

# ENTEBBE INTERNATIONAL AIRPORT

# Aerodrome Manual

**UCAA/EIA/AM/01**



**03 FEBRUARY 2023**

**REVISION 01**

## **0.1 Foreword**

This Aerodrome Manual describes policies, operating procedures, details of facilities and equipment for use in the day-to-day operations of Entebbe International Airport (EIA). It has also been prepared in part to comply with the requirements under the Civil Aviation (Aerodromes) Regulations 2022.

Procedures documented in this manual are a reflection of current practices at EIA; and adherence and observance of the procedures herein, is one of the conditions of working at EIA. It is essential that all staff understand their own responsibilities and accountabilities as defined in this manual.

This manual is distributed to all staff with a role to play in the safe operation of the airport, airline operators and other service partners.

**Al Hajj Eng. Sooma Ayub**

**Director Airports and Aviation Security**

**INTENTIONALLY LEFT BLANK**

## 0.2 Master Contact List

DESIGNATION/NAME	EMAIL	TELEPHONE
Director General (DG) UCAA  <i>Fred. K. Bamwesigye</i>	<a href="mailto:fbamwesigye@caa.co.ug">fbamwesigye@caa.co.ug</a>	Office: +256 414 321 426 +256 312 352 001 Mobile: +256 752 643 093 Ext: 2001
Deputy Director General (DG) UCAA  <i>Olive Birungi Lumonya</i>	<a href="mailto:obirungi@caa.co.ug">obirungi@caa.co.ug</a>	Office: +256 312 352 004 Mobile: +256 752 755 220 Ext: 2004
Director Safety Security and Economic Regulations (DSSER)  <i>Eng. Ronny Barongo</i>	<a href="mailto:dat@caa.co.ug">dat@caa.co.ug</a>	Office: +256 312 352 100 Mobile: +256 757 977 352 Ext: 2100/2101
Director Airports and Aviation Security  <i>Eng. Ayub Sooma</i>	<a href="mailto:asooma@caa.co.ug">asooma@caa.co.ug</a>	Office: +256 414 320 890 +256 312 323 049 Mobile: +256 772 507 618 Ext: 3049
General Manager Entebbe International Airport  <i>Emmanuel Barungi</i>	<a href="mailto:gm-eia@caa.co.ug">gm-eia@caa.co.ug</a> <a href="mailto:ebarungi@caa.co.ug">ebarungi@caa.co.ug</a>	Office: +256 312 353 041 Mobile: +256 702 055 518 +256 772 505 158 Ext: 3041
Manager Operations  <i>Christopher Omondi</i>	<a href="mailto:mo-eia@caa.co.ug">mo-eia@caa.co.ug</a> <a href="mailto:comondi@caa.co.ug">comondi@caa.co.ug</a>	Office: +256 414 352 230 +256 312 353 017 Mobile: +256 758 483 681 Ext: 2230/ 3017
Manager Safety Management Systems  <i>Fred Lutalo</i>	<a href="mailto:safety-eia@caa.co.ug">safety-eia@caa.co.ug</a> <a href="mailto:flutalo@caa.co.ug">flutalo@caa.co.ug</a>	Office: +256 312 353 113 Mobile: +256 752 649 149 Ext: 3113
Manager Aerodrome Maintenance  <i>Eng. Geoffrey Wanyama</i>	<a href="mailto:gwanyama@caa.co.ug">gwanyama@caa.co.ug</a>	Office: +256 312 352 260 Mobile: +256 750 693 925 Ext: 2260

<b>DESIGNATION/NAME</b>	<b>EMAIL</b>	<b>TELEPHONE</b>
Manager Aerodrome Engineering Planning and Development <i>Eng. Ronald Twesigye</i>	<a href="mailto:rtwesigye@caa.co.ug">rtwesigye@caa.co.ug</a>	Office: +256 312 352 240 Mobile: +256 756 880 140 Ext: 2240
Chief Fire Officer  <i>Rev. Samuel Atabua</i>	<a href="mailto:satabua@caa.co.ug">satabua@caa.co.ug</a>	Office: +256 312 353 266 +256 312 353 312 Mobile: +256 776 748 407 Ext: 3266/ 3312
Aviation Security Manager  <i>Mike Kisame</i>	<a href="mailto:mkisame@caa.co.ug">mkisame@caa.co.ug</a>	Office: +256 312 353 027 Mobile: +256 701 488 366 +256 772 488 366 Ext: 3027
Airside Operations Services <i>Shift Leader</i>	<a href="mailto:shiftleaderairside@caa.co.ug">shiftleaderairside@caa.co.ug</a>	Office: +256 312 353 261 Ext: 3261
Aviation Security <i>Duty Officer</i>	<a href="mailto:AvsecOperations@caa.co.ug">AvsecOperations@caa.co.ug</a>	Office: +256 414 353 372 Office: +256 704 215 090 Ext: 7705
Rescue and Fire Fighting Services <i>Watch room</i>	<a href="mailto:ARFFS@caa.co.ug">ARFFS@caa.co.ug</a>	Office: +256 312 353 322 Ext: 3322
Marine North Station <i>Duty Officer</i>		Office: +256 312 353 298 Ext: 3298
Marine South Station <i>Duty Officer</i>		Office: +256 312 353 307 Ext: 3307
Electrical Section <i>Shift Office</i>	<a href="mailto:electrical@caa.co.ug">electrical@caa.co.ug</a>	Office: +256 312 353 371 Ext: 3371
Principal Bird hazard and Wildlife Management <i>Gloria Kirabo</i>		Office: +256 312 352 264 Mobile +256 756 543 297 Ext: 2264
Wildlife Hazard Management <i>Duty Officer</i>	<a href="mailto:wildlife@caa.co.ug">wildlife@caa.co.ug</a>	Office: +256 312 353 263 Ext: 2267/ 3263
Aeronautical Information Management	<a href="mailto:ais@caa.co.ug">ais@caa.co.ug</a>	Office: +256 312 352 503

<b>DESIGNATION/NAME</b>	<b>EMAIL</b>	<b>TELEPHONE</b>
<i>AIS Headquarters</i>		+256 312 352 534 Ext: 2503/2534
<i>NOTAM Office</i>	<a href="mailto:notam@caa.co.ug">notam@caa.co.ug</a>	Office: +256 312 352 527 Ext: 2525/3257
<i>Communication Centre</i>		Office: +256 312 353 257 Ext: 2525/3257
<i>ATS Reporting office/Briefing Office</i>		Ext 3283/2270
Officer In-Charge Air Navigation Services (OC-ANS)  <i>Fred Owomukama</i>	<a href="mailto:oc-ans@caa.co.ug">oc-ans@caa.co.ug</a>	Office: +256 414 320 680 +256 312 352 531 Mobile: +256 708 786 132 +256 774 542 756 Ext: 2531
Air Traffic Control		
<i>Area Control Centre</i>		Office: +256 414 320 907 Ext: 2541
<i>Approach Control Unit</i>		Ext: 3137
<i>Control Tower</i>		Office: +256 414 320 892 +256 312 352515 Ext: 2515/3250
Meteorological Services		Office: +256 414 320920
Communication Navigation and Surveillance Services	<a href="mailto:cns@caa.co.ug">cns@caa.co.ug</a>	Office: +256 414 320 384 +256 414 320905 +256 312 352 520 Ext: 2520/2521

# **PART 1: GENERAL**

**1.1 Table of contents**

0.1 Foreword..... I  
 0.2 Approval page.....**ERROR! BOOKMARK NOT DEFINED.**  
 0.3 Master contact list ..... III

**PART 1: GENERAL**

1.1 Table of contents ..... 1-1  
 1.2 List of Appendices to the Aerodrome Manual ..... 1-4  
 1.3 Record of Amendments..... 1-5  
 1.4 Distribution of the Aerodrome Manual ..... 1-6  
 1.5 Procedure for amendment of the Aerodrome Manual..... 1-8  
 1.6 Checklist of Pages ..... 1-9  
 1.7 References ..... 1-12  
 1.8 Abbreviations..... 1-13  
 1.9 Definitions ..... 1-17  
 1.10 Technical Administration ..... 1-22  
 1.11 Purpose And Scope Of The Aerodrome Manual..... 1-24  
 1.12 Legal Requirements ..... 1-24  
 1.13 Staff to comply with the manual ..... 1-24  
 1.14 Exemptions and limitations ..... 1-24  
 1.15 Deviation from procedures ..... 1-24  
 1.16 Conditions for use of the aerodrome ..... 1-24  
 1.17 Aeronautical Information System and its promulgation..... 1-25  
 1.18 The system for recording aircraft movements..... 1-25  
 1.19 Obligations of DAAS as the aerodrome operator: ..... 1-26  
 1.20 Obligations of entities operating at EIA..... 1-27

**PART 2: PARTICULARS OF THE AERODROME SITE**

2.1 Aerodrome Chart..... 2-1  
 2.2 Aerodrome location from the nearest city ..... 2-1  
 2.3 Particulars of the land title ..... 2-1  
 2.4 Aprons at EIA ..... 2-2  
 2.5 Maintenance of aerodrome charts and plans..... 2-2

**PART 3: PARTICULARS OF THE AERODROME TO BE REPORTED TO THE AIS**

3.1 General Information ..... 3-1  
 3.2 Aerodrome Geographical And Administrative Data:..... 3-1



3.3	Aerodrome Operational Hours: .....	3-1
3.4	Aerodrome Handling Services And Facilities: .....	3-2
3.5	Passenger Facilities: .....	3-3
3.6	Rescue And Firefighting Services: .....	3-4
3.7	Seasonal Availability .....	3-4
3.8	Aprons, Taxiway and Check Location Data.....	3-4
3.9	Surface Movement Guidance/Control System and Markings.....	3-7
3.10	Significant obstacles in the approach, circling areas and vicinity of the aerodrome .....	3-8
3.11	Meteorological information provided.....	3-44
3.12	Runway Physical Characteristics.....	3-45
3.13	Strip Dimensions .....	3-46
3.14	Declared Distances .....	3-47
3.15	Approach and Runway Lighting Available.....	3-47
3.16	Other Lighting or secondary power supply .....	3-48
3.17	Helicopter Landing Area .....	3-48
3.18	Air Traffic Services Airspace.....	3-49
3.19	Air Traffic Services Communication Facilities .....	3-49
3.20	Radio navigation and landing aids .....	3-50
3.21	Local Aerodrome Regulations.....	3-50
3.22	Noise Abatement Procedures .....	52
3.23	Flight Procedures.....	3-53
3.24	Low Visibility Procedures .....	3-58
3.25	Aerodrome Related Charts:.....	3-58

#### **PART 4: AERODROME OPERATING PROCEDURES AND SAFETY MEASURES**

4.1	Aerodrome Reporting .....	4-1
4.2	Access to the aerodrome movement area.....	4-5
4.3	Aerodrome Emergency Plan .....	4-7
4.4	Aerodrome Rescue and Fire Fighting Service .....	4-9
4.5	Inspections of Aerodrome Movement Area and Obstacle Limitation Surface.....	4-10
4.6	Visual Aids and Aerodrome Electrical Systems.....	4-13
4.7	Maintenance of the Movement Area .....	4-15
4.8	Safety of Aerodrome Works.....	4-17
4.9	Apron Management .....	4-21
4.10	Apron Safety .....	4-22
4.11	Airside Vehicle Control .....	4-23

4.12 Wildlife Hazard Management .....	4-24
4.13 Obstacle Control .....	4-26
4.14 Removal of Disabled Aircraft.....	4-28
4.15 Hazardous Meteorological Conditions.....	4-29
4.16 Handling of Hazardous Materials/Dangerous Goods .....	4-31
4.17 Low Visibility Operations .....	4-41
4.18 Protection of Sites of Navigational Aids.....	4-45

### **Part 5: Aerodrome Administration and Safety Management System**

5.1 Aerodrome Administration.....	5-1
5.2 Overall Responsibility for Safety At EIA .....	5-2
5.3 Roles and Responsibilities for Personnel .....	5-2
5.4 Training of Personnel.....	5-2
5.5 Airport Committees: .....	5-3
5.6 Safety Management System .....	5-11
5.7 Safety Organisation and Structure Of EIA.....	5-11
5.8 Quality Management System .....	5-11

### **6.0 Attachments**

Attachment 1: Aerodrome Chart .....	6-1
Attachment 2: Aerodrome Obstacle Chart Type A Entebbe Rwy 17/35.....	6-1
Attachment 3: Aerodrome Obstacle Chart Type A Entebbe Rwy 12/30.....	6-1
Attachment 4: Apron Parking/Docking Chart Apron 1 .....	6-1
Attachment 5: Apron Parking/Docking Chart Apron 2 and 4.....	6-1
Attachment 6: Apron Parking/Docking Chart Apron 5.....	6-1

**1.2 List of Appendices to the Aerodrome Manual**

<b>Appendix</b>	<b>Control Number</b>	<b>Department/Section</b>
Appendix 1 Airside: Operations Manual	UCAA/EIA/AM/APP/01	Airport Operations
Appendix 2: Aerodrome Rescue and Fire Fighting Services Manual	UCAA/EIA/AM/APP/02	ARFFS
Appendix 3: Aerodrome Engineering Manual	UCAA/EIA/AM/APP/03	Aerodrome Planning and Civil Aerodrome Maintenance.
Appendix 4: AGL and Electrical Systems Manual	UCAA/EIA/AM/APP/04	Electrical Maintenance
Appendix 5: Wildlife Hazard Management Plan	UCAA/EIA/AM/APP/05	Aerodrome Wildlife Hazard Management
<b>Stand Alone Manuals.</b>		
Safety Management Systems Manual	UCAA/DAAS/EIA/SMSM/02	SMS
Entebbe International Airport Emergency Plan	UCAA/EIA/AEP	
Entebbe International Airport Disabled Aircraft Removal Plan	UCAA/EIA/DARP	

**1.3 Record of Amendments**

<b>Revision No</b>	<b>Revision Date</b>	<b>Reason for Change</b>	<b>Amended Pages/ Sections</b>	<b>Inserted By</b>	<b>Effective Date</b>
00	19 Aug 2020	Initial	All Pages	MSMS	
01	03 Feb. 2023	<ol style="list-style-type: none"> <li>1. New Aerodrome Data</li> <li>2. Revised Civil Aviation Aerodromes Regulations.</li> <li>3. New Facilities</li> <li>4. New procedures</li> <li>5. Staff Restructuring</li> </ol>	All Pages	MSMS	15 <sup>th</sup> Feb 2023

## 1.4 Distribution of the Aerodrome Manual

### 1.4.1 Aerodrome Manual Distribution List

Both hard and electronic copies of the Aerodrome Manual are distributed to the different users.

Distribution list for the Electronic Copy is maintained by General Manager Entebbe International Airport and the hard copies are distributed as per the table below:

<b>Copy Number</b>	<b>Copy Holder</b>	<b>Organization</b>
Master Copy	General Manager Entebbe International Airport	UCAA
AM01	Director Airports and Aviation Security	UCAA
AM02	Director Safety Security and Economic Regulations	UCAA
AM03	Manager Safety Management System (EIA)	UCAA
AM04	Manager Airport Operations	UCAA
AM05	Chief Fire Officer EIA	UCAA
AM06	Manager Aerodrome Maintenance	UCAA
AM07	Manager Aerodrome Engineering, Planning & Development	UCAA
AM08	Aviation Security Manager	UCAA
AM09	Manager Aeronautical Information Management	UCAA
AM10	Manager Air Traffic Management	UCAA
AM11	Manager Communication, Navigation & Surveillance	UCAA
AM12	Manager Air Navigation Services & Aerodrome Standards	UCAA
AM13	Manager Quality Assurance	UCAA
AM14	UCAA Main Library	UCAA
AM15	AIM Technical Library	UCAA

## **1.4.2 Procedure for distribution of the Aerodrome Manual**

### **a. Purpose and Scope**

To control distribution of the Aerodrome Manual.

### **b. Responsibility**

The GM –EIA is responsible for the distribution of the Aerodrome Manual.

### **c. Instructions**

Upon approval of the Aerodrome Manual and amendments thereof;

- (i) Hard copies are distributed according to the distribution list.
- (ii) The e-copy is uploaded on the website and the link sent by email to the users as per the e-copy distribution list.
- (iii) The distribution sheet is filed.
- (iv) Older versions of the Aerodrome Manual are withdrawn and archived.
- (v) Stakeholders not on the distribution list request for a copy from the GM-EIA. Upon acceptance of the request, a copy is availed, the distribution list is amended and all copy holders are notified.
- (vi) The distribution sheet and means of access to the electronic copy are used to track the distribution of the Aerodrome Manual.
- (vii) Approved copies and amendments of the Aerodrome Manual are distributed to the recipients 30 days before the effective date of the proposed amendments.

When in the interest of safety, an immediate amendment is made to the Aerodrome Manual and is approved by DSSER, the amendment will be distributed immediately to all the Aerodrome Manual recipients.

## **1.5 Procedure for amendment of the Aerodrome Manual**

### **1.5.1 Purpose and Scope**

To ensure controlled and coordinated amendment of the Aerodrome Manual.

### **1.5.2 Responsibility**

The GM-EIA is responsible for the amendment of the Aerodrome Manual.

### **1.5.3 Instructions**

- (a) The Aerodrome Manual will be amended when:
  - (i) required to fulfill regulatory requirements;
  - (ii) there are changes in Airport Policies and Procedures;
  - (iii) there is personnel and functional restructuring;
  - (iv) new technologies, equipment and facilities are acquired;
  - (v) equipment and facilities are decommissioned
  - (vi) adopting amendments from findings and recommendations of safety audits performed by competent authority or internal auditors.
- (b) The Aerodrome Manual is reviewed annually to ensure it is up to date.
- (c) Proposals for amendment of the Aerodrome Manual shall be sent in writing to the GM-EIA or via email: [gm-eia@caa.co.ug](mailto:gm-eia@caa.co.ug)
- (d) Amendment proposals will be developed by the respective department manager, and presented for consideration in the DAAS management meeting, except for immediate amendments.
- (e) Following paragraph (d) above, the proposed amendments will be submitted to DSSER for approval at least 60 days prior to the proposed effective date.
- (f) Amendments shall be indicated using colours and vertical lines, and provided in replacement pages for all aerodrome manual copies. The replacement pages will have date of amendment.
- (g) Hand amendments are prohibited for all hardcopy holders.
- (h) Minor changes (i.e. phone numbers, typos) may be made through replacement pages, with prior approval of GM-EIA. Distribution of these changes will be recorded in the corrigenda in the same format as the "Record of Amendments."

## 1.6 Checklist of Pages

Page No.	Initial Date	Rev No.	Page No.	Initial Date	Rev. No	Page No.	Initial Date	Rev. No
i	03 Feb 2023	01	1-18	03 Feb 2023	01	3 – 7	03 Feb 2023	01
ii	03 Feb 2023	01	1-19	03 Feb 2023	01	3 – 8	03 Feb 2023	01
iii	03 Feb 2023	01	1-20	03 Feb 2023	01	3 – 9	03 Feb 2023	01
iv	03 Feb 2023	01	1-21	03 Feb 2023	01	3 – 10	03 Feb 2023	01
v	03 Feb 2023	01	1-22	03 Feb 2023	01	3 – 11	03 Feb 2023	01
<b>Part 1</b>			1-23	03 Feb 2023	01	3 -12	03 Feb 2023	01
1-1	03 Feb 2023	01	1-24	03 Feb 2023	01	3 – 13	03 Feb 2023	01
1-2	03 Feb 2023	01	1-25	03 Feb 2023	01	3 – 14	03 Feb 2023	01
1-3	03 Feb 2023	01	1-26	03 Feb 2023	01	3 – 15	03 Feb 2023	01
1-4	03 Feb 2023	01	1-27	03 Feb 2023	01	3 – 16	03 Feb 2023	01
1-5	03 Feb 2023	01				3 – 17	03 Feb 2023	01
1-6	03 Feb 2023	01				3 – 18	03 Feb 2023	01
1-7	03 Feb 2023	01	<b>Part 2</b>			3 – 19	03 Feb 2023	01
1-8	03 Feb 2023	01	2 - 1	03 Feb 2023	01	3 – 20	03 Feb 2023	01
1-9	03 Feb 2023	01	2 – 2	03 Feb 2023	01	3 – 21	03 Feb 2023	01
1-10	03 Feb 2023	01				3 – 22	03 Feb 2023	01
1-11	03 Feb 2023	01	<b>Part 3</b>			3 - 23	03 Feb 2023	01
1-12	03 Feb 2023	01	3 – 1	03 Feb 2023	01	3 – 24	03 Feb 2023	01
1-13	03 Feb 2023	01	3 – 2	03 Feb 2023	01	3 – 25	03 Feb 2023	01
1-14	03 Feb 2023	01	3 – 3	03 Feb 2023	01	3 – 26	03 Feb 2023	01
1-15	03 Feb 2023	01	3 – 4	03 Feb 2023	01	3 – 27	03 Feb 2023	01
1-16	03 Feb 2023	01	3 – 5	03 Feb 2023	01	3 – 28	03 Feb 2023	01
1-17	03 Feb 2023	01	3 – 6	03 Feb 2023	01	3 – 29	03 Feb 2023	01



Page No.	Initial Date	Rev No.	Page No.	Initial Date	Rev. No	Page No.	Initial Date	Rev. No
3 – 30	03 Feb 2023	01	3 – 54	03 Feb 2023	01	4 – 19	03 Feb 2023	01
3 – 31	03 Feb 2023	01	3 – 55	03 Feb 2023	01	4 – 20	03 Feb 2023	01
3 – 32	03 Feb 2023	01	3 – 56	03 Feb 2023	01	4 – 21	03 Feb 2023	01
3 – 33	03 Feb 2023	01	3 – 57	03 Feb 2023	01	4 – 22	03 Feb 2023	01
3 – 34	03 Feb 2023	01	3 – 58	03 Feb 2023	01	4 – 23	03 Feb 2023	01
3 – 35	03 Feb 2023	01	<b>Part 4</b>			4 – 24	03 Feb 2023	01
3 – 36	03 Feb 2023	01	4 – 1	03 Feb 2023	01	4 – 25	03 Feb 2023	01
3 – 37	03 Feb 2023	01	4 – 2	03 Feb 2023	01	4 – 26	03 Feb 2023	01
3 – 38	03 Feb 2023	01	4 – 3	03 Feb 2023	01	4 – 27	03 Feb 2023	01
3 – 39	03 Feb 2023	01	4 – 4	03 Feb 2023	01	4 – 28	03 Feb 2023	01
3 – 40	03 Feb 2023	01	4 – 5	03 Feb 2023	01	4 – 29	03 Feb 2023	01
3 – 41	03 Feb 2023	01	4 – 6	03 Feb 2023	01	4 – 30	03 Feb 2023	01
3 – 42	03 Feb 2023	01	4 – 7	03 Feb 2023	01	4 – 31	03 Feb 2023	01
3 – 43	03 Feb 2023	01	4 – 8	03 Feb 2023	01	4 – 32	03 Feb 2023	01
3 – 44	03 Feb 2023	01	4 – 9	03 Feb 2023	01	4 – 33	03 Feb 2023	01
3 – 45	03 Feb 2023	01	4 – 10	03 Feb 2023	01	4 – 34	03 Feb 2023	01
3 – 46	03 Feb 2023	01	4 – 11	03 Feb 2023	01	4 – 35	03 Feb 2023	01
3 – 47	03 Feb 2023	01	4 – 12	03 Feb 2023	01	4 – 36	03 Feb 2023	01
3 – 48	03 Feb 2023	01	4 – 13	03 Feb 2023	01	4 – 37	03 Feb 2023	01
3 – 49	03 Feb 2023	01	4 – 14	03 Feb 2023	01	4 – 38	03 Feb 2023	01
3 – 50	03 Feb 2023	01	4 – 15	03 Feb 2023	01	4 – 39	03 Feb 2023	01
3 – 51	03 Feb 2023	01	4 – 16	03 Feb 2023	01	4 – 40	03 Feb 2023	01
3 – 52	03 Feb 2023	01	4 – 17	03 Feb 2023	01	4 – 41	03 Feb 2023	01
3 – 53	03 Feb 2023	01	4 – 18	03 Feb 2023	01	4 – 42	03 Feb 2023	01

Page No.	Initial Date	Rev No.	Page No.	Initial Date	Rev. No	Page No.	Initial Date	Rev. No
4 – 43	03 Feb 2023	01	<b>Part 6</b>					
4 – 44	03 Feb 2023	01	6 -	03 Feb 2023	01			
4 – 45	03 Feb 2023	01						
<b>Part 5</b>								
5 –1	03 Feb 2023	01						
5 – 2	03 Feb 2023	01						
5 – 3	03 Feb 2023	01						
5 – 4	03 Feb 2023	01						
5 – 5	03 Feb 2023	01						
5 – 6	03 Feb 2023	01						
5 – 7	03 Feb 2023	01						
5 – 8	03 Feb 2023	01						
5 – 9	03 Feb 2023	01						
5 –10	03 Feb 2023	01						
5-11	03 Feb 2023	01						

## 1.7 References

- (1) The Civil Aviation Authority Act, CAP 354
- (2) The Civil Aviation (Aerodromes) Regulations, 2022
- (3) The Civil Aviation (Safety Management) Regulations, 2022
- (4) Uganda Aeronautical Information Publication
- (5) Uganda Civil Aviation Authority - Quality Management Systems Manual
- (6) ICAO Doc 9981 – PANS Aerodromes
- (7) ICAO Doc 9137 - Airport Services Manual;
  - (a) Part 1 – Rescue and Firefighting
  - (b) Part 2 – Pavement Surface Conditions
  - (c) Part 3 – Wildlife Hazard Management
  - (d) Part 5 – Removal of Disabled Aircraft
  - (e) Part 6 – Control of Obstacles
  - (f) Part 7 – Airport Emergency Planning
  - (g) Part 8 – Airport Operational Services
  - (h) Part 9 – Airport Maintenance Practices
- (8) ICAO Doc 9157 – Aerodrome Design Manual
  - (a) Part 1 - Runways
  - (b) Part 2 – Taxiways, Aprons and Holding Bays.
  - (c) Part 3 – Pavements.
  - (d) Part 4 – Visual Aids.
  - (e) Part 5 – Electrical Systems.
  - (f) Part 6 – Frangibility.
- (9) ICAO Doc 9184 – Airport Planning Manual
  - (a) Part 1 – Master Planning
  - (b) Part 2 – Land Use and Environmental Management.
  - (c) Part 3 – Consultant/ Construction Services
- (10) ICAO Doc 9774 – Manual on Certification of Aerodromes
- (11) ICAO Doc 9830 - Advanced Surface Movement Guidance
- (12) ICAO Doc 9977 - Manual on Civil Aviation Jet Fuel Supply
- (13) ICAO Doc 9859 – Safety Management Manual

## 1.8 Abbreviations

The following Abbreviations are used in this Manual:

<b>Abbreviation</b>	<b>Meaning</b>
<b>A</b>	
ABN	Aerodrome Beacon
ACC	Area Control Center
ACN	Aircraft Classification Number
AD	Aerodrome
AFTN	Aeronautical Fixed Telecommunications Network
AGL	Aeronautical Ground Light
AIM	Aeronautical Information Management
AIP	Aeronautical Information Publication
AIS	Aeronautical Information Service
AOO	Assistant Operations Officer
APP	Approach
ASDA	Accelerate Stop Distance Available
ATC	Air Traffic Control
ATM	Air Traffic Management
ATS	Air Traffic Services
<b>C</b>	
CCTV	Closed Circuit Television
<b>D</b>	
DAAS	Director Airports and Aviation Security
DSSER	Directorate of Safety Security and Economic Regulation (Regulator)
DVOR	Doppler Very High Frequency Omni-directional Range
<b>E</b>	
EIA	Entebbe International Airport
ENR.	En-route
EOC	Emergency Operation Center

<b>Abbreviation</b>	<b>Meaning</b>
<b>F</b>	
FOD	Foreign Object Debris
<b>G</b>	
GND	Ground
<b>H</b>	
H/HR/HRS	Hour(s)
<b>I</b>	
ICAO	International Civil Aviation Organization
ID	Identity
<b>K</b>	
KG/kg	Kilogram
<b>L</b>	
LAT/Lat	Latitude
LDA	Landing Distance Available
LONG/Long	Longitude
L/M	Litres/Minute
LIH	Light Intensity High
LIM	Light Intensity Medium
<b>M</b>	
M	Metres
MAG	Magnetic
MAEPD	Manager Aerodrome Engineering Planning and Development.
MAM	Manager Aerodrome Maintenance
MAS	Manager Aviation Security
MHZ	Megahertz
MO	Manager Operations

<b>Abbreviation</b>	<b>Meaning</b>
<b>N</b>	
N NM/nm NOTAM	North Nautical Mile Notice to Airmen
<b>O</b>	
OO	Operations Officer
<b>P</b>	
PAPI PCN	Precision Approach Path Indicator Pavement Classification Number
<b>R</b>	
RESA RWY R/T RFFS RVR	Runway End Safety Area Runway Radio Telephony Rescue and Fire Fighting Service Runway Visual Range
<b>S</b>	
SITA SMS	System International Transport Aerien Safety Management System
<b>T</b>	
TBN TDZ THR TODA TORA TWR	To Be Notified Touch down Zone Threshold Take-off Distance Available Take-off Run Available Tower
<b>W</b>	

<b>Abbreviation</b>	<b>Meaning</b>
WGS 84	World Geodetic System 1984

## 1.9 Definitions

The following terminologies used in this manual and to those portions of associated manuals that pertain to operations of EIA.

**Accident.** An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

- a) a person is fatally or seriously injured as a result of:
  - (i). being in the aircraft,
  - (ii). direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
  - (iii). direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
- b) the aircraft sustains damage or structural failure which:
  - (i). adversely affects the structural strength, performance or flight characteristics of the aircraft, and
  - (ii). would normally require major repair or replacement of the affected component,
 

except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or
- c) the aircraft is missing or is completely inaccessible.

**Aerodrome:** A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

**Aerodrome beacon:** Aeronautical beacon used to indicate the location of an aerodrome from the air.

**Aerodrome certificate:** A certificate issued by the appropriate authority under applicable regulations for the operation of an aerodrome.

**Aerodrome elevation:** The elevation of the highest point of the landing area.

**Aerodrome identification sign:** A sign placed on an aerodrome to aid in identifying the aerodrome from the air.

**Aerodrome reference point:** The designated geographical location of an aerodrome.



**Aeronautical beacon:** An aeronautical ground light visible at all azimuths, either continuously or intermittently, to designate a particular point on the surface of the earth.

**Aeronautical ground light:** Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft.

**Aircraft classification number (ACN):** A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category.

**Aircraft stand:** A designated area on an apron intended to be used for parking an aircraft.

**Apron:** A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.

**Apron management service:** A service provided to regulate the activities and the movement of aircraft and vehicles on an apron.

**Certified aerodrome:** An aerodrome whose operator has been granted an aerodrome certificate.

**Clearway:** A defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.

**Data accuracy:** A degree of conformance between the estimated or measured value and the true value.

**Declared distances:**

- a) Take-off run available (TORA). The length of runway declared available and suitable for the ground run of an aeroplane taking off.
- b) Take-off distance available (TODA). The length of the take-off run available plus the length of the clearway, if provided.
- c) Accelerate-stop distance available (ASDA). The length of the take-off run available plus the length of the stopway, if provided.
- d) Landing distance available (LDA). The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

**Displaced threshold:** A threshold not located at the extremity of a runway.

**Fixed light:** A light having constant luminous intensity when observed from a fixed point.

**Foreign object debris (FOD):** An inanimate object within the movement area which has no operational or aeronautical function and which has the potential to be a hazard to aircraft operations.

**Frangible object:** An object of low mass designed to break, distort or yield on impact so as to present the minimum hazard to aircraft.

**Hot spot:** A location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

**Instrument runway:** One of the following types of runways intended for the operation of aircraft using instrument approach procedures:

**a) Non-precision approach runway.** A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type A and a visibility not less than 1 000 m.

**b) Precision approach runway, category I.** A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) not lower than 200 ft and either a visibility not less than 800 m or a runway visual range not less than 550 m.

**c) Precision approach runway, category II.** A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) lower than 200 ft but not lower than 100 ft and a runway visual range not less than 300 m.

**d) Precision approach runway, category III.** A runway served by visual aids and non-visual aid(s) intended for landing operations following an instrument approach operation type B with a decision height (DH) lower than 100 ft, or no decision height and a runway visual range less than 300 m, or no runway visual range limitations.

**Landing area:** That part of a movement area intended for the landing or take-off of aircraft.

**Manoeuvring area:** That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

**Marker:** An object displayed above ground level in order to indicate an obstacle or delineate a boundary.

**Marking:** A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.

**Movement area:** That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

**Non-instrument runway:** A runway intended for the operation of aircraft using visual approach procedures or an instrument approach procedure to a point beyond which the approach may continue in visual meteorological conditions.

**Obstacle:** All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that:

- a) are located on an area intended for the surface movement of aircraft; or
- b) extend above a defined surface intended to protect aircraft in flight; or
- c) stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.

**Obstacle free zone (OFZ);** The airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangibly mounted one required for air navigation purposes.

**Road:** An established surface route on the movement area meant for the exclusive use of vehicles.

**Road-holding position:** A designated position at which vehicles may be required to hold.

**Runway:** A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

**Runway condition report (RCR):** A comprehensive standardized report relating to runway surface condition(s) and its effect on the aeroplane landing and take-off performance.

**Runway end safety area (RESA):** An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.

**Runway-holding position:** A designated position intended to protect a runway, an obstacle limitation surface, or an ILS critical area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower.

**Runway strip:** A defined area including the runway and stopway, if provided, intended:

- a) to reduce the risk of damage to aircraft running off a runway; and
- b) to protect aircraft flying over it during take-off or landing operations.

**Runway surface condition(s):** A description of the condition(s) of the runway surface used in the runway condition report which establishes the basis for the determination of the runway condition code for aeroplane performance purposes.

**Runway turn pad:** A defined area on a land aerodrome adjacent to a runway for the purpose of completing a 180-degree turn on a runway.

**Runway visual range (RVR):** The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

**Safety management system (SMS):** A systematic approach to managing safety including the necessary organizational structure, accountabilities, policies and procedures.

**Shoulder:** An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.

**Sign:**

- a) Fixed message sign. A sign presenting only one message.
- b) Variable message sign. A sign capable of presenting several predetermined messages or no message, as applicable.

**Taxiway:** A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:

- a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.
- b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi-route across the apron.
- c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.

**Taxiway intersection:** A junction of two or more taxiways.

**Taxiway strip:** An area including a taxiway intended to protect an aircraft operating on the taxiway and to reduce the risk of damage to an aircraft accidentally running off the taxiway.

**Threshold:** The beginning of that portion of the runway usable for landing.

**Touchdown zone:** The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.

**Wildlife:** means feral birds and animals, including domestic animals out of the control of owners

**Wildlife Hazard:** The presence of wildlife that could result in damage to aircraft.

**Note:** Terminologies not defined here, shall have the same meaning as defined in the Civil Aviation (Aerodromes) Regulations, Civil Aviation (Safety Management) Regulations.

### **1.10 Technical Administration**

Director Airports and Aviation Security.

Uganda Civil Aviation Authority

Directorate of Airports and Aviation Security.

Entebbe International Airport.

P.O. BOX 5536

**KAMPALA** UGANDA

Tel: (+256) 414 352000

(+256) 312 352000

Email: [aviation@caa.co.ug](mailto:aviation@caa.co.ug),

Website: [www.caa.go.ug](http://www.caa.go.ug)

AFS: HUENYDYX

**INTENTIONALLY LEFT BLANK**

### **1.11 Purpose and scope of the Aerodrome Manual**

The purpose of this Aerodrome Manual is to provide direction and lines of responsibility in the day-to-day operations of EIA with regard to aviation. The manual contains information regarding the aerodrome infrastructure, services, facilities, equipment, operational procedures, organization, management and any restrictions on aerodrome availability.

This manual covers all activities and organizational processes that fall under EIA and confirms Directorate of Airports and Aviation Security's ability as the Aerodrome Operator to comply with the aviation legislations applicable to aerodrome operations.

The manual serves as a reference document for use by all staff at EIA in their day- to- day activities.

Relevant parts of this manual serve as rules for contractors or any other person who has to operate at EIA in the course of their duties.

### **1.12 Legal Requirements**

(a) The Civil Aviation (Aerodromes) Regulations 2022 require an aerodrome used for international operations to hold an Aerodrome Certificate.

(b) The Civil Aviation (Aerodromes) Regulations 2022 require an aerodrome used for international operations to have an Aerodrome Manual.

### **1.13 Staff to Comply With the Manual**

All aerodrome operating Staff and stakeholders at EIA shall comply with and implement the policies, procedures and work instructions laid down in this manual to achieve the highest levels of safety, security, and service.

### **1.14 Exemptions and Limitations**

There are no exemptions granted or operational limitations at EIA,

### **1.15 Deviation from procedures**

In case of emergency and for protection of life or property, aerodrome personnel may deviate from any requirement or procedures in this Manual to the extent required to meet the emergency.

The deviation under this will be reported in writing to the Safety Manager and to the DSSER within one day. The report will include the nature, extent and duration of the deviation.

### **1.16 Conditions for Use of the Aerodrome**

EIA operates 24hrs and shall at all times when available for take-off and landing of aircraft, be available to all persons on equal terms and conditions.

### 1.17 Aeronautical Information System and Its Promulgation

All aeronautical data relating to EIA is published in Uganda Aeronautical Information Products.

The Manager Operations (MO) is responsible for complete and correct promulgation of Aeronautical Information to AIM department in accordance with the procedure in this manual.

### 1.18 The System for Recording Aircraft Movements

Details relating to aircraft movements are collected, recorded, and maintained in the Airport Operations Database (AODB). Airside operations Unit is responsible for complete and correct collection of information on aircraft movements and reporting to the MO in accordance with the procedures.

The Aircraft Movement log contains the following;

(a) Inbound:

Date	Aircraft Reg. no	Aircraft Type	Air Operator	Flight No	From	ETA	ATA	CHOCKS ON	Stand No.	Marshalls Name	Remarks

(b) Outbound:

Date	Aircraft Reg. no	Aircraft Type	Air Operator	Flight No	To	ETD	CHOCKS OFF	ATD	Stand No.	Marshalls Name	Remarks

Other records for aircraft movement are maintained by the Briefing office and ATC.



### **1.19 Obligations of DAAS as the Aerodrome Operator:**

DAAS, the operator of EIA commits to comply with the following obligations;

- 1) All conditions endorsed on the aerodrome certificate and any other conditions that may be set by the DSSER.
- 2) Employ adequate number of qualified and skilled personnel for the operation and maintenance of the aerodrome.
- 3) Operate and maintain the aerodrome in accordance with the procedures set out in the Aerodrome Manual.
- 4) Have a Safety Management System that complies with the requirements set out in the Civil Aviation (Safety Management) regulations and any other requirements as may be prescribed by DSSER.
- 5) Arrange and carry out Audit of the Safety Management System and the management of airport organizations.
- 6) Permit Access to authorized DSSER Officers for inspection and testing purposes related to ensuring safety at the aerodrome.
- 7) Notify DSSER, AIS and ATC of any changes in AD facilities or level of service.
- 8) Remove obstructions on the aerodrome that are likely to be a hazard.
- 9) Erect warning signs if low flying or taxiing aircraft are likely to be hazardous to people or vehicles.
- 10) Review and provide information for Aeronautical Publication.
- 11) Carry out inspections of the aerodrome facilities after an aviation occurrence and in the event of hazardous operations.
- 12) Remove from the aerodrome surface any vehicles or other obstructions that are likely to be hazardous to aviation safety.
- 13) Inspect the runways, taxiways and aprons after an accident or incident and whenever there are operations that may be determined as unsafe,
- 14) Ensure DSSER approves all personnel involved with aerodrome safety functions.
- 15) Install signage and notices of hazards on any road, path or sidewalk ways.
- 16) Co-ordinate with ATS on the relevant aspects of safety and security of aircraft operations.

## **1.20 Obligations of Entities Operating at EIA**

As part of the conditions for operating at EIA, all users of the aerodrome (Stakeholders) i.e. Airline Operators, Fixed Base Operators, Ground Handling Agencies, Fuelling Companies and other organizations that perform activities independently at the aerodrome in relating to Flight, Aircraft, Passengers, or Cargo are hereby obliged to:

- i. Comply with the policies and procedures detailed in the manual and appendices thereto as applicable to their activities.
- ii. Establish safety management system to ensure their operations are carried out in a demonstrably safe and controlled way and are improved where necessary.
- iii. Cooperate in the programme to promote safety and safe use of the aerodrome.
- iv. Inform the GM-EIA immediately of any accidents, incidents, defects and faults which have a bearing on safety.
- v. Allow the GM-EIA or his designated agent and Manager SMS from time to time to inspect or audit their operations at the airport.
- vi. To provide up-to-date data of their transport and other activities carried out at the airport.
- vii. Notify the Manager operations and the Manager SMS of any hazardous materials in their custody.

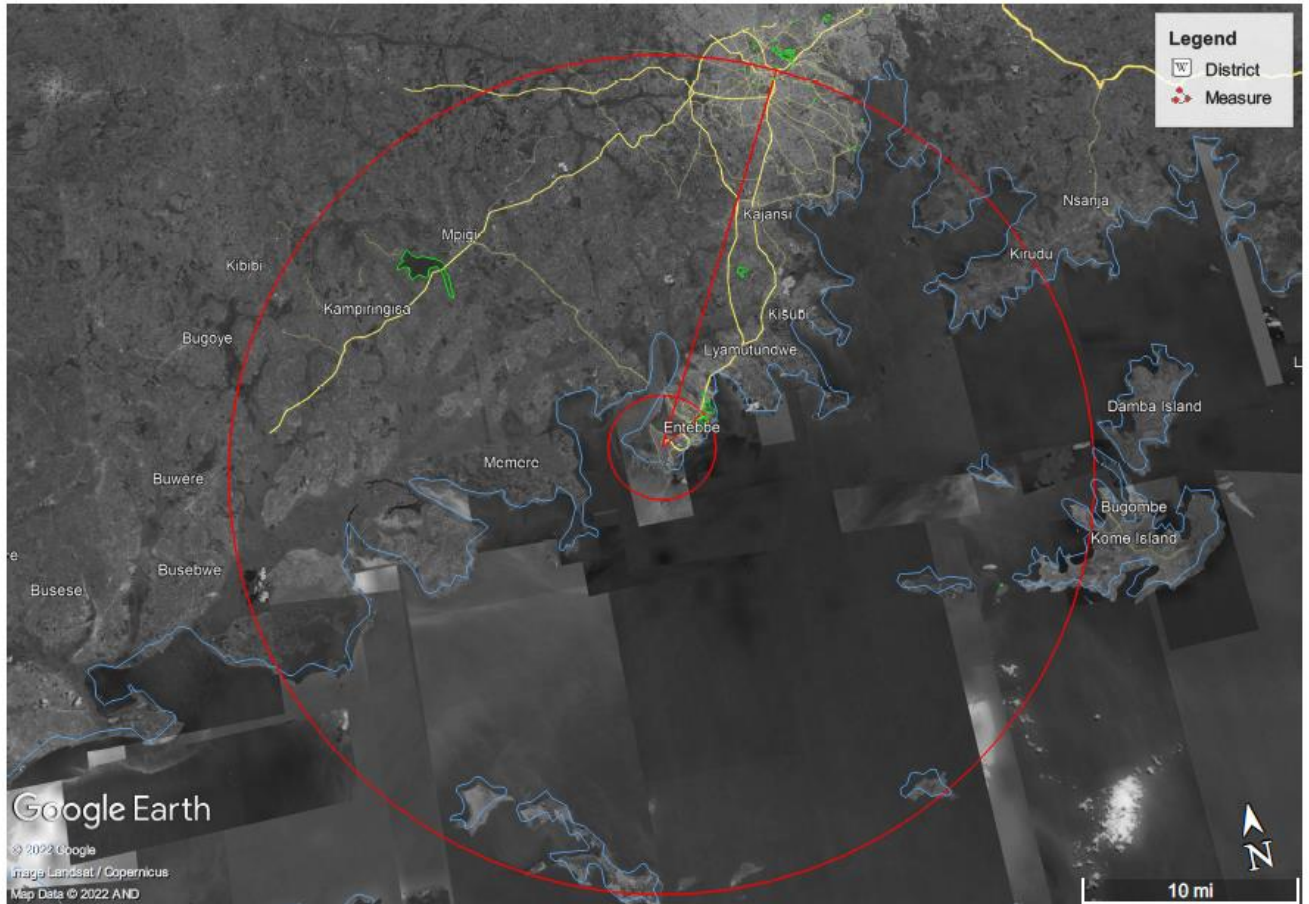
# **PART 2: PARTICULARS OF THE AERODROME SITE**

## 2.1 Aerodrome Chart.

An aerodrome chart showing all the aerodrome facilities at EIA and the boundary is attached. (Attachment 1: Entebbe Aerodrome Chart-ICAO).

## 2.2 Aerodrome Location from the nearest city

EIA is located at a distance of 2.3 NM South West of Entebbe City Post Office and 18.365 NM South West of Kampala City Post Office.



## 2.3 Particulars of the Land Title

The particulars of land title of the aerodrome are as follows:

- a) Land Title Name: Civil Aviation Authority
- b) Land Location: Entebbe Municipality, Wakiso District
- c) Land Plot No: M92, M121
- d) Land Area: 403 hectares, 132 hectares
- e) Land Type: Leasehold

## 2.4 Aprons At EIA

<b>Apron</b>	<b>User/Operator</b>	<b>Remarks</b>
Apron 1	DAAS	International/Domestic Passenger & Cargo Traffic
Apron 2	DAAS	VVIP
Apron 3	UPDAF/DAAS	Military Operations
Apron 4	DAAS	General
Apron 5	DAAS	Cargo Operations

## 2.5 Maintenance of Aerodrome Charts and Plans

The information on aerodrome charts and plans will be maintained and amended regularly, to ensure they are up to date and accurate, whenever there are changes in the aerodrome physical characteristics or facilities.

**PART 3: PARTICULARS OF  
THE AERODROME TO BE  
REPORTED TO THE AIS**

**3.1 General Information****Aerodrome Location Indicator** : HUEN**Name** : Entebbe/Entebbe International Airport**3.2 Aerodrome Geographical and Administrative Data:**

1.	ARP Coordinates and site at AD	00°02'26.93" N 032°26'25.95" E 163.624°/2002.896m from THR 17
2.	Direction and Distance from City	240.09°T/2.3NM from Entebbe Town Post Office and 207.30°T/18.365NM from Kampala City Post Office
3.	Elevation/ Reference Temperature	3782 ft. AMSL / 27° C
4.	Geoid Undulation at AD ELEV PSN	41 ft.
5.	MAG VAR/Annual change	1°33' E (2020) / 0°1' increasing
6.	AD Administration, Address, Telephone, Telefax, Telex, AFS	Uganda Civil Aviation Authority Directorate of Airports and Aviation Security Entebbe International Airport P.O. BOX 5536 KAMPALA-UGANDA Tel: (+256) 414 352000 (+256) 312 352000 Email: <a href="mailto:aviation@caa.co.ug">aviation@caa.co.ug</a> , <a href="mailto:gm-eia@caa.co.ug">gm-eia@caa.co.ug</a> . Website: <a href="http://www.caa.go.ug">www.caa.go.ug</a> AFS: HUENYDYX
7.	Types of Traffic Permitted (IFR/VFR)	IFR/VFR
8.	Remarks	NIL

**3.3 Aerodrome Operational Hours:**

1.	AD Administration	H24
2.	Customs	H24
3.	Immigration	H24
4.	Health and Sanitation	H24
5.	AIS Briefing Office	H24
6.	ATS Reporting Office (ARO)	H24
7.	MET Briefing Office	H24

8.	ATS	H24
9.	Fuelling	H24
10.	Handling	H24
11.	Security	H24
12.	Remarks	NIL

### 3.4 Aerodrome Handling Services and Facilities:

1.	Cargo-Handling Facilities	<p>Available 24Hrs.</p> <p><b>1. Entebbe Handling Services trading as Menzies Aviation Operations</b>  Contact Person: Mr. Kenneth Bainomugisha  Title: Station Manager  GSM +256 787 992 834  Operations Mobile 24/24,7/7: GSM +256 761004923  Email: UGOps@nas.aero</p> <p><b>Accountable Manager (Uganda).</b>  Contact Person: Mr. Nouamane Zahouani  Title: General Manager  Tel: +256 414 321 446, GSM +256 761 005 000  Email: UG.ENHAS-INFO@menziesaviation.com</p> <p><b>2. DAS Handling Limited</b>  +256 312 320 600; +256 785 170 710  Email: admin@dashhandling.com,  operations@dashhandling.com  Website: www.dashhandling.com</p> <p><b>Handling Facilities Available</b></p> <table border="1"> <thead> <tr> <th>Capacity in Tones</th> <th>Item</th> </tr> </thead> <tbody> <tr> <td>7-120</td> <td>High Loaders</td> </tr> <tr> <td>14</td> <td>Low Loaders</td> </tr> <tr> <td>20</td> <td>Pallet Loaders</td> </tr> <tr> <td>2-7</td> <td>Forklifts</td> </tr> <tr> <td>8-10</td> <td>Forklifts</td> </tr> <tr> <td></td> <td>Conveyor Trucks</td> </tr> </tbody> </table>	Capacity in Tones	Item	7-120	High Loaders	14	Low Loaders	20	Pallet Loaders	2-7	Forklifts	8-10	Forklifts		Conveyor Trucks
Capacity in Tones	Item															
7-120	High Loaders															
14	Low Loaders															
20	Pallet Loaders															
2-7	Forklifts															
8-10	Forklifts															
	Conveyor Trucks															
2.	Fuel and Oil Types	<p>1) Fuel: Jet A1  2) Oil: NIL</p> <p>Contacts:  1) Total Energies  TEL: +256 414321417; + 256 752 793099;  +256 752 793042; +256 414 390 877  FAX: + 256 414341900  Email: <a href="mailto:totalenergies@co.com">totalenergies@co.com</a></p> <p>2) VIVO Energy  a. Customer Service  Email: <a href="mailto:customerservice.c@vivoenergy.com">customerservice.c@vivoenergy.com</a></p>														



		<p>Telephone: +256 312 210010</p> <p>b. Aviation Sales Account Manager Email: <a href="mailto:Suzan.Nkemba@vivoenergy.com">Suzan.Nkemba@vivoenergy.com</a> Telephone: +256 775 691382</p> <p>c. Aviation Manager Email: <a href="mailto:Collins.Sunday@vivoenergy.com">Collins.Sunday@vivoenergy.com</a> Telephone: +256 781 754159</p> <p>d. Operations Duty Line Email: <a href="mailto:John.katongole@vivoenergy.com">John.katongole@vivoenergy.com</a> Telephone: +256 772 754064</p>
3.	Fuelling Facilities/ Capacities	<p><b>Jet A1:</b></p> <p>a) Hydrants Refueling for Apron 1 Stands 1-11; b) Bowsers Refueling for Apron 2 &amp; 4 c) Use of Jet A1 tanks.</p>
4.	Hangar Space Privately operated/visiting aircraft	<p>Available by prior arrangement through;</p> <p><b>Eagle Air Facilities&amp; Services</b> Facilities Manager: Tel. Mob. +256 705 227485/+256 772 777 338 Email: <a href="mailto:fred.mugabe@eagleair-ug.co">fred.mugabe@eagleair-ug.co</a></p> <p><b>Bar Aviation</b> Facilities Manager: +256 754 096 666 Email: <a href="mailto:legal@baraviationug.com">legal@baraviationug.com</a></p>
6	Repair Facilities for Visiting Aircraft	Minor repairs, by arrangement with Eagle Air and Bar Aviation.
7	Remarks	NIL

### 3.5 Passenger Facilities:

1	Hotels at/in Vicinity of Aerodrome	Hotel available within 3.7 KM of terminal and other hotels in Entebbe town and Kampala City;
2	Restaurants	Available within the terminal building
3	Transportation	<p>a) Taxis, b) Car Hire and rentals; c) Hotel shuttles;</p>
4	Medical Facilities	<p>1) First aid available 2) 24 hour – clinic within the Passenger Terminal building. Emergency Contacts: Tel: +256 708 888 862, +256 312 352 258 Email: <a href="mailto:info@kazurimedical.com">info@kazurimedical.com</a> Hospitals are also available in Entebbe Town and Kampala City.</p>
5	Banks	ATMs and Bureau de change in Terminal Building.
6	Post Services	Available at the Terminal Building, 0525 - 1400 UTC.

7	Tourist Office	Available at airport. 0600 - 2100 UTC. Self-help material displayed at Tourism Office; Arrival; Departures & Customer Care Desks. <b>Address:</b> Uganda Tourism Board (Arrivals Hall) +256 414 342 196/7, +256 414 242 188 Email: utb@utb.go.ug <a href="http://www.visituganda.com">www.visituganda.com</a> Uganda Wildlife Authority <a href="http://www.ugandawildlife.org/">http://www.ugandawildlife.org/</a>
8	Remarks	Public Information Desk Available H24 TEL: +256 414 352 210/353 057/353 326 Hotel Booking Offices available at Aerodrome Arrival Hall

### 3.6 Rescue and Firefighting Services:

1	AD Category for Fire Fighting	CAT 9
2	Rescue Equipment	2 Major Foam Tenders, 2 Medium Foam Tenders, 2 Rapid Intervention Vehicles (RIV), 1 Water Tender; and 1 Ambulance. Foam meets performance level B: On wheels: - 4,900 liters Foam and 53,000 liters Water. Discharge rate foam solution: 9,000 liters per minute Dry chemical powder (DCP): On wheels: - 1,500 Kgs 3 Boats, Floatation capacity: 275
4	Capability for Removal of Disabled Aircraft	B777 Aircraft. Airlines required to provide contracts for Disabled Aircraft removal.
5	Remarks	NIL

### 3.7 Seasonal Availability

Not Applicable

### 3.8 Aprons, Taxiway and Check Location Data

Designation	Surface:	Strength:
<b>Apron 1 (Stand 1-10)</b>  <b>(Stand 20-25)</b>	Concrete	PCN 86/R/B/X/T
	Asphalt	PCN 70/F/A/X/T
	Concrete	PCN 52/R/B/X/T
	Asphalt	PCN 48/F/A/X/T
Apron 2	Asphalt	PCN 90/F/C/X/T
Apron 4	Concrete	PCN 64/R/B/X/T

Apron 5	Concrete		PCN 86/ R/B/X/T	
Taxiway Width, Surface, and Strength	<b>Designation</b>	<b>Width</b>	<b>Surface</b>	<b>Strength</b>
	Taxiway A1	33 M	Asphalt	PCN 68/F/A/X/T
	Taxiway A2	23 M	Asphalt	PCN 68/F/A/X/T
	Taxiway A3	27 M	Asphalt	PCN 68/F/A/X/T
	Taxiway A4	23 M	Asphalt	PCN 68/F/A/X/T
	Taxiway B	22 M	Asphalt	PCN 68/F/A/X/T
	Taxiway C1	48 M	Asphalt	PCN 68/F/A/X/T
	Taxiway C2	32 M	Asphalt	PCN 68/F/A/X/T
	Taxiway C3	32 M	Asphalt	PCN 68/F/A/X/T
	Taxiway D	24 M	Asphalt	PCN 68/F/A/X/T
	Taxiway J1	23 M	Asphalt	PCN 77/F/B/X/T
	Taxiway J2	22 M	Asphalt	PCN 77/F/B/X/T
	Taxiway J3	30 M	Asphalt	PCN 77/F/B/X/T
	Taxiway H1	30 M	Asphalt	PCN 77/F/B/X/T
Altimeter Check Location (ACL) and Elevation	<b>Location</b>		<b>Elevation</b>	
	Apron 1	Stand 1-10	3797FT	
		Stand 20-25	3791FT	
	Apron 2		3756FT	
	Apron 4		3754FT	
	Apron 5		3781FT	
VOR Check Points	Taxiway A1: 0°01' 23.83"N 032°26' 31.22"E, 3747FT Taxiway A4: 0°03' 14.88"N 032°26' 15.83"E, 3786FT			
INS Check Points	The coordinates are located on the innermost aircraft standpoint, at each stand at the respective aprons at the Aircraft stand identification Paint Marking on the Lead-in Line <b>Apron 1:</b> Stand 1      00 02 34.63 N 032 26 32.51 E Stand 2      00 02 36.32 N 032 26 32.48 E Stand 3      00 02 38.23 N 032 26 32.21 E Stand 4      00 02 39.90 N 032 26 31.82 E Stand 5      00 02 40.60 N 032 26 31.89 E Stand 6      00 02 43.31 N 032 26 31.51 E			

Stand 7	00 02 46.23 N 032 26 31.46 E
Stand 8	00 02 48.35 N 032 26 31.06 E
Stand 9	00 02 50.38 N 032 26 30.88 E
Stand 10	00 02 52.14 N 032 26 30.53 E
Stand 20	00 02 35.54 N 032 26 25.58 E
Stand 21	00 02 37.34 N 032 26 25.33 E
Stand 22	00 02 39.15 N 032 26 25.07 E
Stand 23	00 02 40.96 N 032 26 24.82 E
Stand 24	00 02 42.76 N 032 26 24.57 E
Stand 25	00 02 44.57 N 032 26 24.32 E
<b>Apron 2:</b>	
Stand 1	00 02 38.91 N 032 27 17.67 E
Stand 2	00 02 38.91 N 032 27 16.38 E
Stand 3	00 02 37.93 N 032 27 14.92 E
Stand 4	00 02 37.93 N 032 27 13.37 E
Stand 5	00 02 37.92 N 032 27 11.82 E
<b>Apron 4:</b>	
Stand 30	00 02 26.03 N 032 27 05.39 E
Stand 31	00 02 25.32 N 032 27 06.51 E
Stand 32	00 02 24.61 N 032 27 07.63 E
Stand 33	00 02 23.90 N 032 27 08.76 E
Stand 34	00 02 23.20 N 032 27 09.88 E
Stand 35	00 02 22.49 N 032 27 11.00 E
Stand 36	00 02 21.78 N 032 27 12.13 E
Stand 37	00 02 21.07 N 032 27 13.26 E
Stand 38	00 02 20.36 N 032 27 14.38 E
<b>Apron 5:</b>	
Stand 50	00°01'55.66" N 032°26'36.94"E
Stand 51A	00°01'53.54" N 032°26'37.10"E
Stand 51	00°01'52.84" N 032°26'37.34"E
Stand 51B	00°01'52.09" N 032°26'37.31"E
Stand 52	00°01'50.01" N 032°26'37.73"E
Stand 53	00°01'47.93" N 032°26'37.50"E

Remarks	NIL
---------	-----

### 3.9 Surface Movement Guidance/Control System and Markings

1	Use of aircraft stand ID sign TWY guide lines and visual docking-parking guidance system of aircraft stands	<p>Taxiing guidance signs/markings at all Runway Holding Positions; All Intermediate Holding Positions.</p> <p>Yellow Guide/Lead-in lines with stand Identification Numbers at aprons 1,2,3,4 and 5.</p> <p>Guidance sign at the head of Parking Stand 5, 6 and on the Terminal Building Wall at Apron I</p> <p>Nose-In guidance at aircraft stands Provided H24 by Marshaller at Stands 1-10</p>
2	RWY and TWY Marking	<p><b>RWY 17/35:</b> White: Runway Designation, THR, TDZ, Aiming Points, Centre Line and Side Stripes and edge;</p> <p><b>RWY 12/30:</b></p> <p>White: designation, THR, TDZ, Aiming points, Centre line, edge, displaced threshold</p> <p>Yellow: exit lines</p> <p><b>TWYs A1, A2, A3, A4, B, C1, C2, C3, D, J1, J2, J3, H1:</b></p> <ol style="list-style-type: none"> <li>Marked with single Yellow Centre Line.</li> <li>Single Broken Yellow Intermediate Holding Position Markings.</li> <li>Guidance lines: solid continuous yellow lines.</li> <li>Edge: Yellow double parallel lines.</li> <li>Holding positions: yellow double lines and spacing between them running across the TWY.</li> </ol>
3	RWY and TWY Lighting	<p><b>RWY 17/35:</b></p> <p>White: Runway edge lights (the last 600m lighted Amber in both directions).</p> <p>Red: Runway end lights</p> <p>Green: Threshold lights</p> <p><b>TWYs A1, A2, A3, A4, B, C1, C2, C3, D:</b></p> <p>Edges are lighted blue</p>
4	Remarks	NIL

**3.10 Significant Obstacles in the Approach, Circling Areas and Vicinity of the Aerodrome**

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
<b>Area 2</b>					
<b>RWY 17/35 AREA 2A POINT OBSTACLES</b>					
HUEN OB002 GLIDEPATH (GP)	Navaid	00 03 09.567 N, 032 26 07.910 E	3827.182/48.4252	Threshold 17	YES/ RED
HUENOB004 GP Near Field Monitor	Antenna	00 03 11.941 N, 032 26 07.553 E	3799.226 /20.6791	Threshold 17	YES/ RED
HUEN OB003 DME Antenna	Navaid	00 03 09.336 N, 032 26 07.834 E	3799.669/20.0492	Threshold 17	YES/ RED
HUEN OB005 Windsock 17	Installation Meteorological	00 03 19.808 N, 032 26 07.339 E	3799.764/22.2408	Threshold 17	YES/ RED
HUEN OB006 AWOS 17	Installation Meteorological	00 03 10.895 N,032 26 15.596 E	3816.329/30.8235	Threshold 17	YES/ RED
HUEN OB007 Forward Backscatter	Installation Meteorological	00 03 11.229 N, 032 26 15.636 E	3794.173 /9.505	Threshold 17	NO
<b>RWY 17/35 AREA 2A LINE OBSTACLES: NIL</b>					
<b>RWY 17/35 AREA 2A POLYGON OBSTACLES: NIL</b>					
<b>RWY 17/35 AREA 2B POINT OBSTACLES</b>					
HUEN OB024 Windsock 35	Installation Meteorological	00 01 19.802 N, 032 26 23.998 E	3761.106/21.742	RWY 17/35	YES/ RED
HUEN OB025 Tall isolated Tree	Tree	00 01 10.184 N, 032 26 33.997 E	3763.179/30.115	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB026 Tall isolated Tree	Tree	00 05 29.959 N, 032 25 52.737 E	3942.684/43.412	RWY 17/35	NO
HUEN OB027 Tall isolated Tree	Tree	00 05 30.067 N, 032 25 52.875 E	3945.312/44.068	RWY 17/35	NO
HUEN OB028 Tall isolated Tree	Tree	00 05 25.673 N, 032 25 56.641 E	3938.304/42.395	RWY 17/35	NO
HUEN OB029 Tall isolated Tree	Tree	00 05 25.493 N, 032 25 57.222 E	3933.399/38.816	RWY 17/35	NO
HUEN OB030 Tall isolated Tree	Tree	00 05 25.559 N, 032 25 59.750 E	3935.108/41.460	RWY 17/35	NO
HUEN OB031 Tall isolated Tree	Tree	00 05 26.924 N, 032 25 54.508 E	3950.623/51.611	RWY 17/35	NO
HUEN OB032 Tall isolated Tree	Tree	00 05 26.996 N, 032 25 59.359 E	3948.694/48.123	RWY 17/35	NO
HUEN OB033 Tall isolated Tree	Tree	00 05 29.485 N, 032 25 55.688 E	3958.556/39.042	RWY 17/35	NO
<b>RWY 17/35 AREA 2B LINE OBSTACLES: NIL</b>					
<b>RWY 17/35 AREA 2B POLYGON OBSTACLES</b>					
HUEN OB001 ILS Localizer	Antenna	00 01 16.681 N, 032 26 27.550 E	3752.264/11.713	RWY 17/35	YES/ RED
HUEN OB035 Vegetation	Vegetation	00 05 24.442 N, 032 26 00.046 E	3939.009/58.301	RWY 17/35	NO
HUEN OB036 Vegetation	Vegetation	00 05 32.248 N, 032 25 57.002 E	3968.537/55.381	RWY 17/35	NO
HUEN OB037 Vegetation	Vegetation	00 05 36.713 N, 032 25 57.005 E	3961.286/ 63.681	RWY 17/35	NO
<b>RWY 17/35 AREA 2C POINT OBSTACLES</b>					
HUEN OB038 Mast	Antenna	00 03 8.453 N, 032 27 20.013 E	3889.757/149.370	RWY 17/35	YES/ RED
HUEN OB039 Billboard	sign	00 02 24.011 N, 032 26 56.240 E	3849.934/54.170	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB040 Flood Light	Electrical exterior light	00 02 15.488 N, 032 26 41.056 E	3982.615 /62.730	RWY 17/35	YES/ RED
HUEN OB041 Flood Light	Electrical exterior light	00 02 19.564 N,032 27 13.524 E	3832.257/83.665	RWY 17/35	YES/ RED
HUEN OB042 Flood Light	Electrical exterior light	00 02 20.881 N, 032 27 11.451 E	3837.818/86.345	RWY 17/35	YES/ RED
HUEN OB043 Flood Light	Electrical exterior light	00 02 23.469 N, 032 27 07.319 E	3841.893/87.195	RWY 17/35	YES/ RED
HUEN OB044 Flood Light	Electrical exterior light	00 02 24.763 N, 032 27 05.277 E	3843.488/86.503	RWY 17/35	YES/ RED
HUEN OB045 Flood Light	Electrical exterior light	00 02 42.935 N, 032 27 12.198 E	3842.645/83.107	RWY 17/35	YES/ RED
HUEN OB046 Flood Light	Electrical exterior light	00 02 43.048 N, 032 27 17.405 E	3850.197/88.163	RWY 17/35	YES/ RED
HUEN OB047 Flood Light	Electrical exterior light	00 02 47.114 N, 032 26 31.914 E	3860.371/61.762	RWY 17/35	YES/ RED
HUEN OB048 Flood Light	Electrical exterior light	00 02 42.068 N, 032 26 36.123 E	3862.464/64.009	RWY 17/35	YES/ RED
HUEN OB049 Flood Light	Electrical exterior light	00 02 44.491 N, 032 26 35.774 E	3867.031/68.077	RWY 17/35	YES/ RED
HUEN OB050 Flood Light	Electrical exterior light	00 02 38.656 N, 032 26 41.500 E	3867.008/62.887	RWY 17/35	YES/ RED
HUEN OB051 Flood Light	Electrical exterior light	00 01 51.339 N, 032 26 37.464 E	3864.282/82.316	RWY 17/35	YES/ RED
HUEN OB052 Flood Light	Electrical exterior light	00 01 56.975 N,032 26 36.665 E	3862.451/81.631	RWY 17/35	YES/ RED
HUEN OB053 Flood Light	Electrical exterior light	00 01 54.396 N, 032 26 37.026 E	3864.282/82.218	RWY 17/35	YES/ RED
HUEN OB054 Flood Light	Electrical exterior light	00 01 46.819 N, 032 26 38.081 E	3863.409/81.496	RWY 17/35	YES/ RED
HUEN OB055 Flood Light	Electrical exterior light	00 01 48.754 N, 032 26 37.811 E	3864.259/82.680	RWY 17/35	YES/ RED
HUEN OB056 Flood Light	Electrical exterior light	00 02 37.765 N, 032 26 39.693 E	3864.150/66.437	RWY 17/35	YES/ RED



<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB057 Flood Light	Electrical exterior light	00 02 37.563 N, 032 26 38.229 E	3864.078/66.404	RWY 17/35	YES/ RED
HUEN OB058 Flood Light	Electrical exterior light	00 02 37.372 N, 032 26 36.781 E	3865.955/67.815	RWY 17/35	YES/ RED
HUEN OB059 Mast	Antenna	00 02 21.949 N, 032 26 59.173 E	3860.673/97.464	RWY 17/35	YES/ RED
HUEN OB060 Flood light	Electrical exterior light	00 02 41.770 N, 032 26 39.132 E	3861.034/63.301	RWY 17/35	YES/ RED
HUEN OB061 Flood light	Electrical exterior light	00 02 43.045 N, 032 27 15.154 E	3849.259/ 88.878	RWY 17/35	YES/ RED
HUEN OB062 Flood light	Electrical exterior light	00 02 34.451 N, 032 26 33.698 E	3869.882/ 71.342	RWY 17/35	YES/ RED
HUEN OB063 Flood light	Electrical exterior light	00 02 22.161 N, 032 27 09.384 E	3836.896/84.380	RWY 17/35	YES/ RED
HUEN OB112 Tall isolated Tree	Tree	00 01 38.900 N, 032 26 18.432 E	3789.544/51.968	RWY 17/35	NO
HUEN OB113 Tall isolated Tree	Tree	00 01 49.691 N, 032 26 16.484 E	3808.537/ 49.419	RWY 17/35	NO
HUEN OB114 Tall isolated Tree	Tree	00 01 49.976 N, 032 26 17.022 E	3808.537/49.866	RWY 17/35	NO
HUEN OB115 Tall isolated Tree	Tree	00 02 06.491 N, 032 26 12.961 E	3821.014/57.008	RWY 17/35	NO
HUEN OB064 Tall isolated Tree	Tree	00 02 21.530 N, 032 26 54.190 E	3856.942/49.419	RWY 17/35	NO
HUEN OB065 Tall isolated Tree	Tree	00 02 21.694 N, 032 26 53.873 E	3866.949/55.850	RWY 17/35	NO
HUEN OB067 Tall isolated Tree	Tree	00 02 34.394 N, 032 27 33.795 E	3861.112/68.051	RWY 17/35	NO
HUEN OB070 Tall isolated Tree	Tree	00 02 36.546 N, 032 26 38.728 E	3864.200/65.213	RWY 17/35	NO
HUEN OB072 Tall isolated Tree	Tree	00 02 42.416 N, 032 26 40.317 E	3855.722/57.267	RWY 17/35	NO
HUEN OB075 Tall isolated Tree	Tree	00 02 46.432 N, 032 26 36.519 E	3849.846/51.844	RWY 17/35	NO
HUEN OB076 Tall isolated Tree	Tree	00 02 47.248 N, 032 26 32.950 E	3847.795/50.410	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB077 Tall isolated Tree	Tree	00 02 47.347 N, 032 26 33.337 E	3856.329/58.901	RWY 17/35	NO
HUEN OB078 Billboard	Sign	00 02 15.270 N, 032 26 59.953 E	3823.261/56.270	RWY 17/35	NO
HUEN OB080 Mast	Antenna	00 01 59.168 N, 032 26 05.283 E	3885.807/101.161	RWY 17/35	YES/ RED
HUEN OB081 Navaid Antenna	Antenna	00 02 16.247 N, 032 26 40.814 E	3982.240/ 60.788	RWY 17/35	YES
HUEN OB082 RADAR	Dome	00 02 16.476 N, 032 26 41.239 E	3992.880/72.264	RWY 17/35	YES/ RED
HUEN OB083 VHF Antenna	Antenna	00 02 17.389 N, 032 26 40.513 E	3985.269/62.828	RWY 17/35	YES/ RED
HUEN OB084 Antenna	Antennae	00 02 18.921 N, 032 26 42.020 E	3964.009/52.001	RWY 17/35	NO
HUEN OB085 Mast	Antenna	00 02 20.903 N, 032 27 04.095 E	3837.533/80.348	RWY 17/35	YES/ RED
HUEN OB116 High Freq. Antenna	Antenna	00 01 52.010 N, 032 26 04.150 E	3839.154/80.495	RWY 17/35	YES/ NIL
HUEN OB117 High Freq. Antenna	HFA Antenna	00 01 52.222 N, 032 26 03.311 E	3847.845/90.705	RWY 17/35	YES/ NIL
HUEN OB118 High Freq Antenna	HFA Antenna	00 01 53.738 N, 032 26 02.933 E	3847.644/90.551	RWY 17/35	YES/ NIL
HUEN OB119 High Freq. Antenna	HFA Antenna	00 01 53.455 N, 032 26 05.811 E	3845.617/87.090	RWY 17/35	YES/ NIL
HUEN OB120 High Freq. Antenna	HFA Antenna	00 01 49.374 N, 032 26 02.735 E	3832.661/75.463	RWY 17/35	YES/ NIL
HUEN OB121 High Freq. Antenna	HFA Antenna	00 01 50.305 N, 032 26 04.580 E	3838.406/79.823	RWY 17/35	YES/ NIL
HUEN OB122 High Freq. Antenna	HFA Antenna	00 01 50.089 N, 032 26 06.661 E	3838.773/80.213	RWY 17/35	YES/ NIL
HUEN OB123 High Freq. Antenna	HFA Antenna	00 01 51.531 N, 032 26 06.293 E	3843.944/85.846	RWY 17/35	YES / NIL
HUEN OB124 Tall isolated Tree	Tree	00 01 40.356 N, 032 26 10.611 E	3787.185/57.907	RWY 17/35	NO
HUEN OB125 Tall isolated Tree	Tree	00 01 40.450 N, 032 26 13.240 E	3792.329/60.781	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB126 Tall isolated Tree	Tree	00 01 44.192 N, 032 26 08.706 E	3789.501/50.856	RWY 17/35	NO
HUEN OB127 Tall isolated Tree	Tree	00 01 46.446 N, 032 26 06.446 E	3803.589/54.888	RWY 17/35	NO
HUEN OB128 Tall isolated Tree	Tree	00 01 48.344 N, 032 26 11.943 E	3829.278/ 72.428	RWY 17/35	NO
HUEN OB129 Tall isolated Tree	Tree	00 01 49.410 N, 032 26 11.225 E	3817.044/ 60.403	RWY 17/35	NO
HUEN OB130 Tall isolated Tree	Tree	00 01 49.611 N, 032 26 13.113 E	3838.225/ 81.854	RWY 17/35	NO
HUEN OB131 Tall isolated Tree	Tree	00 01 49.729 N, 032 26 11.274E	3833.698/ 76.850	RWY 17/35	NO
HUEN OB132 Tall isolated Tree	Tree	00 01 50.374 N, 032 26 12.635 E	3831.959/ 75.285	RWY 17/35	NO
HUEN OB133 Tall isolated Tree	Tree	00 01 51.563 N, 032 25 38.416 E	3823.347/53.963	RWY 17/35	NO
HUEN OB134 Tall isolated Tree	Tree	00 02 01.628 N, 032 25 43.805 E	3847.736/ 74.643	RWY 17/35	NO
HUEN OB135 Tall isolated Tree	Tree	00 02 02.357 N, 032 25 44.832 E	3832.228/ 60.052	RWY 17/35	NO
HUEN OB136 Tall isolated Tree	Tree	00 02 03.434 N, 032 25 45.176 E	3828.622/ 53.701	RWY 17/35	NO
HUEN OB137 Tall isolated Tree	Tree	00 02 04.463 N, 032 26 09.093 E	3817.428/ 51.470	RWY 17/35	NO
HUEN OB138 Tall isolated Tree	Tree	00 02 03.736 N, 032 26 12.202 E	3818.638/ 53.310	RWY 17/35	NO
HUEN OB139 Tall isolated Tree	Tree	00 02 06.770 N, 032 25 47.948 E	3838.648/ 58.628	RWY 17/35	NO
HUEN OB140 Tall isolated Tree	Tree	00 02 17.882 N, 032 25 27.175 E	3842.740/52.825	RWY 17/35	NO
HUEN OB141 Tall isolated Tree	Tree	00 02 38.478 N, 032 27 36.741 E	3869.669/62.664	RWY 17/35	NO
HUEN OB142 Tall isolated Tree	Tree	00 02 38.830 N, 032 27 38.061 E	3899.026/ 61.463	RWY 17/35	NO
HUEN OB143 Tall isolated Tree	Tree	00 02 46.203 N, 032 27 33.146 E	3892.723/66.621	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB144 Tall isolated Tree	Tree	00 03 00.863 N, 032 27 30.558 E	3877.382/ 69.216	RWY 17/35	NO
HUEN OB145 Tall isolated Tree	Tree	00 01 44.818 N, 032 25 56.450 E	3789.754/ 49.698	RWY 17/35	NO
HUEN OB146 Tall isolated Tree	Tree	00 01 44.141 N, 032 26 03.631 E	3789.137/ 51.361	RWY 17/35	NO
HUEN OB147 Tall isolated Tree	Tree	00 01 45.702 N, 032 25 44.372 E	3811.171/51.945	RWY 17/35	NO
HUEN OB148 Tall isolated Tree	Tree	00 01 46.598 N, 032 25 43.267 E	3824.380/ 49.760	RWY 17/35	NO
HUEN OB149 Tall isolated Tree	Tree	00 01 47.584 N, 032 25 56.899 E	3802.969/ 49.859	RWY 17/35	NO
HUEN OB150 Tall isolated Tree	Tree	00 01 47.046 N, 032 25 57.125 E	3805.358/ 53.976	RWY 17/35	NO
HUEN OB151 Tall isolated Tree	Tree	00 01 50.073 N, 032 25 40.268 E	3837.959/ 60.578	RWY 17/35	NO
HUEN OB152 Tall isolated Tree	Tree	00 01 50.924 N, 032 26 09.185 E	3818.602/ 57.073	RWY 17/35	NO
HUEN OB153 Tall isolated Tree	Tree	00 01 51.355 N, 032 25 51.553E	3830.272/ 72.818	RWY 17/35	NO
HUEN OB154 Tall isolated Tree	Tree	00 01 51.755 N,032 25 55.465 E	3810.322/ 53.628	RWY 17/35	NO
HUEN OB155 Tall isolated Tree	Tree	00 01 51.954 N, 032 25 56.452 E	3811.319/ 54.052	RWY 17/35	NO
HUEN OB156 Tall isolated Tree	Tree	00 01 55.804 N, 032 25 55.925 E	3810.876/ 52.152	RWY 17/35	NO
HUEN OB157 Tall isolated Tree	Tree	00 01 58.429 N, 032 26 01.078 E	3814.062/ 51.024	RWY 17/35	NO
HUEN OB158 Tall isolated Tree	Tree	00 01 58.871 N, 032 26 01.237 E	3814.583/ 51.040	RWY 17/35	NO
HUEN OB159 Tall isolated Tree	Tree	00 01 58.341 N, 032 26 03.828 E	3819.665/ 53.392	RWY 17/35	NO
HUEN OB160 Tall isolated Tree	Tree	00 02 00.240 N, 032 26 08.287 E	3821.086/ 49.925	RWY 17/35	NO
HUEN OB161 Tall isolated Tree	Tree	00 01 59.533 N, 032 25 37.177 E	3871.923/ 97.359	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB162 Tall isolated Tree	Tree	00 01 59.208 N, 032 26 01.177 E	3818.871/ 55.643	RWY 17/35	NO
HUEN OB163 Tall isolated Tree	Tree	00 01 59.831 N, 032 26 08.411 E	3816.591/ 51.486	RWY 17/35	NO
HUEN OB164 Tall isolated Tree	Tree	00 02 00.344 N, 032 25 55.209 E	3822.024/ 59.363	RWY 17/35	NO
HUEN OB165 Tall isolated Tree	Tree	00 02 00.586 N, 032 25 54.757 E	3827.228/ 63.642	RWY 17/35	NO
HUEN OB166 Tall isolated Tree	Tree	00 02 01.252 N, 032 26 11.901 E	3817.172/ 52.687	RWY 17/35	NO
HUEN OB167 Tall isolated Tree	Tree	00 02 02.390 N, 032 26 08.137 E	3823.520/ 58.579	RWY 17/35	NO
HUEN OB168 Tall isolated Tree	Tree	00 02 02.367 N, 032 26 10.804 E	3819.774/ 54.823	RWY 17/35	NO
HUEN OB169 Tall isolated Tree	Tree	00 02 03.465 N, 032 25 56.969 E	3818.786/ 54.160	RWY 17/35	NO
HUEN OB170 Tall isolated Tree	Tree	00 02 02.417 N, 032 26 02.258 E	3822.510/ 51.608	RWY 17/35	NO
HUEN OB171 Tall isolated Tree	Tree	00 02 03.357 N, 032 26 02.828 E	3826.178 / 51.558	RWY 17/35	NO
HUEN OB172 Tall isolated Tree	Tree	00 02 03.625 N, 032 25 57.420 E	3816.998/ 51.384	RWY 17/35	NO
HUEN OB173 Tall isolated Tree	Tree	00 02 03.857 N, 032 25 59.608 E	3821.818/ 54.629	RWY 17/35	NO
HUEN OB174 Tall isolated Tree	Tree	00 02 05.043 N, 032 25 58.198 E	3821.608/ 54.252	RWY 17/35	NO
HUEN OB175 Tall isolated Tree	Tree	00 02 06.380 N, 032 25 43.582 E	3868.064/ 70.187	RWY 17/35	NO
HUEN OB176 Tall isolated Tree	Tree	00 02 06.023 N, 032 25 47.170 E	3828.337/ 49.469	RWY 17/35	NO
HUEN OB177 Tall isolated Tree	Tree	00 02 07.453 N, 032 25 34.067 E	3882.812/ 64.095	RWY 17/35	NO
HUEN OB178 Tall isolated Tree	Tree	00 02 07.304 N, 032 26 02.890 E	3813.776/ 49.891	RWY 17/35	NO
HUEN OB179 Tall isolated Tree	Tree	00 02 07.917 N, 032 25 56.240 E	3837.083/ 59.803	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB180 Tall isolated Tree	Tree	00 02 09.703 N, 032 25 19.874 E	3847.667/ 68.189	RWY 17/35	NO
HUEN OB181 Tall isolated Tree	Tree	00 02 09.513 N, 032 26 05.215 E	3791.339/ 51.447	RWY 17/35	NO
HUEN OB182 Tall isolated Tree	Tree	00 02 09.006 N, 032 26 07.215 E	3793.609/ 49.829	RWY 17/35	NO
HUEN OB183 Tall isolated Tree	Tree	00 02 11.313 N, 032 25 34.832 E	3885.692/ 52.034	RWY 17/35	NO
HUEN OB184 Tall isolated Tree	Tree	00 02 12.919 N, 032 26 13.173 E	3804.213/ 50.525	RWY 17/35	NO
HUEN OB185 Tall isolated Tree	Tree	00 02 13.321 N, 032 25 31.282 E	3852.077/ 51.037	RWY 17/35	NO
HUEN OB186 Tall isolated Tree	Tree	00 02 13.521 N, 032 26 13.342 E	3804.213/ 50.095	RWY 17/35	NO
HUEN OB187 Tall isolated Tree	Tree	00 02 15.704 N, 032 25 27.172 E	3850.312/ 62.657	RWY 17/35	NO
HUEN OB188 Tall isolated Tree	Tree	00 02 15.656 N, 032 25 53.322 E	3803.96/ 55.121	RWY 17/35	NO
HUEN OB189 Tall isolated Tree	Tree	00 02 15.312 N, 032 25 54.281 E	3799.514/ 51.463	RWY 17/35	NO
HUEN OB190 Tall isolated Tree	Tree	00 02 16.567 N, 032 25 27.796 E	3850.312/ 59.219	RWY 17/35	NO
HUEN OB191 Tall isolated Tree	Tree	00 02 16.675 N, 032 25 35.433 E	3855.331/ 53.179	RWY 17/35	NO
HUEN OB192 Tall isolated Tree	Tree	00 02 16.680 N, 032 25 45.072 E	3844.337/ 61.050	RWY 17/35	NO
HUEN OB193 Tall isolated Tree	Tree	00 02 17.368 N, 032 25 40.254 E	3839.305/ 51.184	RWY 17/35	NO
HUEN OB194 Tall isolated Tree	Tree	00 02 20.351 N, 032 25 35.004 E	3836.450/ 52.694	RWY 17/35	NO
HUEN OB195 Tall isolated Tree	Tree	00 02 53.632 N, 032 27 27.873 E	3864.203/ 58.500	RWY 17/35	NO
HUEN OB196 Tall isolated Tree	Tree	00 02 54.152 N, 032 27 29.022 E	3876.299/ 59.655	RWY 17/35	NO
HUEN OB197 Tall isolated Tree	Tree	00 02 56.896 N, 032 27 27.951 E	3861.056/ 61.024	RWY 17/35	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB198 Tall isolated Tree	Tree	00 03 01.309 N, 032 27 30.603 E	3865.502/ 57.132	RWY 17/35	NO
HUEN OB199 Tall isolated Tree	Tree	00 03 01.340 N, 032 27 31.602 E	3865.965/ 55.377	RWY 17/35	NO
HUEN OB200 Communication Mast	Antenna	00 01 56.809 N, 032 25 41.097 E	3858.563/ 91.168	RWY 17/35	YES/RED WHITE
HUEN OB201 Communication Mast	Antenna	00 02 10.086 N, 032 25 32.382 E	3920.971/ 119.931	RWY 17/35	YES/RED WHITE
<b>RWY 17/35 AREA 2C LINE OBSTACLES: NIL</b>					
<b>RWY 17/35 AREA 2C POLYGON OBSTACLES</b>					
HUEN OB223 UCAA Head Quarters	Building	00 02 23.451 N, 032 26 53.008 E	3874.777/ 51.047	RWY 17/35	NO
HUEN OB224 UCAA Head Quarters	Building	00 02 22.960 N, 032 26 53.189 E	3874.790/ 51.988	RWY 17/35	NO
HUEN OB225 Fuel Tank	Tank	00 02 34.884 N, 032 26 41.848 E	3855.174/ 51.608	RWY 17/35	NO/ RED
HUEN OB226 PTB	Building	00 02 41.670 N, 032 26 33.873 E	3851.969/ 52.215	RWY 17/35	NO/ RED
HUEN OB227 PTB	Building	00 02 39.512 N, 032 26 34.460 E	3870.374/ 71.161	RWY 17/35	NO/ RED
HUEN OB228 PTB	Building	00 02 40.401 N, 032 26 36.499 E	3864.206/ 64.029	RWY 17/35	NO/ RED
HUEN OB229 PTB	Building	00 02 39.526 N, 032 26 34.574 E	3849.475/ 50.791	RWY 17/35	NO/ RED
HUEN OB230 PTB	Building	00 02 42.201 N, 032 26 32.552 E	3851.969/ 50.187	RWY 17/35	NO/ RED
HUEN OB231 PTB	Building	00 02 42.787 N, 032 26 32.467 E	3851.969/ 50.187	RWY 17/35	NO/ RED
HUEN OB232 PTB	Building	00 02 43.287 N, 032 26 35.375 E	3868.537/ 69.452	RWY 17/35	NO/ RED
HUEN OB233 PTB	Building	00 02 44.237 N, 032 26 34.171 E	3866.240/ 64.078	RWY 17/35	NO/ RED

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB234 RADAR	Dome	00 01 55.943 N, 032 26 07.323 E	3878.707/ 98.015	RWY 17/35	YES/ RED
<b>RWY 12/30 AREA 2A POINT OBSTACLES: NIL</b>					
<b>RWY 12/30 AREA 2A LINE OBSTACLES: NIL</b>					
<b>RWY 12/30 AREA 2A POLYGON OBSTACLES: NIL</b>					
<b>RWY 12/30 AREA 2B POINT OBSTACLES</b>					
HUEN OB002 GLIDEPATH	Navaid	00 03 09.567 N, 032 26 07.910 E	3827.182/ 48.425	RWY 12/30	YES/ RED
HUEN OB491 DVOR DME NN Near Field Monitor	Antenna	00 03 05.959 N, 032 26 17.502 E	3803.707/ 20.764	RWY 12/30	YES/ RED
HUEN OB008 Tall isolated Tree	Tree	00 02 21.792 N, 032 27 31.974 E	3766.368/ 24.177	RWY 12/30	NO
HUEN OB009 Billboard	Sign	00 02 17.719 N, 032 27 31.721 E	3770.847/ 33.419	RWY 12/30	NO
HUEN OB010 Billboard	Sign	00 02 20.643 N, 032 27 32.792 E	3793.678/ 52.467	RWY 12/30	NO
HUEN OB006 AWOS 17	Installation Meteorological	00 03 10.895 N, 032 26 15.596 E	3816.329/ 30.823	RWY 12/30	YES/ RED
HUEN OB011 DVOR/DME NN Antenna	Navaid	00 03 11.124 N, 032 26 17.079 E	3813.317/ 27.270	RWY 12/30	NO/ RED
HUEN OB012 Pole	Pole	00 02 17.697 N, 032 27 31.696 E	3767.471/ 29.374	RWY 12/30	NO
HUEN OB013 Tall isolated Tree	Tree	00 02 16.231 N, 032 27 47.019 E	3794.521/ 49.826	RWY 12/30	NO
HUEN OB014 Tall isolated Tree	Tree	00 02 16.747 N, 032 27 32.220 E	3779.081/ 46.329	RWY 12/30	NO



<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB015 Tall isolated Tree	Tree	00 02 17.319 N, 032 27 34.556 E	3776.578/ 44.265	RWY 12/30	NO
HUEN OB016 Tall isolated Tree	Tree	00 02 18.060 N, 032 27 35.994 E	3776.217/ 44.144	RWY 12/30	NO
HUEN OB017 Tall isolated Tree	Tree	00 02 18.287 N, 032 27 39.313 E	3774.570/ 46.030	RWY 12/30	NO
HUEN OB018 Tall isolated Tree	Tree	00 02 18.056 N, 032 27 38.547 E	3775.318/ 46.739	RWY 12/30	NO
HUEN OB019 Tall isolated Tree	Tree	00 02 18.885 N, 032 27 34.832 E	3771.191/ 35.190	RWY 12/30	NO
HUEN OB020 DVOR Lightning Arrester	Navaid	00 03 10.391 N, 032 26 16.785 E	3817.723/ 21.322	RWY 12/30	YES/ NIL
HUEN OB021 DVOR Lightning Arrester	Navaid	00 03 10.846 N, 032 26 16.437 E	3817.684/ 21.283	RWY 12/30	YES/ NIL
HUEN OB022 DVOR Lightning Arrester	Navaid	00 03 10.745 N, 032 26 17.239 E	3817.608/ 21.207	RWY 12/30	YES/ NIL
HUEN OB023 DVOR Lightning Arrester	Navaid	00 03 11.200 N, 032 26 16.887 E	3815.597/ 19.295	RWY 12/30	YES/ NIL
<b>RWY 12/30 AREA 2B LINE OBSTACLES: NIL</b>					
<b>RWY 12/30 AREA 2B POLYGON OBSTACLES: NIL</b>					
<b>RWY 12/30 AREA 2C POINT OBSTACLES</b>					
HUEN OB038 Mast	Antenna	00 03 08.453 N, 032 27 20.013 E	3889.757/ 149.370	RWY 1230	YES/ RED
HUEN OB039 Billboard	sign	00 02 24.011 N, 032 26 56.240 E	3849.934/ 54.170	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB040 Flood Light	Electrical exterior light	00 02 15.488 N, 032 26 41.056 E	3982.615/ 62.730	RWY 1230	YES/ RED
HUEN OB041 Flood light	Electrical exterior light	00 02 19.564 N, 032 27 13.524 E	3832.257/ 83.665	RWY 1230	YES/ RED
HUEN OB042 Flood light	Electrical exterior light	00 02 20.881 N, 032 27 11.451 E	3837.818/ 86.345	RWY 1230	YES/ RED
HUEN OB043 Flood light	Electrical exterior light	00 02 23.469 N, 032 27 07.319 E	3841.893/ 87.195	RWY 1230	YES/ RED
HUEN OB044 Flood light	Electrical exterior light	00 02 24.763 N, 032 27 05.277 E	3843.488/ 86.503	RWY 1230	YES/ RED
HUEN OB045 Flood light	Electrical exterior light	00 02 42.935 N, 032 27 12.198 E	3842.645/ 83.107	RWY 1230	YES/ RED
HUEN OB046 Flood light	Electrical exterior light	00 02 43.048 N, 032 27 17.405 E	3850.197/ 88.163	RWY 1230	YES/ RED
HUEN OB047 Flood light	Electrical exterior light	00 02 47.114 N, 032 26 31.914 E	3860.371/ 61.762	RWY 1230	YES/ RED
HUEN OB048 Flood light	Electrical exterior light	00 02 42.068 N, 032 26 36.123 E	3862.464/ 64.009	RWY 1230	YES/ RED
HUEN OB049 Flood light	Electrical exterior light	00 02 44.491 N, 032 26 35.774 E	3867.031/ 68.077	RWY 1230	YES/ RED
HUEN OB050 Flood light	Electrical exterior light	00 02 38.656 N, 032 26 41.500 E	3867.008/ 62.887	RWY 1230	YES/ RED
HUEN OB051 Flood light	Electrical exterior light	00 01 51.339 N, 032 26 37.464 E	3864.282/ 82.316	RWY 1230	YES/ RED
HUEN OB052 Flood light	Electrical exterior light	00 01 56.975 N, 032 26 36.665 E	3862.451/ 81.631	RWY 1230	YES/ RED
HUEN OB053 Flood light	Electrical exterior light	00 01 54.396 N, 032 26 37.026 E	3864.282/ 82.218	RWY 1230	YES/ RED
HUEN OB054 Flood light	Electrical exterior light	00 01 46.819 N, 032 26 38.081 E	3863.409/ 81.496	RWY 1230	YES/ RED
HUEN OB055 Flood light	Electrical exterior light	00 01 48.754 N, 032 26 37.811 E	3864.259/ 82.680	RWY 1230	YES/ RED
HUEN OB056 Flood light	Electrical exterior light	00 02 37.765 N, 032 26 39.693 E	3864.150/ 66.437	RWY 1230	YES/ RED

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB057 Flood light	Electrical exterior light	00 02 37.563 N, 032 26 38.229 E	3864.078/ 66.404	RWY 1230	YES/ RED
HUEN OB058 Flood light	Electrical exterior light	00 02 37.372 N, 032 26 36.781 E	3865.955/ 67.815	RWY 1230	YES/ RED
HUEN OB059 Mast	Antenna	00 02 21.949 N, 032 26 59.173 E	3860.673/ 97.464	RWY 1230	YES/ RED
HUEN OB060 Flood light	Electrical exterior light	00 02 41.770 N, 032 26 39.132 E	3861.034/ 63.301	RWY 1230	YES/ RED
HUEN OB061 Flood light	Electrical exterior light	00 02 43.045 N, 032 27 15.154 E	3849.259/ 88.878	RWY 1230	YES/ RED
HUEN OB062 Flood light	Electrical exterior light	00 02 34.451 N, 032 26 33.698 E	3869.882/ 71.342	RWY 1230	YES/ RED
HUEN OB063 Flood light	Electrical exterior light	00 02 22.161 N, 032 27 09.384 E	3836.896/ 84.380	RWY 1230	YES/ RED
HUEN OB064 Tall isolated Tree	Tree	00 02 21.530 N, 032 26 54.190 E	3856.942/ 49.419	RWY 1230	NO
HUEN OB065 Tall isolated Tree	Tree	00 02 21.694 N, 032 26 53.873 E	3866.949/ 55.850	RWY 1230	NO
HUEN OB066 Tall isolated Tree	Tree	00 02 33.892 N, 032 27 30.928 E	3828.698/ 61.605	RWY 1230	NO
HUEN OB067 Tall isolated Tree	Tree	00 02 34.394 N, 032 27 33.795 E	3861.112/ 68.051	RWY 1230	NO
HUEN OB068 Tall isolated Tree	Tree	00 02 35.192 N, 032 27 33.436 E	3841.158/ 65.856	RWY 1230	NO
HUEN OB069 Tall isolated Tree	Tree	00 02 35.214 N, 032 27 34.936 E	3855.026/ 53.560	RWY 1230	NO
HUEN OB070 Tall isolated Tree	Tree	00 02 36.546 N, 032 26 38.728 E	3864.200/ 65.213	RWY 1230	NO
HUEN OB071 Tall isolated Tree	Tree	00 02 39.638 N, 032 27 32.366 E	3826.650/ 54.833	RWY 1230	NO
HUEN OB072 Tall isolated Tree	Tree	00 02 42.416 N, 032 26 40.317 E	3855.722/ 57.267	RWY 1230	NO
HUEN OB073 Tall isolated Tree	Tree	00 02 43.167 N, 032 27 11.927 E	3813.770/ 53.862	RWY 1230	NO
HUEN OB074 Tall isolated Tree	Tree	00 02 44.882 N, 032 27 31.429 E	3838.215/ 51.447	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB075 Tall isolated Tree	Tree	00 02 46.432 N, 032 26 36.519 E	3849.846/ 51.844	RWY 1230	NO
HUEN OB076 Tall isolated Tree	Tree	00 02 47.248 N, 032 26 32.950 E	3847.795/ 50.410	RWY 1230	NO
HUEN OB077 Tall isolated Tree	Tree	00 02 47.347 N, 032 26 33.337 E	3856.329/ 58.901	RWY 1230	NO
HUEN OB078 Billboard	Sign	00 02 15.270 N, 032 26 59.953 E	3823.261/ 56.270	RWY 1230	NO
HUEN OB079 Billboard	Sign	00 02 38.163 N, 032 27 35.615 E	3848.622/ 53.042	RWY 1230	NO
HUEN OB080 Mast	Antenna	00 01 59.168 N, 032 26 05.283 E	3885.807/ 101.161	RWY 1230	YES/ RED
HUEN OB081 Navaid	Antenna	00 02 16.247 N, 032 26 40.814 E	3982.240/ 60.788	RWY 1230	YES/ NIL
HUEN OB082 RADAR	Dome	00 02 16.476 N, 032 26 41.239 E	3992.880/ 72.264	RWY 1230	YES/ RED
HUEN OB083 VHF Antenna	Antenna	00 02 17.389 N, 032 26 40.513 E	3985.269/ 62.828	RWY 1230	YES/ RED
HUEN OB084 Antenna	Antennae	00 02 18.921 N, 032 26 42.020 E	3964.009/ 52.001	RWY 1230	NO
HUEN OB085 Mast	Antenna	00 02 20.903 N, 032 27 04.095 E	3837.533/ 80.348	RWY 1230	YES/ RED
HUEN OB086 Tall isolated Tree	Tree	00 01 45.470 N, 032 26 48.499 E	3830.135/ 67.982	RWY 1230	NO
HUEN OB087 Tall isolated Tree	Tree	00 02 07.353 N, 032 27 10.453 E	3794.075/ 54.485	RWY 1230	NO
HUEN OB088 Tall isolated Tree	Tree	00 02 09.038 N, 032 27 02.419 E	3802.953/ 55.020	RWY 1230	NO
HUEN OB089 Tall isolated Tree	Tree	00 02 10.719 N, 032 27 22.385 E	3780.830/ 50.187	RWY 1230	NO
HUEN OB090 tall isolated Tree	Tree	00 02 11.769 N, 032 27 03.146 E	3802.411/ 50.387	RWY 1230	NO
HUEN OB091 tall isolated Tree	Tree	00 02 17.825 N, 032 27 45.319 E	3814.839/ 65.738	RWY 1230	NO
HUEN OB092 tall isolated Tree	Tree	00 02 17.670 N, 032 27 46.947 E	3810.443/ 53.845	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB093 tall isolated Tree	Tree	00 02 19.981 N, 032 27 48.596 E	3821.545/ 53.451	RWY 1230	NO
HUEN OB094 tall isolated Tree	Tree	00 02 23.331 N, 032 27 47.698 E	3824.160/ 49.281	RWY 1230	NO
HUEN OB095 tall isolated Tree	Tree	00 02 23.446 N, 032 27 49.732 E	3823.819/ 57.785	RWY 1230	NO
HUEN OB096 tall isolated Tree	Tree	00 02 38.971 N, 032 27 32.340 E	3827.244/ 56.378	RWY 1230	NO
HUEN OB097 tall isolated Tree	Tree	00 03 01.595 N, 032 27 29.036 E	3851.686/ 52.740	RWY 1230	NO
HUEN OB098 tall isolated Tree	Tree	00 03 06.002 N, 032 27 32.838 E	3860.217/ 58.071	RWY 1230	NO
HUEN OB099 tall isolated Tree	Tree	00 02 54.504 N, 032 27 25.412 E	3838.173/ 53.369	RWY 1230	NO
HUEN OB100 tall isolated Tree	Tree	00 02 55.724 N, 032 27 25.460 E	3847.694/ 64.869	RWY 1230	NO
HUEN OB101 tall isolated Tree	Tree	00 02 55.184 N, 032 27 26.706 E	3842.864/ 53.143	RWY 1230	NO
HUEN OB102 tall isolated Tree	Tree	00 02 56.746 N, 032 27 24.580 E	3828.501/ 49.780	RWY 1230	NO
HUEN OB103 tall isolated Tree	Tree	00 02 56.673 N, 032 27 25.942 E	3836.634/ 52.752	RWY 1230	NO
HUEN OB104 tall isolated Tree	Tree	00 02 57.105 N, 032 27 26.188 E	3837.415/ 53.560	RWY 1230	NO
HUEN OB105 tall isolated Tree	Tree	00 02 57.416 N, 032 27 28.144 E	3847.589/ 50.794	RWY 1230	NO
HUEN OB106 tall isolated Tree	Tree	00 02 57.976 N, 032 27 26.268 E	3838.264/ 51.991	RWY 1230	NO
HUEN OB107 tall isolated Tree	Tree	00 02 58.590 N, 032 27 27.001 E	3840.466/ 51.539	RWY 1230	NO
HUEN OB108 tall isolated Tree	Tree	00 02 59.504 N, 032 27 26.386 E	3843.048/ 57.585	RWY 1230	NO
HUEN OB109 tall isolated Tree	Tree	00 03 02.095 N, 032 27 32.076 E	3866.591/ 54.662	RWY 1230	NO
HUEN OB110 Bill Board	Sign	00 02 11.386 N, 032 27 06.442 E	3809.016/ 50.089	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB111 Bill Board	Sign	00 02 13.029 N, 032 27 03.164 E	3814.872/ 49.475	RWY 1230	NO
<b>RWY 12/30 AREA 2C POLYGON OBSTACLES</b>					
HUEN OB202 Vegetation	Vegetation	00 02 48.822 N, 032 27 31.158 E	3890.387/ 59.186	RWY 1230	NO
HUEN OB203 Old Tower	Control Tower	00 02 43.119 N, 032 27 11.635 E	3817.356/ 57.283	RWY 1230	NO/ RED
HUEN OB204 Old Tower	Control Tower	00 02 43.507 N, 032 27 11.641 E	3811.972/ 51.759	RWY 1230	NO/ RED
HUEN OB205 United Nations	Building	00 03 10.153 N, 032 27 22.788 E	3822.179/ 49.577	RWY 1230	NO
HUEN OB206 Military Hangar	Building	00 02 34.952 N, 032 27 27.118 E	3814.797/ 52.402	RWY 1230	NO
HUEN OB207 Military Hangar	Building	00 02 34.944 N, 032 27 28.354 E	3814.633/ 51.345	RWY 1230	NO
HUEN OB208 Fuel Tank	Tank	00 02 34.884 N, 032 26 41.848 E	3855.174/ 51.608	RWY 1230	NO/ RED
HUEN OB209 PTB	Building	00 02 41.670 N, 032 26 33.873 E	3851.969/ 52.215	RWY 1230	NO/ RED
HUEN OB210 PTB	Building	00 02 39.512 N, 032 26 34.460 E	3870.374/ 71.161	RWY 1230	NO/ RED
HUEN OB211 PTB	Building	00 02 40.401 N 032 26 36.499 E	3864.206/ 64.029	RWY 1230	NO/ RED
HUEN OB212 PTB	Building	00 02 39.526 N ,032 26 34.574 E	3849.475/ 50.791	RWY 1230	NO/ RED
HUEN OB213 PTB	Building	00 02 42.201 N, 032 26 32.552 E	3851.969/ 50.187	RWY 1230	NO/ RED
HUEN OB214 PTB	Building	00 02 42.787 N, 032 26 32.467 E	3851.969/ 50.187	RWY 1230	NO/ RED
HUEN OB215 PTB	Building	00 02 43.287 N, 032 26 35.375 E	3868.537/ 69.452	RWY 1230	NO/ RED
HUEN OB216 PTB	Building	00 02 44.237 N, 032 26 34.171 E	3866.240/ 64.078	RWY 1230	NO/ RED
HUEN OB217 RADAR	Dome	00 01 55.943 N, 032 26 07.323 E	3878.707/ 98.015	RWY 1230	NO/ RED

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>	
HUEN OB218 Building	Building	00 02 07.964 N, 032 27 18.307 E	3783.297/ 51.351	RWY 1230	NO	
HUEN OB219 Building	Building	00 02 07.837 N, 032 27 17.604 E	3783.386/ 51.516	RWY 1230	NO	
HUEN OB220 Building	Building	00 02 07.963 N, 032 27 18.853 E	3783.297/ 53.001	RWY 1230	NO	
HUEN OB221 Building	Building	00 02 20.099 N, 032 27 51.842 E	3816.257/ 54.350	RWY 1230	NO	
HUEN OB222 Building	Building	00 02 20.089 N, 032 27 51.795 E	3826.214/ 64.365	RWY 1230	NO	
<b>RWY 12/30 AREA 2C LINE OBSTACLES: NIL</b>						
<b>Area 3</b>						
<b>RWY 17/35 and RWY 12/30 AREA 3 POINT OBSTACLES</b>						
HUEN OB234 RB35A1	Installation Air Side	Signage	00 01 20.721 N, 32 26 30.107 E	3749.081/4.265	RWY 1735	YES/ NIL
HUEN OB235YB-BA1	Installation Air Side	Signage	00 01 27.877 N, 32 26 33.268 E	3754.036/4.265	RWY 1735	YES/ NIL
HUEN OB236 Installation Sign Air Side	Installation Air Side	Signage	00 01 38.682 N, 32 26 29.170 E	3763.337/4.938	RWY 1735	YES/ NIL
HUEN OB237 RB-35-A2	Installation Air Side	Signage	00 01 41.852 N, 32 26 26.571 E	3762.139/4.298	RWY 1735	YES/ NIL
HUEN OB238 RB35A2	Installation Air Side	Signage	00 01 43.315 N, 32 26 28.403 E	3766.011/4.272	RWY 1735	YES/ NIL
HUEN OB239 CARGO	Installation Air Side	Signage	00 01 48.812 N, 32 26 28.466 E	3774.967/4.265	RWY 1735	YES/ NIL

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB240 B-C1-B	Installation Signage Air Side	00 01 50.655 N, 32 26 28.203 E	3779.495/4.265	RWY 1735	YES/ NIL
HUEN OB240 CARGO	Installation Signage Air Side	00 01 53.358 N, 32 26 30.025 E	3781.004/4.265	RWY 1735	YES/ NIL
HUEN OB242	Electric Lights	00 01 50.435 N, 32 26 40.260 E	3816.581/35.597	RWY 1735	NO
HUEN OB243	CCTV Camera	00 01 54.986 N, 32 26 30.320 E	3794.270/17.618	RWY 1735	NO
HUEN OB244 STOP Sign	Installation Signage Air Side	00 02 27.519 N, 32 26 19.936 E	3773.228/6.955	RWY 1735	YES/ NIL
HUEN OB245 Installation Sign Air Side	Installation Signage Air Side	00 02 31.269 N, 32 26 22.570 E	3791.214/2.625	RWY 1735	YES/ NIL
HUEN OB246 BY-B-C3	Installation Signage Air Side	00 02 53.108 N, 32 26 19.539 E	3791.765/4.265	RWY 1735	YES/ NIL
HUEN OB247	Installation Signage Air Side	00 02 57.249 N, 32 26 20.936 E	3787.435/2.657	RWY 1735	NO
HUEN OB248	Electric Lights	00 02 46.012 N, 32 26 25.138 E	3838.360/45.732	RWY 1735	NO
HUEN OB249 FUEL_HYDRANT	Installation	00 02 47.564 N, 32 26 31.739 E	3805.742/7.136	RWY 1735	NO
HUEN OB250 FUEL_HYDRANT	Installation	00 02 49.762 N, 32 26 31.446 E	3804.669/7.218	RWY 1735	NO
HUEN OB251 FUEL_HYDRANT	Installation	00 02 51.609 N, 32 26 31.187 E	3801.873/7.218	RWY 1735	NO
HUEN OB252 A3-17	Installation Signage Air Side	00 03 00.888 N, 32 26 16.168 E	3785.915/4.265	RWY 1735	YES/ NIL



<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB253	RWY Edge Lights	00 02 56.900 N, 32 26 12.873 E	3777.700/0.984	RWY 1735	NO
HUEN OB254	RWY Edge Lights	00 02 58.836 N, 32 26 12.603 E	3779.029/0.984	RWY 1735	NO
HUEN OB255	RWY TouchdownZone Lights	00 03 00.763 N, 32 26 12.333 E	3780.286/0.984	RWY 1735	NO
HUEN OB256 A3-17	Installation Signage Air Side	00 03 03.039 N, 32 26 15.940 E	3785.623/4.075	RWY 1735	YES/ NIL
HUEN OB257	TWY_EDGE_LIGHT	00 03 04.477 N, 32 26 13.605 E	3782.713/0.984	RWY 1735	NO
HUEN OB258	RWY TouchdownZone Lights	00 03 06.574 N, 32 26 11.528 E	3782.448/0.984	RWY 1735	NO
HUEN OB259	RWY TouchdownZone Lights	00 03 04.843 N, 32 26 13.303 E	3782.796/0.984	RWY 1735	NO
HUEN OB260	RWY TouchdownZone Lights	00 03 04.637 N, 32 26 11.796 E	3781.900/0.984	RWY 1735	NO
HUEN OB261	RWY_END_LIGHTS	00 03 20.281 N, 32 26 10.765 E	3781.631/1.230	RWY 1735	NO
HUEN OB262	RWY_END_LIGHTS	00 03 20.313 N, 32 26 10.958 E	3781.723/1.230	RWY 1735	NO
HUEN OB263 RWY_END_LIGHTS		00 03 20.340 N, 32 26 11.151 E	3781.772/1.230	RWY 1735	NO
HUEN OB264 Installation CCTV	Installation Security	00 02 20.133 N, 32 26 26.535 E	3797.999/8.133	RWY 1735	NO
HUEN OB265	CCTV Camera	00 02 18.846 N, 32 26 27.069 E	3807.884/17.618	RWY 1735	NO
HUEN OB266 Installation CCTV	Installation Security	00 02 00.779 N, 32 26 29.229 E	3791.017/7.218	RWY 1735	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB267	CCTV Camera	00 02 02.990 N, 32 26 29.238 E	3804.128/17.618	RWY 1735	NO
HUEN OB268	RWY Edge Lights	00 01 57.147 N, 32 26 22.704 E	3764.249/ 0.984	RWY 1735	NO
HUEN OB269 Installation CCTV	Installation Security	00 02 13.663 N, 32 26 27.420 E	3797.028/8.327	RWY 1735	NO
HUEN OB270	Electric Lights	00 02 19.564 N, 32 27 13.524 E	3832.257/83.665	RWY 1230	NO
HUEN OB271	Electric Lights	00 02 20.881 N, 32 27 11.451 E	3837.818/86.345	RWY 1230	NO
HUEN OB272	Electric Lights	00 02 19.560 N, 32 27 24.061 E	3782.149/34.088	RWY 1230	NO
HUEN OB273	Electric Lights	00 02 22.161 N, 32 27 09.384 E	3836.896/84.380	RWY 1230	NO
HUEN OB274	CCTV Camera	00 02 10.849 N, 32 26 28.141 E	3805.776/17.618	RWY 1735	NO
HUEN OB275 Installation CCTV	Installation Security	00 02 26.707 N, 32 26 25.485 E	3798.724/7.257	RWY 1735	NO
HUEN OB276 Electric Lights	Electric Lights	00 01 56.783 N, 32 26 30.557 E	3792.497/12.887	RWY 1735	NO
HUEN OB277	CCTV Camera	00 01 58.187 N, 32 26 35.293 E	3811.484/29.921	RWY 1735	NO
HUEN OB278	Lamp Post	00 01 58.400 N, 32 26 33.562 E	3810.621/29.921	RWY 1735	NO
HUEN OB279	Lamp Post	00 01 58.292 N, 32 26 34.430 E	3810.865/29.921	RWY 1735	NO
HUEN OB280	Lamp Post	00 01 58.080 N, 32 26 36.161 E	3811.444/29.921	RWY 1735	NO
HUEN OB281	Lamp Post	00 01 57.725 N, 32 26 36.942 E	3811.978/29.921	RWY 1735	NO
HUEN OB282	Pole	00 02 41.578 N, 32 27 31.631 E	3785.256/16.457	RWY 1230	NO
HUEN OB283	Pole	00 02 42.784 N, 32 27 30.669 E	3780.331/12.014	RWY 1230	NO
HUEN OB284	Pillar	00 02 44.327 N, 32 27 12.098 E	3781.027/5.620	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB285	Pillar	00 02 44.292 N, 32 27 15.176 E	3781.053/5.135	RWY 1230	NO
HUEN OB286	Installation Flagpost	00 02 45.770 N, 32 26 32.039 E	3818.701/20.308	RWY 1735	NO
HUEN OB287	Installation Flagpost	00 02 45.673 N, 32 26 32.082 E	3819.009/20.295	RWY 1735	NO
HUEN OB288	Installation Flagpost	00 02 46.636 N, 32 26 31.938 E	3808.708/10.443	RWY 1735	NO
HUEN OB289	Installation Flagpost	00 02 46.964 N, 32 26 31.752 E	3809.003/10.443	RWY 1735	NO
HUEN OB290	Installation CCTV Security	00 02 500.34 N, 32 27 21.471 E	3787.730/19.321	RWY 1230	NO
HUEN OB291	Electric Lights	00 02 37.779 N, 32 26 33.305 E	3867.280/48.793	RWY 1735	NO
HUEN OB292	Electric Lights	00 02 42.935 N, 32 27 12.198 E	3842.645/ 83.107	RWY 1230	NO
HUEN OB293	Electric Lights	00 02 43.048 N, 32 27 17.405 E	3850.197/88.163	RWY 1230	NO
HUEN OB294	Electric Lights	00 02 47.114 N, 32 26 31.914 E	3860.371/61.762	RWY 1735	NO
HUEN OB295	Electric Lights	00 02 47.695 N, 32 27 22.707 E	3792.041/23.284	RWY 1230	NO
HUEN OB296 Mast	Installation	00 02 50.821 N, 32 27 22.916 E	3800.089/30.735	RWY 1230	NO
HUEN OB297	Electric Lights	00 02 48.792 N, 32 27 17.197 E	3786.680/23.077	RWY 1230	NO
HUEN OB298	Electric Lights	00 02 43.045 N, 32 27 15.154 E	3849.259/88.878	RWY 1230	NO
HUEN OB299	Electric Lights	00 02 34.451 N, 32 26 33.698 E	3869.882/71.342	RWY 1735	NO
HUEN OB300	Electric Lights	00 02 43.171 N, 32 27 15.517 E	3780.692/21.706	RWY 1230	NO
HUEN OB301	Electric Lights	00 02 43.665 N, 32 27 15.521 E	3780.696/20.285	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB302	Electric Lights	00 02 44.277 N, 32 27 15.529 E	3780.75120.331	RWY 1230	NO
HUEN OB303	Electric Lights	00 02 48.040 N, 32 27 17.144 E	3787.507/24.862	RWY 1230	NO
HUEN OB304	Installation Flagpost	00 02 42.881 N, 32 27 12.253 E	3773.724/14.488	RWY 1230	NO
HUEN OB305	Installation Flagpost	00 02 42.880 N, 32 27 12.483 E	3773.888/14.482	RWY 1230	NO
HUEN OB306	Installation Flagpost	00 02 42.961 N, 32 27 12.252 E	3773.724/14.475	RWY 1230	NO
HUEN OB307	Installation Flagpost	00 02 42.969 N, 32 27 12.487 E	3773.789/14.478	RWY 1230	NO
HUEN OB308	Installation Flagpost	00 02 42.972 N, 32 27 12.755 E	3773.855/14.485	RWY 1230	NO
HUEN OB309	Installation Flagpost	00 02 42.882 N, 32 27 12.716 E	3773.757/14.488	RWY 1230	NO
HUEN OB310	Installation Flagpost	00 02 42.725 N, 32 27 12.879 E	3773.789/14.459	RWY 1230	NO
HUEN OB311	Installation Flagpost	00 02 42.806 N, 32 27 12.922 E	3773.888/14.469	RWY 1230	NO
HUEN OB312	Installation Flagpost	00 02 42.718 N, 32 27 13.256 E	3773.789/14.465	RWY 1230	NO
HUEN OB313	Installation Flagpost	00 02 42.756 N, 32 27 13.262 E	3773.855/14.469	RWY 1230	NO
HUEN OB314	Installation Flagpost	00 02 42.751 N, 32 27 13.535 E	3774.019/ 14.459	RWY 1230	NO
HUEN OB315	Installation Flagpost	00 02 42.712 N, 32 27 13.530 E	3773.855/ 14.478	RWY 1230	NO
HUEN OB316	Installation Flagpost	00 02 42.716 N, 32 27 13.704 E	3774.019/14.485	RWY 1230	NO
HUEN OB317	Installation Flagpost	00 02 42.749 N, 32 27 13.701 E	3774.117/14.475	RWY 1230	NO
HUEN OB318	Installation Flagpost	00 02 42.710 N, 32 27 14.020 E	3774.052/14.482	RWY 1230	NO
HUEN OB319	Installation Flagpost	00 02 42.749 N, 32 27 14.012 E	3774.117/14.482	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB320	Installation Flagpost	00 02 42.789 N, 32 27 14.165 E	3774.019/14.475	RWY 1230	NO
HUEN OB321	Installation Flagpost	00 02 42.786 N, 32 27 14.244 E	3774.150/14.478	RWY 1230	NO
HUEN OB322	Installation Flagpost	00 02 42.826 N, 32 27 14.444 E	3774.249/14.469	RWY 1230	NO
HUEN OB323	Installation Flagpost	00 02 42.784 N, 32 27 14.460 E	3774.183/14.482	RWY 1230	NO
HUEN OB324	Installation Flagpost	00 02 42.700 N, 32 27 14.386 E	3781.946/22.133	RWY 1230	NO
HUEN OB325	Installation Flagpost	00 02 42.752 N, 32 27 14.370 E	3774.150/14.475	RWY 1230	NO
HUEN OB326	Installation Flagpost	00 02 43.159 N, 32 27 30.776 E	3803.268/34.797	RWY 1230	NO
HUEN OB327	Installation Flagpost	00 02 46.982 N, 32 26 31.897 E	3808.576/10.430	RWY 1735	NO
HUEN OB328	Installation Flagpost	00 02 47.030 N, 32 26 31.890 E	3808.871/10.440	RWY 1735	NO
HUEN OB329	Installation Flagpost	00 02 46.695 N, 32 26 31.934 E	3808.675/10.443	RWY 1735	NO
HUEN OB330	Installation Flagpost	00 02 47.065 N, 32 26 31.740 E	3808.871/10.443	RWY 1735	NO
HUEN OB331	Installation Flagpost	00 02 46.920 N, 32 26 31.759 E	3809.199/10.459	RWY 1735	NO
HUEN OB332	Installation Flagpost	00 02 46.881 N, 32 26 31.768 E	3809.134/10.446	RWY 1735	NO
HUEN OB333	Installation Flagpost	00 02 46.837 N, 32 26 31.774 E	3809.429/10.456	RWY 1735	NO
HUEN OB334	Installation Flagpost	00 02 46.651 N, 32 26 31.799 E	3809.134/10.443	RWY 1735	NO
HUEN OB335	Installation Flagpost	00 02 46.604 N, 32 26 31.807 E	3808.904/10.443	RWY 1735	NO
HUEN OB336	Installation Flagpost	00 02 45.432 N, 32 26 31.967 E	3819.009/20.279	RWY 1735	NO
HUEN OB337	Installation Flagpost	00 02 44.846 N, 32 26 32.050 E	3818.911/20.279	RWY 1735	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB338	Installation Flagpost	00 02 44.654 N, 32 26 32.077 E	3818.911/20.282	RWY 1735	NO
HUEN OB339	Installation Flagpost	00 02 44.612 N, 32 26 32.082 E	3818.780/20.282	RWY 1735	NO
HUEN OB340	Installation Flagpost	00 02 44.654 N, 32 26 32.221 E	3819.140/20.305	RWY 1735	NO
HUEN OB341	Installation Flagpost	00 02 44.701 N, 32 26 32.216 E	3819.075/20.285	RWY 1735	NO
HUEN OB342	Installation Flagpost	00 02 44.944 N, 32 26 32.180 E	3818.488/20.079	RWY 1735	NO
HUEN OB343	Installation Flagpost	00 02 44.478 N, 32 27 29.890 E	3808.576/39.921	RWY 1230	NO
HUEN OB344	Installation Flagpost	00 02 45.620 N, 32 26 32.088 E	3818.602/19.987	RWY 1735	NO
HUEN OB345 FUEL_HYDRANT	Installation	00 02 35.468 N, 32 26 33.438 E	3803.826/7.218	RWY 1735	NO
HUEN OB346	Tree	00 02 37.202 N, 32 27 31.404 E	3789.055/22.028	RWY 1230	NO
HUEN OB347	Tree	00 02 38.013 N, 32 27 31.234 E	3785.768/19.652	RWY 1230	NO
HUEN OB348	Tree	00 02 39.562 N, 32 27 31.688 E	3794.157/25.686	RWY 1230	NO
HUEN OB349	Tree	00 02 43.155 N, 32 27 10.854 E	3771.900/12.228	RWY 1230	NO
HUEN OB350	Tree	00 02 43.167 N, 32 27 11.927 E	3813.770/53.862	RWY 1230	NO
HUEN OB351	Tree	00 02 42.961 N, 32 27 15.483 E	3787.369/26.775	RWY 1230	NO
HUEN OB352	Tree	00 02 43.011 N, 32 27 31.294 E	3801.283/28.064	RWY 1230	NO
HUEN OB353	Tree	00 02 43.333 N, 32 27 07.077 E	3785.840/25.266	RWY 1230	NO
HUEN OB354	Tree	00 02 43.503 N, 32 27 15.501 E	3793.875/33.557	RWY 1230	NO
HUEN OB355	Tree	00 02 43.834 N, 32 27 06.615 E	3779.272/18.291	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB356	Tree	00 02 44.179 N, 32 27 15.495 E	3796.283/35.850	RWY 1230	NO
HUEN OB357	Tree	00 02 45.720 N, 32 27 16.751 E	3776.178/14.285	RWY 1230	NO
HUEN OB358	Tree	00 02 45.739 N, 32 27 16.986 E	3772.041/9.839	RWY 1230	NO
HUEN OB359	Tree	00 02 47.248 N, 32 26 32.950 E	3847.795/50.410	RWY 1735	NO
HUEN OB360	Tree	00 02 48.087 N, 32 27 16.499 E	3779.219/15.692	RWY 1230	NO
HUEN OB361	Tree	00 02 48.109 N, 32 27 17.116 E	3779.219/15.387	RWY 1230	NO
HUEN OB362	Tree	00 02 48.489 N, 32 27 16.753 E	3779.219/15.823	RWY 1230	NO
HUEN OB363	Electric Lights	00 02 43.849 N, 32 27 22.879 E	3786.893/19.377	RWY 1230	NO
HUEN OB364	Electric Lights	00 02 43.868 N, 32 27 23.711 E	3786.460/17.930	RWY 1230	NO
HUEN OB365	Electric Lights	00 02 44.221 N, 32 27 24.704 E	3798.497/27.815	RWY 1230	NO
HUEN OB366	Electric Lights	00 02 44.176 N, 32 27 25.211 E	3786.460/19.092	RWY 1230	NO
HUEN OB367	Electric Lights	00 02 44.562 N, 32 27 22.857 E	3785.984/18.225	RWY 1230	NO
HUEN OB368	Electric Lights	00 02 44.745 N, 32 27 23.621 E	3788.770/17.438	RWY 1230	NO
HUEN OB369	Electric Lights	00 02 46.504 N, 32 27 22.840 E	3785.994/18.235	RWY 1230	NO
HUEN OB370	Electric Lights	00 02 47.503 N, 32 27 22.822 E	3787.569/19.272	RWY 1230	NO
HUEN OB371	Electric Lights	00 02 49.752 N, 32 27 22.191 E	3792.825/23.806	RWY 1230	NO
HUEN OB372	Electric Lights	00 02 51.037 N, 32 27 20.444 E	3790.870/22.527	RWY 1230	NO
HUEN OB373	Electric Lights	00 02 51.024 N, 32 27 20.484 E	3785.007/16.359	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB374 Antennae	Installation	00 02 32.689 N, 32 26 34.868 E	3840.125/10.302	RWY 1735	NO
HUEN OB375 Antennae	Installation	00 02 32.838 N, 32 26 34.580 E	3855.282/25.459	RWY 1735	NO
HUEN OB376 Antennae	Installation	00 02 33.212 N, 32 26 34.294 E	3842.487/12.664	RWY 1735	NO
HUEN OB377 Antennae	Installation	00 02 34.184 N, 32 26 34.165 E	3834.810/4.987	RWY 1735	NO
HUEN OB378 Antennae	Installation	00 02 35.649 N, 32 27 27.151 E	3822.179/7.382	RWY 1230	NO
HUEN OB379 Antennae	Installation	00 02 39.403 N, 32 26 32.927 E	3868.668/17.306	RWY 1735	NO
HUEN OB380 Antennae	Installation	00 02 40.145 N, 32 26 32.918 E	3876.280/12.687	RWY 1735	NO
HUEN OB381 Antennae	Installation	00 02 40.264 N, 32 26 32.967 E	3877.592/26.230	RWY 1735	NO
HUEN OB382 Antennae	Installation	00 02 43.251 N, 32 27 11.513 E	3817.389/6.467	RWY 1230	NO
HUEN OB383 Antennae	Installation	00 02 43.633 N, 32 26 32.522 E	3879.987/ 28.625	RWY 1735	NO
HUEN OB384 Antennae	Installation	00 02 43.606 N, 32 26 33.093 E	3880.414/ 11.877	RWY 1735	NO
HUEN OB385 Antennae	Installation	00 02 43.610 N, 32 27 11.554 E	3815.026/3.054	RWY 1230	NO
HUEN OB386 Antennae	Installation	00 02 43.821 N, 32 26 32.249 E	3869.554/18.192	RWY 1735	NO
HUEN OB387 Antennae	Installation	00 02 43.837 N, 32 26 32.355 E	3869.652/18.291	RWY 1735	NO
HUEN OB388 Antennae	Installation	00 02 43.941 N, 32 26 32.991 E	3869.751/18.389	RWY 1735	NO
HUEN OB389 Antennae	Installation	00 02 44.235 N, 32 27 18.375 E	3813.156/16.440	RWY 1230	NO
HUEN OB390Antennae	Installation	00 02 44.510 N, 32 26 32.415 E	3859.875/27.051	RWY 1735	NO
HUEN OB391 FUEL_HYDRANT	Installation	00 02 44.630 N, 32 26 32.091 E	3802.848/7.218	RWY 1735	NO



<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB392 RB35A1	Signage Air Side	00 01 24.286 N, 32 26 29.613 E	3750.345/4.281	RWY 1735	YES/ NIL
HUEN OB393	Electric Lights	00 02 17.975 N, 32 27 24.059 E	3779.390/33.990	RWY 1230	NO
HUEN OB394	Electric Lights	00 02 14.500 N, 32 27 23.574 E	3775.706/34.042	RWY 1230	NO
HUEN OB395 Installation CCTV	Installation Security	00 02 07.226 N, 32 26 28.337 E	3796.289/7.339	RWY 1735	NO
HUEN OB396	Electric Lights	00 02 14.321 N, 32 27 21.907 E	3775.692/34.275	RWY 1230	NO
HUEN OB397	Lamp Post	00 02 29.655 N, 32 26 26.677 E	3820.817/29.921	RWY 1735	NO
HUEN OB398 AWOS 35	Installation Meteorological	00 01 21.207 N, 32 26 33.296 E	3776.391/28.809	RWY 1735	YES/ RED
HUEN OB399	Electric Lights	00 02 23.469 N, 32 27 07.319 E	3841.893/87.195	RWY 1230	NO
HUEN OB400	Electric Lights	00 02 24.763 N, 32 27 05.277 E	3843.488/86.503	RWY 1230	NO
HUEN OB401Antennae	Installation	00 02 31.404 N, 32 26 33.108 E	3828.872/1.709	RWY 1735	NO
HUEN OB402 Antennae	Installation	00 02 31.899 N, 32 26 34.563 E	3823.950/3.911	RWY 1735	NO
HUEN OB403 Antennae	Installation	00 02 32.058 N, 32 26 33.936 E	3827.461/0.502	RWY 1735	NO
HUEN OB404 CCTV_CAMERA	Installation Security CCTV	00 02 31.877 N, 32 26 33.091 E	3824.621/26.280	RWY 1735	NO
HUEN OB405	Lamp Post	00 02 29.851 N, 32 26 27.701 E	3823.610/29.921	RWY 1735	NO
HUEN OB406	Lamp Post	00 02 29.942 N, 32 26 28.526 E	3825.312/29.921	RWY 1735	NO
HUEN OB407	Lamp Post	00 02 30.095 N, 32 26 29.075 E	3825.928/29.921	RWY 1735	NO
HUEN OB408	Lamp Post	00 02 30.595 N, 32 26 29.343 E	3825.054/29.921	RWY 1735	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB409	Lamp Post	00 02 30.708 N, 32 26 30.143 E	3825.638/29.921	RWY 1735	NO
HUEN OB410	Lamp Post	00 02 30.829 N, 32 26 31.000 E	3826.735/29.921	RWY 1735	NO
HUEN OB411	Lamp Post	00 02 30.930 N, 32 26 31.721 E	3827.775/29.921	RWY 1735	NO
HUEN OB412	Lamp Post	00 02 31.104 N, 32 26 32.378 E	3827.917/29.921	RWY 1735	NO
HUEN OB413	Lamp Post	00 02 31.523 N, 32 26 32.342 E	3826.526/29.921	RWY 1735	NO
HUEN OB414	Lamp Post	00 02 31.963 N, 32 26 32.294 E	3827.028/29.921	RWY 1735	NO
HUEN OB415	CCTV Camera	00 02 25.909 N, 32 27 03.767 E	3775.437/17.618	RWY 1230	NO
<b>RWY 12/30 AREA 3 LINE OBSTACLES</b>					
HUEN OB416 Iron	Fence	00 01 33.637N, 32 26 33.036E	3764.184494/7.9334 762	RWY 1735	NO
HUEN OB417 Iron	Fence	00 01 35.657 N, 32 26 32.747 E	3765.099993/7.9490 682	RWY 1735	NO
HUEN OB418 Iron	Fence	00 01 40.516 N, 32 26 32.059 E	3772.874402/8.4717 483	RWY 1735	NO
HUEN OB419 Iron	Fence	00 01 45.561 N, 32 26 34.941 E	3785.259137/9.5990 202	RWY 1735	NO
HUEN OB420 Iron	Fence	00 01 45.600 N, 32 26 37.931 E	3785.259137/9.5990 202	RWY 1735	NO
HUEN OB421 Iron	Fence	00 01 45.643 N, 32 26 38.140 E	3785.085325/9.3907 637	RWY 1735	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB422 Iron	Fence	00 01 46.159 N, 32 26 39.281 E	3785.085325/9.3907 637	RWY 1735	NO
HUEN OB423 Iron	Fence	00 01 46.378 N, 32 26 40.783 E	3785.085325/10.964 301	RWY 1735	NO
HUEN OB424 Iron	Fence	00 01 47.498 N, 32 26 40.620 E	3788.743428/7.8524 695	RWY 1735	NO
HUEN OB425 Iron	Fence	00 01 49.310 N, 32 26 40.371 E	3788.743428/7.7271 151	RWY 1735	NO
HUEN OB426 Iron	Fence	00 01 57.352 N, 32 26 29.713 E	3791.068507/7.4706 155	RWY 1735	NO
HUEN OB427 Iron	Fence	00 02 03.601 N, 32 26 28.852 E	3796.013773/6.7593 146	RWY 1735	NO
HUEN OB428 Iron	Fence	00 02 14.607 N, 32 26 27.324 E	3798.031667/7.6342 007	RWY 1735	NO
HUEN OB429 Iron	Fence	00 02 24.504 N, 32 27 04.473 E	3768.031525/11.507 37	RWY 1230	NO
HUEN OB430 Iron	Fence	00 02 24.439 N, 32 27 04.543 E	3764.868828/8.1848 788	RWY 1230	NO
HUEN OB431 Iron	Fence	00 02 24.753 N, 32 27 04.197 E	3765.226469/6.9966 156	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB432 Gate	Gate	00 02 25.172 N, 32 27 03.737 E	3766.893323/8.0074 603	RWY 1230	NO
HUEN OB433Iron	Fence	00 02 25.294 N, 32 27 03.569 E	3767.893752/9.0078 923	RWY 1230	NO
HUEN OB434 Iron	Fence	00 02 25.513 N, 32 27 03.331 E	3767.893752/8.1167 949	RWY 1230	NO
HUEN OB435 Iron	Fence	00 02 25.597 N, 32 27 03.252 E	3767.893752/8.1003 747	RWY 1230	NO
HUEN OB436 Gate	Gate	00 02 25.683 N, 32 27 03.154 E	3767.893752/7.6578 298	RWY 1230	NO
HUEN OB437 Iron	Fence	00 02 24.709 N, 32 26 25.923 E	3798.153015/6.6021 298	RWY 1735	NO
HUEN OB438 Iron	Fence	00 02 30.477 N, 32 26 33.049 E	3816.378259/5.4427 021	RWY 1735	NO
HUEN OB439 Iron	Fence	00 02 31.053 N, 32 26 33.949 E	3859.839375/53.086 17	RWY 1735	NO
HUEN OB440 Iron	Fence	00 02 31.056 N, 32 26 33.483 E	3810.658964/8.5034 191	RWY 1735	NO
HUEN OB441 Iron	Fence	00 02 35.384 N, 32 27 22.968 E	3773.067726/9.0371 282	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB442 Iron	Fence	00 02 42.744 N, 32 27 22.865 E	3774.918005/8.2377 439	RWY 1230	NO
HUEN OB443 Iron	Fence	00 02 43.136 N, 32 27 16.716 E	3773.628815/9.2634 069	RWY 1230	NO
HUEN OB444 Iron	Fence	00 02 43.183 N, 32 27 17.702 E	3774.166679/9.0014 844	RWY 1230	NO
HUEN OB445 Iron	Fence	00 02 43.317 N, 32 27 15.584 E	3768.513716/7.8528 7	RWY 1230	NO
HUEN OB446 Iron	Fence	00 02 43.323 N, 32 27 15.529 E	3767.742768/7.6073 676	RWY 1230	NO
HUEN OB447 Gate	Gate	00 02 43.322 N, 32 27 15.374 E	3767.742768/7.5208 611	RWY 1230	NO
HUEN OB448 Iron	Fence	00 02 43.322 N, 32 27 15.176 E	3767.742768/7.3670 717	RWY 1230	NO
HUEN OB449/Iron	Fence	00 02 43.303 N, 32 27 10.629 E	3768.389163/8.0579 225	RWY 1230	NO
HUEN OB450 Gate	Gate	00 02 43.495 N, 32 27 10.435 E	3768.389163/8.0579 225	RWY 1230	NO
HUEN OB451 Iron	Fence	00 02 43.306 N, 32 27 22.844 E	3774.918005/7.6366 037	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB452 Iron	Fence	00 02 43.688 N, 32 27 10.634 E	3768.389163/8.1115 885	RWY 1230	NO
HUEN OB453 Iron	Fence	00 02 43.707 N, 32 27 10.734 E	3768.389163/8.2593 705	RWY 1230	NO
HUEN OB454 Iron	Fence	00 02 43.802 N, 32 27 22.825 E	3774.918005/7.6366 037	RWY 1230	NO
HUEN OB455 Iron	Fence	00 02 44.295 N, 32 27 15.584 E	3768.513716/8.1992 966	RWY 1230	NO
HUEN OB456 Iron	Fence	00 02 44.293 N, 32 27 15.755 E	3768.519917/7.6992 739	RWY 1230	NO
HUEN OB457 Iron	Fence	00 02 44.294 N, 32 27 15.546 E	3768.519917/7.6163 718	RWY 1230	NO
HUEN OB458 Gate	Gate	00 02 45.187 N, 32 27 18.885 E	3773.668064/8.2069 059	RWY 1230	NO
HUEN OB459 Iron	Fence	00 02 44.638 N, 32 27 22.813 E	3775.567604/8.6354 336	RWY 1230	NO
HUEN OB460 Iron	Fence	00 02 45.211 N, 32 26 32.145 E	3807.736414/8.9522 237	RWY 1735	NO
HUEN OB461 Gate	Gate	00 02 45.650 N, 32 27 22.799 E	3774.918005/7.9846 322	RWY 1230	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB462 Iron	Fence	00 02 46.753 N, 32 27 17.551 E	3771.201026/6.6702 136	RWY 1230	NO
HUEN OB463 Gate	Gate	00 02 46.848 N, 32 27 17.553 E	3771.201026/6.8464 306	RWY 1230	NO
HUEN OB464 Iron	Fence	00 02 46.865 N, 32 26 31.770 E	3806.844118/8.6494 508	RWY 1735	NO
HUEN OB465 Iron	Fence	00 02 46.696 N, 32 27 22.780 E	3774.918005/6.8312 119	RWY 1230	NO
HUEN OB466 Wall	Fence	00 02 47.566 N, 32 27 22.764 E	3779.209288/11.052 41	RWY 1230	NO
HUEN OB467 Wall	Fence	00 02 47.777 N, 32 27 22.464 E	3779.209288/10.694 369	RWY 1230	NO
HUEN OB468 Iron	Fence	00 02 48.030 N, 32 27 17.466 E	3774.074967/10.237 807	RWY 1230	NO
HUEN OB469Iron	Fence	00 02 47.487 N, 32 27 17.532 E	3770.617109/6.4547 483	RWY 1230	NO
HUEN OB470 Iron	Fence	00 02 48.011 N, 32 27 19.060 E	3774.074967/7.0338 614	RWY 1230	NO
HUEN OB471 Gate	Gate	00 02 48.587 N, 32 26 31.714 E	3806.273016/8.2037 02	RWY 1735	NO

<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB472 Iron	Fence	00 02 49.396 N, 32 27 23.206 E	3773.549921 3.2940563	RWY 1230	NO
HUEN OB473 Wall	Fence	00 02 48.888 N, 32 27 22.157 E	3777.431099/8.4664 255	RWY 1230	NO
HUEN OB474 Wall	Fence	00 02 49.869 N, 32 27 22.036 E	3777.431099/8.4664 255	RWY 1230	NO
HUEN OB475 Iron	Fence	00 02 49.955 N, 32 27 21.684 E	3775.528356/6.5937 195	RWY 1230	NO
HUEN OB476Iron	Fence	00 02 49.961 N, 32 27 20.943 E	3775.50873/7.24772 48	RWY 1230	NO
HUEN OB477 Gate	Gate	00 02 49.963 N, 32 27 21.360 E	3775.528356/7.0943 359	RWY 1230	NO
HUEN OB478 Iron	Fence	00 02 49.958 N, 32 27 22.080 E	3772.778969/3.4967 058	RWY 1230	NO
HUEN OB479 Wall	Fence	00 02 50.329 N, 32 27 20.585 E	3775.50873/7.40271 56	RWY 1230	NO
HUEN OB480 Iron	Fence	00 03 08.068 N, 32 26 24.328 E	3791.292969/8.4275 777	RWY 1735	NO
HUEN OB481 Iron	Fence	00 03 10.547 N, 32 26 23.846 E	3791.292969/8.6154 089	RWY 1735	NO



<b>OBST ID Designation</b>	<b>OBST Type</b>	<b>OBST Position</b>	<b>Elev/Hgt (Ft)</b>	<b>Affected Area(s)</b>	<b>Marking/ Colour Type</b>
HUEN OB482 Iron	Fence	00 03 11.097 N, 32 26 23.501 E	3790.145164/8.2357 511	RWY 1735	NO
HUEN OB483 Fence	Fence	00 02 42.944 N, 32 27 18.530 E	3769.160114/2.9932 859	RWY 1230	NO
<b>RUNWAY 17/35 and RWY 1230 AREA 3 POLYGON OBSTACLES</b>					
HUEN OB484 Electric Transformer	Transformer	00 02 34.958 N, 32 27 01.807 E	3766.305895/5.3805 776	RWY 1230	NO
HUEN OB485 Electric Transformer	Transformer	00 02 42.428 N, 32 27 30.932 E	3773.458126/5.2985 566	RWY 1230	NO
HUEN OB486 Water Tank	Tank	00 02 47.138 N, 32 26 32.011 E	3804.986998/6.5059 057	RWY 1735	NO
HUEN OB487 PAPI 17 Right	Navaid	00 03 10.592 N, 32 26 13.239 E	3812.467314/2.4573 492	RWY 1735	NO
HUEN OB488 PAPI 17	Navaid	00 03 10.633 N, 32 26 13.532 E	3819.91482/2.75590 56	RWY 1735	NO
HUEN OB489 Water Tank	Tank	00 02 44.800 N, 32 27 17.600 E	3769.160226/3.7959 319	RWY 1230	NO
HUEN OB490 Water Tank	Tank	00 02 44.899 N, 32 27 17.590 E	3779.199596/13.845 145	RWY 1230	NO

**3.11 Meteorological Information Provided**

1.	Associated MET Office	ENTEBBE MET OFFICE
2.	Hours of Services	H24
3.	Office Responsible for TAF Preparation Periods of Validity	ENTEBBE MET OFFICE 6,12,18,24 HR
4.	Type of Landing Forecast	TREND SIGMENTS: a) Convective: Waterspouts; Thunderstorms.
5.	Interval of Forecast Issuance	a) 30 Minutes: Routine METARs; Routine Met Report - Local b) 6 Hr. (Aerodrome Terminal Forecast); c) Ad hoc/Conditional Specie
6.	Briefing/Consultation Provided	ATIS; Self-Briefing - Display TWR and Briefing; Personal consultation, telephone to forecaster TEL: + 256-414-320910
7.	Flight Document  Language(s) used	C, CR, TB, Charts, abbreviated plain language text. TAFs/METARS  English
8.	Chart and Other Information Available for Providing Information	S, U, P, W, T, SWH SWM SWL all levels on request, ( <b>Downward tendency in RVR during previous 10 minutes</b> ) , (both ends RYW 17/35)
9.	Supplementary Equipment Available For Providing Information	SADIS, AWOS, Satellite ground equipment (MSG), VSAT; Telefax: +256-414-321403; Low Wind Shear (LWS); Weather Radar
10.	ATS Units Provided with Information	Entebbe TWR; Entebbe APP; Entebbe ACC
11.	Additional Information	NIL

## 3.12 Runway Physical Characteristics

Designation Runway Number	True Bearing	Dimensions of Runway (M)	Runway Strength & Surface Type	Threshold Coordinates Runway End Coordinates THR Geoid Undulation	Thresholds Elevation & Highest Elevation of Touchdown Zone of Precision Approach Runway (Ft)	Slope of Runway
17	172.042°	3655 X 45	PCN 68/F/A/X/T ASPHALT	00°03'20.19" N 032°26'10.40" E  00°01'22.30N 032°26'26.77" E  GUND 41.2FT	THR 3779.1 TDZ 3782	<b>Transverse:</b> 0.711% decreasing from left to right <b>Longitudinal:</b> Threshold 17 0.256% First 350 m -0.414% Next 1050 m -0.00017% Next 1000 m -0.489% Last 1254.77 m Threshold 35
35	352.042°	3655 X 45	PCN 68/F/A/X/T ASPHALT	00°01'22.30"N 032°26'26.77"E  00°03'20.19N 032°26'10.40"E GND 41FT	THR 3744 TDZ 3747	<b>Transverse:</b> 0.882% decreasing from right to left <b>Longitudinal:</b> Threshold 35 0.489% First 1254.77 m 0.00017% Next 1000 m 0.414% Next 1050 m 0.256% Last 350 m Threshold 17
12	122.064°	2167 x 45	77/F/B/X/T Asphalt	00°02'53.35"N 032°26'38.77"E 00°02'22.36"N 032°27'27.92"E GUND 41FT	THR 3766  TDZ 3766	<b>Transverse:</b> 0.540% decreasing from left to right. <b>Longitudinal:</b> Threshold 12 -0.072% First 600m

Designation Runway Number	True Bearing	Dimensions of Runway (M)	Runway Strength & Surface Type	Threshold Coordinates Runway End Coordinates THR Geoid Undulation	Thresholds Elevation & Highest Elevation of Touchdown Zone of Precision Approach Runway (Ft)	Slope of Runway
						-0.389%Next 750m -0.146%Last 360.77m Threshold 30
30	302.06°	2167 X 45	77/F/B/X/T Asphalt	00° 02' 23.79"N 032° 27' 25.65"E  00° 03' 04.31"N 032° 26' 21.40"E GND 41FT	THR 3754	<b>Transverse:</b> 0.956 % decreasing from right to left. <b>Longitudinal:</b> Threshold 30 0.146% First 360.77m 0.389%Next 750m 0.072% Last 600m Threshold 12

### 3.13 Strip Dimensions

RWY Designation	Stop Way Dimensions (M)	Clearway Dimensions (M)	Strip Dimensions (M)	RESA Dimensions (M)	Obstacle Free Zone	Remarks
17	NIL	NIL	3775 x 280	90 x 90	NIL	
35	NIL	NIL	3775 x 280	240 x 90	NIL	
12	NIL	NIL	2287 x 150	90 x 90	NIL	
30	NIL	NIL	2287 x 150	90 X 90	NIL	

**3.14 Declared Distances**

RWY Designation	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
17	3655	3655	3655	3655	Overrun RESA: 90m length x 90m width Undershoot: 240m length x 90m width
35	3655	3655	3655	3655	Overrun: 240m length x 90m width Undershoot: 90m length x 90m width
12	2167	2167	2167	1703	Overrun: 90m length x 90m width Undershoot: 90m length x 90m width
30	1703	1703	2167	2167	Overrun: 90m length x 90m width Undershoot: 90m length x 90m width

**3.15 Approach and Runway Lighting Available**

RWY Designator	Approach Light: Type; Length; Intensity	Threshold Light: Colour; Wing Bar	PAPI/ MEHT/ PAPI Distance from Threshold	TDZ, Light; Length	RWY Centre line Light:	RWY Edge Light: Length; Spacing; Colour, Intensity	RWY End Light: Colour; Wing Bar	Stop way Light: Length (M); Colour	Rmks
17	CAT 1 Coded Centre line with five 5 crossbars 915m LIH	Green -	PAPI Left/3° 49ft 303m (995ft)	NIL	NIL	3654.86m 60m White Last 600m Amber LIH	Red -	Nil	Nil
35	Extended Simple Approach Centre Line with 3 Cross Bars 427m LIM	Green -	PAPI Left/3° 57 ft 305m (1000 ft)	NIL	NIL	3654.86m 60m White Last 600m Amber LIH	Red -	Nil	Nil

### 3.16 Other Lighting or Secondary Power Supply

1.	<b>ABN</b> Location Characteristics Hours of operation	on top Control Tower Flashes Green and White H12 – Night Operations 1500-0300z
2.	<b>IBN</b> Location Characteristics Hours Of Operation	NN Morse Code H24
3.	Location and LGT, if any, of Anemometer or LDI	NIL
4.	TWY edge and taxiway centerline lights	Edge: All TWYs lighted Blue Centerline: NIL
5.	Secondary Power Supply/ Switch-over time	Secondary Power Supply to all lighting at AD Switch- over time is 0 seconds for Critical Installations (Approach, Runway, Taxiway, Lighting; ATS; ILS; DME/DVOR; ARFFS & Marine Rescue) and 15 seconds to other areas.
6.	Remarks	A 250KVA and a 400KVA No-Break set, 2x1250KVA Standby set – 15 sec Flood lighting is provided for Apron 1, 2, 4 and 5.

### 3.17 Helicopter Landing Area

Helicopters are treated as fixed wing aircraft in the landing and take-off procedures, thus land and take off on the runway in use.

### 3.18 Air Traffic Services Airspace

Designation Lateral Limits	Vertical Limits	Airspace Classification	ATS Unit Call Sign/ Language	Transition Altitude	Hours of applicability	Remarks
ENTEbbe TMA CTA is within 65NM radius on NN 00°03'10.79"N 032° 26' 16.81"E	FL 145/ 1500 FT	E	Entebbe Approach/ English	7000ft	H24	NIL
Entebbe CTR A circle with a radius 15 NM centred on 00°03'10.79"N 032° 26' 16.81"E	Surface to 9000 ft AMSL <u>5500 ft</u> GRD	C  D	Entebbe Tower/ English	7000 FT	H24	NIL

### 3.19 Air Traffic Services Communication Facilities

Service Designation	Call Sign	Frequency	Hours of operation	Remarks
ACC	Entebbe Control	128.5 MHz	H24	
		11300 KHz	H24	
		8903 KHz	H24	
		5517 KHz	H24	
App	Entebbe Approach Procedural	119.1 MHz	H24	
App Radar	Entebbe Approach Radar	126.6 MHz	H24	
TWR	Entebbe Tower Ground Frequency	118.1 MHz 121.9 MHz	H24	
ATIS	Entebbe International Airport	120.2 MHz	H24	Fully Operational In Dual Mode.
Other	Emergency	121.5 MHz	H24	Emergency Freq.

### 3.20 Radio Navigation and landing Aids

Type of Aid; MAG VAR; CAT of ILS (For VOR/ILS/give Station Declination)	ID	Frequency	Hours of operation	Position of Transmitting Antenna geographical Coordinates	Elevation of Transmittin g Antenna (Ft) of DME	Remarks
DVOR (2°E/2020)	NN	117.5 MHZ	H24	00°02'15.75"N 032°27'20.14"E		Coverage 150NM
DME (2°E/2020)	NN	CH 122X	H24	00°02'15.75"N 032°27'20.14"E	3800	Coverage 150NM
LLZ 17 (2°E/2020)		110.7 MHZ	H24	00°01'16.67"N 032°26'27.50"E		Range 25 NM
GP 17		330.2 MHZ	H24	00°03'09.53"N 032°27'00.14"E		Range 10 NM
ILS DME (2°E/2020) CAT I	EL	CH44X	H24	00°03'09.34"N 032°26'07.83"E	3820	Range 70 NM
NDB (2°E/2020)	EM	355 KHZ	H24	00°08'18.94" N 032°25'28.86"E		Coverage 150 NM
NDB (2°E/2020)	PB	270 KHZ	H24	00°17'44.79"N 032°39'21.73"E		Coverage 50 NM

### 3.21 Local Aerodrome Regulations

#### 3.21.1 Airport regulations

- (a) Operators of General and Business Aviation aircraft may only operate it they obtain permission to do so from the aerodrome operator in advance of each movement.
- (b) Wearing of high visibility clothing is mandatory for all airside operating personnel, including flight crew, and flight attendants.

#### 3.21.2 Ground Movement

All surface movement of aircraft, vehicles and persons on the Manoeuvring area is subject to ATC approval.

#### 3.21.3 Start-Up Procedures.

- a) ATC (Entebbe Tower) is responsible for clearance
- b) Pilots are requested to call Entebbe Tower for ATC clearance (stating aircraft call sign, aircraft type, stand number and intentions) for start-up



- c) Start up and push-back clearance is given by Entebbe Tower. Start-up approval does not imply approval to push-back.
- d) Pilots are required to inform Tower when ready to start
- e) When requesting start-up or push-back pilots should give the full call sign and stand number. Aircraft must be ready in all respects to start and if necessary push-back before calling tower. Pilots should only request push-back when they are actually ready to do so.

#### **3.21.4 Push-back Procedures.**

All aircraft making requests for taxiing or towing clearance on the TWR frequency should state their location in the initial call.

Aircraft requesting push-back must be in direct communication with the tug crew, via a headset person. Aircraft must inform ATC if they have no direct communication with a headset person.

#### **3.21.5 Aircraft Blast Warnings.**

Jet aircraft using Apron 1, stands 3 to 8, are required to push back until parallel to the taxiway and to engage minimum power while taxiing due to the proximity of light aircraft operations stands 20 to 25.

#### **3.21.6 Warnings**

##### **Bird Concentrations in the Vicinity of the Airport**

- a) Intense activity of birds takes place daily from one to two hours after sunrise. The birds fly from their roosting areas to the feeding area on the Lake shore and on the runways during the termite season flying at a height between 0 – 1,000ft AGL.
- b) From one to two hours before sunset, birds return to their roosting areas. The height varies from 0 – 1,000ft (0 -300m) AGL.
- c) The most frequent bird species at the airport include: African fish eagles, black kites, marabou storks, black headed herons, gulls, terns and egrets. The migratory bird species visit the peninsula around March and October.
- d) As far as practicable, Aerodrome Control will inform pilots of this bird activity, other wildlife.
- e) During the above periods, pilots are advised, where the design limitations of aircraft installations permit, to operate landing lights in flight, within the terminal area and during take off, approach to land and climb and descend procedure.

#### **3.21.7 Helicopter Operations**

- (a) All rotary-wing aircraft will be treated as fixed wing operations and will be instructed to land and take-off on a runway. Aircraft unable to ground taxi will be escorted by an Airfield Operations vehicle whilst in the hover.

(b) Helicopters are guided by a Marshaller on the allocated stand.

### **3.21.8 Taxiing to and From Stands**

- (a) Arriving aircraft will be allocated a stand number by the Marshaller through TWR.
- (b) Departing IFR flights shall contact the TWR to obtain ATC clearance before commencing taxiing. Request for ATC clearance may take place 10 minutes at the earliest prior to engine start-up, on Frequency 118.1 MHz
- (c) Departing aircraft shall obtain push-back approval and taxiing instruction from ENTEBBE TWR on 118.1MHZ.

### **3.21.9 Parking Area for Small Aircraft (General Aviation)**

General aviation aircraft are guided by Marshaller to the parking area.

### **3.21.10 School and Training Flights**

- i) Training flights shall be made after permission has been obtained from Air Transport Office.
- ii) All crew training circuits shall be carried out at least 1500 FT AGL
- iii) All types of IFR/VFR training are only available by prior arrangement with ATC .
- iv) Pilots are strongly advised to plan their training with ATC well in advance.
- v) Only right hand circuit for RWY17 and left hand circuit for RWY35.
- vi) Pilots should join the circuit as instructed by ATC.

### **3.21.11 Technical Test Flights and use of Runways**

Technical test flights shall be made after permission has been obtained from ATC.

### **3.21.12 Removal of Disabled Aircraft From Runways**

All aircraft operators in EIA are required to submit Aircraft Removal Plans to the aerodrome operator. When an aircraft is disabled on a runway, it is the responsibility of the owner or user of such aircraft to have it removed as soon as possible. In case the aircraft is not removed by the owner or user within 6 hours, the aerodrome operator will remove the aircraft at the cost of the owner or user.

## **3.22 Noise Abatement Procedures**

There are no established noise abatement procedures for EIA.

### **3.23 Flight Procedures**

#### **3.23.1 General**

A mixture of traffic in entebbe TMA and CTR is authorised, however, special permission has to be obtained from Entebbe Approach or Entebbe Tower as appropriate, for VFR flight within Entebbe TMA and Entebbe CTR in bad weather and at night.

#### **3.23.2 Procedures for IFR Flights within Entebbe TMA**

The following rules apply to IFR Flights in Entebbe TMA

- a) A flight plan must be submitted to the appropriate Air Traffic Service Unit
- b) Clearance for the flight must be obtained from the appropriate Air Traffic Service Unit.
- c) The pilot of the Aircraft must be the holder of a license which includes an instrument rating.
- d) The aircraft must be equipped with suitable instruments and must carry notified radio apparatus operating on notified radio frequencies .
- e) The flight must be conducted in accordance with any air traffic clearances received.
- f) The inbound, transit and outbound routes shown on the charts may be varied at the discretion of ATC.

#### **3.23.3 Change from IFR Flight to VFR Flight:**

- a) An aircraft electing to change the conduct of its flight to compliance with the visual flight rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.
- b) When the ATS unit is in possession of information that IMC are likely to be encountered along the route of flight, a pilot changing from IFR to VFR will be advised accordingly.

#### **3.23.4 Special Application of Instrument Flight Rules:**

- a) Irrespective of meteorological conditions, all flights above Flight Level 150 shall be conducted in accordance with Instrument Flight Rules.
- b) All flights on Airways shall be conducted in accordance with the instrument Flight Rules irrespective of the flight level at which the aircraft is being flown.

#### **3.23.5 Control of arriving and departing Aircraft**

##### **3.23.6 Departing Aircraft**

- a) Aircraft departing under IFR from EIA will normally be issued with a composite control zone and control area clearance based on the flight plan. The clearance will be passed by RTF immediately before departure, whilst departure instructions based on the current traffic situation will sometimes be added. Both clearance and instructions must be read back verbatim to ensure correct reception.

- b) A clearance issued from Entebbe Approach Control will, whenever possible, be in the form of a Standard Instrument Departure, route details of which are contained in the AIP, HUEN AD 2.24
- c) Two danger areas in the TMA; HUD7 and HUD 11 established for military training may be active during sometimes as notified by NOTAM. Additional information on activity in these areas may be contained in the ATIS broadcasts on frequency 120.2 MHZ.
- d) Except when under RADAR control, Pilots shall adhere to the following procedures to avoid these danger areas when active:

**1) When HUD 11 is active:**

- i) Aircraft outbound Entebbe shall elect to fly on VOR radials not greater than VOR radial 306<sup>0</sup> from NN and not less than VOR radial 349<sup>0</sup> from NN
- ii) Aircraft shall not fly below FL 200 or the level notified by NOTAM, whichever is higher whenever flying within the dimensions described in (i) above

**2) When HUD 7 is active**

- i) Aircraft outbound Entebbe shall elect to fly on VOR radials not greater than VOR radial 210<sup>0</sup> from NN and not less than VOR radial 280<sup>0</sup> from NN.
- ii) Aircraft shall not fly below FL 200 or the level notified by NOTAM, whichever is higher whenever flying within the dimensions described in (i) above

**3.23.7 Arriving Aircraft**

- a) Aircraft inbound to Entebbe under IFR will be cleared by the unit providing Approach Control service or Area Control Service into the Terminal Area in accordance with the minimum safe levels notified on the different ATS routes.
- b) The clearance will be passed by RTF on first contact whilst arrival instructions based on the current traffic situation will sometimes be added. Both clearance and instructions must be read back verbatim to ensure correct reception.
- c) The following additional procedures for avoiding Danger areas in the TMA have been established.

**1) When HUD 11 is active:**

- i) Aircraft inbound Entebbe shall elect to fly on VOR radials not greater than VOR radial 306<sup>0</sup> from NN and not less than VOR radial 349<sup>0</sup> from NN
- ii) Aircraft shall not fly below FL 200 or the level notified by NOTAM, whichever is higher whenever flying within the dimensions described in (i) above

**2) When HUD 7 is active**

- i) Aircraft inbound Entebbe shall elect to fly on VOR radials not greater than VOR radial 210<sup>0</sup> from NN and not less than VOR radial 280<sup>0</sup> from NN.

- ii) Aircraft shall not fly below FL 200 or the level notified by NOTAM, whichever is higher whenever flying within the dimensions described in (i) above

### **3.23.8 Communication Failure (RCF)**

Procedures for RCF for both arriving and departing aircraft are as published in the AIP ENR 1.1.12

### **3.23.9 Radar Procedures within ENTEBBE TMA**

Procedures for RADAR Control for both arriving and departing aircraft are as published in the AIP ENR 1.6.

### **3.23.10 Procedures for VFR Flights within Entebbe TMA**

Provided traffic conditions so permit, ATC clearance for VFR flights will be given under the conditions described below:

- a) A flight plan requesting ATC clearance and indicating the purpose of the flight, shall be submitted
- b) ATC clearance is obtained prior to the aircraft entering the the area concerned.
- c) Deviation from the ATC clearance may only be made when prior permission has been obtained.

### **3.23.11 Procedures for VFR Flights within ENTEBBE CTR**

- a) The ENTEBBE CONTROL ZONE is designated as the airspace contained from ground level up to 9000' AMSL and 15NM radius about NN coordinates 00 03 11.11N 032 26 17.06E frequency 117.5MHz
- b) It contains two types of airspace classification namely; Airspace class C; between VOR radials 315° and 040° and VOR radials 130° and 240° clockwise, from GND to 9000' AMSL and between VOR radials 040° and 130° and VOR radials 240° and 315° clockwise, between 5500' to 9000' AMSL; Airspace class D elsewhere.

**Note:** *Aircraft shall not enter class C airspace unless explicitly authorized by ATC*

- c) All aircraft, including state aircraft, intending to operate in and/or around the HUEN CTR, shall always file a flight plan. Airborne flight plans (AFILs) are highly discouraged and pilots encouraged to contact HUEN Briefing Office for alternate ways of filing FPLs.
- d) Entebbe Aerodrome traffic shall contact and obtain Clearance from the Control tower prior to making any movements on the movement areas.
- e) All aircraft transiting into/out of, traversing or operating within the CTR (except HUEN aerodrome traffic) and its environs SHALL always contact the unit providing Approach Control Service prior to operation in the CTR.

### **3.23.12 Special VFR and Night Operations**

- a) VFR flights are not permitted at night and pilots will be required to file a Special VFR flight plan and fly in accordance with an ATC Authorization
- b) For aircraft departing Entebbe Aerodrome, a flight plan may be filed in advance when it is known or anticipated, that the return flight will be made after dark from an aerodrome in Uganda without an ATS reporting office. The action of filing a flight plan does not constitute an ATC Clearance to enter controlled airspace at night.
- c) Special VFR clearance for flights within the Control Zone may be requested and may be given in accordance with rules applicable to the Class of airspace.
- d) VFR clearance in the Control Zone will be given for flights operating in VMC. Routing instructions and/or altitude restrictions may be specified in order to integrate VFR flights with other traffic. Pilots are reminded of the requirement to remain in VMC at all times and to comply with the relevant parts the Rules of the Air Regulations, and must advise ATC if at any time they are unable to comply with the clearance issued.

### **3.23.13 Additional Procedures for Operation of VFR aircraft**

- a) During IFR approaches at HUEN, VFR traffic may be required to stay clear of the approach corridors. As such, Visual Reporting points (VRP)s have been designated to assist ATC keep VFR clear of the IFR approach as below:
  - i. Kasenge T. C: 00 15 30.60N 032 30 30.32E
  - ii. Bbira VRP: 00 19 02N 032 28 49E
  - iii. Suubi VRP: 00 15 21N 032 24 31E
  - iv. Wagagai Green House VRP: 00 03 31N 032 30 38E
  - v. Mandela National stadium Nambole: 00 20 48N 032 39 30E
  - vi. Kabasanda VRP: 00 15 49N 032 13 35E
- b) Traffic from the West, North, South West and North West shall expect utilize VRPs Kabasanda and Suubi.
- c) Traffic from the East and North East shall expect utilize VRPs Namboole and Suubi.

### **3.23.14 Operations within the Entebbe Control Zone**

- a) Aircraft shall not enter Entebbe Control class C airspace unless explicitly authorized by ATC
- b) All aircraft, including state aircraft, intending to operate in and/or around the HUEN CTR, shall always file a flight plan. Airborne flight plans (AFILs) are highly discouraged and pilots encouraged to contact HUEN Briefing Office for alternate ways of filing FPLs.

- c) All aircraft transiting into/out of, traversing or operating within the CTR (except HUEN aerodrome traffic) and its environs shall always contact the unit providing Approach service

### **3.23.15 Helicopter Procedures**

#### **3.23.15.1 General**

- (a) Departing helicopter should delay any turning manoeuvre associated with departure until crossing the departure end of the runway, unless:
  - i) The direction of turn is such that no critical infrastructure, installations or parked aircraft are overflown during the manoeuvre,
  - ii) The manoeuvre is commenced at such a height above ground that the aircraft will safely alight clear in case of a power unit failure and no damage is likely to result from blade downwash, and
  - iii) The manoeuvre has been authorized by ATC.
- (b) No direct approaches may be attempted to any of the Aprons at the airport without express authorization by ATC.

#### **3.23.15.2 Helicopter routing between Entebbe and Kampala.**

- (a) Helicopters from Entebbe to East and North East will fly OVERHEAD Nakawuka Trading center, follow the Nakawuka road until Kasenge trading center then fly west of Mutesa II stadium, Wankulukuku stadium. Helicopters authorized to overfly HUP6 shall continue via Clock Tower to destination.
- (b) Helicopters inbound from East and North East will fly clear of HUP6; then fly east of Mutesa II stadium, Wankulukuku stadium then to Kasenge trading center and keep Nakawuka road to the left until Nakawuka trading center, then follow ATC joining instructions.
- (c) All helicopters inbound from the East and North East shall contact the unit providing APP. In the event of failure to raise the APP frequencies especially due to low altitudes, helicopters can relay their information on the ENTEBBE TOWER frequency 118.1 MHz but only for coordination purposes.
- (d) All Helicopters shall, in addition monitor the unmanned frequency 118.2MHz and make the mandatory position reports, especially when operating in such areas that are known to contain aerodrome traffic zones for unmanned aerodromes. As per the regulations, helicopter pilots shall ensure they are conversant and adhere to these regulations.
- (e) All helicopters shall be operated up to 500ft AGL within the control zone.
- (f) Established Visual Reporting Points along the Helicopter Route and Coordinates:
  - (i) Nakawuka Trading Centre: 00 11 18.86N 032 27 44.45E
  - (ii) Kasenge T.C: 00 15 30.60N 032 30 30.32E
  - (iii) Mutesa II Stadium: 00 17 03.32N 032 32 53.34E
  - (iv) Clock Tower Kampala: 00 18 26.47N 032 34 40.76E

**3.24 Low Visibility Procedures**

- (a) RWY 17, equipped with CAT I Approach Lighting System , will be used under RVR below 800 m to 550 m.
- (b) In order to provide adequate protection of the ILS system, no vehicle or aircraft shall infringe the ILS sensitive areas when an arriving aircraft is within 2 NM of touchdown and has not completed its landing run.
- (c) When RVR at TDZ falls below 550 m, a follow-me car is available on standby to assist pilots during taxi.
- (d) Pilots will be informed by ATIS or ATC when LVP are in progress. The ATIS message will contain the phrase "LOW VISIBILITY PROCEDURES IN PROGRESS" and will also provide details of any unavailability of equipment relevant to LVP.
- (e) Pilots will be informed by ATC when LVP are terminated.
- (f) The preparation phase will start when visibility falls below 2000m. The operations phase will start when RVR falls below 800m.
- (g) LVP will be terminated when RVR is greater than 2000m and a continuing improvement in these conditions is expected.

**3.25 Aerodrome Related Charts:**

- a. The following Charts are provided

<b>Chart Name</b>	<b>Page</b>
ENTEBBE AERODROME CHART-ICAO	Attachment 1
Aerodrome Obstacle Chart Type A Entebbe RWY 17/35	Attachment 2:
Aerodrome Obstacle Chart Type A Entebbe RWY 12/30	Attachment 3:
Apron Parking/Docking Chart Apron 1 – Entebbe International	Attachment 4:
Apron Parking/Docking Chart Apron 2 and 4 – Entebbe International	Attachment 5:
Apron Parking/Docking Chart Apron 5 – Entebbe International	Attachment 6

**b. Other Aerodrome Related Charts**

Other aerodrome related charts for EIA including Aerodrome Obstacle Chart –ICAO Type A, Instrument Approach charts, SID charts and STAR charts are provided in the Uganda AIP.



# **Part 4: Aerodrome Operating Procedures and Safety Measures**

## **4.1 AERODROME REPORTING**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### **4.1.1 Purpose**

To ensure that DSSER, ATC and AIM are notified of changes in the physical characteristics of the aerodrome, new obstacles and changes in the level of service, that may affect the safety of aircraft operations in a timely manner so as to facilitate dissemination of information to airmen.

### **4.1.2 Responsibility**

- (a) The General Manager EIA has the overall responsibility for ensuring that procedures and resources are in place and services are provided to report changes in the physical characteristics of the aerodrome, new obstacles and changes in the level of service that may affect the safety of aircraft operations.
- (b) The Manager Operations is responsible for notifying DSSER and AIM of permanent changes to airport information and significant changes to aerodrome information and level of service that may occur. The MO is also responsible for reporting the day to day serviceability of the airport and temporary changes to published aerodrome information to ATC, AIM and DSSER in a timely manner.
- (c) The Principal Operations officer is responsible for implementing the reporting procedures documented in this manual.
- (d) The OO/AOO and duty marshallers are responsible for reporting the day-to-day serviceability of the airport and notifying temporary changes to published aeronautical information to ATC and the NOF, including surface conditions.

### **4.1.3 Procedure**

- (a) The following Aerodrome conditions that may affect the safe operation of aircraft will reported to the ATC, DSSER, AIM, MO, and disseminated locally to aircraft operators or his agents:
  - (i) Works on Aerodrome Movement Areas;
  - (ii) Surface irregularities on Movement Areas;
  - (iii) Water on Movement Areas;
  - (iv) Hazards/objects in the movement areas;
  - (v) Malfunction of any required Lighting System or ILS Critical Area Signs;
  - (vi) Unresolved Wildlife Hazards;
  - (vii) Changes in the level of services available e.g. ARFFS category;
  - (viii) Changes in aerodrome procedures currently used; and
  - (ix) Any other conditions that may otherwise adversely affect aircraft safety.
- (b) All changes to aerodrome information shall be reported to the Manager Operations.

- (c) Outside normal office hours, the designated person for receiving changes is the Airport Operations Officer on duty.
- (d) Any situation that may have an immediate effect on the safety of aircraft operations will be reported by the operations officer or marshaller to ATC – Entebbe control Tower by radio.
- (e) Such situation then will be reported by the operations officer to Manager Operations to consider, whether there is need for NOTAM or AIP supplement to be issued.
- (f) Any significant object found on the movement area will be immediately reported to POO:
- (g) POO will immediately advise ATC, and identify the object through various operators on the airside. ATC may choose to alert the pilot of the aircraft or the station manager that may have involved.
- (h) All incidents are recorded in the log book. Where necessary an additional written Incident Report will be raised. OO gathers accident and incident information. The information shall be reported to the Manager Operations
- (i) The Manager Operations will determine if an Accident/Incident Report needs to be submitted to DSSER and MSMS in accordance with mandatory occurrence reporting system.
- (j) The MSMS will initiate and coordinate internal investigations into aviation incidents relevant to the Airport.

#### **4.1.3.1 Handling of Reports on reported changes**

##### **(a) Manager Operation**

On receipt of advice of a planned change to the AIP information relating to EIA, the Manager Operations:

- (i) Make an assessment of the effect of the change on the airport operations and take the necessary action.
- (ii) Advise the GM-EIA, ATC and Apron Management except when the information is originated from there.
- (iii) Consult with DSSER and GM-EIA on its effect and possible re-organization or limitation of flight operation if the change involves the airside as well as advisability of issuing a NOTAM;
- (iv) Inform the OO/AS

##### **(b) Duty Marshaller**

On receipt of advice of change of information in the AIP that is inadvertent or unplanned, the Duty Marshaller shall:

- a) Make assessment and determine the effect of the change on the airports operations and the time frame of interruption;
- b) If the change has detrimental effects on safety, liaise with relevant agencies, departments and sections at/of the airport to mitigate effects.

- c) Inform and consult with the Watch Supervisor ACC, except when the information emanated from there on the issuance of NOTAM.
- d) Share Information of the assessment with MO, MSMS, GM-EIA, DSSER and DANS.
- e) Initiate the issuance of NOTAM, when needed.

#### **4.1.3.2 The Procedure for Reporting Changes to the AIP information**

This is divided into two: Planned and Unplanned

##### **(1) Planned Changes**

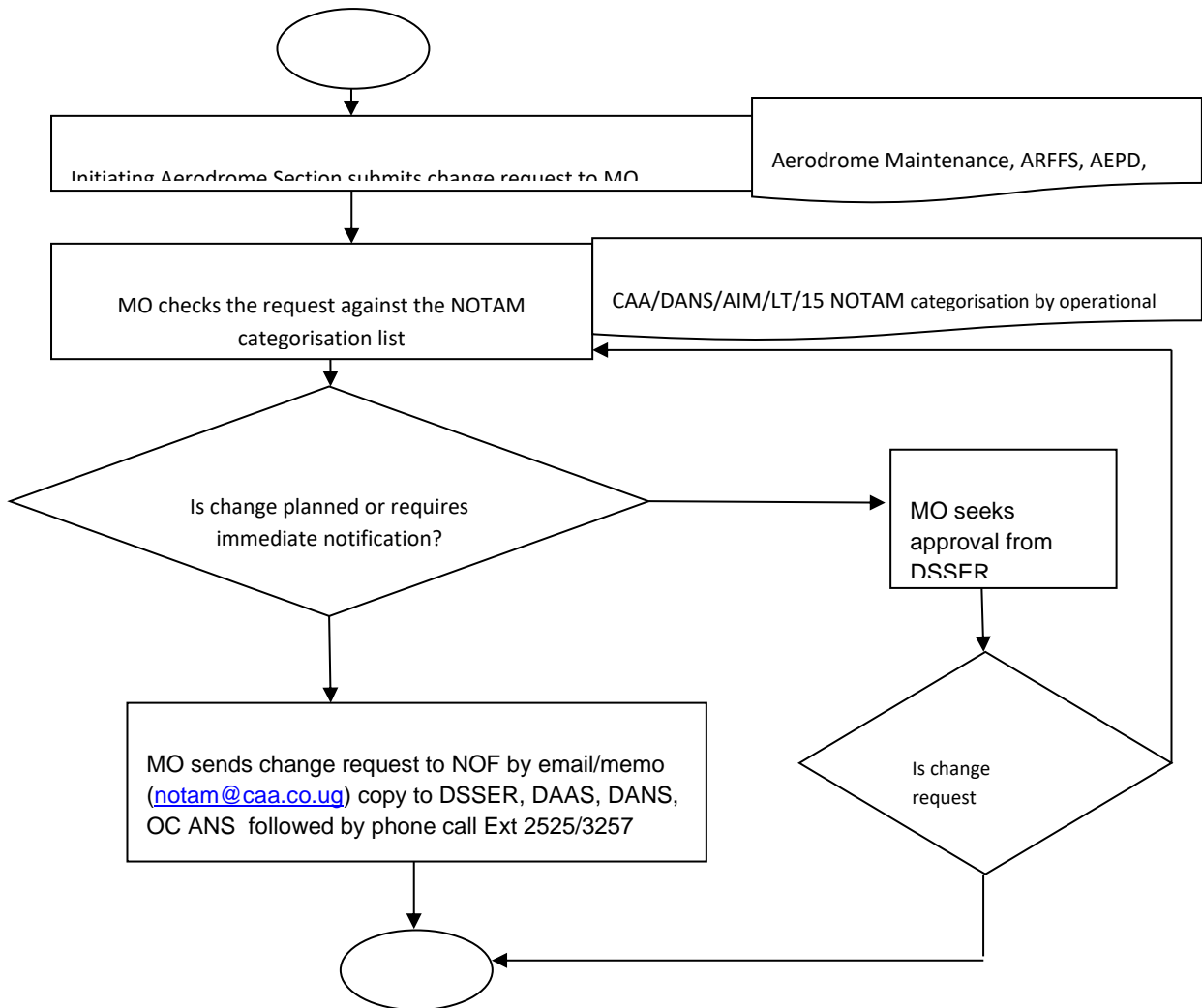
- (a) These include occurrences that will come into effect at least 48 hours after their notification e.g. the introduction of new facility, planned aerodrome works, new service at the aerodrome, among others.
- (b) Reports, information or decisions to make permanent or long term changes to the data in the AIP may be the results of:
  - i. Continuation of a status that had been expected to be temporary but had instead lived on for a longer time e.g. displacement of runway threshold.
  - ii. Planned withdrawal or major change of existing service or facility e.g. immigration services at an aerodrome serving international traffic.
- (c) When the Airport decides to make long term or permanent changes to the availability or the characteristics of the facility or service it provides, the head department or agency (for services provided by other agencies at the EIA), where the change is originated will write to the GM-EIA, with copies to the Director General UCAA, DAAS and the MO.
- (d) On receipt of information requiring NOTAM, AIP amendment or AIP Supplement, the MO shall forward the same to the DSSER in written form and copy to AIM, for approval and onward transmission to AIM.
- (e) The request for a NOTAM to be issued may be made in the NOTAM format (using the NOTAM request Form) or in plain language.

##### **(2) Inadvertent or Unplanned Changes**

These changes may be because of un-serviceability of Navigation Aids or unavailability of ARFFS.

- (a) During office hours all unplanned changes are handled by Manager Operations and outside working hours by the Duty Marshaller.
- (b) NOTAM request shall be handled as indicated in the NOTAM procedure below.

### (3) NOTAM Flow Chart



**Note:** Outside office hours, the NOTAM request will be made by duty marshaller

#### 4.1.3.3 SNOWTAM

The criteria and procedure for issuing SNOWTAM to disseminate a runway condition report is in Paragraph 4.5

#### 4.1.3.4 Records of Aerodrome Reporting

All actions regarding the issuance of NOTAM, SNOWTAM and changes in AIP will be recorded in NOTAM, SNOWTAM and AIP Logbook. The log books are available with airport operations department and are maintained by airport operations staff

## 4.2 ACCESS TO THE AERODROME MOVEMENT AREA

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### 4.2.1 Purpose

The purpose of this procedure is to enable airport personnel provide safety of aircraft by only providing access to authorized persons, vehicles, equipment, animals or other things on to the movement areas.

### 4.2.2 Responsibility

- (a) The GM-EIA has the overall responsibility for ensuring that these procedures are established and implemented for aviation security and for the control of access to the aerodrome movement areas.
- (b) The Manager Aviation Security is responsible for developing the airport security program and for ensuring there is no change in the airside/landside barriers except with prior authorization.
- (c) Airside Operations personnel in coordination with AVSEC are responsible for surveillance of the movement areas.
- (d) Entebbe Air Traffic Control Tower personnel are responsible for control of vehicles and persons onto the maneuvering area by giving authorization. No vehicle or equipment or person is allowed onto the maneuvering area without their authorization.
- (e) AVSEC personnel are responsible for guarding the access points and for surveillance of the aerodrome perimeter fence.

**Note:** *The Airport Security Program is published and distributed independent of the Aerodrome Manual. The Security Program is prepared primarily to address specific aviation security requirements. Its provisions for regulating airside access are also sufficient to satisfy separate regulatory requirements.*

*The Security Program is a restricted document, the provisions relevant to access of the movement area summarised in this paragraph. These procedures should also be read in conjunction with Airside Vehicle Control Procedure.*

### 4.2.3 Procedure

- (a) Access to the Airside is via access control points described in the Airport security program.
- (b) Full security procedures will be undertaken by AVSEC personnel for all aerodrome personnel and vehicles, including access control and search, in accordance with the security program.
- (c) Airside vehicle permits are checked by Aviation Security.
- (d) No person is permitted to the airside without authorization from AVSEC.
- (e) Personnel authorised to access the airport restricted areas are provided with either;
  - (i) Permanent valid Security access permits
  - (ii) Temporary valid Security access permits
  - (iii) Contractors Security Access Permits or

- (iv) A visitor's Security Access Permit.
- (f) All visitors and contractors must be accompanied at all times by holders of (temporary or permanent security permits) while on the airside.
- (g) Vehicle access airside is controlled as per the Airside Vehicle Control procedure in this manual.
- (h) EIA is bounded by a security fence and buildings for prevention of unauthorised entry. Unmanned gates are padlocked at all times.
- (i) Vehicle access gates are manned and monitored via CCTV by AVSEC.

## **4.3 AERODROME EMERGENCY PLAN**

### **4.3.1 Purpose**

The purpose of an AEP is to provide a timely and coordinated response for rescue and recovery from an emergency on airport. The primary purpose of this section is to document responsibilities and background information in relation to the AEP.

### **4.3.2 Responsibility**

The General Manager EIA has overall responsibility for establishing a plan to coordinate the response if an emergency occurs at the airport involving aircraft or airport facilities.

### **4.3.3 General**

EIA has a documented Aerodrome Emergency Plan, UCAA/EIA/AEP, which forms part of this Aerodrome Manual.

The emergency plan sets forth duties and responsibilities for each responding agency, and procedures to ensure prompt response to emergencies and other unusual conditions, with the object of minimizing the possibility and extent of loss of life, personal injury and property damage on the airport.

### **4.3.4 AEP Operational Response**

The operational responsibilities and procedures for aerodrome staff are documented in the Airport Emergency Plan.

### **4.3.5 Airport Emergency Planning Committee**

There is an established Airport Emergency Planning Committee (AEPC) which will develop, distribute and amend the EIA Airport Emergency Plan. This committee will endorse any amendments to the AEP.

The AEPC organizes periodic training and other preparations for personnel dealing with emergencies.

### **4.3.6 Airport Emergency Exercises**

To ensure that the plan is functional and that all agencies are familiar with their roles and responsibilities, an exercise program will be developed by the AEPC. The committee will determine the frequency and type of exercises required, subject to a minimum of one full scale exercise every two years.

Exercise critique will be appointed to provide impartial comment on exercises and the performance of participating agencies. Each of the critiques will provide an exercise critique for consideration by the Airport Emergency Planning Committee.

### **4.3.7 Airport Emergency Plan Review**

After a major activation of the AEP or following an exercise, the AEPC will meet to identify areas where the plan might be improved.



#### **4.3.8 Standard Operating Procedures**

Each responding agency is responsible for developing its own procedures that represent its method of implementing the AEP.

#### **4.3.9 Letters of Agreements with Mutual Aid Agencies.**

In case of major disaster or emergency, EIA may obtain additional facilities, equipment and trained personnel from the Mutual Aid Agencies to support the Airport emergency unit.

Letters of agreements have been signed between EIA and the Mutual Aid Agencies. The original copies of the agreements are maintained on file in the office of the Director Airports and Aviation Security. The response organizations have acknowledged that the prescribed procedures in the EIA Emergency Plan will be utilized to the extent practicable in the event of an accident or emergency, or the potential for such on or in the vicinity of EIA.

A copy of the Aerodrome Emergency Plan is stored at the EOC.

## **4.4 AERODROME RESCUE AND FIRE FIGHTING SERVICE**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### **4.4.1 Purpose**

The purpose of this procedure is to enable airport RFFS personnel safety, by defining the required policies, equipment and procedures to be followed in the event of accident or incident occurring at, or in the immediate vicinity of, the aerodrome.

The services provided cover a radius of 5 Nautical Miles on land and 10 Nautical Miles in Water from the Aerodrome Reference Point. For non-aircraft incidents, the services cover only the airport installations and operations.

### **4.4.2 Responsibility**

- (a) The Director Airports and Aviation Security has the overall responsibility for the establishment, organization and management of the department.
- (b) The General Manager is responsible for the operations of the department.
- (c) The Chief fire officer is responsible for ensuring all equipment is available and the appropriate level of protection is available, including the required amount of extinguishing agents, to achieve the fire category

### **4.4.3 RFFS Policy**

Entebbe International Airport RFFS is committed to saving life and minimizing damage to property in the event of an emergency occurring at, or in the immediate vicinity of the Aerodrome and will ensure:

- (a) Availability of operational RFFS facilities and equipment for category 9,
- (b) Availability of competent personnel as determined through Task Resource Analysis (TRA) and Training Needs Analysis (TNA),
- (c) Effective and efficient response to emergencies,
- (d) Periodic review of its policies and procedures, and
- (e) Personnel understand and implement the policies and procedures.

### **4.4.4 Objectives of RFFS.**

- (a) To save lives in the event of an aircraft accident or incident occurring at, or in the immediate vicinity of the Aerodrome.
- (b) To protect and minimize damage to property in accordance with EIA Emergency plan.
- (c) To achieve response time not exceeding 3 minutes to either end of active runway, as well as to any other part of the movement area in optimum conditions of visibility and surface conditions.

Details of the facilities, equipment, personnel, policies and procedures, for RFFS and Marine services are in Appendix 2 of this manual – UCAA/EIA/AM/APP/02 – ARFFS Manual.

## **4.5 INSPECTIONS OF AERODROME MOVEMENT AREA AND OBSTACLE LIMITATION SURFACE**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### **4.5.1 Purpose**

The purpose of this procedure is to ensure that Movement areas, related facilities and Obstacle Limitation surfaces (OLS) are frequently inspected to ensure compliance with Civil Aviation (Aerodromes) Regulations and for safety of aircraft operations.

### **4.5.2 Responsibility**

- a) The GM-EIA has the overall responsibility for ensuring that procedures are established and resources are provided for inspections of the Aerodrome Movement Areas and Obstacle Limitation Surface.
- b) The Manager Operations is responsible for the inspection of the Aerodrome Movement Areas and OLS.
- c) The Manager Aerodrome Engineering Planning and Development is responsible for inspection of the OLS outside the movement area.
- d) The Manager Maintenance has the responsibility of ensuring that detailed pavement, including friction tests and lighting inspections are carried out in accordance with the inspection and maintenance schedules.

### **4.5.3 Procedure for inspection of the Aerodrome Movement Area**

- i) Duty operations officer/AOO shall inspect the aerodrome movement areas, all runways, taxiways and aprons including stands, at least two times a day (Mandatory).
- ii) Before entering the runways and taxiways, contact Entebbe Tower and communicate intention, and Maintain two-way communication during the inspection.
- iii) Use the inspection checklist for each inspection.
- iv) Note all observed issues on the checklist and logbooks.
- v) Report all observed issues that require immediate attention promptly to the MO, SMS and ATC. Maintenance issues are be reported to MAM and obstacles to MAEPD.
- vi) Record all the inspection findings in the log book at the Airside Operations Office the necessary action by OO/AOO.
- vii) Signed checklists are filed by the officer inspecting and records maintained.
- viii) Observed issues requiring notification, are notified to DSSER, ATC and AIM in accordance with Procedure 4.1 – Aerodrome reporting.

### **4.5.4 Special Inspections**

Special inspections are carried out during and after construction activities, removal of disabled aircraft, passage of severe storms or when a report of unserviceability is received from an operator, pilot etc, in accordance with the procedure in paragraph 4.5.3.

#### 4.5.5 Assessment and Reporting of Runway Surface Conditions.

- i) Wildlife Management officer on duty will carry out measurement and assessment of the Runway Surface Condition during and after down pours (Rain) until the runway is reported dry.
- ii) While measuring and assessing the runway surface condition, the Wildlife Management Officer will maintain a two-way communication with Entebbe Control Tower.
- iii) The runway surface condition report will contain;
  - a. The aerodrome location indicator (HUEN)
  - b. Date and time (UTC) of assessment (Month/Day/Hour/Minutes)
  - c. Lower runway designation number (i.e., 17 or 12),
  - d. The runway condition code for each runway third (e.g., 6/5/5),
  - e. Percentage contaminant coverage for each runway third (e.g., 25/75/50),
  - f. Depth of loose contaminant(e.g., 04/04/04),
  - g. Condition description of each part (e.g, standing water/ standing water/ standing water),
  - h. Width of runway to which the runway condition code applies if less than the published width of the runway,
  - i. Situational awareness.
- iv) The Wildlife Management officer will report the runway surface condition to Aerodrome Control Tower on radio and submit a report to Airside Operations office.
- v) The Airside Operations officer verifies the report and submits to AIM for promulgation of a SNOWTAM with GRF team in copy.
- vi) Wildlife Hazard Management personnel monitor the Runway Surface condition every 30 minutes and reports any change to Control Tower and Airside Operations until the runway is reported dry.
- vii) Airside Operations verifies the change and submits to AIS for SNOWTAM promulgation with GRF team in copy.
- viii) Where Airside Operations receives a pilot report on Runway braking action from Control Tower and there is need to revise the Runway condition code, the airside operations officer will inform the wildlife management officer on duty to re-assess the runway surface condition and report accordingly.
- ix) Records are maintained by Wildlife hazard management and Airside Operations office.

#### 4.5.6 Runway Friction Testing

- i) Runway Friction testing is carried out monthly and in accordance with a Schedule in the Engineering manual by Aerodrome Maintenance team.
- ii) Inform Control Tower and Airside Operations about runway friction testing.
- iii) Testing is done while maintaining two-way communication with Control Tower.

- iv) Upon completion, inform Control Tower and Airside Operations.
- v) Record status in the Logbook at the Airside operations and File detailed report.

#### **4.5.7 Communication with air traffic control during an inspection**

All personnel carrying out inspection on the runways and taxiways are required to establish and maintain two way communication with Entebbe Tower at all times during the inspection.

## 4.6 Visual Aids And Aerodrome Electrical Systems

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### 4.6.1 Purpose

The purpose of this procedure is to give the arrangements for inspecting and maintaining the aerodrome lighting, markings, signs, markers and electrical systems.

### 4.6.2 Responsibility

- (a) The Manager Aerodrome Maintenance has the overall responsibility for the inspection of aerodrome Lighting and Visual Aids.
- (b) The Chief Electrical and Electronics Engineer is responsible for ensuring that maintenance and inspection of aerodrome lighting facilities and Visual Aids are carried out daily, monthly, semi-annually and annually in accordance with the regulatory requirements.
- (c) The Chief Civil Engineer is responsible for ensuring that maintenance and inspection of aerodrome markings are carried out monthly, semi-annually and annually in accordance with the regulatory requirements.
- (d) The Electrical Technicians are responsible for preventive and corrective maintenance of visual aids and electrical systems

### 4.6.3 Inspection of aerodrome Lighting and Visual Aids

- (a) Inspections of the visual aids (lights, signs and markers) are carried out in accordance with procedure 4.5.3 and in compliance with the procedures set out in Appendix 4 - AGL and Electrical Systems Manual that forms part of this Aerodrome Manual.
- (b) Inspections of the markings are carried out in accordance with procedure 4.5.3 and in compliance with the procedures set out in Appendix 3 - Aerodrome Engineering Manual that forms part of this Aerodrome Manual.
- (c) During inspections, all inspecting personnel will observe the requirements for inspections on movement areas in paragraph 4.5.

### 4.6.4 Periodic and Emergency Maintenance of electrical systems and visual Aids.

- (a) The Electrical Engineering team carries out periodic maintenance of the electrical systems, aerodrome lighting and signs, Monthly, Quarterly, Semi-annually and annually, in accordance with procedure 4.5.3 and in compliance the procedures set out in Appendix 4 - AGL and Electrical Systems Manual, that forms part of this Aerodrome Manual.
- (b) Corrective and emergency maintenance of electrical systems, aerodrome lighting, markers and signs is carried out by the Electrical Engineering team in accordance with the procedures set out in Appendix 4 - AGL and Electrical Systems Manual that forms part of this Aerodrome Manual.
- (c) Corrective and emergency maintenance of markings is carried out by the Civil Engineering team in accordance with the procedures set out in Appendix 3 – Engineering Manual that forms part of this Aerodrome Manual.

#### **4.6.5 Secondary Power Supply System:**

- (a) In the event of failure of the primary power source to the Airport, two No break dynamic rotary type generators, three (03) standby generators, Uninterruptible Power Supply System and battery backups are available as secondary power sources to ensure continuity and reliability of operations.
- (b) Power Supply System unit inspects the Secondary Power Supply Systems Monthly, Quarterly, semi-annually and annually, in accordance with the procedures set out in Appendix 4 - AGL and Electrical Systems Manual that forms part of this Aerodrome Manual.
- (c) Corrective and emergency maintenance of secondary power supply systems is carried out by the Power Supply System unit in accordance with the procedures set out in Appendix 4 - AGL and Electrical Systems Manual that forms part of this Aerodrome Manual.
- (d) The Head of Power Supply System Unit and Outsourced Contractors carry out testing of the power supply systems quarterly to ensure reliability and stability- in accordance with the procedures set out in Appendix 4 - AGL and Electrical Systems Manual that forms part of this Aerodrome Manual.
- (e) Power Supply Systems Team carries out periodic maintenance of the power supply systems according Monthly, Quarterly, semi-annually and annual schedule in accordance with the procedures set out in Appendix 4 - AGL and Electrical Systems Manual that forms part of this Aerodrome Manual.

#### **4.6.3 Fault Reporting and Record Keeping System**

A Fault Reporting and Record Keeping System is set out in Appendix 4 - AGL and Electrical Systems Manual that forms part of this Aerodrome Manual.

## **4.7 Maintenance of the Movement Area**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### **4.7.1 Purpose**

The purpose of this procedure is to ensure that the movement areas, paved and unpaved areas, and that drainage system are maintained to provide unimpaired safety to aircraft operations.

### **4.7.2 Responsibility:**

- (a) The Manager Aerodrome Maintenance has the overall responsibility for ensuring the maintenance of movement areas and drainage systems, including the planning personnel and resources for maintenance.
- (b) The Chief Civil Engineer is responsible supervising maintenance personnel to carry out maintenance of the movement areas and drainages in accordance with the established schedule and procedures.

### **4.7.3 Maintenance of paved areas and unpaved areas**

- (a) The maintenance of all paved and unpaved areas in the aerodrome is carried and supervised by the Civil Engineering section in accordance with the aerodrome maintenance program and procedures set out in Appendix 3 – Engineering Manual that forms part of this Aerodrome Manual.
- (b) All paved areas will be inspected and maintained in a condition free of surface debris and harmful irregularities.
- (c) When hazardous conditions are observed, they shall be recorded and reported to ATS. A NOTAM may be issued if needed and corrective maintenance carried out.

### **4.7.4 Rubber Removal**

- (a) Aerodrome Civil Maintenance and Airside Operations personnel while inspecting the runway will look out for rubber deposits on the runway.
- (b) When there are noticeable runway deposits on the runway, the aerodrome civil maintenance team will monitor the runway, carry out friction tests and remove the rubber when required, in accordance with the procedures set out in Appendix 3 – Engineering Manual that forms part of this Aerodrome Manual.
- (c) Rubber deposits on the runway will be removed using chemical solvents or high-pressure water blasting. Where chemical solvents are to be used, they will not be harmful to pavements or aircraft, and will not have toxic effects on the environment.

### **4.7.5 Maintenance of aerodrome drainage system**

The aerodrome drainage system is inspected, monitored, and maintained by the Civil Engineering section in accordance with the procedures set out in Appendix 3 – Engineering Manual that forms part of this Aerodrome Manual.



#### **4.7.6 Closure of Unserviceable Runways and Taxiways**

##### **Permanent Closure:**

- i) Carry out risk assessment and originate NOTAM concerning the closure of the facility.
- ii) Obliterate the affected taxiway and runway markings
- iii) Decommission affected taxiway and runway lights
- iv) Deploy Runway and Taxiway closure markings and signage or parts thereof

##### **For Temporary Closure:**

- i) Carry out risk assessment and originate NOTAM concerning the closure of the facility.
- ii) Deploy Runway and Taxiway closure markings and signage on affected taxiway or runway or parts thereof.
- iii) Upon completion of work, Airside Operation inspects the Movement and inform TWR to cancel the NOTAM as well as alerting DSSER.
- iv) Contact Aeronautical Information Service (AIS) to withdraw the NOTAM.

## 4.8 Safety Of Aerodrome Works

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### 4.8.1 Purpose

The purpose of this procedure is to ensure that any works carried out in the aerodrome are planned and conducted in a safe manner so as not to endanger the safety of aircraft operations and infringe on the OLS.

### 4.8.2 Responsibility

- (a) The MO has the overall responsibility for ensuring safety during works on the aerodrome.
- (b) The MAM and MAEPD are responsible for ensuring that the methods of work plans are provided and executed.
- (c) The Project Manager is responsible for planning, developing the method of work plan, coordination and ensuring that all works are done according to the method of work plan.

### 4.8.3 Planning of Works

Before commencement of work, agreement should be established on:

- a) The hours of work, preferably works to be executed during low volume traffic periods.
- b) The authorized routes – preferably these should be marked with contractor’s signs. At critical points, controls should be established.
- c) The communication facilities to be used. Where direct control of vehicles is required, each vehicle should either have radiotelephone (R/T) or be escorted by airside operations vehicle.
- d) Permitted heights of vehicles, equipment, and the limitations to be placed on operating heights of crane jibs or other mobile obstacles that occur during the works along the sides of the runway or at the runway end. This also includes the laying up of heaps/embankments and the placement of supply depots of construction material and equipment.
- e) Any limitation to be placed on use of aerodrome facilities including electrical equipment, interference with navigational facilities or aircraft communication.
- f) Any blasting works shall only be executed on the period agreed upon between the Contractor and the Project Manager.
- g) Method of work plan will be prepared for major aerodrome works (involving change of physical characteristics) or works that may affect the operations over an extended period.
- h) Before commencement of any major aerodrome works at the aerodrome, such as changes to the physical characteristics, the method of work plan will be presented for approval by DSSER.
- i) Consultations will be made with the key stakeholders before commencement of the works.
- j) Contractor(s) should be warned in writing of possible hazards to personnel working on airports, in particular the jet blast problem and noise.
- k) Contractor submits safety plan for evaluation before issuance of work permit.

#### 4.8.4 Airport works that do not require a Method of Work Plan (MOWP).

- a) Maintenance staffs or contractors accessing the movement area will be issued with fully signed off permit to grant them work in a movement area. The work permit will show times of works, areas in which work may be done, the routes to be followed, the R/T procedures, and the reporting procedure to be followed on completion of work.
- b) Personnel and vehicles associated with the works in the airside must have a permit from the airport or under escort at all times. The airport rules will be followed while working and driving in the airside.
- c) Personnel and vehicles must receive a clearance from ATC before accessing the movement area.
- d) The airport does not allow construction or maintenance during low visibility operations. During low visibility operations, maintenance staffs and contractors will stop works and exit from the airside.

#### 4.8.5 Airport works that require a MOWP

The airport will ensure that people associated with works requiring a MOWP follow them and also implement the following;

- a) Contractors must submit MOWP and execute the approved MOWP.
- b) Personnel and vehicles in the airside must have permits from the airport.
- c) Project Manager has a responsibility to supervise aerodrome work safety and must:
  - (i) Ensure the safety of aircraft operations and the day-to-day safe conduct of works in accordance with provisions of the MOWP.
  - (ii) Ensure that the Works are notified by NOTAM and that the text of each NOTAM is exactly as set out in the MOWP.
  - (iii) Supply ATC, on a daily basis, with all information necessary to ensure the safe conduct of Works.
  - (iv) Discuss with the Works Organizer, Project Manager on a daily basis and Airport Operations officer -Airside services, any matters necessary to ensure the safe conduct of Works in relation to operational safety.
  - (v) Ensure that unserviceable portions of the movement area, temporary obstructions, and the limits of the Works area are correctly marked and lit in accordance with the MOWP.
  - (vi) Ensure that vehicles and plant engaged on aerodrome works comply with the obstacle marking and lighting standards or alternatively are directly under escort.
  - (vii) Ensure that vehicles, plant equipment and materials not directly in use on the Works, are parked or stored outside the movement area, and do not obstruct the approach, takeoff or transition OLS, or interfere with radio navigational and landing aids.
  - (viii) Ensure that access routes are in accordance with the MOWP.

- (ix) Direct the immediate removal of vehicles, plant and personnel from the movement area where necessary to ensure the safety of aircraft operations.
  - (x) Ensure that the movement area is safe for normal aircraft operations following removal of signage, vehicles, plant equipment and personnel from the Works area.
  - (xi) Ensure that floodlighting or any other lighting required for works is shielded so as not to cause glare or confusion to pilots and air traffic controllers.
  - (xii) Immediately on completion of the works, the Works Safety Officer is to ensure that the Airside Operations is advised formally of the date of completion and time of cancellation of any associated NOTAM.
  - (xiii) The contractor must nominate a work safety officer for each project to coordinate with the airport and ensure that MOWP is executed.
- d) The work safety officer must report any hot work and abnormality to the ARFFS.
- e) The clerk of works will record a daily log of the construction work.

#### **4.8.6 Permit to Commence Work**

Work Permit is issued by the GM-EIA for all works to be done at the airside.

#### **4.8.7 Communication with Air Traffic Service Unit**

- (a) The contractors must have two-way radio communication ready to communicate with ATC at all time.
- (b) The contractors must establish a communication network to ensure that safety information from the ATC can be transmitted to everyone and all concerned contractor staff in a timely manner.
- (c) The contractors must strictly follow ATC instructions at all times.

#### **4.8.8 Obstacle Consideration**

- (a) No works should be permitted within the obstacle free zone when the runway is in use.
- (b) When works are proceeding within the approach area, outside the runway end, any temporary obstacles penetrating the standard approach surface must be marked as obstacles.
- (c) If the obstacle penetrates the take-off, climb out or the approach surface on a precision approach runway in such a way that the area is not totally obstacle free, the runway threshold must be displaced in such a way that there are no obstacles within this area.
- (d) No obstacles may interfere with the transitional surface along the side of the strip and part of the side of the approach surface.

#### **4.8.9 Works on Taxiways, Apron and Aircraft Stands (Temporary Obstacles)**

- (a) Temporary obstacles on taxiways, apron and aircraft stands refer to any obstacles that come up from work in progress inside these areas. These also include the laying up of mounds and the placement of supply depots of construction material and equipment.
- (b) Temporary obstacles close to taxiways, aprons and aircraft stands must not be of such height or extent that any risks arise for taxiing aircraft.
- (c) Any restrictions for the use of any Taxiway, Apron or Aircraft Stand must continuously be reported to the ATC.

#### **4.8.10 Effects on Operations Limits**

The effects of tall cranes on ILS and Radar will be considered in conjunction with those responsible for electronic landing aids and steps taken to reduce limitations to the minimum.

## 4.9 Apron Management

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### 4.9.1 Purpose

The aim of these procedures is to provide for coordination the orderly and safe allocation of operation of aircraft at EIA's aprons. .

### 4.9.2 Responsibility

- (a) MO has the overall responsibility for developing and implementing procedures for apron management and to ensure that the airport standards meet the requirements of the civil Aviation (Aerodromes) Regulations.
- (b) POO is responsible for creating a manual and SOPs associated with apron management.
- (c) The duty marshaller is responsible for the allocation of aircraft parking standards, record of aircraft parking information and supervision of parking procedures.
- (d) ATC is responsible for giving instructions to pilots and coordinating between pilots and airport operations staff when airport services are requested.

### 4.9.3 Procedure

Apron Management Service is a Section in airport operations department mandated to regulate activities of various stakeholders at airside to ensure safety.

It contributes towards reductions of hazards at the apron and responsible of coordinating the interaction of the Movements of aircraft, vehicles, equipment, airport employees, and passengers, with different demands without compromising safety.

Details of the procedures for Apron management, including procedures for;

- a) Aircraft Parking Areas,
- b) Communication between Air Traffic Control and the Apron Management Unit,
- c) Allocating Aircraft Parking Positions,
- d) Initiating Engine Start and Aircraft Push-back,
- e) Marshalling Procedures, and
- f) Follow-me Procedures,

have been defined in Airside Operations Manual – UCAA/EIA/AM/APP/01.

## **4.10 Apron Safety**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### **4.10.1 Purpose**

The purpose of this procedure is set out how manages apron safety to minimize ground operations risks, injuries, loss of life and property and disruption to airport operations.

### **4.10.2 Responsibility**

- (a) MO has the overall responsibility to ensure safety on the aprons.
- (b) Apron management unit has responsibility to set up procedures relating to apron safety and supervise operations in apron to ensure the compliance of ground operations.

### **4.10.3 Procedure**

- (a) Apron Safety Management is done through reporting incidents, training staff on safety management procedures, and striving to make continuous proactive improvement to the overall level of safety performance on the airside.
- (b) Ground Handling companies are required to establish of operations manuals in compliance with apron safety procedures.
- (c) Procedures for apron are set out in Airside Operations Manual – UCAA/EIA/AM/APP/01.

### **4.10.4 FOD and cleaning of movement areas**

- (a) EIA has Foreign Object Debris (FOD) prevention program developed in line with the Civil Aviation (Aerodromes) Regulations, with the object of preventing damage to aircraft within EIA caused by Foreign Object Debris.
- (b) EIA airside organisations, contractors and employees generate FOD on a daily basis during routine airport operations, maintenance, waste handling, disposal activities, and construction operations. The FOD prevention program defines the responsibilities and methods used to prevent FOD.
- (c) The FOD Program has been prepared to assist airside organisations, contractors and employees address trash, hazardous waste and materials during daily operations at EIA.
- (d) FOD prevention is the responsibility of everyone operating on the airside.

### **4.10.5 Removal of spillages**

The POO will ensure that fuel and oil spillages on the aprons are cleaned as per the procedures in the Airside Operations Manual – UCAA/EIA/AM/APP/01.

### **4.10.6 Safety Compliance Monitoring**

The duty marshaller will randomly inspect the ground handling procedures on the apron to ensure the compliance to the safety requirements. Non-compliances shall be reported to MO through the airport safety report system. The EIA management may cease a non-compliant operation that may affect the safety of aircraft operations.

#### **4.11 Airside Vehicle Control**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

The procedures for airside vehicle control are set out in the Airside Operations Manual – UCAA/EIA/AM/APP/01.

**4.11.1** EIA has established requirements for vehicles/equipment inspection and certification to ensure that all vehicles operating at the airside are in good sound condition to enhance safety.

**4.11.2** All vehicles are inspected by UCAA Head Mechanical and OO/AS airport operations before initial issue of a vehicle permit to operate on the aerodrome.

**4.11.3** Periodic inspections and checks on vehicles are done by the Equipment Serviceability Status Team (ESSAT) to ensure continued Apron worthiness.

**4.11.4** An emergency vehicle responding to an emergency shall be given priority over all other surface movement traffic.

**4.11.5** A vehicle operating on an apron shall:

- a) give way to an emergency vehicle; an aircraft taxiing, about to taxi, or being pushed or towed; and
- b) give way to other vehicles from the right hand side.

**4.11.6** An aircraft stand shall be visually monitored to ensure that the recommended clearance distances are provided to an aircraft using the stand.



## 4.12 Wildlife Hazard Management

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### 4.12.1 Purpose

The purpose is to mitigate hazards to aircraft caused by the presence of wildlife at the airport and its environs.

### 4.12.2 Responsibility

- (a) The Manager Operations has the overall responsibility for Wildlife Hazard Management.
- (b) The Principal Wildlife Hazard Management Officer is responsible for the development and implementation of the Wildlife Hazard Management Plan.

### 4.12.3 Wildlife Hazard Reporting

- a) Report Minor bird/wildlife strikes through Wildlife Hazard Management Daily Activity Report Form to GM-EIA, MO and MSMS.
- b) Report Major bird/wildlife strikes through Airport Operations SITREPS to DAAS, DSSER and DG.
- c) Mandatory reports should be made by other stakeholders (aircraft crew, airport employees, fixed base operators etc.) to the Airside Briefing office for onward submission and Air Traffic Control.
- d) Records of bird strike incident(s) and wildlife activity are kept on file in the Wildlife Hazard Management Office.
- e) Details of records shall include but not limited to the following: date, time, species (if known), numbers, location, movements, seasonal occurrences of observed wildlife and action taken to manage wildlife hazards.

### 4.12.4 Wildlife Hazard Assessment

This is majorly done through environmental / ecological studies and continuous research as demonstrated in the Wildlife Hazard Management Plan.

### 4.12.5 Environmental /Ecological Studies:

At its inception, EIA carried out an environmental and ecological study of bird hazards. The report included:

- a) Identification of birds and other wildlife species,
- b) Activity and behaviour of different wildlife species.
- c) Common locations for the different wildlife.
- d) Wildlife attractants – both on aerodrome and off aerodrome.
- e) Mitigation measures for wildlife hazard management.

A similar Ecological study will be carried out every 10 years to capture the above and will include land use changes around the aerodrome as well as effects of climate change on biodiversity.

#### 4.12.6 Wildlife Hazard Management Plan.

EIA has a Wildlife Hazard Management Plan – UCAA/EIA/AM/APP/05 that sets out EIA's actions to manage wildlife hazards at the Airport. The plan uses a four way approach to mitigate hazards associated with birds and other wildlife.

- a) **Dispersal activities** among others include; vehicle inspections 10 minutes prior to every jet aircraft movement, Human foot patrolling along runway grass strips, and firing of pyrotechnics.
- b) **On site habitat management** includes discouragement of wildlife attractants such as food points and water pools, termite mound eradication, grass height management and proper waste handling practices at the airport.
- c) **Airport Off-site activities** include engagement with the neighboring communities to discourage land use activities with a potential to attract birds and other wildlife. The Airport holds quarterly Wildlife Hazard Management meetings to review wildlife hazard assessment issues and collaborates with third party stakeholders such as Uganda Wildlife Authority, Nature Uganda, Uganda Wildlife Education Center, National Environmental Management Authority to gather relevant information concerning wildlife hazard management within the 13km radius of the airport.
- d) **Continuous research** is an approach through which the aerodrome authority improves wildlife hazard management at the airport. All pilots should report wildlife strikes and wildlife activity to ATC to advise other pilots and to enable the wildlife section assess and take the necessary action for continuous improvement of wildlife hazard management at Entebbe Aerodrome.

## 4.13 Obstacle Control

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### 4.13.1 Purpose

The purpose of procedures is to ensure that measures made to monitor and control the erection of temporary and permanent structures that may adversely impact aircraft operations

### 4.13.2 Responsibility

The Manager Aerodrome Engineering Planning and Development is responsible for Obstacle Control.

### 4.13.3 Obstacle Inspection

- a) Visual inspections of obstacles will be conducted during daily airport inspection by OO using a checklist.
- b) During the inspection OO, look out for obstacles within the following surfaces:
  - (i) Outer Horizontal Surface
  - (ii) Conical Surface
  - (iii) Inner Horizontal Surface
  - (iv) Approach Surface
  - (v) Inner Approach Surface
  - (vi) Transitional Surface
  - (vii) Inner Transitional Surface
  - (viii) Take-off Climb Surface
- c) Record findings of the inspection in the airside inspection logbook
- d) Unsafe conditions/obstacles shall be noted on the checklist and reported to MAEPD for prompt redress
- e) If a temporary obstacle is found, OO will:
  - (i) Immediately inform ATC and MAEPD.
  - (ii) If the obstacle is in airport perimeter, the airport will immediately remove it. If not, MAEPD will initiate instructions to truncate or remove the obstacle as per the Engineering manual.
- f) MAEPD will assess and inspect an object in OLS as soon as it is reported. If the object is an obstacle, MAEPD will initiate a NOTAM and report to DSSER immediately.
- g) Any equipment or installation located near or on the runway, or on the nongraded portion of the runway strip, or on RESAs shall be frangible and meet height restrictions.

Details of Obstacle Control are contained in the Aerodrome Engineering Manual – UCAA/EIA/AM/APP/03.

#### **4.13.4 Obstacle Evaluation**

The procedures for obstacle evaluation are set out in the Aerodrome Engineering manual – UCAA/EIA/AM/APP/03.

#### **4.13.5 Obstacle Survey, Measurement and Control**

- i) Obstacle survey and measurement is performed every 5 years, and in accordance with the requirements in Aerodrome Engineering manual – UCAA/EIA/AM/APP/03.
- ii) Results of the survey are filed at Aerodrome planning office, DAAS, DSSER, Airside operations, and AIS for publication where necessary.
- iii) Equipment or installations located near or on a runway, on the non-graded portion of a runway strip, on precision approach runway 17, or for obstacles of operational significance shall comply with frangibility requirements and height restrictions in accordance with the Civil Aviation (Aerodromes) Regulations.
- iv) Any equipment not complying with frangibility requirements and height restrictions is considered an obstacle and will be removed.

#### **4.14 Removal of Disabled Aircraft**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

The purpose is to expedite the recovery of aircraft in order to ensure airport business continuity.

The policies, procedures and instructions for the removal of disabled aircraft are set out in EIA's Disabled Aircraft Removal Plan – UCAA/ EIA/ DARP. The plan covers:

- a) The roles of the aerodrome operator and the holder of the aircraft certificate or registration
- b) Arrangements for notifying the holder of the certificate of registration
- c) Arrangements for liaising with the air traffic control unit
- d) Arrangements for obtaining equipment and personnel to remove the disabled aircraft
- e) The names, role and telephone numbers of persons responsible for the removal of disabled aircraft

#### **4.15 Hazardous Meteorological Conditions.**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

##### **4.15.1 Purpose**

The purpose of this procedure is to ensure that the aircraft operations at EIA can continue safely during adverse weather conditions.

##### **4.15.2 Responsibility**

MO has the overall responsibility for providing procedures related to hazardous meteorological conditions and to ensure that the procedures are implemented.

##### **4.15.3 General**

The following hazardous meteorological conditions, which affect, especially, AGL and Electrical Systems are often experienced at EIA:

- a) Strong winds
- b) Thunderstorms associated with severe strong winds
- c) Thunderstorms associated with direct and indirect lightning strikes.

##### **4.15.4 Hazardous Meteorological Conditions on AGL and electrical Systems**

###### **(1) Effects of On AGL And Electrical Systems:**

- (a) Sudden changes in the system operational parameters and fault conditions such as insulation failures resulting in equipment damages, thermal effects (fire) and power outages.
- (b) Atmospheric discharges resulting in direct lightning, frequency peak values, large lightening current strikes leading to damage of power system networks such as transformers, ring main units, switch gears and structures
- (c) Large induced power, lightening over voltages surges, flash overs and electric arcs by indirect lightning strikes.
- (d) Thermal and electrodynamic effects induced by circulation of lightening currents.

###### **(2) Mitigation Measures Against Hazardous Meteorological Conditions:**

- (a) Employ protections schemes on the network which are fast to detect any on a system and initiate a trip to isolate faulty circuit.
- (b) Employ protection schemes which are sensitive, selective and stable to detect even smallest fault on system to operate correctly at its settings, isolate only fault circuits to avoid unwanted false trips and leave all healthy circuits intact to ensure continuity of power supply.
- (c) Installation of lightening arresters, surge protection devices (SPD), diverters both for indoor and outdoor installations.

- (d) Earthing and bonding all installations and power system networks by use of protective conductors, earthing conductors and equipotential limits.
- (e) Installation of current and voltage transformers to step down high voltages and currents of the electrical power system to convert levels for the protection relays to operate.
- (f) Installation of protection relays which are highly sensitive on all power distribution networks to detect earth faults and initiate a trip to disconnect the faulty networks.
- (g) Employ residue current and earth leakage devices on all power distribution networks.
- (h) Installation of residual circuit breakers with overload protection (rcbo) are installed to automatically open/close the power system network based on auto recloser commands.
- (i) Employing air terminals that incorporate sharp rods, copper tapes and ground earth electrodes to protect equipment and structures.
- (j) Shielding overhead lines, heavy duty surge diverters and pre insertion reactors.
- (k) Installation of proximity voltage surge protectors for both indoor and outdoor installations.

#### **4.15.5 Disseminating Hazardous Meteorological Warning**

- (1) When hazardous weather conditions are reported to ATC, through the AWOS or other available means of communication, ATC – Entebbe Tower will communicate the weather reports to pilots through ATIS and inform OO.
- (2) OO will inform all airside operators of the weather and the following rules shall apply;

##### **Strong Winds and thunderstorms**

When there is a strong winds and thunderstorm warnings;

- i) the airport maintenance and contractors will cover material stack, park and secure ground service equipment to ensure that there are no loose objects.
- ii) Owners of aircraft in general aviation shall secure their aircraft.
- iii) Ground handling companies shall secure their equipment to ensure they are safe.
- iv) OO will patrol the airside especially the areas with high risks and report an unusual situations likely to affect safety of aircraft.
- v) Ground service equipment accidents and incidents shall be reported to; the owners of the equipment, MO and MSMS.

## **4.16 Handling of Hazardous Materials/Dangerous Goods**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### **4.16.1 General Information on Hazardous Material**

Hazardous materials are defined as substances or materials that, when involved in an accident and released in sufficient quantities, poses a risk to health, safety, property and/or environment. These include;

1. Explosives
2. Gases
3. Flammable Liquids
4. Flammable Solids
5. Oxidizing Substances and Organic Peroxides
6. Toxic Substances and Infectious Substances
7. Radioactive Materials
8. Corrosive Substances
9. Miscellaneous Dangerous Substances and Articles

Flights operating at EIA may carry hazardous materials, which are required to be marked and packed in accordance with IATA Dangerous Goods Protocols.

The transfer, handling and storage of hazardous materials from aircraft to storage facilities is the responsibility of the GHAs. Designated personnel have up to date training in the IATA Dangerous goods regulations as based on the ICAO Annex 18 and Technical Instructions for the safe transportation of dangerous goods by air and equipped for this task.

Emergencies involving hazardous material are handled by designated personnel from various specialized units consisting of: GHAs, ARFFS; AVSEC and Relevant Governmental Agencies.

### **4.16.2 Roles in Hazardous Material Emergency at EIA.**

#### **(1) General**

If a package containing radioactive materials ruptures and spillage occurs, the vehicles or persons that come near or cross through the area may become contaminated. If a radioactive material is disturbed, winds or a thermal column from an aircraft fire could carry and spread the radioactive material over a great distance, endangering a wide area.

Provision for decontamination of responding personnel and equipment are included in emergency planning procedures. If packages containing radioactive material are damaged, the assistance of radiological experts will be required without delay. The most appropriate organizations to provide such assistance are listed below.



Organisation	Emergency	Contacts
Atomic Energy Council (AEC)	Radio Active Material	0800100488
National Radiation Protection Services (NRPS)		+256-414-531498
Ministry Of Health	Infectious Substances	+256-414-340874

## (2) Ground Handling Agent

The cargo handling agents have established procedures for handling of hazardous materials as follows:

- a) Designated personnel receive and handle hazardous substances and materials;
- b) Receive assurance from Shippers that cargo can be handled safely, including any special handling procedures required for safety;
- c) Designated special areas on the aerodrome for storage of hazardous materials while on the aerodrome

## (3) ARFFS

Hazardous materials may be on flight, storage bonds or pallet at the apron. In case emergency occurs in flight, Pilot-In-Command (PIC) informs ATM for information relating to RFFS of any dangerous goods onboard. If situation permits PIC shall also include in the information the class; type and quantity of dangerous goods. If situation does not permit PIC to furnish all the details, these details shall be obtained from concerned Airlines Ground Personnel.

Where broken containers are found especially if they are radioactive, infectious or poisonous materials, precaution should be taken to safeguard the health of exposed aircraft occupants and rescue personnel. Trained personnel will be utilized.

In the event radioactive materials are suspected, the following procedures are undertaken:

- a) Inform the nearest nuclear energy facility, hospital with a radiological unit, or military base
- b) The nearest nuclear energy facility, hospital with a radiological unit, military base is required to dispatch immediately a radiological team to the accident site as per MOU;
- c) Persons coming in contact with radioactive material are isolated until examined by radiological team;
- d) Suspected material will be not handled until it has been Monitored and released by authorized personnel. Clothing and tools used at the accident scene are isolated until released by a radiological emergency team;
- e) Food or drinking water suspected of contamination should not be consumed.

- f) Only trained rescue and firefighting personnel with hazmat protective gear will remain at the scene
- g) All hospitals as per attachment - b will be notified immediately that radioactive materials are involved so they can establish radioactive decontamination areas in the hospital
- h) Any casualty or person exposed to dangerous materials should be removed from the scene of the occurrence and transported to the appropriate medical facilities for suitable treatment as soon as possible.

#### (4) Fueling Agents Hazardous Material Emergency

- a) The supply of fuel at EIA is the responsibility of Entebbe Joint Aviation Facility (EJAF) a consortium of companies Fueling Agent(S) operating at the aerodrome. These include:
  - i) Vivo Energy Operations +256 772 754064
  - ii) Air Total Operations +256 752 793042
- b) All fueling agents are required by the aerodrome to comply with requirement of UCAARs 2019 Reg. 43 and reasonable surveillance of all fueling activities on the aerodrome is conducted by the Airside Safety Officer.

#### 4.16.3 National Coordination Contacts For Hazardous Materials at EIA

##### National Coordination Contacts for Hazardous Material at EIA

Organization	Hazardous materials	Telephone
Atomic energy council	Radio Active	Tel Office: +256414696333/5 Radiological Emergency Toll Free Line: 0800100488
National Radiation Protection Services	Radiation	+256 -414-531498
Ministry of Health	Infectious Substances	+256 -414-340874
Uganda Police Force	Explosives	+256 -414-321901
UCAA Rescue And Firefighting Service		+256 -414-320879
UCAA Safety Management System Manager		+256 -752649149
UCAA Airport Operations Manager		+256 -758483681

Medical Services Coordinator		+256 -752222855
National Aviation Service (NAS)		+256 714 194005; +256 792 661002 <a href="mailto:Operations@nas.aero">Operations@nas.aero</a> ;
Das handling services (das)		+256 312 320670; +256 717 789005 <a href="mailto:Operations@dashandling.com">Operations@dashandling.com</a>
EJAF	Oils& fuels	+256 414321417; + 256 752 793081 +256 752 793042

#### 4.16.4 Dangerous Goods Handling Procedures

##### (1) Cargo (Exports)

- a) Display sufficient notices at cargo acceptance areas alerting shippers of restricted items that may be contained in general cargo for example lithium batteries, battery acids.
- b) Book at exports centre for acceptance shipment of Dangerous goods days before actual date of shipment.
- c) Carry out security screening of DG for acceptance;
- d) Carry out Acceptance checks of the DG using a current DG checklist. If any box is ticked NO on the checklist, shipment is returned to shipper for correction. Shipment is accepted if the checklist is all okay (YES).
- e) Store Shipment in the DG Cage awaiting airlifting. The Dangerous goods shipments in the cage are stored as per respective segregation requirements reflected in Table 9.3.A of the IATA DGR to avoid dangerous reaction.
- f) File Copies of all documents concerning the shipment. These include: Shipper's declaration, NOTOC, Airway bill and blue pages (4.2) where the item is found in the DG manual. Original documents accompany the shipment. Copies are then filed with the airline, GHA and a copy given to the shipper.
- g) Carry out further inspections of DG shipment for possible leaks and damages, invisible marks during cargo build up and securitization before actual loading.
- h) Follow report procedures are followed as per CAA requirements in case of accidents or incidents. DG incident report is used as reflected in 9.6 IATA DGR.

##### (2) Cargo (Imports)

- a) Receive pre-alerts from airlines on expected DGs on arriving flights and their loading positions.

- b) Receive accompanying paper work on all DGs shipments on board and store in the warehouse as per segregation requirements. DGs shipments whose consignees are available on site are given their shipments as per standard procedure at imports.

### **(3) Fuels**

- a) Fuels shall be stored only in designated and approved storage units in full compliance with the RFFS Procedural Manual.
- b) All fuel tankers and mobile refuelling tanks are to be properly labelled in accordance with the Transportation of Dangerous Goods Regulation.
- c) Fire extinguishers shall be located near the fuel storage areas and be of a suitable type and size to permit the evacuation of workers during a fire.
- d) Only personnel who have successfully completed fuel handling and fire safety sensitization training in line with UCAAR 2019 requirement plus sufficient on the job training from a supervisor shall handle fuels on the airport premises.
- e) At least one supervisor from each of the Fuel Agents shall have completed the fuel handling and fire safety course initially and recurrent training every 2years.
- f) If a Fuel Agent is found to be out of compliance the Director, Airport and Aviation Security or designated representative shall notify the Manager EJAF of the non compliance and give notice to rectify the non-compliance.
- g) All visitors to any fuel handling facility at the Airport shall be under escort by the Fuel Agent
- h) All fuels and other combustible materials stored at the Airport must have a security fence.
- i)

### **(4) Fuelling and Defueling**

The following general rules shall govern the refuelling, defueling, oil service and sumping of aircraft, the placing of fuels in storage tanks or dispensers:

- a) No aircraft shall be refuelled or defueled while aircraft engines are running, or aircraft is being warmed by application of heat or while such aircraft is in a hangar or congested or enclosed space.
- b) No person shall smoke or permit any open flames within the vicinity of an aircraft being refuelled.
- c) There shall be no parking or standing within 15metres of an aircraft being refuelled.
- d) When malfunction of refuelling equipment is detected all refuelling shall cease immediately and the malfunction remedied or the entire unit replaced. Any malfunction or irregularity detected on within the aircraft being serviced will be brought to the attention of the aircraft owner or operator immediately.

- e) Crew engaged in the fuelling and defueling of aircraft, the filling of dispensing equipment or storage of aviation fuels shall exercise extreme caution to prevent spillage.
- f) Cease fuelling when spillage occurs. Use only prescribed material in line with industry practice to absorb spillage.
- g) Provide no less than two Carbon Dioxide or approved dry chemical fire extinguishers when fuelling or defueling aircraft.
- h) No person shall perform or allow performance of any refuelling operation during an electrical storm.
- i) No person shall operate any radio transmitter or receiver or switch electrical appliances on or in an aircraft being fuelled or defueled.
- j) No person shall use any material or equipment during fuelling or defueling of aircraft that is likely to cause a spark or ignition.
- k) No person shall start the engine of any aircraft when there is gasoline on the ground under the aircraft.
- l) All hoses, funnels and appurtenances used in fuelling and defueling operations shall be equipped with an appropriate bonding device to prevent ignition of volatile liquids.
- m) Do not fuel or defuel aircraft while passengers are on board unless ARFFS is providing fire cover, passenger mobile stairs are in place at the cabin of the aircraft, the aircraft door is open and cabin attendants present at or near the open cabin door.
- n) During fuelling or defueling, position handling vehicles so as to make them readily moveable in the event of fire.

#### **4.16.5 Actions for Dangerous Goods Emergency Response**

##### **(1) General Procedures**

- a) Advise immediate supervisor
- b) Identify substance involved by reference to documentation (Shipper's declaration) or package marks
- c) Isolate package by removing other packages or property
- d) Isolate the area and advise emergency services as per local procedures.
- e) Avoid contact with the contents of the package.
- f) If contents come into contact with body or clothes:
  - i. Thoroughly wash off body with plenty of water
  - ii. Remove contaminated clothes
- g) Do not eat or smoke
- h) Keep hands away from eyes, mouth and nose
- i) Seek medical assistance

- j) Staff involved in such incidents stay on site until their names are noted and should follow emergency procedures.

**(2) Dangerous Goods Emergency Response Chart**

Hazard Class Division and Compatibility Group	Dangerous Goods Class	Hazard Description	Immediate Action Minimize Leakage and Contact with other Cargo	
1.3C 1.3G	Explosives (acceptable on Cargo Aircraft only)	Fire and minor blast hazard and/or minor propulsive hazard	Notify Fire Department  Guard against fire	
1.4B 1.4C 1.4D 1.4E 1.4G		Fire, but no other significant hazard		
1.4S		Small fire hazard		
2.1 2.2 2.2		Flammable Gas Non-Flammable Gas Cryogenic Liquid		Ignites when leaking High pressure cylinder bursting Subcooling
2.3		Toxic Gas (acceptable on Cargo Aircraft only)		High pressure cylinder bursting and toxic inhalation
3	Flammable Liquid	Gives off flammable vapour	Notify Fire Department Guard against fire	
4.1 4.2 4.3	Flammable Solid Spontaneously Combustible Dangerous when wet	Combustible, contributes to fire Ignites in contact with air Ignites in contact with water	Do NOT use water under any circumstances	
5.1 5.2	Oxidizer Organic Peroxide	Ignites combustibles on contact Reacts violently with other substances	Notify Fire Department Guard against fire Do NOT use water	
6.1 6.2	Toxic substance Infectious Substance	Harmful if swallowed, inhaled or in contact with skin Causes disease in Humans and Animals	Isolate area Obtain qualified assistance Do NOT touch  Keep away minimum 25 m	
7 Cat I 7 Cat II/III	Radioactive—White Radioactive—Yellow	Radiation hazards and harmful to health	Keep away minimum 25 m	
8	Corrosive	Hazardous to skin and metal	Notify Fire Department Guard against fire Avoid contact with skin	
9	Polymeric Beads Magnetized Material Carbon dioxide, solid (Dry Ice) Miscellaneous Dangerous Goods	Evolves small quantities of flammable gas Affects navigation system Causes subcooling/suffocation Hazards not covered by other classes	Avoid contact with skin No immediate action required	

**(3) Actions of ARFFS Personnel During Hazardous Emergency**

- Isolate the affected area or suspected hazardous materials
- Conduct hazardous materials detection, Monitoring, using a variety of detection instruments including Combustible Gas Indicators (CGIs) or Explosimeter, Oxygen Monitors, Colorimetric Tubes, Specific Chemical Monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.
- Conduct hazardous materials spill control and confinement, in case of a spill. Include confining or diking hazardous materials. These are actions taken to confine the product

released to a limited area including the use of absorbents, damming/ diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.

- d) Conduct hazardous materials leak control and containment in case of a leak. Includes actions taken to keep a material within its container, such as plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.
- e) Remove hazardous materials includes neutralizing a hazardous condition, product offload/ transfer, controlled burning (disposal of jet a1 by burning) or product flaring, venting, and over packing
- f) Decontaminate persons or equipment. Includes actions taken to prevent the spread of contaminants from the "hot zone" to the "cold zone." This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.
- g) Decontamination of occupancy or area exposed to hazardous materials.
- h) Request for assistance from experts as per the table below.

**Note:** all responding RFF Personnel must be in Full Hazmat Protective Wear before entering the suspected hazardous materials scene.

#### 4.16.6 Storage of Hazardous Material at EIA

- a) The airport operates cargo bonds located next to the passenger terminal building where hazardous materials are temporarily stored in accordance with relevant International requirements and National rules and regulations.
- b) There is a bulky fuel storage facility with the capacity to store 6 million litres of jet fuel for aircraft that refuel at EIA operated in accordance with Fueling Standards.
- c) These facilities are maintained in a manner that provides high level of safety and security.

#### 4.16.7 Classification Of Hazardous Materials

##### 1) Class 1 - Explosives

Division 1: 1 Explosives Which Have a Mass Explosion Hazard

Division 1:2 Explosives Which Have a Projection Hazard but Not a Mass Explosion hazard

Division 1: 3 Explosives which have a Fire Hazard and either a Minor Blast Hazard or a Minor Projection Hazard or both, but not a Mass Explosion Hazard

Division 1: 4 Explosives Which Present No Significant Blast Hazard

Division 1: 5 Very Insensitive Explosives with a Mass Explosion Hazard

Division 1: 6 Extremely Insensitive Articles Which Do Not Have a Mass Explosion Hazard

##### 2) Class 2 - Gases

Division 2: 1 Flammable Gases

- Division 2: 2 Non-Flammable, Non-Toxic Gases
  - Division 2: 3 Toxic Gases
  - 3) Class 3 - Flammable Liquids (And Combustible Liquids
  - 4) Class 4 - Flammable Solids; Substances liable to Spontaneous Combustion; Substances Which, on contact with water, Emit Flammable Gases
    - Division 4: 1 Flammable Solids, Self-Reactive Substances and Solid Desensitized Explosives
    - Division 4: 2 Substances Liable to Spontaneous Combustion
    - Division 4: 3 Substances Which in Contact with Water Emit Flammable Gases
  - 5) Class 5 - Oxidizing Substances And Organic Peroxides
    - Division 5: 1 Oxidizing Substances
    - Division 5: 2 Organic Peroxides
  - 6) Class 6 - Toxic Substances and Infectious Substances
    - Division 6: 1 Toxic Substances
    - Division 6: 2 Infectious Substances
  - 7) Class 7 - Radioactive Materials
  - 8) Class 8 - Corrosive Substances
  - 9) Class 9 - Miscellaneous Dangerous Goods/Hazardous Materials And Articles
- The Words "Poison" Or "Poisonous" Are Synonymous With The Word "Toxic".

#### **4.16.8 Inspection of Hazardous Material Storage Facilities at EIA**

- a) Storage facilities at the airport are inspected regularly to ensure adherence to safety guidelines. A team of safety and security personnel (ARFFS-prevention, airside) led by MSMS conducts Quarterly inspections of the fueling agents, fuel storage area, fuel cabinet, Mobile fuelers and hydrants for compliance with the aerodrome's fire safety standards at least once every 3 consecutive months.
- b) Follow up inspections will be conducted when unsatisfactory items are found.
- c) Inspection records are maintained in the office of the Manager SMS for at least 12 months.
- d) All fueling agents engaged in handling and dispensing aviation fuel are required to take immediate corrective action whenever notified of noncompliance with any of the regulations or requirement. If corrective action cannot be accomplished within a reasonable period of time, the fuelling agent will notify the General Manager, EIA who will in turn inform DSSER.



#### **4.16.9 Training in Hazardous Material Handling**

- a) Each fueling agent will have a supervisor complete an aviation fuel training course in fire safety that is acceptable to the aerodrome safety inspectorate of the authority.
- b) The supervisor will receive recurrent training at least once every 24 MOonths. If a new supervisor is hired, s/he will successfully complete an authorized aviation fuel-training course within 90 days.
- c) All fueling agents engaged in handling and dispensing fuel at the aerodrome, shall submit written certification to aerodrome management once every 12 months that the above training standards have been accomplished. (if applicable add: those records shall be maintained (insert location) for 12 months.

## 4.17 Low Visibility Operations

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### 4.17.1 Purpose

The purpose of this procedure is to provide pilots with information relevant to aircraft movement in conditions of low visibility at EIA.

### 4.17.2 Responsibility

The manager operations has overall responsibility for ensuring that low visibility procedures are developed and sufficient resources are available.

### 4.17.3 General

The following measures apply at EIA:

- a) Low Visibility Procedure (LVP) is declared at 2000m visibility.
- b) At 800m RVR, operation of aircraft class A and B is restricted.
- c) 550m is the lowest acceptable RVR for operation on RWY 17. Aircraft operations shall be based on aircraft capability and or aircraft operating minima.

### 4.17.4 Measurement of RVR at EIA

There are two RVR observing practices at EIA as follows:

#### 1) Instrumented RVR Measurements:

- a. In this method, the RVR is measured and reported according to the automated readings by the Automatic Weather Observation Systems (AWOS).
- b. In the event of unavailability of AWOS readings, RVR measurements will be made by the duty Meteorological observer and reported through any available two way communication between ATS and the Meteorological Authority.

#### 2) Visual Observation: the human observer technique

The duty meteorological observer counts the number of runway lights visible from the observer station near the runway;

#### **Accountable Duty Officer:**

The Officer-in-Charge NMC: +256 414 320920

### 4.17.5 Part I: Preparation for Low Visibility Operations.

When the visibility deteriorates to approximately 2000m RVR, safeguarding is initiated by carrying the following activities before declaration of full LVP:

- i. The withdrawal of vehicles and personnel involved in non-essential activities on the manoeuvring area;
- ii. Any temporary WIP and maintenance activities on the Movement Area are halted;

- iii. Work areas vacated and equipment removed; glide path critical and sensitive areas are cleared of all traffic.
- iv. Taxiways: A1, B, C1, C2, D, A4 will be open. All other Taxiways are closed off as unavailable for use.
- v. Airside undertakes airfield inspection;
- vi. Electrical checks on lighting and backup generator;
- vii. On receiving LVP safeguarding alerts, the DO-RFFS briefs the RFFS crews to create situational awareness about a local standby due Low Visibility
- viii. After receiving the brief and awareness of the situation, the RFFS crews standby at the new fire station with RFF vehicles lights, beacon and siren turned on;
- ix. On receiving LVP safeguarding alerts, the station DO/IC operations informs marine crews and nearby stakeholders via PAS to create situational awareness about a local standby due Low Visibility
- x. After receiving the brief and awareness of the situation, the marine crews unmoor the boats, ignites and take the boats out and anchor in front of the pier for LVP standby emergency; with Navigation Lights, Search Lights, Deck Lights, Beacon and Siren/ Horn are turned on;

#### 4.17.6 LVP Part II: When low visibility is declared

Step	Action by	Activity
1	ATMO	Declare LVP Part I and Part II as appropriate.
2	Assistant Airside Operations Officer (AAOO)	<p>When ATMO declares low visibility in effect, the AAOO does the following:</p> <ul style="list-style-type: none"> <li>a) Stop construction and maintenance activities at the airside;</li> <li>b) Restricts personnel and equipment Movement to the essential minimum. Only activities/vehicles determined by Airside Operations as essential to the safe operation of the airport are permitted. They include: <ul style="list-style-type: none"> <li>- Safety critical repairs to navigational aids, RADAR and airfield visual aids using the technical maintenance vehicle</li> <li>- Runway/taxiway surface inspections using customised airside vehicle.</li> <li>- Wildlife Management using the wildlife service vehicle</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>- RFFS trucks during Emergency</li> <li>- Escort duties using Follow Me and/or Alpha Charlie</li> <li>- Aircraft servicing vehicle/equipment;</li> </ul>
3	AAOO	<p>a) On landing in LV, requests ATMO for permission to enter manoeuvring area to provide Follow Me service to the arriving aircraft to a designated parking stand</p> <p>b) On receiving permission and location of the arriving aircraft, proceeds with extreme caution operating with dipped headlights, and where fitted, fog lights.</p> <p>c) Escorts arriving aircraft one at a time to prevent collision between aircraft to aircraft and aircraft and vehicle.</p> <p>d) Constantly keep a listening watch from ATM for information update</p> <p>e) Provide escort/Follow-Me service in the vehicle corridor as corridor Movement are also restricted to bare minimum.</p>
4	ELEC/ ATMO	Operate the CCR control switch, manually or otherwise, by increasing the intensity/brilliance of light in Low Visibility.
5	RFFS DO	Deploys RFFS crews at designated standby point when visibility is at 2000m RVR
6	RFFS Crews	Takes standby position at the designated points
7	AVSEC DO	<p>Coordinates with AVPOL IC/OPS, who together institutes heightened security measure of:</p> <ul style="list-style-type: none"> <li>- Increased joint patrols within and outside of the perimeter fence;</li> <li>- beefing up deployment;</li> <li>- screening at access points of the terminal buildings and other critical aviation safety and security installations</li> </ul>
8	Vehicle/Equip't Operator	When a vehicle is in the manoeuvring area and has lost radio contact with all stations, the driver should continue to the last position for which a driver had ATM permission. The driver should not Move any

		<p>further than the position for which the driver has ATM permission.</p> <p>a) If the driver is in possession of a Mobile phone he should contact control tower, inform them of the current problem? This will be relayed to ATM and a vehicle will be dispatched to escort him to a safe position.</p> <p>b) In the event of a vehicle breakdown report your location and the nature of the breakdown to ATM by R/T and await instructions.</p> <p>If the breakdown also causes radio failure, and if the driver is in possession of a Mobile phone he should contact apron control tower to inform them of current problem. In either event wait for assistance, do not leave the vehicle unattended.</p>
9	All Operational Staff on the maneuvering area	Maintain a two-way communication with ATC on frequency 121.9MHz or where possible, maintain a listening watch on frequency 118.1MHz.

## **4.18 Protection of Sites of Navigational Aids**

*Note: For Contacts of persons responsible refer to master Contact list paragraph 0.3.*

### **4.18.1 General**

EIA is equipped ILS and DVOR installed at various sites at the aerodrome. As these facilities and equipment are used for Aircraft Navigation, Instrument Approach and for Air Traffic Control purposes it is necessary that the radio signals of the facilities be maintained at the highest level of integrity.

All radio facilities have Defined Critical and Sensitive Areas within which the introduction of large objects will affect their signals either as reflectors or deflectors of radio signals.

Therefore, it is important that particular measures are taken to ensure the signals from the above approach and navigational aids are not degraded by random Movements of objects in their vicinity.

### **4.18.2 Control of Activities In The Vicinity Of Nav aids**

There are procedures in place for the protection of navigation aids within and off the aerodrome are outlined below:

### **4.18.3 Interruption of Visual And Electronic Signals Of Nav aids**

- a) Approval is required from DSSER to undertake any construction within the vicinity of navigational equipment
- b) Maintenance personnel cut and maintain the grass height at ILS Critical Areas below level that don't affect nav aids
- c) The MAEPD/MAM/MCNS coordinates the construction and maintenance activities that affect navigational equipment;
- d) MO notifies DSSER of any intended construction activities within the vicinity of navigational equipment.
- e) The CNS Duty personnel monitors construction activities to prevent the interruption of Visual and Electronic Signals of Nav aids.

### **4.18.4 Protection Against Vandalism**

- a) A perimeter/protective fence is provided at EIA to deter access to navigational facilities by potential vandals.
- b) Aviation Security conducts frequent inspections of all Nav aids on and off the aerodrome to deter potential intrusion or vandals.

### **4.18.5 Protection of the ILS and Glide Path (GP)**

Within the critical areas of the ILS localizer and GP, the following rules/procedure apply:

- a) Maintenance of the ground e.g. Grass cutting, levelling etc, may only be done on prior notice to the O/C Air Navigation Services.
- b) The work will be done during periods of low or no traffic Movements and of good visibility.

- c) To avoid disruption the work will as far as practicable be carried out during the maintenance scheduled agreed upon with DANS.
- d) The associated facility will be switched off.
- e) At the completion of the work the area involved will be inspected.
- f) No object is or will be installed in these areas other than the ILS Monitor aerials.
- g) Pedestrians are not allowed to walk through the areas at any time.
- h) During normal aircraft Movement periods both areas will be kept free of people, vehicles and equipment as required.
- i) Further precautionary security measures have been taken by deploying a watchman near the localizer site to ensure that no pedestrian approaches its critical area.

#### **4.18.6 Protection of the DVOR**

The protection area for the DVOR is the space contained within a ground level circle of 230 metres from the site centre with a further slope of 2% (1:50) out to 900 metres radius from the site. Within the protected area the following rules apply:

- a) Maintenance of the ground may be carried out only with prior notice to manager communications, CAA.
- b) The work will be done only at periods of good visibility.
- c) Except when the DVOR equipment has been shut down, no vehicle, tractors or large equipment will be operated within the first 230 metres from it.
- d) No object shall be installed within the 230-meter radius other than the dvor Monitor.
- e) In addition except for maintenance vehicles, no vehicle or large equipment will be parked in this area at any time;

#### **4.18.7 Ground Maintenance In Vicinity Of Navaid Installation**

- a) Maintenance of the ground e.g. Grass cutting, levelling etc, may only be done on prior notice to the O/C Air Navigation Services.
- b) The work will be done during periods of Low or no traffic movements and good visibility.
- c) To avoid disruption the work will as far as practicable be carried out during the maintenance scheduled agreed upon with DANS.
- d) The associated facility will be switched off.
- e) At the completion of the work the area involved will be inspected.
- f) No object is or will be installed in these areas other than the ILS Monitor aerials.

#### **4.18.8 Periodic And Emergency Maintenance Of Navigation Aids**

NAVAIDS are maintained by CNS department in DANS.

#### **4.18.9 Signs and Warning For Hazardous Microwave Radiation**

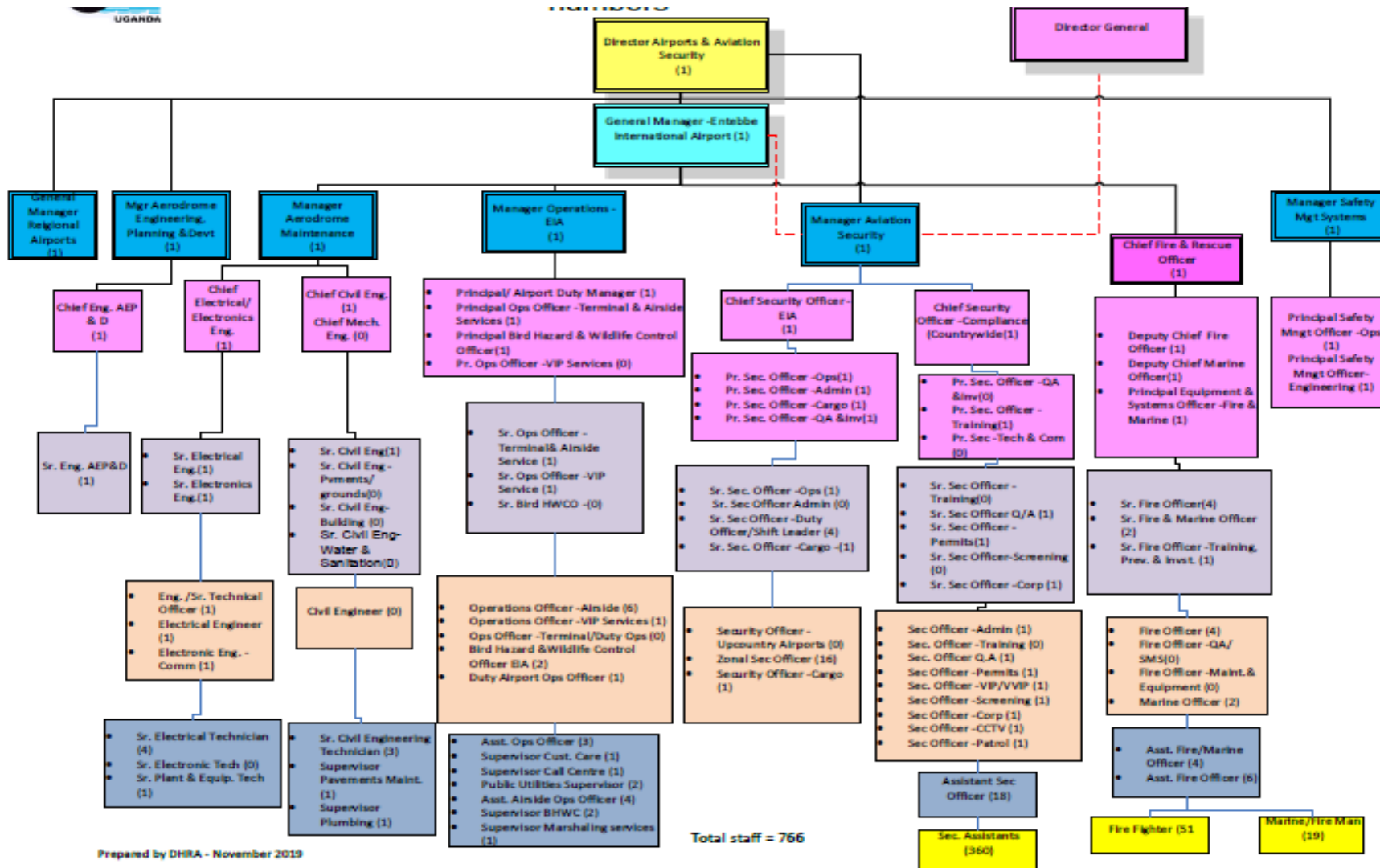
- a) Notices of dangerous radiation have been displayed at various places near the DVOR site and other Nav aids.
- b) In addition there is a permanent security guard to stop casual visitors and pedestrians near the navaid/equipment site.



# **Part 5: Aerodrome Administration and Safety Management System**

5.1 Aerodrome Administration

EIA Organizational Chart for Directorate of Airports and Aviation Security



## **5.2 Overall Responsibility for Safety at EIA**

At EIA, the Director General Uganda Civil Aviation Authority (UCAA) has the ultimate accountability and responsibility for the SMS and provides the resources necessary to implement and maintain the SMS.

The DAAS is the Accountable Manager for SMS.

The Manager SMS is responsible for the implementation of SMS in the Airport.

Note: For Contacts of the persons responsible for SMS, refer to attachment 2 – Aerodrome Manual Contact Information.

## **5.3 Roles and Responsibilities for Personnel**

The roles and responsibilities of the different personnel are contained in the job descriptions of the personnel that are held by Human Resource department. Copies of the documents are kept in DAAS' office.

Roles and responsibilities are communicated to all staff in appointment letters and using the performance appraisal system.

## **5.4 Training of Personnel**

Training programmes are developed for the different Safety and Security areas. Annual training Plans are developed and implemented, in line with the documented training programmes.

## 5.5 Airport Committees:

S.n	Committee	Composition	TOR/Roles	Frequency of Meeting
1	Airport Security Committee (ASC)	<ol style="list-style-type: none"> <li>1. GM-EIA (Chairperson)</li> <li>2. ASM (Secretary)</li> <li>3. CJSO</li> <li>4. AvPol Commandant</li> <li>5. Chief Liaison Officer - ISO</li> <li>6. Liaison Officer -UPDF</li> <li>7. Liaison Officer - ESO</li> <li>8. Liaison Officer - SFC</li> <li>9. Liaison Officer - UPDAF</li> <li>10. Liaison Officer - Interpol</li> <li>11. In Charge, Counter Terrorism, AvPol</li> <li>12. CFO</li> <li>13. Assistant Commissioner, Immigration</li> <li>14. The Manager Customs EIA</li> <li>15. The CEO - NAS</li> <li>16. The CEO – DAS</li> </ol>	<ol style="list-style-type: none"> <li>a) Assist the general manager in coordinating among the stakeholders the implementation of security controls and procedures as specified in the NCASP and ASP;</li> <li>b) To oversee the implementation of the decisions or directives of the NCASC;</li> <li>c) Review and endorse the draft ASP or any adjustment of the ASP before its submission for formal approval by the appropriate authority;</li> <li>d) Monitor the ASP including special measures introduced by the airport authority, aircraft operators and airport tenants;</li> <li>e) Review the prevailing threat to airport security;</li> <li>f) Draw up and maintain a list of vulnerable points including essential equipment and facilities, and review the security of these points on a regular basis;</li> <li>g) Ensure that security measures and procedures in place are adequate to meet threats and that they remain under constant review, providing for normal situations and contingencies for</li> </ol>	<ol style="list-style-type: none"> <li>a) Quarterly (Every 3 months)</li> <li>b) ad-hoc in case of an accident or incident.</li> </ol>

S.n	Committee	Composition	TOR/Roles	Frequency of Meeting
		17.The CEO – Newrest – UIS 18.The Chairperson, AOC 19.A representative of the EIA Tenants 20.A representative of Ministry of Health 21.A representative of the Postal and Courier Services 22.A representative of Entebbe Joint Aviation Facility (EJAF) 23.A representative of Entebbe Municipal Council 24.OC Uganda Wildlife Authority (UWA) 25.DSSER Representative	periods of heightened security and emergency situations; h) Arrange for security surveys and inspections to be carried out on an unpredictable (irregularly-spaced) but frequent basis; i) Review the results of quality control processes and external audits or inspections, adequacy and effectiveness of the ASP; j) Ensure that the appropriate recommendations for improvement in security measures and procedures are implemented; k) Inform the appropriate authority of the current state of security measures and procedures in effect at the airport and refer to that authority any problems related to the protection of the airport and its services which cannot be resolved at the local level; l) Prescribe and co-ordinate security education, awareness and training of airport and other staff and the general public; m) Review and provide security advice on plans for new or modified facilities as well as new or modified operational processes;	

S.n	Committee	Composition	TOR/Roles	Frequency of Meeting
			<ul style="list-style-type: none"> <li>n) Provide a forum for the discussion of aviation security matters;</li> <li>o) Oversee the planning, implementation and coordination of MANPADS mitigation and response activities at EIA;</li> <li>p) Ensure availability of necessary resources and equipment to mitigate the MANPADs risk including trained staff;</li> <li>q) Coordinate MANPADS exercises to review plans, identify/confirm possible PLS/PLA as well as the MANPADs footprint area and ascertain surveillance/reconnaissance resources;</li> <li>r) Develop and maintain first responder crisis response requirements;</li> <li>s) Support Community Outreach and MANPADS awareness training;</li> <li>t) Ensure that the ATCO are trained and have the necessary procedures and equipment to communicate with all relevant stakeholders;</li> <li>u) Developing with the relevant stakeholders maps of the areas and sites indicating which agency is responsible for an identified location;</li> </ul>	

S.n	Committee	Composition	TOR/Roles	Frequency of Meeting
			v) Handling public information requests regarding the MANPADs risk mitigation; w) Any coordination with other supporting agencies not included in the EIA MANPADs mitigation plan; x) Any other relevant coordination information. y) Refer to the National Civil Aviation Security Committee any matter relating to the security of the airport which is within its functions under sub regulation 24 (2), which cannot be resolved at the airport level;	
5	Airport Emergency Planning Committee (AEPC)	1. GM-EIA– Chairman 2. MSMS 3. MO 4. ASM 5. Medical Services Coordinator 6. CJSO 7. Commandant AVPOL 8. Air Base Commandant 9. Chairman AOC 10. GHAs Representatives 11. EJAF 12. OC Tower 13. CFRO– Secretary	a) Reviewing the Emergency plan b) Mobilizing and training stakeholders in Airport emergency management c) Organizing the Full Scale Emergency Exercises d) Organizing other Emergency Exercises (Tabletop, annual hot drills, communication exercise) e) Advising Airport Management on matters relating to Emergencies. f) Coordination with SAR on emergency management.	Quarterly - Every 3 months to discuss the progress of exercises and in case of a real emergency.

S.n	Committee	Composition	TOR/Roles	Frequency of Meeting
		14. MF 15. MP 16. Airside Safety Officer 17. MAA 18. OC Met		
6	Airport Security Permits Vetting Committee (ASPVC)	1. Aviation Security Manager-CAA (Chairperson) 2. Commandant Aviation Police 3. SSO/Permits AVSEC (Secretary) 4. Chief liaison Officer Airports- ISO 5. Airport liaison officer -ESO 6. Airport liaison officer-CMI 7. Airport liaison officer-Interpol 8. Airport liaison officer- SFC 9. Airport liaison officer-UPDAF 10. O/C Crime Intelligence Aviation Police 11. Any other representative as may be determined by the ASC and the NASC.	a) Ensuring the implementation of the permits policy; b) Holding periodic meetings and attended by only substantive members; c) Regulate the procedure for meetings determining issues such as quorum, secretary, minute's approval, circulation and keeping records; d) Vetting all applicants for airport (security) access permits; e) Advice the issuing authority (CAA) in all matters concerning airport security access permits; f) Arrange for regular security surveys and inspections to be carried out to evaluate implementation of the permits policy; g) Report to the airport security committee any security concerns. h) Carries out background checks on all personnel seeking unescorted access to airport restricted areas and security personnel implementing security controls at EIA.	a) At least once every week and b) ad-hoc in case of an emergency.



<b>S.n</b>	<b>Committee</b>	<b>Composition</b>	<b>TOR/Roles</b>	<b>Frequency of Meeting</b>
7	Airport Facilitation Committee	1) GM- EIA (Chairperson) 2) MO 3) ASM 4) MMC 5) CJSO 6) CLOA 7) Commandant AVPOL 8) PSO/Ops 9) SVSO	a) To implement the National Facilitation programme at the Airport level b) To examine problems arising in connection with the clearance of aircraft, passengers, baggage, cargo, mail and stores and where possible provide and effect immediate solutions to the problems which may arise at international Airports concerned c) To make recommendations as appropriate to the NFALC or Ministry/ Agency/ Authority concerned for the implementation of proposals which cannot be effected by the Airport facilitation committee d) To inform the NFALC of action taken and recommendations made by forwarding copies of the confirmed minutes of the Airport facilitation committee meetings.	a) Twice a year; b) Ad hoc – in event of an Emergency
8	Airport Joint Security Committee	1) AVSEC 2) AVPOL 3) UPDF 4) ISO 5) ESO 6) SFC 7) UPDAF	To coordinate joint security operations for: a) EIA b) UCAA operated Regional Airport c) Privately owned/operated airport/entities in Uganda.	a) At least weekly b) Ad hoc in case of emergency

S.n	Committee	Composition	TOR/Roles	Frequency of Meeting
		8) CMI 9) Customs EIA 10) Immigration EIA 11) UWA		
17	AOC	1) All Airline Operators; 2) GM-EIA 3) MO 4) ASM 5) MPA 6) MIT 7) CJSO	a) Provide opportunities for dialogue, education, advancement and improvement of all aspects of the airport operations through meetings, seminars, communications, publications and other programs and activities. i.e. Guide when consulted b) Ensuring any adjustments to Industry rules agreed upon to overcome local difficulties; c) Referring all matters related to facilities, operations and services both in the air and on the ground; d) Referring all matters concerning medium to long-term airport development programs involving the handling of passengers, cargo and aircraft; e) Stay focused on safety, security, operational excellence and cost efficiency by transparency; f) Play an active role in the decision making process with stakeholders; g) Consult, involve and inform members about relevant issues.	Monthly

<b>S.n</b>	<b>Committee</b>	<b>Composition</b>	<b>TOR/Roles</b>	<b>Frequency of Meeting</b>
19	Training Committee	1) MSMS – Chairman 2) PSMSO – Ops 3) PSMSO – E 4) RFFS Training Coordinator 5) Airport Operations Training Coordinator 6) Avsec Training Coordinator 7) Maintenance Training Coordinator 8) Planning Training Coordinator	a) Receive and Review Departmental Training Plans and Programs b) Synchronise the Directorate Training with the Organizational Training Plan; c) Align Directorate training with organizational Objectives; Business and Strategic Plan; Budget and Work plans. Prioritize DAAS training d) Create a database for the Directorate Training e) Carry out TNA for the Directorate	Quarterly

## **5.6 Safety Management System**

The Safety Management System (SMS) implemented at EIA is applicable to all departments and sections at the airport.

Ground Handling Agencies and other Agencies at the airport are obliged to comply with the safety management procedures.

The established SMS is documented in the EIA SMS Manual CAA/DAAS/SMSM/01. That is submitted to DSSER for acceptance, inline with the Civil Aviation (Safety Management) Regulations.

## **5.7 Safety Organisation and Structure of EIA**

EIA is administered by the Directorate of Airports and Aviation Security (DAAS), which is responsible for:

- i) The Safety of operations.
- ii) Management of the terminal and other buildings.
- iii) Management of all terminal installations.
- iv) Maintenance of Airfield Ground Lighting and electrical installations.
- v) Aviation Security Services including the screening of passengers, issue of ID cards and other permits, etc.
- vi) The provision of Rescue and Fire Fighting Services.

The various Departments of DAAS are charged with the responsibility for the provision of the aforementioned as well as allied services.

The safety management functions of the aerodrome are organised by a safety review committee, a co-ordination group and a departmental safety action group. In addition, the SMS Manager has a stand-alone function and reports directly to The Director Airports and Aviation Security.

## **5.8 Quality Management System**

EIA implements a Quality Management System as described in the UCAA Quality Manual – UCAA/CORP/MAN/01.

**6.0 Attachments**

**Attachment 1: Aerodrome Chart**

**Attachment 2: Aerodrome Obstacle Chart Type A Entebbe RWY 17/35**

**Attachment 3: Aerodrome Obstacle Chart Type A Entebbe RWY 12/30**

**Attachment 4: Apron Parking/Docking Chart Apron 1**

**Attachment 5: Apron Parking/Docking Chart Apron 2 and 4**

**Attachment 6: Apron Parking/Docking Chart Apron 5**