو دراسة هذا المشروع حيث نعتت القواعد الدولية و المحلية على شأنك مثل تلك المشروعات على السلامة الجوية هذا بالإضافة إلى وجود العديد من الاقتراق الدولية التي تتوزع بها جمهورية مصر العربية في هذا الشأن .

علماً بأن الهدف الأساسي من قيام سلطة الطيران المدني بمعالجة أصائل التسيير و البناء بمناطق الاقتراق الدولي وثللا الإجازات اللازمة جبالها هو ضمان سلامة الطيران المدني و الممتلكات و المواطنين و يجب تكلف كالموجود على كاه لتسويات كتبت نتائج ما قد يتم من التنازل في هذا الشأن .

مريل لسرادتكم التكرم بالتبني لحر الخلال التكرم و الاتفاق بما تم .  
و تفعلوا سباحته بقبول فانق الاعتراء ...

طيار / محمود طه الزياتي  
رئيس سلطة الطيران المدني المصري

مدير عام المطارات و إقليم الأداة  
م / سناء عثمان محمد

مهندس / محمد عيسى حسيب  
رئيس قطاع المطابقة والسلامة

مدير عام المطارات - إقليم وزارة الطيران المدني  
طريق المطار - أمام وزارة الطيران المدني  
Web site: www.eca.gov.eg  
Tel: (202) 25643027-23447865

وزارة الطيران المدني  
الشرعة المصرية لمطارات  
القطاع المطابقة والسلامة

السيد الطيار / مدير مطار خرم الشيخ الدولي  
تحية طيبة و بعد ...

إيماءة إلى الخطاب الوزاري إيداً رقم ٣٨٠٣ بتاريخ ٢٠١٢/٥/٢٧ و الخاص بملاحظات سلطة الطيران المدني على خطة الحياة البرية بالمطار ولساتكم .

يرجى التكرم بالتبني و إتخاذ اللازم نحو تغطية المكان المكتشف لمحطة معالجة مياه الصرف الصحي بشبكة لمنع عوامل جذب الطيور والكورنيس بمحطة المعالجة .

و تفعلوا بقبول وانقر الإحرام ...

مدير عام المطارات و إقليم الأداة  
م / سناء عثمان محمد

مهندس / محمد عيسى حسيب  
رئيس قطاع المطابقة والسلامة

مدير عام المطارات - إقليم وزارة الطيران المدني  
طريق المطار - أمام وزارة الطيران المدني  
Web site: www.eca.gov.eg  
Tel: (202) 25643027-23447865

# 3 – Cases:

1- Introduction

Law and Regulation

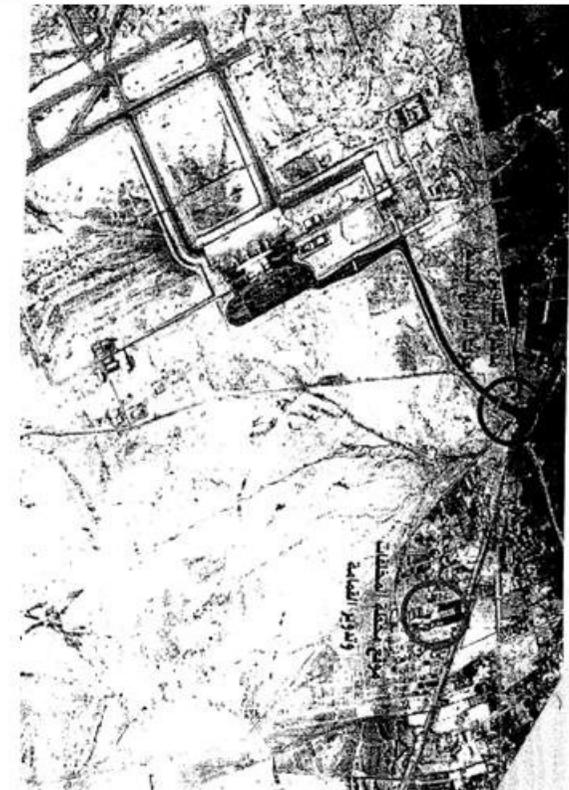
Cases

New area

Dumping area

Resorts

Check lists



# 3 – Cases:

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جمهورية مصر العربية  
وزارة الطيران المدني  
سلطة الطيران المدني المصري

الهيئة العامة للطيران / رئيس مجلس إدارة  
الخريطة العسكرية للمطار  
لحديقة خاوية .. ووعده

بالإضافة إلى منطقتين لاحت الطيران المدني الجزء 139-345 وخصص ببرامج مكافحة الحوادث الجوية  
و بالاشتراك إلى الدورية الإثنانية 139-20 بشأن تقييم المخاطر الحالية / المتوقعة لتواجد الحيوانات البرية بالترتيب  
أختصاص مطار شرم الشيخ الدولي و كذا الدورية الإثنانية 139-16

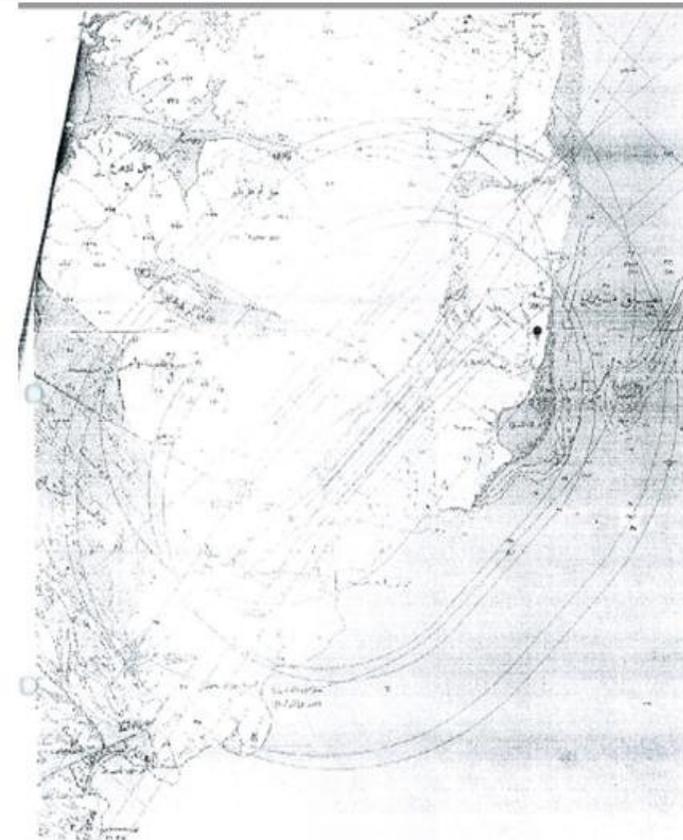
تتروى بان نواقس لمدانكم الطلب العنصر من شركة مصر جروب للاستثمار و مرافقه و الناس بقتاد قرية سياحية  
بمناخه شرم الشيخ جنوب سين

يرجى التكرم بالنتيجه بالخط الإزم التنسيق مع مقدم الطلب و تحديد جميع المتطلبات الإزمه للحد من جذب  
الطيور طبقاً للدراسه البيئيه و ما قد استحدثت عليها و الإقراء حتى يتسنى لنا التحقق من التوافق مع  
التشريعات ذات الصله

وتمثلوا مصادره و قبول هائق الأعداء...

مهندس / هاني يحيى العبدوي  
رئيس سلطة الطيران المدني المصري

محرر و مرفقات لخطوط شرم الشيخ الدولي





# 3 – Cases:

1- Introduction

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Dumping area

Resorts

Check lists

Ministry of Civil Aviation  
Egyptian Civil Aviation Authority - Aerodrome Safety and Standards Control Administration  
Doc No. 1124  
Policy and Procedures Manual

## APPENDIX 57 ECAA FORM 2002-58 WILDLIFE HAZARD MANAGEMENT CHECKLIST

Name of Aerodrome/Aerodrome:  
Inspection date:  
Name of Operator:  
Inspector(s) name (s):  
Head(s) of Department(s):  
Reference:  
Regulation:

SN	ITEM	REG REF	YES	NO	N/A
1.	Has bird/wildlife control officer(s) at the site been appointed and responsibilities assigned?				
2.	Has a training programme been developed to train those involved in bird/wildlife control programme?				
3.	Have the control officer(s) being trained accordingly?				
3.	Has the bird/wildlife control co-ordinating committee been established with well-defined responsibilities?				
4.	Has a bird/wildlife control programme/management plan been developed?				
5.	Is level of implementation of measures in control programme (including those below) satisfactory?				
6.	Does the aerodrome operator maintain an observation log? Does the content of the log give an indication of the actual status during inspection?				
7.	Does the aerodrome operator on a regular basis remove the attraction to birds particularly water, food, nesting sites and resting places?				
8.	Does the operator maintain a wildlife bird dispersed log? Does the content of the log give an indication of the actual status during inspection?				
9.	Does the aerodrome operator regulate the creation of refuse dumps that would attract birds in the vicinity of the aerodrome, whilst the staff of ground operations do this?				
10.	Has a reporting procedure been documented covering all aspects of the bird/wildlife control programme?				
11.	Does the aerodrome operator keep records of timely reports on bird strike incidents or accidents occurring at aerodrome?				
12.	Does the aerodrome operator submit to ECAA for onward submission to ICAO on a regular basis, bird strike reports to facilitate effective use of the TBS programme in accordance with doc138-25?				
13.	Does the operator make available information on the presence of birds and associated hazards to Air traffic controllers for advising arrivals and departing aircraft?				

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14.	Does the aerodrome operator take active part in workshops on bird hazard control and reduction organized by ECAA and other relevant bodies for exchange of views and experience concerned?				
15.	Has a list of all bird/wildlife attractants at the aerodrome been completed?				
16.	Has a list of all bird/wildlife surrounding the aerodrome been completed?				
17.	Has a land use plan been established with regard to effective land use on and off the aerodrome as it pertains to the bird/wildlife control programme?				

INSPECTOR'S REMARK:  
RECOMMENDATION:  
NAME OF INSPECTOR: \_\_\_\_\_ SIGN: \_\_\_\_\_ DATE: \_\_\_\_\_

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## 4 – Safeguarding Structure :

