



Leeds Bradford[®]
Yorkshire's Airport

Aerodrome Manual

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Document Author
Airfield Safety & Compliance Manager

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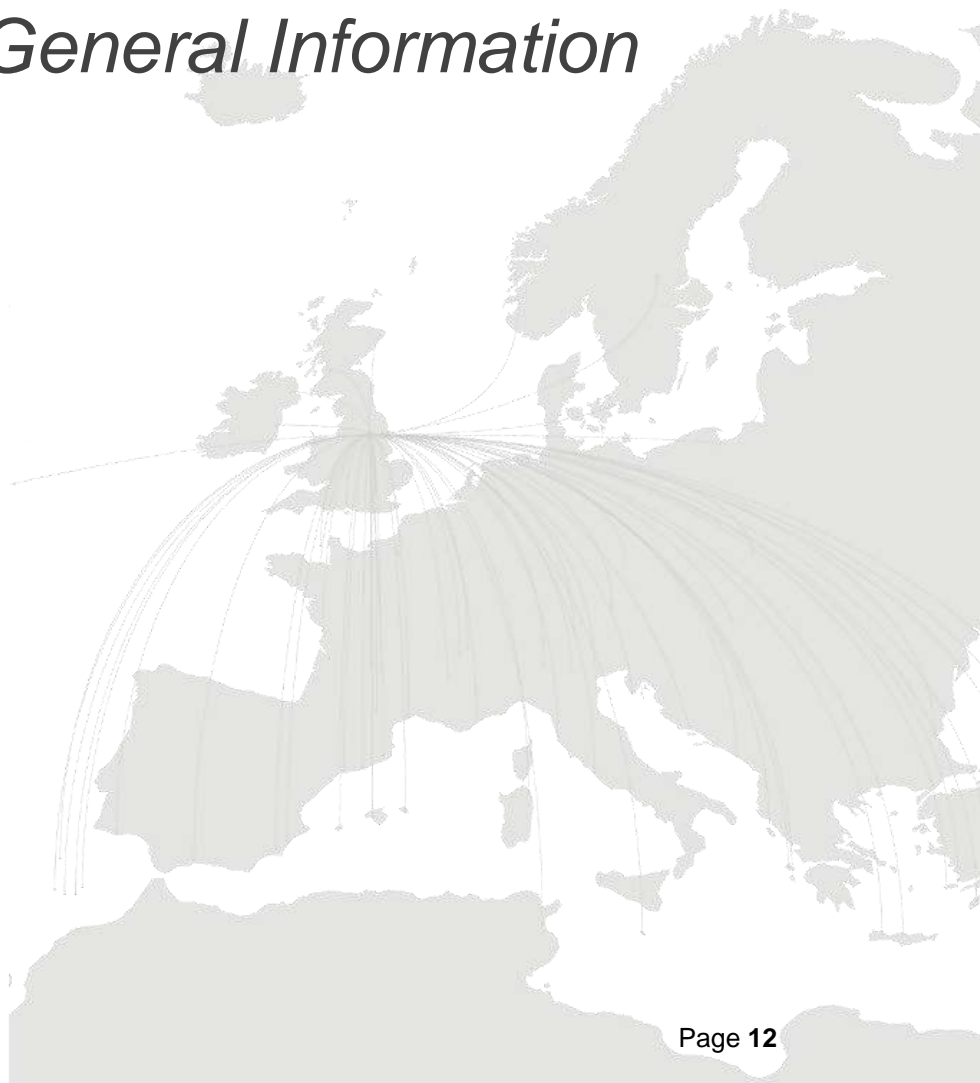
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Part A

GENERAL

1. Administration and Control of the Aerodrome Manual

2. General Information



1 SECTION 1 - Administration and control of the aerodrome manual

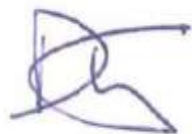
1.1 Introduction

1.1.1 Statement of Compliance

The Leeds Bradford Airport Aerodrome Manual clearly and concisely describes the systematic approach to the operation of the aerodrome, demonstrating our commitment to managing the aerodrome safely and effectively. This document concerns the certification of Leeds Bradford Airport (LBA) in accordance with AMC-GM-ADR, CS-ADR-DSN, the terms of the certificate & EU Commissioning Regulation No 139/2014. Also contained are the technical and operational requirements, based on the contents of ICAO, EASA and the CAA, and contains details of the operational management of the aerodrome as required by EASA. The Aerodrome Manual is distributed to all relevant departments and third parties that have a role in the safe operation of the aerodrome. Whilst accountability starts at the top of any organisation, it is essential that all individuals understand their own responsibilities and accountabilities as defined within the manual.

1.1.2 Operational Procedures

The LBA Aerodrome Manual contains the Airport Operational Procedures (AOP's) which must be complied with at all times by persons operating on the aerodrome. These procedures are written in compliance with all of the relevant regulations of ICAO and the EASA. The operational procedures are contained in Part E of the manual.



Simon Whitby
Accountable Manager
Leeds Bradford Airport

30th JULY 2018

1.2 Definitions

	Definitions
Aerodrome	Any area of land or water designed, equipped, set apart or commonly used to afford facilities for the landing and departure of aircraft and includes any area or space, whether on the ground, on the roof of a building or elsewhere, which is designed, equipped or set apart to afford facilities for the landing and departure of aircraft capable of descending or climbing vertically, but shall not include any area the use of which for affording facilities for the landing and departure of aircraft has been abandoned and has not been resumed.
Aerodrome elevation	The elevation of the highest point of the landing area.
Aerodrome Reference Point	The aerodrome reference point is the geographical location of the aerodrome and the centre of its traffic zone where an ATZ is established.
Apron	A defined area on a land aerodrome provided for the stationing of aircraft for the embarkation and disembarkation of passengers, the loading and unloading of cargo and for parking.
Category 1 (CAT 1) Operation	A precision Instrument Approach and Landing with a decisions height not lower than 200 feet and with either a visibility not less than 800m, or runway visual range (IRVR) not less than 550m.
Category II (CAT II) Operation	A precision instrument approach and landing with a decision height lower than 200ft but not lower than 100ft., and a runway visual range not less than 300m.
Category IIIA (CAT IIIA) Operation	A precision instrument approach and landing with either, a decision height lower than 100ft, or with no decision height and a runway visual range not less than 175m.
Category IIIB (CAT IIIB) Operation	A precision instrument approach and landing with either, a decision height lower than 50ft, or with no decision height and a runway visual range less than 175m but not less than 50m.
Cleared and Graded Area	An area within a runway strip free from obstacles.
Clearway	An area at the end of the take-off run available and under the control of the aerodrome, selected or prepared as a suitable area over which an aircraft may make a portion of its initial climb to a specified height.
Instrument Approach Runway	A runway intended for the operation of aircraft using non-visual aids providing at least directional guidance in azimuth adequate for a straight-in approach.
Instrument Strip	An area of specified dimensions which encloses an instrument runway.

Manoeuvring Area	That part of an aerodrome provided for the take-off and landing of aircraft and for the movement of aircraft on the surface, excluding the apron and any part of the aerodrome provided for the maintenance of aircraft.
Movement Area	That part of an aerodrome intended for the surface movement of aircraft including the manoeuvring area, aprons and any part of the aerodrome provided for the maintenance of aircraft.
Non-Instrument Runway	A runway intended for the operation of aircraft using visual approach procedures.
Obstacle	All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extends above a defined surface intended to protect aircraft in flight.
Precision Approach Runway	A runway intended for the operation of aircraft using visual and non-visual aids providing guidance in both pitch and azimuth adequate for a straight-in approach. See Category 1, 2 and 3 Operations.
Runway	A defined rectangular area, on a land aerodrome prepared for the landing and take-off run of aircraft along its length.
Runway End Safety Area (RESA)	An area symmetrical about the extended runway centreline and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.
Shoulder	An area adjacent to the edge of a paved surface so prepared as to provide a transition between the pavement and the adjacent surface for aircraft running off the pavement.
Stopway	A defined rectangular area at the end of the take-off run available prepared and designated as suitable area in which an aircraft can be stopped in the case of a discontinued take-off.
Strip	An area of specified dimensions enclosing a runway and taxiway to provide for the safety of aircraft operations.
Taxiway	A defined path, usually paved, 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: Aircraft Stand Taxi lane - a portion of an apron designated as a taxiway and intended to provide access to aircraft stands only (i.e. in a cul-de-sac).
Taxiway Holding Position	A designated position at which taxiing aircraft and vehicles may be required to hold in order to provide adequate clearance from a runway.
Taxiway Intersection	A junction of two more taxiways.
Threshold	The beginning of that portion of the runway usable for landing.

So far as is reasonably practicable	The degree of risk in a particular job or workplace needs to be balanced against the time, trouble, cost and physical difficulty
-------------------------------------	--

1.3 Abbreviations

	Abbreviations
AAIB	Air Accident Investigation Branch
ADP	Airside Driving Permit
AGL	Airfield Ground Lighting
AIP	Aeronautical Information Publication
AIS	Aeronautical Information Service
AMSL	Above Mean Sea Level
ANO	Air Navigation Order
AOI	Airport Operational Instruction
AOUS	Airside Operations Unit Supervisor
ASCM	Airfield Safety and Compliance Manager
ASDA	Accelerate Stop Distance Available
ATC	Air Traffic Control
ATCWM	Air Traffic Control Watch Manager
ATE	Air Traffic Engineering
ASB	Airside Safety Bulletin
AVP	Airside Vehicle Pass
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CP	Critical Part
CEWS	Civil Engineering Works Supervisor
CMS	Compliance Monitoring System
DfT	Department of Transport
EM	Environmental Manager
FOD	Foreign Object Debris
FSM	Fire Services Manager
HAS	Head of Airfield Services
HoATS	Head of Air Traffic Services
HSE	Health & Safety Executive
ICAO	International Civil Aviation Organisation
IATA	International Air Transport Association
ILS	Instrument Landing System
LBA	Leeds Bradford Airport
LDA	Landing Distance Available
LDR	Landing Distance Required
LVP	Low Visibility Procedure
MATS	Manual of Air Traffic Services (Parts 1 or 2)
NOTAM	Notification to Airmen
OPNOT	Operational Notice
OPSD	Operations Director
PAPI	Precision Approach Path Indicator
RESA	Runway End Safety Area
RFFS	Rescue & Fire Fighting Service
RTHP	Runway Taxi Holding Position
RTO	Rejected Take Off
RVR	Runway Visual Range
SAGLE	Senior Airfield Ground Lighting Engineer
SATE	Senior Air Traffic Engineer
SCOD	Senior Controller On Duty

SRG	Safety Regulation Group (CAA)
SMS	Safety Management System
TAOI	Temporary Airport Operating Instruction
TDM	Terminal Duty Manager
TODA	Take Off Distance Available
TRA	Task Resource Analysis
TORA	Take Off Run Available
UHF	Ultra-High Frequency
VCR	Visual Control Room
VFR	Visual Flight Rules
VHF	Very High Frequency
WIP	Work in Progress

1.4 System of Amendment and Revision

1.4.1 Authorised Personnel for the Issuance and Insertion of the Amendments and Revisions

Should an amendment to the Aerodrome Manual be required, these should be documented using the Generic Audit Form detailed in APPENDIX 1 and sent to compliance@lba.co.uk. The ASCM is then responsible for ensuring that relevant parts of the manual are amended if required.

1.5 Amendment Record

The following list of amendments clearly details the agreed amendment made to the manual. Each relevant amendment will be detailed and highlighted to all recipients on the distribution list for promulgation to all staff where applicable. Any critical deletions will be marked with **STIKETHROUGH** and any additions or amendments will be **UNDERLINED IN RED**.

Amendment Number:	Amendment Date:	Paragraph Updated:	Incorporated by (NAME):	Detail:
JB001	20180730	31.3	James Baldwin	Number of RFFS Fire Fighters decreased from 28 to 24
JB002	20180730	14.2.1	James Baldwin	Confidential Reporting Lines reaffirmed.
JB003	20180730	14.2	James Baldwin	SIR correction times clarified
JB004	20180730	17.2.2	James Baldwin	CEWS Runway inspection removed
JB005	20180730	30.1/30.2	James Baldwin	CMS Schedule Updated
JB006	20180730	37.4	James Baldwin	Airside Driver Permissions added
JB007	20180730	31.10/31.13	James Baldwin	RFFS Station Standards Updated

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[illegible]

1.6 Issuing and Amendment of the Aerodrome Manual

1.6.1 Hand Written Amendments and Revisions

Hand written amendments and revisions to the manual are not permitted. The current and up to date version of the manual will be located on the LBA website and the company intranet system SharePoint. Any copies of the manual which have been printed are uncontrolled and may not be the most current edition.

1.6.2 Annotation of Pages

The Aerodrome Manual will be issued by electronic means via the LBA website and company intranet. When an amendment is required to the Aerodrome Manual, the document on the website will be updated and all recipients advised via Airport Operational Instruction (AOI). They will be directed to which section of the manual has been amended. A list of the latest amendments to the manual can be located in the amendments table above. The manual holder is responsible for noting and acting on any amendments.

When an amendment is made to a page of the manual, this change will be listed in the amendments table. Details of how this process is annotated and distributed can be found in the amendments table.

1.7 Checklist of Pages

Page	Date	Page	Date	Page	Date	Page	Date	Page	Date
1	JUL 18	73	JUL 18	145	JUL 18	217	JUL 18	289	JUL 18
2	JUL 18	74	JUL 18	146	JUL 18	218	JUL 18	290	JUL 18
3	JUL 18	75	JUL 18	147	JUL 18	219	JUL 18	291	JUL 18
4	JUL 18	76	JUL 18	148	JUL 18	220	JUL 18	292	JUL 18
5	JUL 18	77	JUL 18	149	JUL 18	221	JUL 18	293	JUL 18
6	JUL 18	78	JUL 18	150	JUL 18	222	JUL 18	294	JUL 18
7	JUL 18	79	JUL 18	151	JUL 18	223	JUL 18	295	JUL 18
8	JUL 18	80	JUL 18	152	JUL 18	224	JUL 18	295	JUL 18
9	JUL 18	81	JUL 18	153	JUL 18	225	JUL 18		
10	JUL 18	82	JUL 18	154	JUL 18	226	JUL 18		
11	JUL 18	83	JUL 18	155	JUL 18	227	JUL 18		
12	JUL 18	84	JUL 18	156	JUL 18	228	JUL 18		
13	JUL 18	85	JUL 18	157	JUL 18	229	JUL 18		
14	JUL 18	86	JUL 18	158	JUL 18	230	JUL 18		
15	JUL 18	87	JUL 18	159	JUL 18	231	JUL 18		
16	JUL 18	88	JUL 18	160	JUL 18	232	JUL 18		
17	JUL 18	89	JUL 18	161	JUL 18	233	JUL 18		
18	JUL 18	90	JUL 18	162	JUL 18	234	JUL 18		
19	JUL 18	91	JUL 18	163	JUL 18	235	JUL 18		
20	JUL 18	92	JUL 18	164	JUL 18	236	JUL 18		
21	JUL 18	93	JUL 18	165	JUL 18	237	JUL 18		
22	JUL 18	94	JUL 18	166	JUL 18	238	JUL 18		
23	JUL 18	95	JUL 18	167	JUL 18	239	JUL 18		
24	JUL 18	96	JUL 18	168	JUL 18	240	JUL 18		
25	JUL 18	97	JUL 18	169	JUL 18	241	JUL 18		

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26	JUL 18	98	JUL 18	170	JUL 18	242	JUL 18		
27	JUL 18	99	JUL 18	171	JUL 18	243	JUL 18		
28	JUL 18	100	JUL 18	172	JUL 18	244	JUL 18		
29	JUL 18	101	JUL 18	173	JUL 18	245	JUL 18		
30	JUL 18	102	JUL 18	174	JUL 18	246	JUL 18		
31	JUL 18	103	JUL 18	175	JUL 18	247	JUL 18		
32	JUL 18	104	JUL 18	176	JUL 18	248	JUL 18		
33	JUL 18	105	JUL 18	177	JUL 18	249	JUL 18		
34	JUL 18	106	JUL 18	178	JUL 18	250	JUL 18		
35	JUL 18	107	JUL 18	179	JUL 18	251	JUL 18		
36	JUL 18	108	JUL 18	180	JUL 18	252	JUL 18		
37	JUL 18	109	JUL 18	181	JUL 18	253	JUL 18		
38	JUL 18	110	JUL 18	182	JUL 18	254	JUL 18		
39	JUL 18	111	JUL 18	183	JUL 18	255	JUL 18		
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42	JUL 18	114	JUL 18	186	JUL 18	258	JUL 18		
43	JUL 18	115	JUL 18	187	JUL 18	259	JUL 18		
44	JUL 18	116	JUL 18	188	JUL 18	260	JUL 18		
45	JUL 18	117	JUL 18	189	JUL 18	261	JUL 18		
46	JUL 18	118	JUL 18	190	JUL 18	262	JUL 18		
47	JUL 18	119	JUL 18	191	JUL 18	263	JUL 18		
48	JUL 18	120	JUL 18	192	JUL 18	264	JUL 18		
49	JUL 18	121	JUL 18	193	JUL 18	265	JUL 18		
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52	JUL 18	124	JUL 18	196	JUL 18	268	JUL 18		
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58	JUL 18	130	JUL 18	202	JUL 18	274	JUL 18		
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64	JUL 18	136	JUL 18	208	JUL 18	280	JUL 18		
65	JUL 18	137	JUL 18	209	JUL 18	281	JUL 18		
66	JUL 18	138	JUL 18	210	JUL 18	282	JUL 18		
67	JUL 18	139	JUL 18	211	JUL 18	283	JUL 18		
68	JUL 18	140	JUL 18	212	JUL 18	284	JUL 18		
69	JUL 18	141	JUL 18	213	JUL 18	285	JUL 18		

70	JUN 18	142	JUN 18	214	JUN 18	286	JUN 18		
71	JUN 18	143	JUN 18	215	JUN 18	287	JUN 18		
72	JUN 18	144	JUN 18	216	JUN 18	288	JUN 18		

1.7.1 Temporary Instructions

The Aerodrome Manual is a 'live document'. Any temporary instructions will be issued as a Temporary Airport Operational Instruction (TAOI) which will incorporate an expiry date and be logged. Any amendments will trigger an update of the live version and an e-mail sent to the distribution list informing recipients of this change.

1.7.2 Distribution System

The Aerodrome Manual is made available to all relevant persons via the LBA website and the company intranet system SharePoint. It is the responsibility of the individual departments and third party companies to advise the airport of any change in management or persons who need to be notified of changes to the manual. Notifications of changes to contact details should be sent to 'compliance@lba.co.uk.'

The Aerodrome Manual, Temporary Airport Operational Instruction (TAOI's) and Airport Operational Instructions (AOI's) are distributed to all parties listed in the distribution list below.

1.8 Distribution List

The following list of recipients will receive all notifications of any amendments to the Aerodrome Manual	
Organisation	Dept / Position / Location
LBA	Chief Executive (CEO)
LBA	Aviation Development Director
LBA	Chief Financial & Commercial Officer
LBA	Operations Director
LBA	Airfield Safety and Compliance Manager
LBA	Airfield Ground Lighting
LBA	Airport Control Centre
LBA	Airside Operations Unit
LBA	Air Traffic Control
LBA	Air Traffic Engineering
LBA	Business Support Unit
LBA	Concessions Manager
LBA	Head of Projects
LBA	Environmental Manager
LBA	Fire Services Manager
LBA	Head of Human Resources
LBA	Head of Information Systems
LBA	Head of Air Traffic Services
LBA	Senior Air Traffic Engineer
LBA	Terminal Duty Manager
LBA	Head of Airfield Services
LBA	Senior Manager - Security and Passenger Services
LBA	PRM Service Development Manager

CAA	ASDDOCS
Alpha Flight Services	Station Manager
ASIG	Station Manager
Border & Immigration Agency	HMI
Border Force (North)	Senior Officer
Flight Care	Station Manager
Jet2	Station Manager
Jet2	Engineering Manager
Jet2	Health & Safety Manager
Jet2	Ramp Manager
Jet2	Base Captain
Jet2	Hanger Manager
Multiflight	Managing Director
Multiflight	Handling Manager
PTT	Flying School
Ports Police	SB Admin Support
Ryanair	Engineering
Ryanair Crew Room	Crew Room
Swissport	Station Manager
Swissport	Ramp Manager
Swissport	Load Control
Swissport	Front of House
Swissport Cargo	Manager
Thomson	Base Manager
West Yorkshire Police	OIC

1.8.1 LBA Responsibilities

It is the responsibility of departmental managers to:

- Identify all parts of the manual which are relevant to their staff.
- Ensure that all staff have read the identified parts of the manual and that adequate training in these procedures is carried out.
- Ensure that all staff complete a sign and read for the manual and record any training on their training records.

1.8.2 Third Party Companies

The Aerodrome Manual is issued to third parties and is their responsibility to:

- Ensure that the latest copy of the manual is provided to all staff.
- Ensure that any operating procedures that their company may have reflect the requirements detailed in the manual.
- Ensure that all staff complete a read and sign for the manual.

1.9 APPENDIX 1 – Generic Audit Form

This form should be used for any generic audits conducted by LBA that fall outside the scope of the Compliance Monitoring System (AOP 9). Departments are permitted to use their own audit forms if they have been designed to audit a specific area. Examples where this form should be used at the review of any, equipment, documents or procedures.

LEEDS BRADFORD AIRPORT GENERIC AUDIT FORM		
Audit Date:		
Auditor(S) Name & Role:		1)
		2)
		3)
		4)
Document/Procedure/Equipment/Other being Audited (<i>inc version number if a document</i>)		
Audited department representative		
AUDIT FINDINGS:		
Number:	Details:	Actions
1		
2		
3		
4		
5		
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7		

8		
9		
10		
11		
12		

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FOLLOW UP AUDIT		
Is a follow up audit required? (Circle As Appropriate)	YES	NO
Date scheduled		
DATE	PRINT	Sign
Auditors		
Audited Department Representative		

2 SECTION 2 – General Information

2.1 Purpose and Scope of the Aerodrome Manual

The Aerodrome Manual is the lead document which describes how the aerodrome infrastructure, facilities, and operational procedures operate safely. It is an accurate reflection of the day-to-day functioning of the aerodrome's safety management system, and its safety culture. The manual contains details of the characteristics, policies, operational procedures for the safe operation of the Aerodrome in accordance with the Air Navigation Order and the Aerodrome Certification.

2.2 Legal Requirements for an Aerodrome

The Aerodrome Certificate, issued by UK CAA under EU Regulation 139/2014, provides for Public Transport use of the Aerodrome.

2.3 Conditions for Use of the Aerodrome

LBA holds a Public Use Aerodrome Certificate issued by the Civil Aviation Authority in the name of "Leeds Bradford". The certificate number is UKEGNM-001 and the date of issue 20161107. A copy of the Aerodrome Certificate can be found at APPENDIX 2 – Aerodrome Certificate.

2.4 Obligation of the Aerodrome Operator

As the certificate holder, LBA is required to take all reasonable steps to ensure that the aerodrome and the airspace within which its visual traffic pattern is normally contained are safe at all times for use by aircraft.

LBA is also required to have an Aerodrome Manual which contains all such information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties as such including information and instructions relating to the matters specified in the ANO, Schedule 12. The Aerodrome Manual complies with all obligations as placed on LBA by ICAO, the CAA and the EASA.

Changes in any characteristics of the Aerodrome (including erection of new buildings, alterations to existing buildings or to visual aids) will be made only after consultation with the CAA in accordance with AMC-GM-ADR. The Accountable Manager is responsible for such notifications.

Amendments will be made as and when required and will normally be notified to the CAA in writing. Exceptions could include change in runway state or the obstacle clearance surfaces, which would need to be made immediately.

The Competent Authority may at any time conduct audits on LBA and its third parties to ensure compliance with the relevant regulatory requirements.

2.5 APPENDIX 2 - Aerodrome Certificate



UNITED KINGDOM

A Member of the European Union

CIVIL AVIATION AUTHORITY AERODROME CERTIFICATE

Aerodrome Name: LEEDS BRADFORD

Certificate Reference: UK: EGNM - 001

Pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council and the Commission Regulation (EU) No 139/2014 for the time being in force and subject to the conditions specified below, The United Kingdom Civil Aviation Authority hereby certifies that:

Leeds Bradford Airport Limited
Yeadon
Leeds
LS19 7TU

is authorised to operate Leeds Bradford Aerodrome in accordance with the provisions of Regulation (EC) No 216/2008 and its Implementing Rules, the aerodrome certification basis, the terms of the certificate and the aerodrome manual.

This certificate shall remain valid for an unlimited duration, unless it is surrendered or revoked.

Date of original issue: 7 November 2016

Signed: Graeme Ritchie
For the UK Civil Aviation Authority

TERMS OF THE CERTIFICATE

Certificate Reference	UKEGNM – 001
Aerodrome Name and ICAO location indicator	Leeds Bradford EGNM
Conditions to operate	Day/Night, IFR/VFR
Runway declared distances Runway designator, TORA, TODA, ASDA, LDA in metres for each runway, including intersection take-off if applicable	TORA TODA ASDA LDA 14 – 2113m 3169m 2113m 1802m 32 – 2190m 2389m 2190m 1916m 14 – 1933m 2900m 1933m Take-off from intersection with Holding Point E2 14 – 1802m 2703m 1803m Take-off from Runway 14 Threshold 14 – 1508m 2262m 1508m Take-off from intersection with Taxiway Alpha 14 – 1433m 2150m 1433m Take-off from intersection with Taxiway Foxtrot 14 – 1251m 1877m 1251m Take-off from intersection with Taxiway Mike 14 - 963m 1445m 963m Take-off from intersection with Taxiway Lima 32 – 1916m 2113m 1913m Take-off from Runway 32 Threshold 32 – 1627m 1826m 1627m Take-off from intersection with Taxiway Delta 32 – 1118m 1317m 1118m Take-off from intersection with Taxiway Lima
Types of approaches	CAT III, LTS CAT I
Aerodrome reference code	4E

TERMS OF THE CERTIFICATE	
Scope of aircraft operations requiring a higher aerodrome reference code letter	N/A
Rescue and fire fighting level of service	7 (8 and 9 by arrangement)
Other	N/A

Part B

AERODROME MANAGEMENT QUALIFICATIONS AND TRAINING REQUIREMENTS

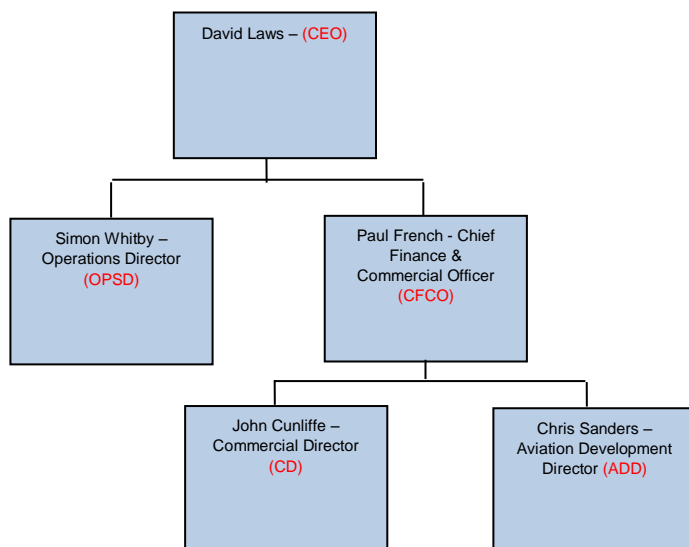
1. *Safety Management Systems*
2. *Required Aerodrome Personnel
Qualifications*



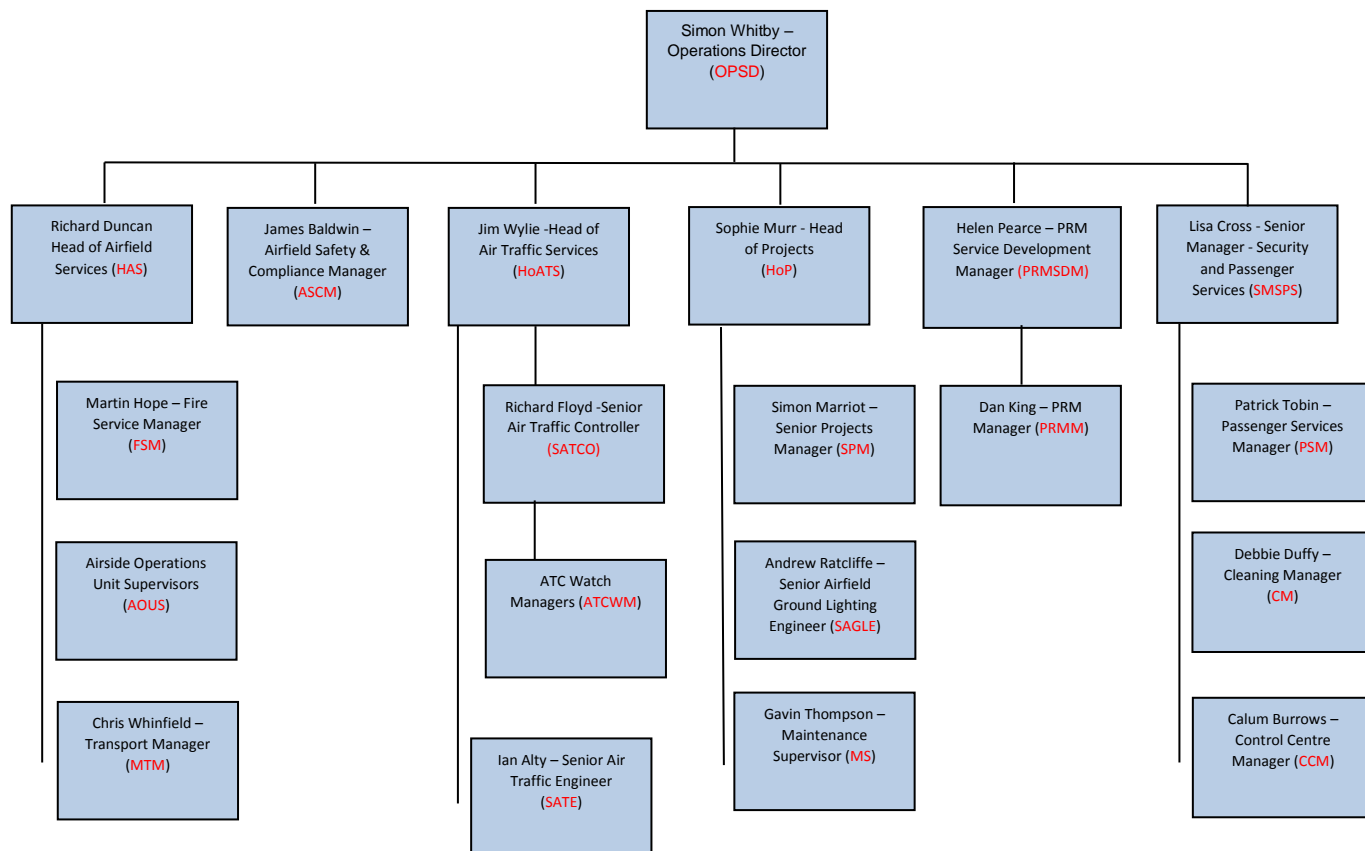
3 SECTION 3 – Safety Management Systems

3.1 Aerodrome Organisation and Responsibilities

3.1.1 LBA Executive Structure



3.1.2 LBA Operational Structure



3.2 Safety Related Committees

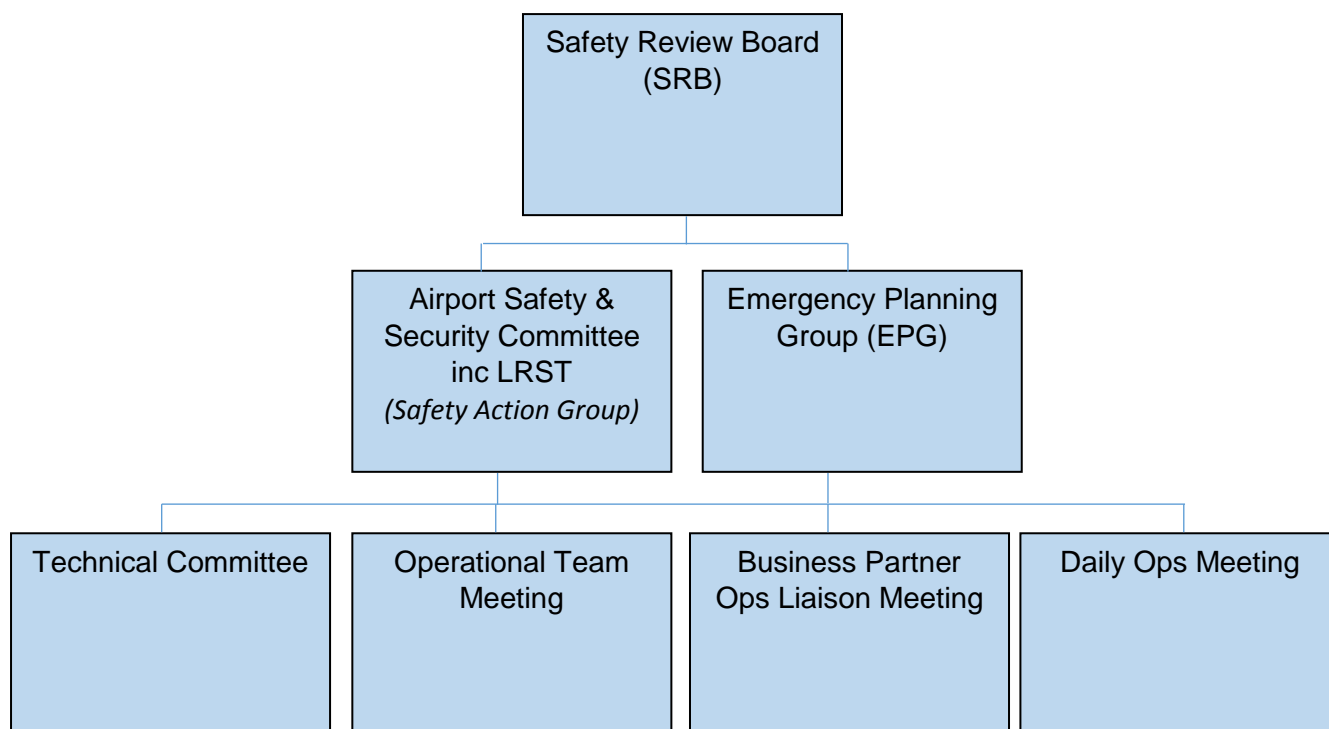
3.2.1 Introduction

LBA has a committee structure in place which monitors and oversees safety activity across the Airport. The functions of each of the committees are detailed in their terms of reference, which show the appointed areas for which that committee has responsibility.

All safety related activity is overseen by the LBA Safety Manager who then refers any matters upwards to the Safety Review Board.

All the Safety Meetings mentioned below are minuted and these minutes are stored on SharePoint

3.2.2 Committee Organogram



Further details can be found in SECTION 3 of the LBA SMM

3.3 Roles and Responsibilities

Roles & responsibilities for safety critical personnel are detailed in SMM - SECTION 6.

3.4 Aircraft Detention – Article 252

Procedures, responsibilities and authorised persons related to the detention of aircraft under article 252 of the Air Navigation Order are detailed in AOP23

3.5 Scope of the Airport Safety Management System

3.5.1 General

The LBA Safety Management System has been established to provide an efficient Management Structure and Systematic approach to the safe operation of the aerodrome. The LBA Safety Management System is written in compliance with relevant legislation, including ICAO Annex 14 Volume 1 and ICAO 9859.

Details on the management of Safety can be found in the Safety Management Manual (SMM)

3.6 Safety Management Principles

Safety management at LBA is achieved through the implementation of the following principles:

- Policy
- Organising
- Planning
- Measuring performance
- Auditing and reviewing performance

3.7 Specific Policy & Objectives

LBA Safety Policy is located in the Safety Management Manual – SECTION 1

3.8 Safety Responsibilities of Key Personnel

3.8.1 Accountable Manager

The Accountable Manager is responsible for the implementation and continuing compliance of the SMS, without their wholehearted support the SMS will not be effective. The Operations Director fulfils the role of the Accountable Manager and has:

- Full responsibility for the LBA Safety Management System;
- Corporate authority for ensuring all activities can be financed and carried out to the required standard;
- Full authority for ensuring adequate staffing levels;
- Corporate authority for ensuring all activities can be financed and carried out to the required standard;
- Direct responsibility for the conduct of the organisation's affairs;
- Final authority over operational matters; and final responsibility for all safety issues.

3.8.2 Safety Manager

The functions of the Safety Management role are incorporated in the ASCM role and include, but are not necessarily limited to:

- Ensuring all processes needed for the SMS are developed, implemented adhered to and maintained;
- Providing the Accountable Manager with reports on the performance of the SMS and on any need for improvement.
- Ensuring that safety documentation accurately reflects the current situation.
- Monitoring the effectiveness of corrective actions
- Providing independent advice to the accountable manager, senior managers and other personnel on safety-related matters.
- Providing periodic reports, as required on the airport SMS.
- Ensuring safety promotion throughout the organisation.
- Monitoring safety concerns in the aviation industry and their perceived impact on airport operations
- Assisting in incident/accident investigations.
- To ensure SMS outputs are reviewed and ensure appropriate preventative measures are actioned.

The ASCM is independent of line management responsibility and provides oversight of the safety management system at LBA.

3.9 Record Keeping & Document Control

3.9.1 All Documents

EU Regulation 139-2014 - ADR.OR.D.035 stipulates guidance for Aerodromes on document retention. LBA has mandated the following requirements which is applicable to ALL documentation stored related to the operation of the Airport.

- Records shall be kept in paper form, or in electronic format, or a combination of both. Records stored on microfilm or optical disc format are also acceptable. The records should remain legible throughout the required retention period. The retention period starts when the record has been created or last amended.
- Paper systems should use robust material which can withstand normal handling and filing.
- Records shall be stored in a manner that ensures protection from damage, alteration and theft.
(Guidance – To comply with the requirement, all LBA electronic records should be saved on the company intranet system (SharePoint) which is access controlled.)
- Records shall be kept for a minimum of five years, except that the below records shall be kept as follows:
 - (1) the aerodrome certification basis, the alternative means of compliance in use and the current aerodrome or aerodrome operator certificate(s), for the lifespan of the certificate;
 - (2) arrangements with other organisations, for as long as such arrangements are in effect;
 - (3) manuals of aerodrome equipment or systems employed at the aerodrome, for as long as they are used at the aerodrome;
 - (4) safety assessment reports for the lifetime of the system/procedure/activity;
 - (5) personnel training, qualifications, and medical records as well as their proficiency checks, as appropriate, for at least four years after the end of their employment, or until the area of their employment has been audited by the Competent Authority
 - (6) the current version of the risk register.
- (e) All records shall be subject to applicable data protection law.

3.9.2 Safety & Compliance Documents

All documents associated with Safety or Compliance, in addition to the above regulations, must be saved in accordance with the below procedures.

No	Process Activity
1	All electronic documents must be saved in the respective department's compliance area on the company intranet- SharePoint – Compliance – Departmental – <i>(relevant department)</i>
2	Each document must be issued a unique reference number. This number is designed to detail the department, sequential number, location & title for the document. An example is shown below Air Traffic Control/0001/SharePoint/ Manual of Air Traffic Services pt 2 Becomes ATC/0001/SP/MATSPT2 (NB the sequential number issued is the 'next number' in the sequence on the master document file)
3	The number should be contained in the header or footer of the document

4	Once the document has been uploaded to SharePoint, it must be logged on the Master Document File. This is located on SharePoint – Compliance – Document Control – Master Document File
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3.10 Safety risk management process

See Safety Management Manual – SECTION 4

3.11 Monitoring effectiveness of safety actions

See Safety Management Manual – SECTION 7

3.12 Safety performance monitoring

See Safety Management Manual – SECTION 7

3.13 Safety reporting

See Safety Management Manual – SECTION 7

3.14 Emergency Response Planning

Aerodrome Emergency Planning is conducted in accordance with ADR.OPS.B.005. Details of which can be found in the LBA Emergency Orders.

3.15 Safety promotion

3.15.1 Airside Safety Briefings

Airports are a hazardous working environment. To ensure the safety of new employees who may be unfamiliar with such environments, it is a requirement that all staff who are issued with a security ID permit that is zoned to allow access to airside areas, must undergo a basic safety briefing before they gain access to any apron or aircraft movement area. This should include, but is not limited to:

- Airside dangers and hazards
- Reporting procedures
- Airside rules & procedures
- FOD awareness

3.15.2 Airside Safety Bulletins

LBA issues an Airside Safety Bulletin Quarterly which is printed and distributed to all relevant parties.

3.16 Compliance Monitoring System

LBA operates a compliance monitoring system to assure itself compliance with the relevant regulations and also to confirm internal and external compliance with its own procedures. Details of this function can be found in AOP9 – Compliance Monitoring System.

3.17 Data Quality Management System

LBA has procedures to manage Data Quality Management relevant to aeronautical data and aeronautical information. Details can be found in AOP 8

3.18 Reporting to Competent Authority

For details see AOP03 “Incident Reporting and Investigations”.

3.19 Accidents & Incidents

For details including definitions, forms, illustrations and procedures for the preservation of evidence, see AOP03 "Incident Reporting and Investigations".

3.20 Alcohol, psychoactive substances and medicines

For details on LBA policy and procedure for Drugs and Alcohol misuse, see AOP 26.

3.21 CAA Safety Directives

For details see AOP28

3.22 Recording Aircraft Movement

ATC uses a system called CHROMA to log all aircraft movements utilising LBA. Details including A/C type, Destination, movement category of flight are all logged and stored on a central database. These details are fed back to the CAA monthly.

4 SECTION 4 Management of Change

Any changes to the operational environment at LBA that involve processes, developments, equipment or procedures will be managed so as not to effect safety and in accordance with ADR.OR.B.040.

All changes affecting the operation at LBA should be documented and assessed on an [Operational Change and Safety Assessment \(OCSA\)](#) form before completing the change. The OCSA should be completed in accordance with the Safety Management Manual – SECTION 4. The OCSA form can be found on the Company Intranet – SharePoint – Compliance – Document Control.

All OCSA forms, must be retained in accordance with Aerodrome Manual Para 3.9 – Document Control. Each department must store their OCSA forms in their respective areas on the SharePoint site (Compliance) in order for the CAA to review as necessary on audit.

Should the change involve personnel, a RRF (Resource Request Form) must also be completed.

5 SECTION 5 – Required aerodrome personnel qualifications

5.1 General

The below training requirements are applicable to all personnel involved in the operation, maintenance and management of the aerodrome, operating unescorted on the movement area, and other operational areas of the aerodrome. These requirements are also applicable to other organisations which operate or provide services at the aerodrome, regardless of their level in the organisation. For the purpose of this instruction, these staff will be referred to as 'operational'.

Departments and organisations should develop training programmes that should include safety management system training and human and organisational factors.

Training programmes should include:

- Training standards, syllabi, and frequency for each type of training and area of activity.
- A validation process that measures the effectiveness of training.
- Assessment Criteria.
- Initial job-specific training.
- On-the-job training.
- Recurrent training.

Departments and organisations should identify training responsibilities and have procedures for training / checking of the trainees and process to be applied in the event that personnel do not achieve or maintain the required standards.

5.2 Instructors and Assessors

Departments should nominate instructors and assessors to be used for the implementation of the training and proficiency check programmes.

A person may be qualified and nominated both as an instructor and as an assessor however, such a person may not provide assessment for own instruction, courses, or material.

5.2.1 Instructors

Instructors should have:

- Appropriate level and depth of knowledge in the field where instruction is to be given
- Documented ability to use appropriate instructional techniques.
- Adequate experience in the subject where instruction is to be given.
- Meet the theoretical knowledge, and the working experience requirements appropriate to the instruction being given,
- Have demonstrated the ability to instruct, and to use appropriate instructional techniques.
- Are proficient in instructional techniques in the areas in which it is intended to provide instruction.
- Receive regular refresher training to ensure that the instructional competences are maintained.

5.2.2 Assessors

Assessors should:

Have demonstrated the ability to assess the performance of, and conduct tests and checks in the areas covered by the training.

Receive regular refresher training to ensure that the assessment standards are maintained up to date.
Meet the theoretical knowledge requirements appropriate to the instruction being given and have adequate working experience in the area of instruction.

5.3 Recurrent, Refresher and Differences Training

5.3.1 Initial Training

Operational staff should receive all relevant training prior to the initial performance of their duties and or before allowing them unescorted access on the movement area and other operational areas of the aerodrome.

5.3.2 Recurrent training

Individual competencies should be valid for a period not exceeding 12 months (unless otherwise stipulated by another regulation).

If the recurrent training is undertaken within the last 3 calendar months of the 12-month period, the new validity period should be counted from the original expiry date.

5.3.3 Refresher training

When an individual has not performed any duties for a significant period before the expiry date of its initial or last recurrent training those individuals must complete a relevant refresher training prior to being

assigned duties or granted unescorted access on the movement area and other operational areas of the aerodrome, as appropriate.

5.3.4 Differences training

Staff who have already completed the necessary training programme, and are to be assigned to different duties must complete an appropriate training which covers any differences between their previous and future duties. The differences training should be determined, as necessary, on the basis of a comparison of the required training programme with the training programme already completed by the relevant personnel, taking into account the personnel's previous training as documented in his/her training records.

5.4 **Checking of Trainees**

The methods to be used for the checking of the trainees could include:

- Practical demonstration.
- Computer-based assessment.
- Oral or written tests.

Or combinations of such methods, as appropriate.

5.5 **Proficiency Checks**

The purpose of the proficiency check is to establish the ability of an individual to perform satisfactorily, in accordance with applicable requirements and the content of the aerodrome manual. Proficiency checks should be conducted by nominated assessors. A proficiency check does not need to cover all associated elements at the same time; however, all elements of a proficiency check should be covered within 24 months. Proficiency checks may be conducted during normal and/or abnormal/emergency conditions depending on the situation and the specialty of the person being checked.

The proficiency check records maintained for each individual should include as a minimum:

- the name of the person checked.
- the date(s) and the duration of the proficiency check.
- the methodology of the check conducted.
- any comments made by the assessor.
- the performance evaluation of the person checked.
- the name and signature of the assessor.

For LBA teams, CAP700's can support the proficiency check process for staff in safety critical roles.

5.6 **Training Records**

A training file should be developed for each employee, including management, to assist in identifying and tracking employee training requirements, and verifying that personnel have received the planned training.

5.6.1 General

Each individual training record should document at least the following:

- Starting date of employment/ending date of employment (if applicable) .
- Area of activity.
- Previous working experience.
- Qualifications.
- Training (before entry and subsequent).
- Proficiency checks, including language proficiency as appropriate.

5.6.2 2.6.2 Specific Training Logs

The training records maintained for each individual should include as a minimum:

- Name of the trainee
- Date(s) and the duration of the training.
- Place where the training was received.
- Name of the organisation that provided the training.
- Subjects covered, and the methodology of the course.
- Any comments made by the instructor if applicable.
- Performance evaluation of the trainee if applicable.
- Name and (when in paper form) - signature of the instructor.

Part C

PARTICULARS OF THE AERODROME SITE

Physical Characteristics of the aerodrome



6 SECTION 6 - Description of the Aerodrome Site

6.1 Aerodrome (Runway) Reference Code

RWY14/32 is a code 4E.

6.2 Geographical Coordinates of the Aerodrome Reference Point

Latitude - 535157.69 N

Longitude - 0013938.77 W

6.3 Aerodrome Elevation

Airfield Reference Elevation: 680.71 ft

6.4 Elevation and Coordinates of each threshold

RWY 14 - 674ft

RWY 32 - 663ft

6.5 Elevation of the Runway ends

RWY 14 - 655.64 ft

RWY 32 - 682.25ft

6.6 Taxiway Characteristics

6.6.1 Length, Width and Surface Type of Taxiways

The taxiways are constructed of either concrete or asphalt and further details are contained in APPENDIX 4.

6.7 Nav aids

6.7.1 Instrument Landing Systems (ILS)

ILS systems are provided for both runways. RWY 32 is equipped with a CAT IIIB system, and runway 14 is equipped with a CAT I system.

6.7.2 Radar

A Plessey Watchman radar is situated on the East side of the aerodrome and provides primary radar for ATC. Secondary radar information is provided via landline from remote sites.

6.7.3 Distance Measuring Equipment (DME)

The DME is coupled to the ILS and is located on the central triangle and is equidistant from both thresholds (Mid Field)

6.7.4 Non Directional Beacons (NDB)

The NDB is situated east of the Airfield.

6.7.5 VDF Equipment

A HRDF antennae is situated on the Central Triangle which enables bearings of aircraft radio transmissions on 120.305, 134.580 and 125.380.

6.8 Visual Aids for Approach

6.8.1 Approach Lighting Type

Lighting at LBA is provided in accordance with ADR-DSN.M.625, and allow CAT IIIB operations on runway 32 and CAT I operations on runway 14. Full details are provided in MATS Part 2

6.8.2 Runway 32 Provisions

RWY 32 is equipped with a high intensity centreline TDZ and a 5 bar high intensity approach, the inner 300m with supplementary lighting consisting of white centreline barrettes and red side row barrettes.

6.8.3 Runway 14 Provisions

Runway 14 is equipped with a high intensity centreline and a 5 bar high intensity approach.

6.8.4 Runway 32 Approach Slope Indicator

A 3° PAPI system is located to the left of the runway. Setting and siting details are contained within MATS Part 2 and the UK AIS.

6.8.5 Runway 14 Approach Slope Indicator

A 3.5° PAPI system is located to the right of the runway, setting and siting details are contained in MATS Part 2, and the UK AIS.

6.9 **Aerodrome Reference Temperature**

The Aerodrome Reference Temperature is 18C

6.10 **Rescue and Fire Fighting Level of Protection**

Details of LBA Rescue and Fire Fighting Level of Protection are located AOP 10.

6.11 **Obstacle Lighting**

Obstacle lighting is installed on any permitted structure which penetrates the runway and taxiway strips & surfaces. The following have obstruction lights fitted:

- 14 Glide path
- 32 Localiser
- 32 Glide path
- Far Field Monitors (Width Monitor Only)
- Watchman Radar
- 14 Anemometer Pole
- 32 Anemometer Pole
- Receiver Site Masts
- EVCR
- HRDF
- DME
- Apron Floodlight Poles 6,7,8,9,10,11,12,13,14,15,16,17,18
- Air Traffic Control
- Multi Flight Hangers
- 14 Localizer
- 14 Glide path Monitor
- NDB
- Security Cabin
- Chevin Beacon

6.12 Marking and Lighting of Obstacles and Unserviceable Surface Areas

The responsibility for ensuring that bad ground and obstruction marking is adequate rests with Airside / Fire Operations during the night.

All associated AGL at LBA has been delethalised with the exception of the NOVEMBER intersection corner lights. This area will be updated in due course.

6.13 Aerodrome Operations Approvals

LBA is approved to conduct operations in accordance with the terms of its Aerodrome Certificate. A copy of which is located in APPENDIX 2.

6.14 APPENDIX 3 - Plan Showing the Distance From Nearest Town/Populous Area

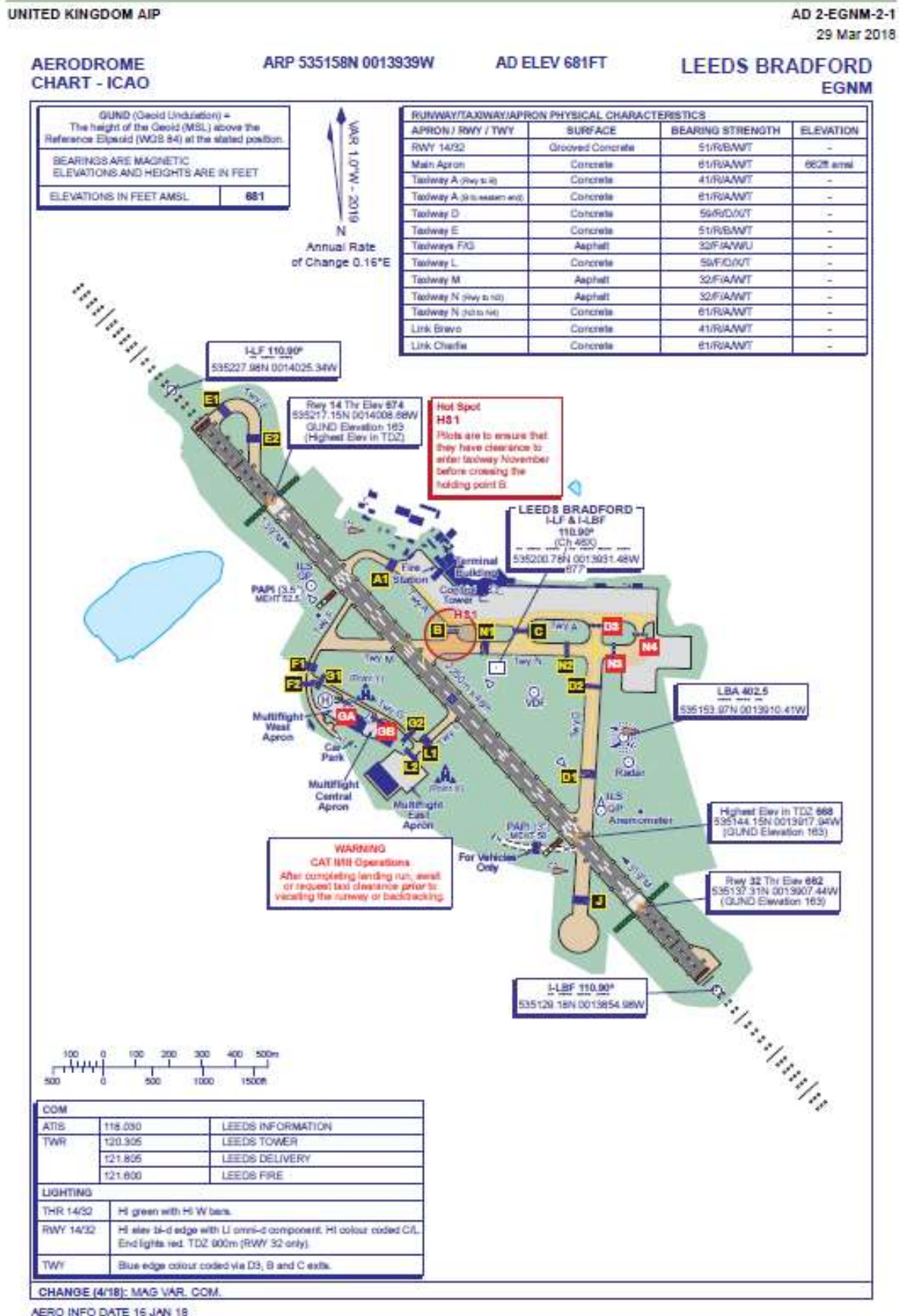


6.15 APPENDIX 4 – Taxiway Table

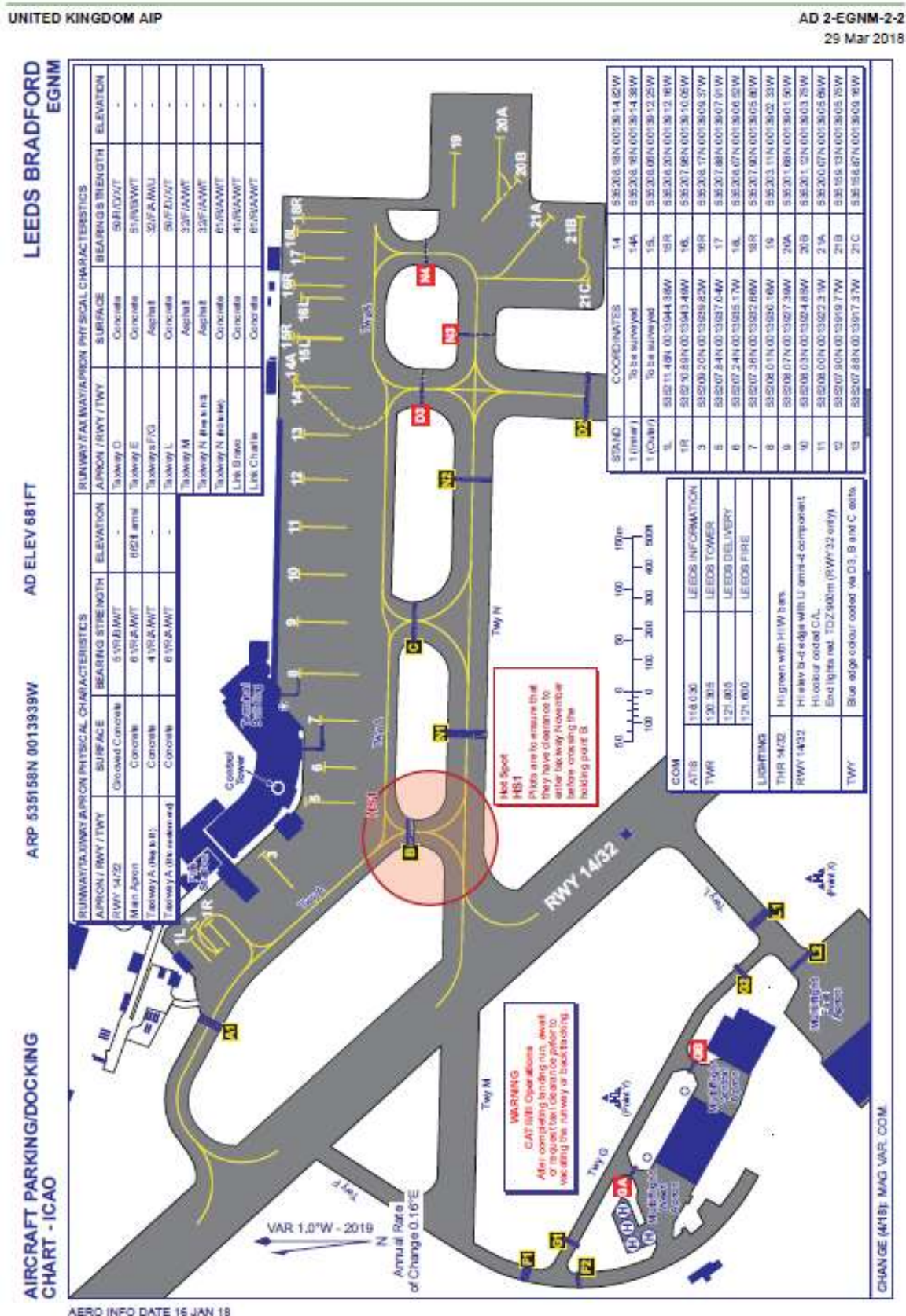
TAXIWAY	CODE	MAX WING SPAN (INC)	STRENGTH	SURFACE	WIDTH	MAX WHEEL SPAN (M)	OTHER
ALPHA (RWY to B)	C		41/R/A/W/T	CONCRETE	38m		
ALPHA (B to C)	C		61/R/A/W/T	CONCRETE	38m		
ALPHA (C to D3)	D*	45 m*	61/R/A/W/T	CONCRETE	45m	≤ 9.1*	
ALPHA (D3 to Std 18R)	C		61/R/A/W/T	CONCRETE	40m		B757-200 approved under tow
DELTA	E*	61 m*	59/R/D/X/T	CONCRETE	23m		
ECHO	E		51/R/B/W/T	CONCRETE	23m		
MIKE	B		32/F/A/W/T	ASPHALT	23m		
NOVEMBER (RWY to N3)	E		32/F/A/W/T	ASPHALT	23m		
NOVEMBER (N3-N4)	D*	41.5 m*	61/R/A/W/T	CONCRETE	23m		
LIMA	E		59/F/D/X/T	CONCRETE	23m		
FOXTROT*	B	18.5 m*	32/F/A/W/U	ASPHALT	13.5m		A/C wingspans > 18.5 m can be approved under tow by operations.
GOLF	B		32/F/A/W/U	ASPHALT	10.5m		
BRAVO	C		41/R/A/W/T	CONCRETE	25m		
NOVEMBER 4	C		61/R/A/W/T	CONCRETE	23m		B757-200 approved under tow
CHARLIE (Parking Std 8)	E*	52 m*	61/R/A/W/T	CONCRETE	35m		
D3 (Parking Std 14A)	E*	61m*	61/R/A/W/T	CONCRETE	38m		

NB: Taxiway codes with an * are restricted. This implies the taxiway is compliant with some but **NOT ALL** of the requirements for the applied code. The restricting factors are highlighted by a further *.

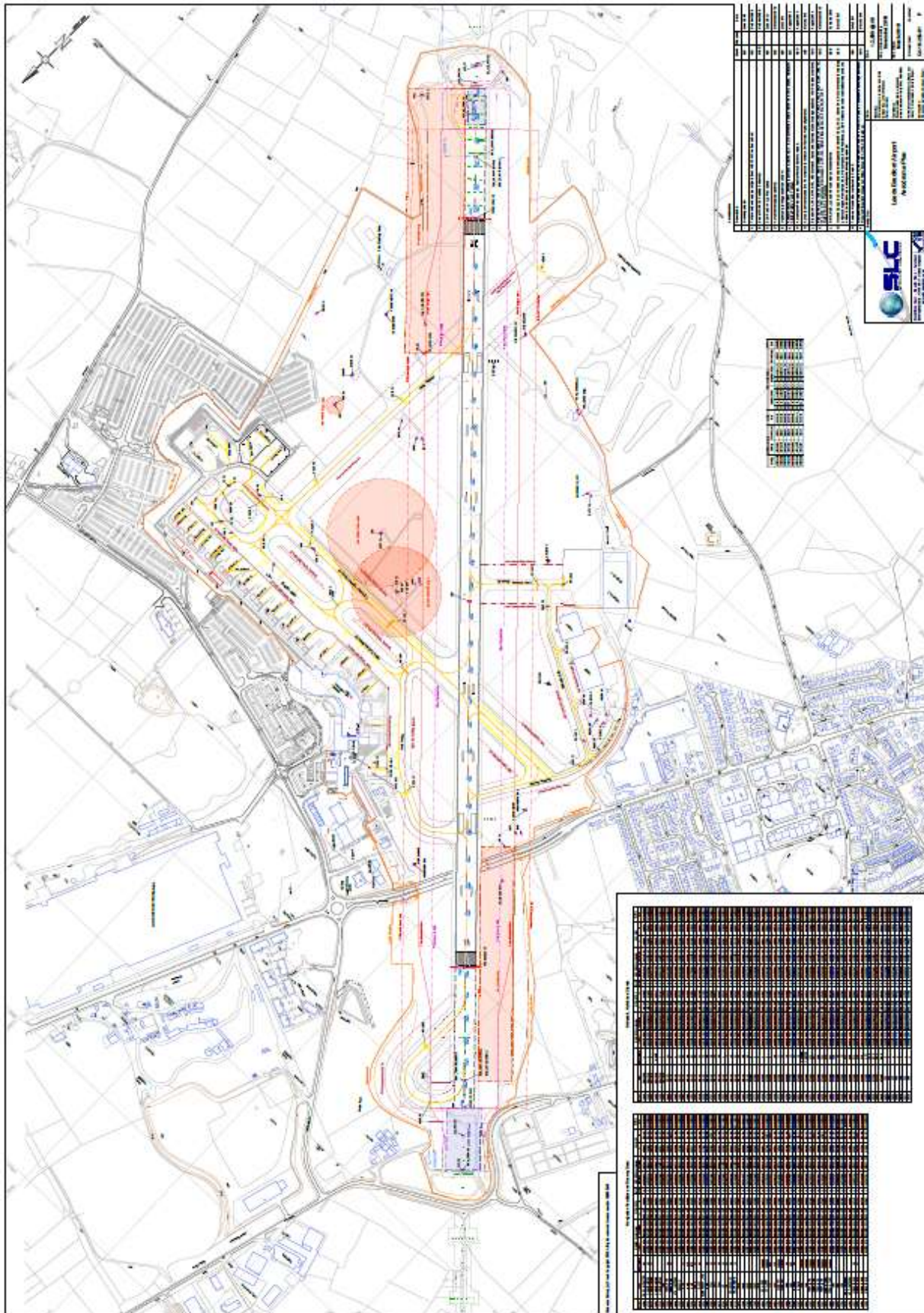
6.16 APPENDIX 5 – Facilities and Visual Aids



6.17 APPENDIX 6 – Layout of Runways, Taxiways and Aprons

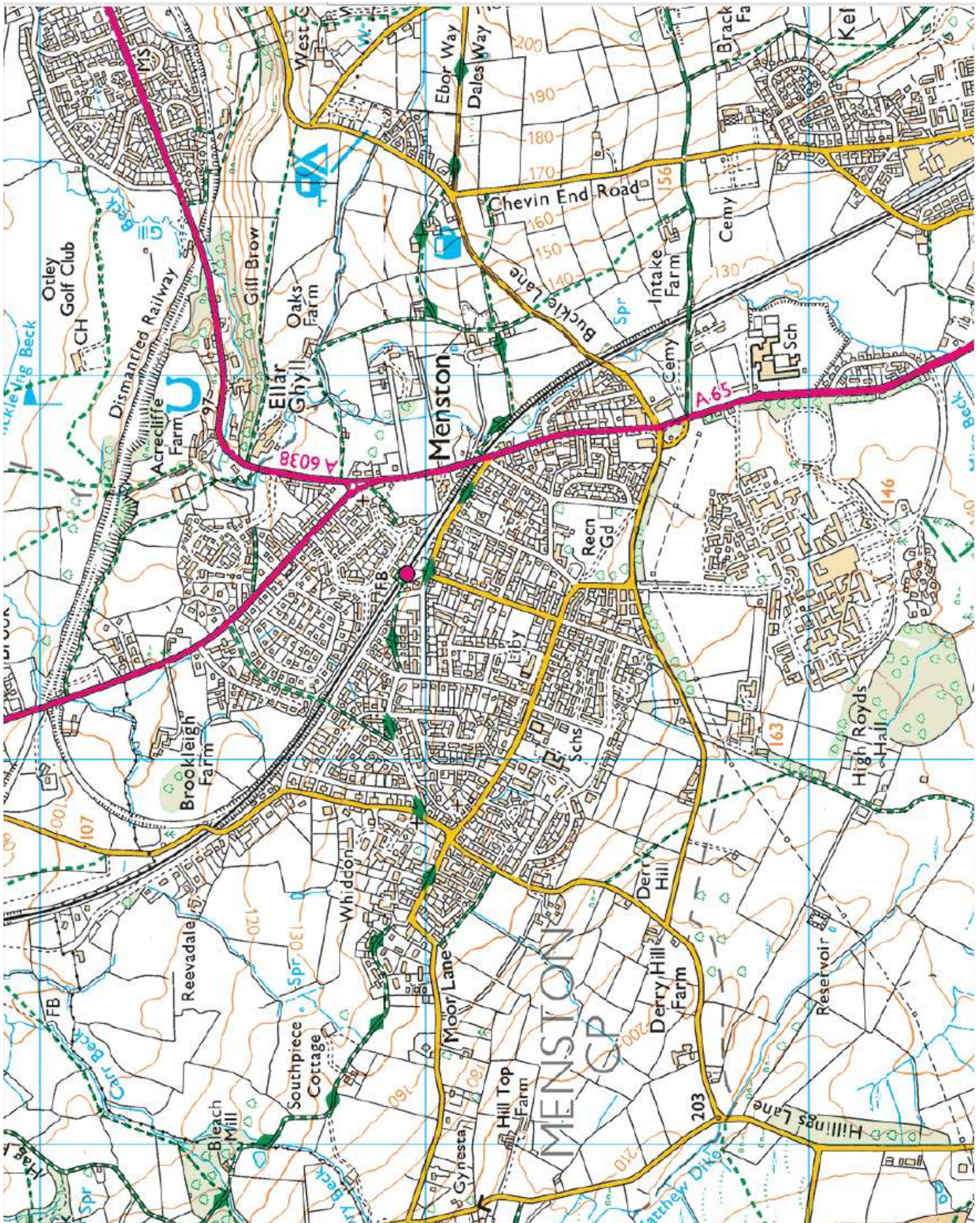


6.18 APPENDIX 7 – LBA Airfield Plan

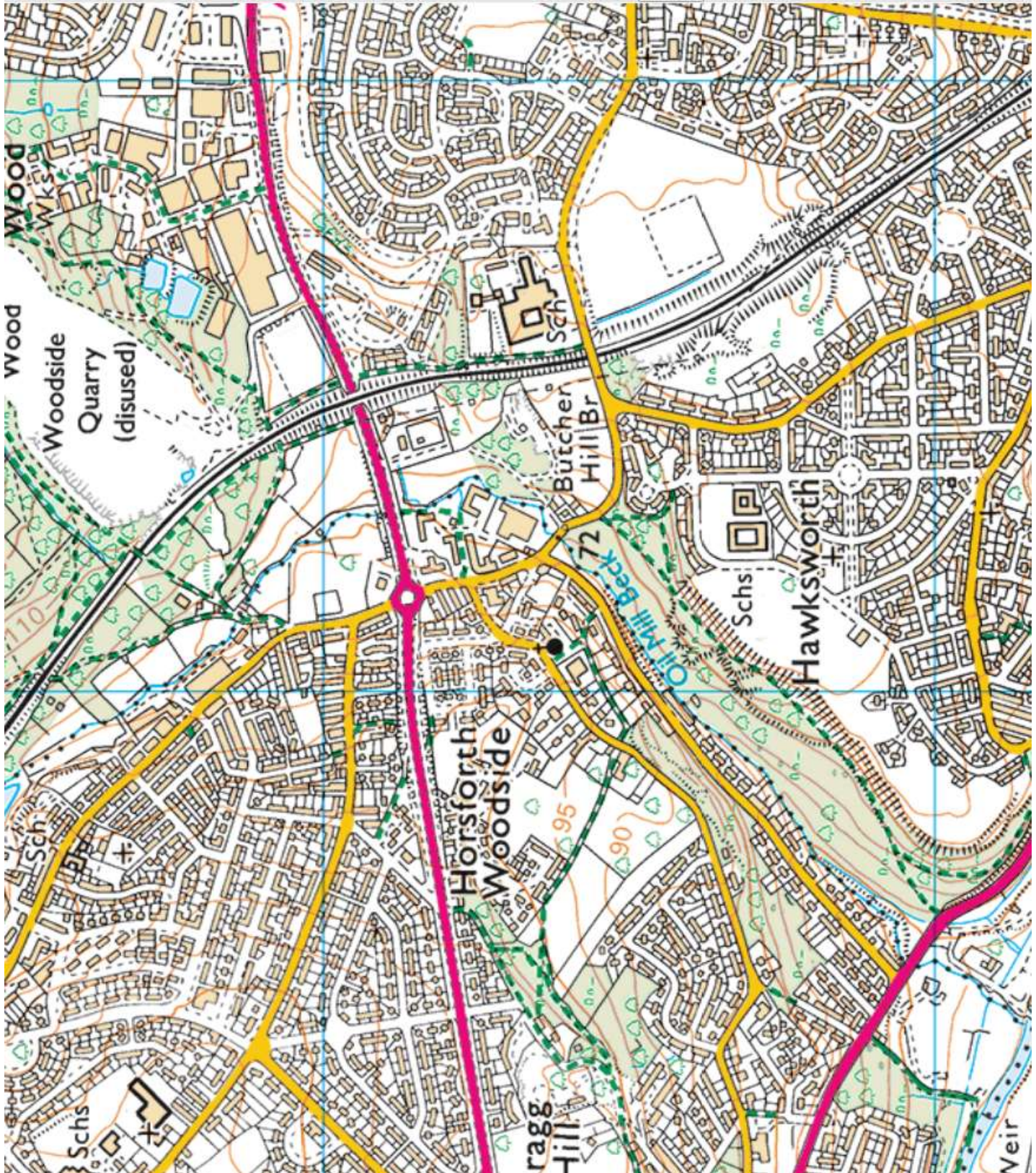


[illegible]

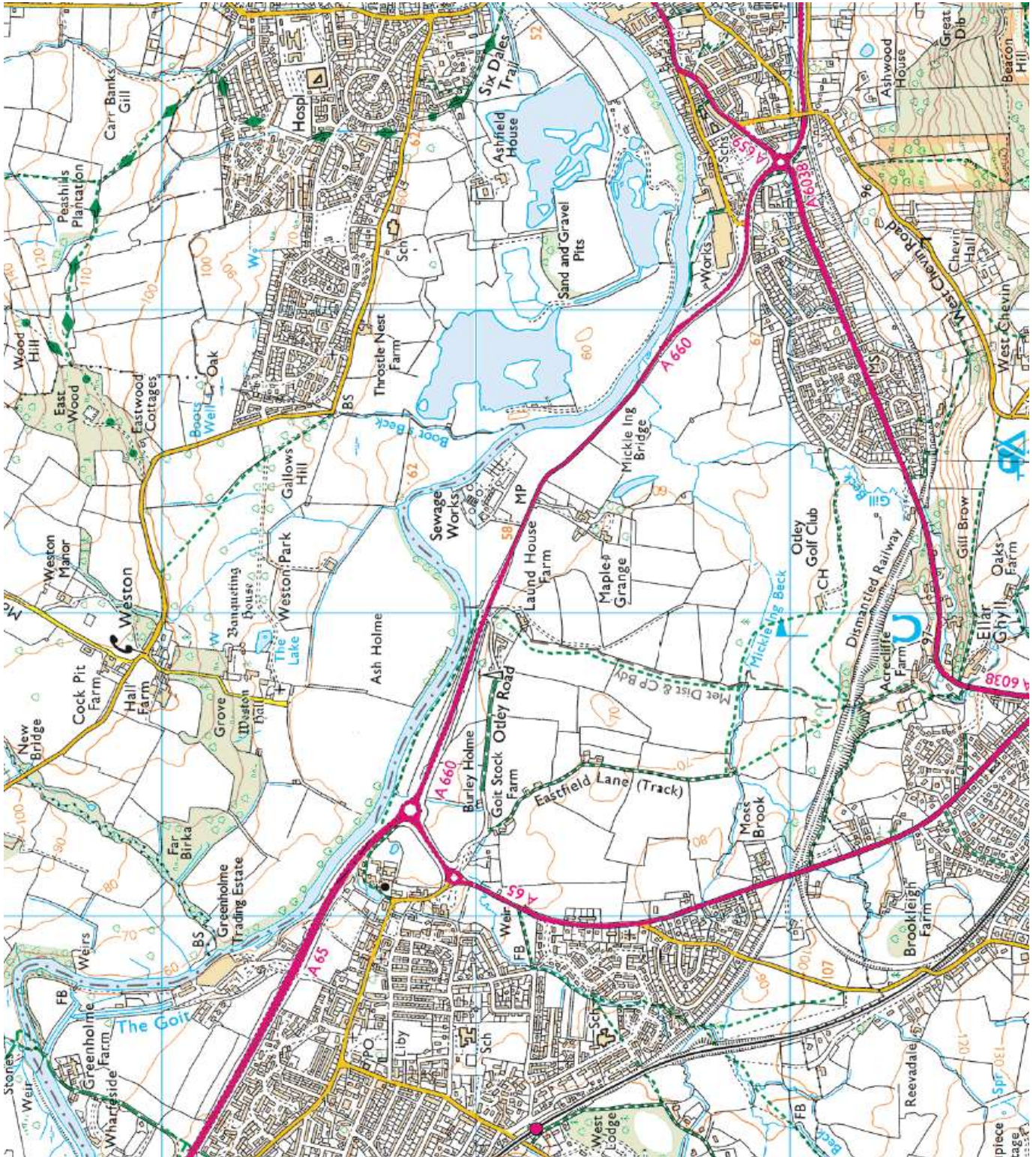
6.20 APPENDIX 9 – Noise Monitoring – Park field



6.21 APPENDIX 10 – Noise Monitoring – Low Lane



6.23 APPENDIX 12 - Noise Monitoring – Laund House Farm



6.24 APPENDIX 13 – Type A Operating Chart



Part D

1. *PARTICULARS TO BE REPORTED TO THE AERONAUTICAL INFORMATION SERVICE*



7 SECTION 7 - PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AERONAUTICAL INFORMATION SERVICES

7.1 Name and Address

Leeds Bradford Airport
Leeds
LS19 7TU
TEL - 0113 391 3285

7.2 Geographical Coordinates of the Aerodrome Reference Point

Latitude - 535157.69 N
Longitude - 0013938.77 W

7.3 Aerodrome Elevation

681FT AMSL

7.4 Geoid Undulation

AD ELEV PSN - 163

7.5 Elevation of Each Threshold

RWY 14 – 674ft (THR co-ordinates - Latitude 535217.15N - Longitude 0014008.68W)
RWY 32 – 662ft (THR co-ordinates - Latitude 535137.31N - Longitude 0013907.44W)

7.6 Elevation of the Runway ends

RWY 14 - 655.64ft
RWY 32 - 682.25ft

7.7 Significant High and Low Points along the Runway

RWY14 -

Pilots should note that when using Runway 14, there is a 100m area of the runway that provides a forward sight distance of less than 1200m (for an eye height of 3 m above the runway surface) between 1300m and 1400 m after the start of the LDA located in the area for the 32 TDZ. Downslope gradient first 400 m of the LDA on Runway 14 is -0.83%.

RWY32 -

Pilots should note that when using Runway 32 there is a 100 m area of the runway that provides a forward sight distance of less than 1200 m (for an eye height of 3 m above the runway surface) between 220m and 320m after the start of the LDA located in the area of the 32 TDZ.

7.8 Aerodrome Reference Temperature

The Aerodrome Reference Temperature is 18C

7.9 Aerodrome Beacon

Aerodrome beacons are not used at LBA.

8 SECTION 8 - Aerodrome Dimensions

8.1 Runway Bearing

RWY 14 - True Bearing - 137.44°

RWY 32 - True Bearing -317.55°

8.2 Runway Designation

Runway designated numbers are 14 and 32.

8.3 Length and Width

Runway 14/32 is 2249.7m long (UTM Projection) and 46m wide.

8.4 Displaced Threshold Location

RWY 14 Latitude 535217.15N - Longitude 0014008.68W - 311 meters from runway start

RWY 32 - Latitude 535217.15N - Longitude 0013907.44W -274 meters from runway start

8.5 Slope

8.5.1 Longitudinal Slopes of Runway

Slope changes exceed 0.1% per 30 m at various points along the runway.

8.5.2 Longitudinal Slope Changes of Runway

Slope changes exceed 0.1% per 30 m at various points along the runway.

8.5.3 Transverse Slopes on Runways

Transverse slopes on the runway are less than 1%, particularly west of the centreline

8.6 Surface Type

RWY 14/32 is constructed of concrete –grooved.

8.7 Type of Runway and Precision Approach Runway

Type 4E runway with a compatible Obstacle Free Zone for a Precision Approach Runway.

8.8 Length, Width and Surface Type of Strip

RWY 14/32:

- Strip width - 140m
- Cleared and Graded Area - 105m (Tapered to 75m for the last 150m)
- Sub-base of granular material.

8.9 Runway End Safety Areas (RESA)

RWY 32 150m - Grass

RWY 14 92m - Concrete/asphalt .

8.10 Stopways

RWY14 = Nil

RWY32 = Nil

8.11 Length, Width and Surface Type of Taxiways

The taxiways are constructed of either concrete or asphalt. A table outlining all of LBA's taxiways can be found in APPENDIX 4

8.12 Surface of aircraft stands

Aircraft stands are constructed of reinforced concrete with a brushed concrete surface.

8.13 Clearway Length and Ground Profile

RWY 14 -1055.996m

RWY 32. – 198.998m

9 SECTION 9 - Visual Aids for Approach

9.1 Approach Lighting Type

Lighting at LBA is provided in accordance with CS ADR-DSN.M.625 and allow CAT IIIB operations on runway 32 and CAT I operations on runway 14.

9.2 Runway 32 Provisions

RWY 32 is equipped with a high intensity centreline TDZ and a 5 bar high intensity approach, the inner 300m with supplementary lighting consisting of white centreline barrettes and red side row barrettes.

9.3 Runway 14 Provisions

RWY 14 is equipped with a high intensity centreline and a 5 bar high intensity approach.

9.4 Runway 32 Approach Slope Indicator

A 3° PAPI system is located to the left of the runway. Setting and siting details are contained within LBIA\AGL\MAINT\JOB2\07/09/15\ISSEU8 and the UK AIP.

9.5 Runway 14 Approach Slope Indicator

A 3.5° PAPI system is located to the right of the runway, setting and siting details are contained in LBIA\AGL\MAINT\JOB2\07/09/15\ISSEU8 and the UK AIP.

10 SECTION 10 - Marking and Lighting

10.1 Runway Lighting

10.1.1 RWY 32

Elevated high intensity bi-directional runway edge lights are provided. The centreline is high intensity colour coded at 15m spacing. 900m of touch down zone lighting is provided together with green runway threshold lights and wing bars. It is also equipped with red runway end and stopway lighting

10.1.2 RWY 14

Elevated high intensity bi-directional runway edge lights are provided. The centreline is high intensity colour coded at 15m spacing. Green runway threshold lights and wing bars are provided. It is also equipped with red runway end and stopway lighting.

10.2 Taxiways

Green centreline lighting is provided with blue edge lights on corners. Alternate amber and green centreline lighting is provided at runway turn-offs within the runway cleared and graded area together with blue edge lighting on corners. Uni-directional stop-bars are provided at all Runway Taxi-Holding Positions (RTHP's) and bi- directional stop-bars are provided at all Intermediate Taxi-Holding Positions.

RTHP stop-bars are permanently illuminated to help to protect the runway against inadvertent incursions. Runway guard lights also enhance the RTHP's which provide access to the runway.

10.3 Aprons

Lighting at LBA is provided, details of which are referenced in
LBIA\AGL\MAINT\JOB12A\10/09/12\ISSUE3

All 3 aprons (including Multiflight East) are illuminated by apron floodlighting.

10.4 Runway / Taxiway Road Access

VH1 / 32/14 EAR/14Glide are all supplied with solar powered guard lights

10.5 Visual Docking Guidance System (VDGS)

Stand 7 is equipped with an FMT Visual Docking Guidance System (VDGS) that operates in conjunction with an Airbridge.

10.6 Signals

A signal square is not provided.

A signalling lamp is available in the VCR for use in aircraft radio failure situations.

10.7 Airfield Guidance & Information Signs

Provided in accordance with CS ADR-DSN.N.775

10.8 Surface Markings General

10.8.1 Surface

Surface markings are provided in accordance with CS-ADR-DSN Chapter L

10.8.2 Road Signs and Markings

A double white line indicates the boundary of the manoeuvring area. Speed limits are reinforced by restriction signs painted on the roadway.

Road signage and markings comply with MOT standards, with modifications for airside areas where necessary. All Airfield signs where possible, conform to: Statutory Instrument 2002 No. 3113 – The Traffic Signs Regulations and General Directions 2002;

10.9 Wind Sleeves

Two illuminated wind sleeves are provided at each end of the runway adjacent to the TDZ (north side and south side).

10.10 Runway Markings

Runway markings are provided in compliance with the CS-ADR-DSN Chapter L for Precision Approach runways. This includes runway edge markings, aiming points and touchdown zone markings

10.11 Secondary Power Supplies for Aerodrome Ground Lighting

- Primary power is provided from the mains.

- Auto-start diesel fuel generators are provided in case there is a fault or failure with the primary supply. These generators supply the aerodrome lighting and some Nav aids. In LVP conditions, the generators are used as a primary supply
- Full details of the power supply/generators and how they operate in LVP's are provided in MATS Part 2

10.12 Location and Designation of Standard Taxi Routes

Location and Designation of LBA Standard Taxi Routes are illustrated on the plan contained APPENDIX 6.

10.13 Geographical Coordinates

LBA's geographical coordinates can be found in APPENDIX 14 – Geographical Coordinates

10.14 Pavement Surface Type and Bearing Strength

The Runway Pavement Classification Number (PCN) is 51/R/B/W/T

The taxiway PCN's can be found In APPENDIX 4.

10.15 Pre-Flight Altimeter Check Locations Established and Their Elevation;

Apron 662 ft (Stand 1)

10.16 Runway and Runway Intersection Declared Distances

Runway and Runway Intersection Declared Distances are calculated in accordance with ADR-DSN.B.035. Declared distances for LBA can be found in APPENDIX 20.

10.17 Contact Details of Aerodrome Coordinator for the Removal of Disabled Aircraft

The Aerodrome Coordinator for the removal of disabled aircraft at LBA is the RFFS. They can be contacted on 0113 391 3241,

Procedures relating to disabled aircraft removal are contained in Emergency Orders Appendix H

10.18 Level of Protection

LBA provides Category 7 cover 24 Hours a day, 7 Days a week. Higher categories can be made available as per the request on the AIP. All RFFS category fire cover will be provided for a minimum of 15 minutes before the actual time of departing and landing aircraft.

10.19 RFF Vehicle Details

Details of RFFS vehicles are contained in AOP 10.

10.20 Exemptions & Derogations from the Applicable Requirements

All exemptions, derogations, legal requirements, limitations, special conditions & equivalent levels of safety are contained within LBA's Certifications Documents on the Company Intranet and are available to selected parties on request.

10.21 APPENDIX 14 - Geographical Coordinates

Ref	No.	Facility	Description	WGS-84 Coordinates		Lit	National Grid Coordinates		Elevation AMSL		Survey	
				Latitude	Longitude		Easting	Northing	m	ft	Date	Date
1003		ATC ANTENNA		535208.54N	0013936.13W	Y	422452.81	441477.13	222.96	731.50	19/06/2008	19/06/2008
1058		EMERGENCY ATC		535146.21N	0013940.29W	Y	422380.25	440786.77	217.56	713.78	19/06/2008	19/06/2008
1063		ANEMOMETER		535205.92N	0014001.00W	Y	421998.95	441394.27	209.58	687.60	19/06/2008	19/06/2008
1377		FFM	GL	535133.34N	0013852.51W	N	423254.97	440393.30	201.61	661.45	19/06/2008	19/06/2008
1408		32 GP MONITOR	32	535145.30N	0013911.91W	N	422898.81	440761.20	205.99	675.82	19/06/2008	19/06/2008
1410		LLZ NFM	32	535226.10N	0014022.44W	N	421604.52	442015.90	207.29	680.09	19/06/2008	19/06/2008
1412		ANEMOMETER	GL	535146.69N	0013907.45W	N	422980.13	440804.63	199.06	653.08	19/06/2008	19/06/2008
1413		ANEMOMETER		535146.70N	0013907.50W	Y	422979.06	440804.81	208.01	682.45	19/06/2008	19/06/2008
1415		BEACON		535150.06N	0013901.22W	N	423093.30	440909.25	197.56	648.16	19/06/2008	19/06/2008
1416		DME	GL	535200.78N	0013931.45W	N	422539.57	441237.76	201.04	659.58	19/06/2008	19/06/2008
1418		DRDF	GL	535158.41N	0013925.20W	N	422653.96	441165.24	201.82	662.14	19/06/2008	19/06/2008
1419		E ATC	GL	535146.18N	0013940.72W	N	422372.42	440785.95	211.53	694.00	19/06/2008	19/06/2008
1420		EWS	GL	535151.47N	0013917.70W	N	422792.15	440951.35	201.37	660.66	19/06/2008	19/06/2008
1422		HELIPAD	1	535157.00N	0014000.29W	N	422013.18	441118.51	199.96	656.04	19/06/2008	19/06/2008
1423		HELIPAD	2	535157.53N	0014000.69W	N	422005.80	441134.86	199.96	656.04	19/06/2008	19/06/2008
1424		HELIPAD	3	535157.66N	0013959.85W	N	422021.17	441138.82	200.07	656.40	19/06/2008	19/06/2008
1425		HELIPAD	4	535157.81N	0013958.97W	N	422037.28	441143.68	200.24	656.96	19/06/2008	19/06/2008
1427		HOLD	B	535204.52N	0013938.63W	N	422407.79	441352.74	199.82	655.58	19/06/2008	19/06/2008
1429		HOLD	D1	535150.37N	0013916.20W	N	422819.55	440917.59	201.64	661.55	19/06/2008	19/06/2008
1430		HOLD	D2	535158.95N	0013915.35W	N	422833.80	441182.78	198.54	651.38	19/06/2008	19/06/2008
1432		HOLD	E1	535226.01N	0014016.68W	N	421709.64	442013.61	207.08	679.40	19/06/2008	19/06/2008
1433		HOLD	E2	535223.27N	0014011.73W	N	421800.54	441929.56	206.00	675.85	19/06/2008	19/06/2008
1445		HOLD	N1	535202.76N	0013933.43W	N	422503.10	441298.91	201.19	660.07	19/06/2008	19/06/2008
1446		HOLD	N2	535202.55N	0013919.81W	N	422751.84	441293.71	199.68	655.12	19/06/2008	19/06/2008

Ref	Facility	Description	WGS-84 Coordinates		Lit	National Grid Coordinates		Elevation AMSL		Survey Date
			Latitude	Longitude		Easting	Northing	m	ft	
1447	HOLD	N3	535202.44N	0013912.04W	N	422893.80	441290.92	197.49	647.93	19/06/2008
1448	HOLD	N4	535204.05N	0013907.68W	N	422973.13	441340.95	196.20	643.70	19/06/2008
1453	NDB	GL	535153.91N	0013910.37W	N	422925.62	441027.30	197.40	647.64	19/06/2008
1455	LLZ_NFM	14	535130.08N	0013856.34W	N	423185.54	440292.19	199.93	655.94	19/06/2008
1456	RADAR	GL	535151.48N	0013909.56W	N	422940.80	440952.52	199.45	654.36	19/06/2008
1457	RADAR		535151.55N	0013909.57W	Y	422940.53	440954.45	215.65	707.51	19/06/2008
1483	VDF		535158.41N	0013925.17W	Y	422654.64	441165.04	207.75	681.59	19/06/2008
1487	WINDSLEEVE	GL	535214.27N	0013955.56W	N	422097.19	441652.55	204.51	670.96	19/06/2008
1488	WINDSLEEVE	GL	535140.92N	0013921.61W	N	422722.19	440624.97	206.75	678.31	19/06/2008
1489	WINDSLEEVE		535140.92N	0013921.61W	Y	422722.20	440624.82	214.75	704.56	19/06/2008
1490	WINDSLEEVE		535214.24N	0013955.52W	Y	422097.81	441651.70	212.39	696.82	19/06/2008
1491	ARP		535157.69N	0013938.77W	N	422406.35	441141.85	200.65	658.30	19/06/2008
1492	ASDA_END	14	535134.03N	0013902.40W	N	423074.31	440413.75	200.88	659.06	19/06/2008
1493	LDA_END	14	535134.00N	0013902.35W	N	423075.18	440412.80	200.87	659.02	19/06/2008
1494	TODA_END	14	535108.74N	0013823.54W	N	423788.16	439635.63	196.37	644.26	19/06/2008
1495	TORA_END	14	535134.03N	0013902.40W	N	423074.31	440413.75	200.88	659.06	19/06/2008
1496	THR	14	535217.15N	0014008.68W	N	421857.02	441740.64	205.48	674.15	19/06/2008
1497	TORA_START	14	535224.63N	0014020.18W	N	421645.91	441970.75	207.95	682.25	19/06/2008
1498	ASDA_END	32	535223.20N	0014017.98W	N	421686.34	441926.68	207.48	680.71	19/06/2008
1499	LDA_END	32	535223.20N	0014017.98W	N	421686.40	441926.62	207.48	680.71	19/06/2008
1501	TORA_END	32	535223.20N	0014017.98W	N	421686.34	441926.68	207.48	680.71	19/06/2008
1502	THR	32	535137.31N	0013907.44W	N	422981.63	440514.78	201.92	662.47	19/06/2008
1503	TORA_START	32	535130.75N	0013857.36W	N	423166.79	440312.95	199.84	655.64	19/06/2008
1504	PROFILE_PT	14/32	535224.63N	0014020.18W	N	421645.91	441970.75	207.95	682.25	19/06/2008
1505	PROFILE_PT	14/32	535223.44N	0014018.35W	N	421679.56	441934.08	207.57	681.00	19/06/2008
1506	PROFILE_PT	14/32	535222.25N	0014016.52W	N	421713.13	441897.49	207.18	679.72	19/06/2008
1507	PROFILE_PT	14/32	535221.06N	0014014.70W	N	421746.60	441861.00	206.79	678.44	19/06/2008
1508	PROFILE_PT	14/32	535219.87N	0014012.87W	N	421780.21	441824.36	206.38	677.10	19/06/2008
1509	PROFILE_PT	14/32	535218.68N	0014011.04W	N	421813.79	441787.76	206.01	675.89	19/06/2008

Ref	No.	Facility	Description	WGS-84 Coordinates			Lit	National Grid Coordinates		Elevation AMSL		Survey Date
				Latitude	Longitude	Y/N		Easting	Northing	m	ft	
1510		PROFILE_PT	14/32	535217.49N	0014009.21W	N		421847.38	441751.15	205.60	674.54	19/06/2008
1511		PROFILE_PT	14/32	535217.15N	0014008.68W	N		421857.02	441740.64	205.48	674.15	19/06/2008
1512		PROFILE_PT	14/32	535214.31N	0014004.31W	N		421937.36	441653.07	204.53	671.03	19/06/2008
1513		PROFILE_PT	14/32	535212.87N	0014002.10W	N		421977.82	441608.96	204.05	669.46	19/06/2008
1514		PROFILE_PT	14/32	535211.44N	0013959.90W	N		422018.37	441564.77	203.58	667.91	19/06/2008
1515		PROFILE_PT	14/32	535210.00N	0013957.69W	N		422058.90	441520.59	203.07	666.24	19/06/2008
1516		PROFILE_PT	14/32	535208.59N	0013955.51W	N		422098.80	441477.09	202.57	664.60	19/06/2008
1517		PROFILE_PT	14/32	535207.13N	0013953.27W	N		422140.01	441432.17	202.07	662.96	19/06/2008
1518		PROFILE_PT	14/32	535205.68N	0013951.04W	N		422180.99	441387.50	201.52	661.15	19/06/2008
1519		PROFILE_PT	14/32	535204.26N	0013948.86W	N		422221.01	441343.88	201.04	659.58	19/06/2008
1520		PROFILE_PT	14/32	535202.82N	0013946.65W	N		422261.62	441299.61	200.54	657.94	19/06/2008
1521		PROFILE_PT	14/32	535201.39N	0013944.44W	N		422302.14	441255.45	200.28	657.09	19/06/2008
1522		PROFILE_PT	14/32	535159.95N	0013942.23W	N		422342.64	441211.30	200.24	656.96	19/06/2008
1523		PROFILE_PT	14/32	535158.51N	0013940.02W	N		422383.27	441167.01	200.45	657.64	19/06/2008
1524		PROFILE_PT	14/32	535157.08N	0013937.81W	N		422423.82	441122.81	200.79	658.76	19/06/2008
1525		PROFILE_PT	14/32	535155.64N	0013935.60W	N		422464.44	441078.53	201.16	659.97	19/06/2008
1526		PROFILE_PT	14/32	535154.20N	0013933.40W	N		422504.91	441034.42	201.49	661.06	19/06/2008
1527		PROFILE_PT	14/32	535152.77N	0013931.19W	N		422545.49	440990.18	201.84	662.20	19/06/2008
1528		PROFILE_PT	14/32	535151.33N	0013928.98W	N		422586.02	440946.00	202.18	663.32	19/06/2008
1529		PROFILE_PT	14/32	535149.89N	0013926.77W	N		422626.54	440901.84	202.50	664.37	19/06/2008
1530		PROFILE_PT	14/32	535148.46N	0013924.56W	N		422667.13	440857.59	202.84	665.49	19/06/2008
1531		PROFILE_PT	14/32	535147.02N	0013922.36W	N		422707.61	440813.47	203.21	666.70	19/06/2008
1532		PROFILE_PT	14/32	535145.58N	0013920.15W	N		422748.29	440769.12	203.50	667.65	19/06/2008
1533		PROFILE_PT	14/32	535144.15N	0013917.94W	N		422788.76	440725.01	203.62	668.04	19/06/2008
1534		PROFILE_PT	14/32	535142.71N	0013915.74W	N		422829.21	440680.92	203.50	667.65	19/06/2008
1535		PROFILE_PT	14/32	535141.28N	0013913.53W	N		422869.71	440636.77	203.13	666.44	19/06/2008
1536		PROFILE_PT	14/32	535139.84N	0013911.32W	N		422910.44	440592.37	202.70	665.03	19/06/2008
1537		PROFILE_PT	14/32	535137.31N	0013907.44W	N		422981.63	440514.78	201.92	662.47	19/06/2008
1538		PROFILE_PT	14/32	535136.94N	0013906.86W	N		422992.29	440503.16	201.81	662.11	19/06/2008

Ref	No.	Facility	Description	WGS-84 Coordinates		Lit	National Grid Coordinates		Elevation AMSL		Survey Date
				Latitude	Longitude		Easting	Northing	m	ft	
1539		PROFILE_PT	14/32	535135.70N	0013904.96W	N	423027.28	440465.02	201.41	660.79	19/06/2008
1540		PROFILE_PT	14/32	535134.46N	0013903.05W	N	423062.21	440426.94	201.01	659.48	19/06/2008
1541		PROFILE_PT	14/32	535133.23N	0013901.16W	N	423096.91	440389.11	200.62	658.20	19/06/2008
1542		PROFILE_PT	14/32	535131.99N	0013859.26W	N	423131.97	440350.90	200.23	656.92	19/06/2008
1543		PROFILE_PT	14/32	535130.75N	0013857.36W	N	423166.79	440312.95	199.84	655.64	19/06/2008
1639		TODA END	32	535227.96N	0014025.31W	N	421551.82	442073.32	207.48	680.71	19/06/2008
1655		GP_ANTENNA	32	535146.80N	0013914.18W	N	422857.08	440807.23	209.27	686.58	21/06/2010
1656		FFM	14	535129.06N	0013854.79W	N	423214.00	440260.92	200.50	657.81	21/06/2010
1763		VHF_ANTENNA		535142.40N	0013932.50W	Y	422523.06	440669.73	213.39	700.10	29/06/2011
1764		VHF_ANTENNA		535142.50N	0013932.98W	Y	422514.30	440672.62	213.62	700.85	29/06/2011
1765		HOLD	C	535204.38N	0013927.34W	N	422614.00	441349.58	200.41	657.51	01/08/2012
1766		HOLD	D3	535204.19N	0013914.94W	N	422840.59	441344.72	197.92	649.34	01/08/2012
1767		HOLD	J	535136.67N	0013917.60W	N	422796.19	440494.00	206.04	675.98	01/08/2012
1768		STAND	1 INNER	535211.33N	0013943.67W	N	422314.71	441562.69	201.75	661.91	01/08/2012
1769		STAND	1 OUTER	535210.58N	0013945.05W	N	422289.69	441539.67	201.76	661.94	01/08/2012
1770		STAND	3	535209.20N	0013939.82W	N	422385.40	441497.36	200.97	659.35	01/08/2012
1771		STAND	5	535207.84N	0013937.04W	N	422436.38	441455.64	200.44	657.61	01/08/2012
1772		STAND	6	535207.24N	0013935.17W	N	422470.62	441437.09	200.11	656.53	01/08/2012
1773		STAND	7	535207.36N	0013932.66W	N	422516.37	441441.08	199.91	655.87	01/08/2012
1774		STAND	8	535208.01N	0013930.16W	N	422561.93	441461.32	199.96	656.04	01/08/2012
1775		STAND	9	535208.07N	0013927.39W	N	422612.66	441463.47	199.91	655.87	01/08/2012
1776		STAND	10	535208.03N	0013924.85W	N	422659.01	441462.62	199.68	655.12	01/08/2012
1777		STAND	11	535208.00N	0013922.31W	N	422705.39	441461.77	199.26	653.74	01/08/2012
1778		STAND	12	535207.90N	0013919.77W	N	422751.87	441459.05	198.79	652.20	01/08/2012
1779		STAND	13	535207.88N	0013917.37W	N	422795.55	441458.39	198.34	650.72	01/08/2012
1787		VH1		535143.21N	0013928.52W	N	422595.70	440695.20	207.46	680.64	01/08/2012
1788		VH2		535128.21N	0013857.70W	N	423160.96	440234.29	194.59	638.42	01/08/2012
1789		HELIPAD	X	535151.74N	0013942.35W	N	422341.73	440957.42	203.75	668.47	01/08/2012
1790		HELIPAD	Y	535158.15N	0013952.58W	N	422153.84	441154.88	199.59	654.82	01/08/2012

Ref	No.	Facility	Description	WGS-84 Coordinates			Lit	National Grid Coordinates		Elevation AMSL		Survey Date
				Latitude	Longitude	Y/N		Easting	Northing	m	ft	
1791	IRVR			535159.43N	0013932.47W	N		422521.11	441196.05	203.12	666.40	01/08/2012
1792	IRVR			535159.19N	0013932.93W	N		422512.78	441188.67	203.29	666.96	01/08/2012
1793	IRVR			535151.67N	0013920.46W	N		422741.61	440957.38	204.35	670.44	01/08/2012
1794	IRVR			535151.43N	0013920.92W	N		422733.29	440949.90	204.52	671.00	01/08/2012
1795	IRVR			535207.39N	0014002.56W	N		421970.30	441439.29	203.02	666.08	01/08/2012
1796	IRVR			535207.63N	0014002.11W	N		421978.49	441446.80	203.17	666.57	01/08/2012
2104	STAND		AP1	535205.60N	0013905.82W	N		423006.87	441389.06	196.17	643.60	20/08/2014
2113	GP MONITOR		14	535210.75N	0014004.75W	Y		421929.85	441543.21	208.33	683.50	03/11/2015
2424	STAND		1L	535211.48N	0013944.38W	N		422301.77	441567.29	201.87	662.30	03/11/2015
2425	STAND		1R	535210.89N	0013943.49W	N		422318.06	441549.39	201.66	661.61	03/11/2015
2426	STAND		14	535208.18N	0013914.82W	N		422842.16	441467.98	197.87	649.18	03/11/2015
2427	STAND		14A	535208.16N	0013914.38W	N		422850.28	441467.37	197.80	648.95	03/11/2015
2428	STAND		15L	535208.06N	0013912.25W	N		422889.08	441464.42	197.39	647.60	03/11/2015
2429	STAND		15R	535208.20N	0013912.16W	N		422890.79	441469.01	197.39	647.60	03/11/2015
2430	STAND		16L	535207.96N	0013910.05W	N		422929.35	441461.54	196.97	646.23	03/11/2015
2431	STAND		16R	535208.17N	0013909.37W	N		422941.73	441468.21	196.86	645.87	03/11/2015
2432	STAND		17	535207.88N	0013907.91W	N		422968.34	441459.44	196.59	644.98	03/11/2015
2433	STAND		18L	535208.07N	0013906.52W	N		422993.79	441465.44	196.34	644.16	03/11/2015
2434	STAND		18R	535207.90N	0013905.80W	N		423007.04	441460.17	196.20	643.70	03/11/2015
2437	STAND		19	535203.11N	0013902.33W	N		423071.07	441312.30	195.21	640.45	16/11/2015
2438	STAND		20A	535201.68N	0013901.50W	N		423086.44	441268.43	195.20	640.42	03/11/2015
2439	STAND		20B	535201.12N	0013903.75W	N		423045.39	441250.75	195.44	641.21	03/11/2015
2440	STAND		21C	535158.87N	0013909.16W	N		422946.97	441180.82	196.33	644.13	03/11/2015
2441	STAND		21A	535200.07N	0013905.69W	N		423010.07	441218.22	195.70	642.06	03/11/2015
2442	STAND		21B	535159.13N	0013905.75W	N		423009.27	441189.14	195.69	642.03	03/11/2015
2443	GP		14	535208.89N	0014002.23W	N		421976.09	441485.81	202.53	664.47	04/11/2015
2444	HOLD		A1	535210.86N	0013948.89W	N		422219.39	441547.98	202.25	663.55	19/06/2008
2447	DME		ILF	535200.78N	0013931.48W	Y		422538.96	441238.00	206.41	677.20	19/06/2008
2448	DME		ILFB	535200.78N	0013931.48W	Y		422538.96	441238.00	206.41	677.20	19/06/2008

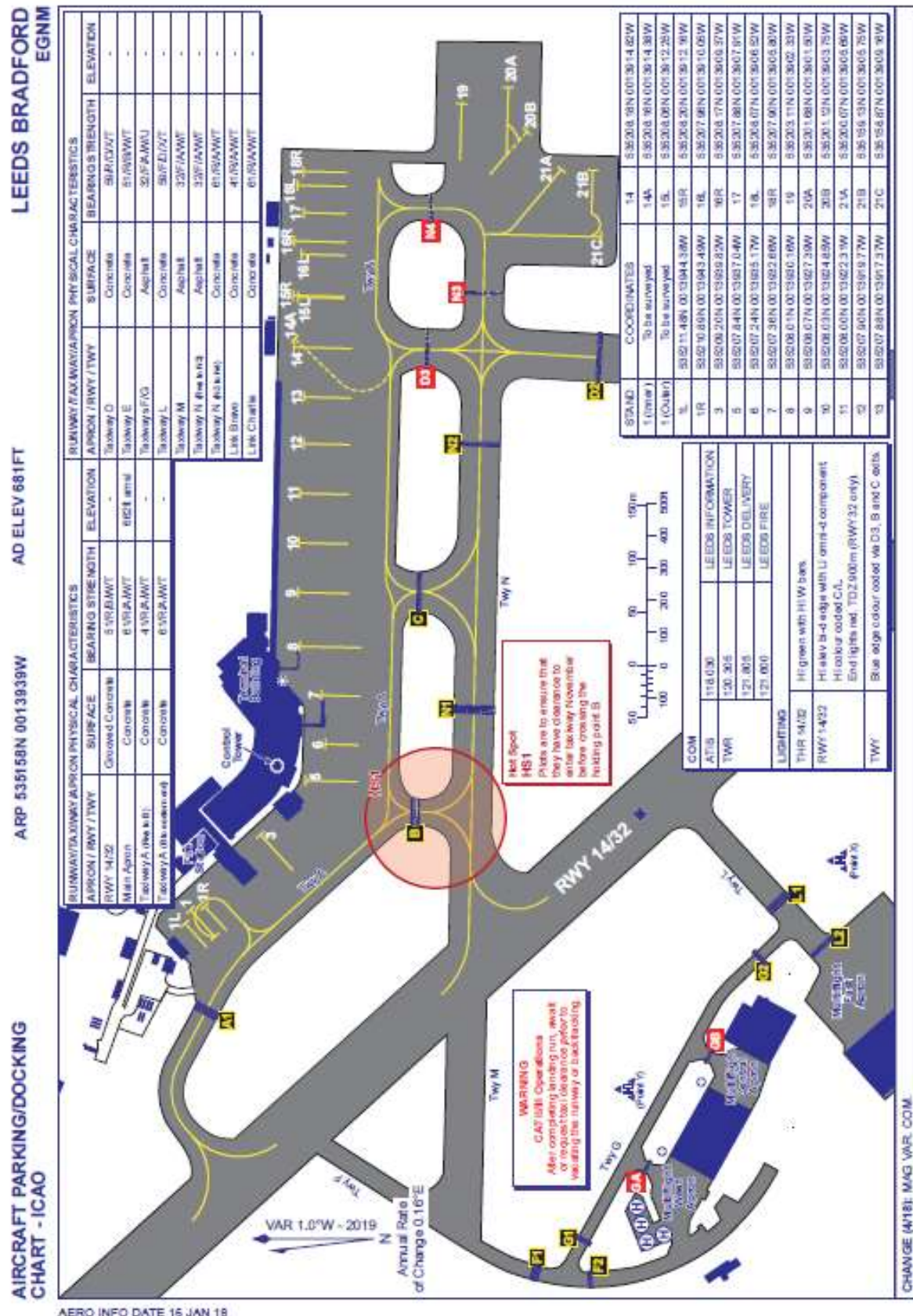
Ref No.	Facility	Description	WGS-84 Coordinates			Lit Y/N	National Grid Coordinates		Elevation AMSL		Survey Date	
			Latitude	Longitude			Easting	Northing	m	ft		
2449	NDB	LBA	535153.97N	0013910.41W		N	422924.85	441029.32	212.48	697.11		19/06/2008
2450	LLZ	ILBF	535129.18N	0013854.98W		Y	423210.51	440264.59	199.16	653.41		19/06/2008
2451	LLZ	ILF	535227.98N	0014025.34W		Y	421551.27	442073.86	206.51	677.53		19/06/2008
2452	GP	32	535146.86N	0013914.18W		N	422857.10	440809.26	201.49	661.06		19/06/2008
2724	HOLD	F1	535200.91N	0014002.27W		N	421976.51	441239.13	199.36	654.07		30/03/2017
2725	HOLD	F2	535159.19N	0014002.62W		N	421970.37	441186.13	199.38	654.12		30/03/2017
2726	HOLD	G1	535159.43N	0014000.54W		N	422008.29	441193.54	199.45	654.35		30/03/2017
2727	HOLD	G2	535154.11N	0013946.10W		N	422272.95	441030.52	202.88	665.62		30/03/2017
2728	HOLD	GA	535157.51N	0013956.91W		N	422074.93	441134.57	200.47	657.69		30/03/2017
2729	HOLD	GB	535155.63N	0013951.16W		N	422180.24	441077.11	201.25	660.27		30/03/2017
2730	HOLD	L1	535153.48N	0013943.38W		N	422322.62	441011.25	202.70	665.01		30/03/2017
2731	HOLD	L2	535152.25N	0013945.65W		N	422281.33	440973.10	203.15	666.49		30/03/2017
2599	FFM	14	535133.35N	0013852.52W		N	423254.77	440393.54	201.68	661.69		28/03/2017
5012	ANEMOMETER	GL	535205.91N	0014000.98W		N	421999.39	441393.97	200.45	657.64		19/06/2008
2862	STAND	AP2	535205.66N	0013909.94W		N	422931.62	441390.55	196.95	646.16		15/03/2018
2863	STAND	NP2	535202.56N	0013920.43W		N	422740.51	441293.97	199.83	655.60		15/03/2018
2864	STAND	NP3	535202.43N	0013911.24W		N	422908.39	441290.61	197.23	647.07		15/03/2018
2865	STAND	NP4	535203.39N	0013907.73W		N	422972.48	441320.49	196.17	643.61		15/03/2018
2866	TRP	2	535202.57N	0013920.48W		N	422739.65	441294.00	199.82	655.58		15/03/2018
2867	TRP	3	535202.43N	0013911.19W		N	422909.43	441290.60	197.21	647.01		15/03/2018
2868	TRP	4	535203.42N	0013907.72W		N	422972.65	441321.54	196.17	643.59		15/03/2018
2869	TRP	5	535204.71N	0013907.68W		N	422973.16	441361.39	196.34	644.15		15/03/2018
2870	TRP	6	535205.66N	0013910.00W		N	422930.54	441390.57	196.96	646.21		15/03/2018
2871	TRP	7	535205.69N	0013911.86W		N	422896.57	441391.24	197.30	647.31		15/03/2018
2872	TRP	8	535205.28N	0013918.17W		N	422781.35	441378.23	198.52	651.31		15/03/2018

10.22 APPENDIX 15 - Aircraft Stands

UNITED KINGDOM AIP

AD 2-EGNM-2-2

29 Mar 2018



10.23 APPENDIX 16 Approach/Take-off area obstacles

Penetrating Obstacles For The 14 Approach Surface:

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt		Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft	m			
1183	535336.63N	0014204.64W	TREE	N	419728.79	444187.35	284.00	931.76	13.98		Approach 14	19/06/2008
1189	535336.89N	0014147.26W	WALL	N	420046.14	444196.79	281.45	923.39	16.49		Approach 14	19/06/2008
1190	535336.26N	0014143.20W	WALL	N	420120.27	444177.66	278.51	913.75	14.83		Approach 14	19/06/2008
1191	535336.64N	0014132.95W	ROCKS	N	420307.29	444190.41	274.90	901.90	13.56		Approach 14	19/06/2008
1253	535330.51N	0014124.62W	EP	N	420460.20	444001.40	266.50	874.34	10.02		Approach 14	19/06/2008
1254	535325.71N	0014124.75W	PYLON	N	420458.55	443853.27	264.39	867.42	10.07		Approach 14	19/06/2008
1255	535325.98N	0014133.46W	PYLON	N	420299.41	443860.69	267.64	878.08	11.05		Approach 14	19/06/2008
1256	535326.18N	0014139.92W	PYLON	N	420181.48	443866.48	268.97	882.45	10.71		Approach 14	19/06/2008
1257	535326.49N	0014150.29W	PYLON	N	419992.18	443875.22	274.51	900.62	13.56		Approach 14	19/06/2008
1258	535331.15N	0014145.98W	EP	N	420070.16	444019.51	272.09	892.68	10.06		Approach 14	19/06/2008
1260	535326.84N	0014201.36W	PYLON	N	419789.89	443885.31	272.91	895.37	9.07		Approach 14	19/06/2008
1261	535331.20N	0014149.97W	TREE	N	419997.33	444020.67	276.81	908.17	13.78		Approach 14	19/06/2008
1262	535331.31N	0014151.71W	TREE	N	419965.54	444024.11	277.46	910.30	13.95		Approach 14	19/06/2008
1263	535331.77N	0014151.39W	TREE	N	419971.25	444038.29	278.15	912.57	14.51		Approach 14	19/06/2008
1264	535332.45N	0014151.38W	TREE	N	419971.41	444059.43	278.46	913.58	14.51		Approach 14	19/06/2008
1265	535333.82N	0014152.01W	TREE	N	419959.68	444101.50	279.78	917.91	15.05		Approach 14	19/06/2008
1266	535334.51N	0014151.86W	OBS BEACON	N	419962.44	444122.88	285.00	935.04	19.99		Approach 14	19/06/2008
1268	535335.79N	0014151.79W	TREE	N	419963.58	444162.61	287.24	942.39	21.64		Approach 14	19/06/2008
1269	535336.33N	0014149.36W	BUILDING	N	420007.73	444179.38	283.73	930.87	18.50		Approach 14	19/06/2008

Ref	WGS-84 Coordinates		Description	Lit	National Grid Coordinates		Elevation AMSL		Pen Amt	Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft			
1270	535337.11N	0014151.09W	TREE	N	419976.05	444203.25	285.39	936.32	19.25	Approach 14	19/06/2008
1271	535337.44N	0014151.66W	TREE	N	419965.64	444213.40	285.06	935.24	18.56	Approach 14	19/06/2008
1272	535338.16N	0014154.40W	TREE	N	419915.58	444235.54	286.22	939.04	18.47	Approach 14	19/06/2008
1273	535338.33N	0014150.76W	TREE	N	419981.96	444241.16	283.79	931.07	17.05	Approach 14	19/06/2008
1274	535336.74N	0014133.88W	ROCKS	N	420290.24	444193.35	275.69	904.49	14.08	Approach 14	19/06/2008
1275	535336.41N	0014130.10W	TREE	N	420359.31	444183.29	273.60	897.64	13.07	Approach 14	19/06/2008
1276	535336.00N	0014130.45W	TREE	N	420353.01	444170.84	273.59	897.60	13.16	Approach 14	19/06/2008
1340	535330.72N	0014201.88W	EP	N	419780.01	444005.10	266.76	875.20	0.96	Approach 14	19/06/2008
1341	535330.73N	0014158.37W	EP	N	419844.09	444005.77	269.71	884.88	4.83	Approach 14	19/06/2008
1342	535330.65N	0014154.52W	EP	N	419914.32	444003.58	271.47	890.65	7.57	Approach 14	19/06/2008
1343	535330.44N	0014153.97W	EP	N	419924.36	443997.06	273.12	896.06	9.45	Approach 14	19/06/2008
1344	535330.27N	0014154.14W	EP	N	419921.37	443991.86	272.89	895.31	9.26	Approach 14	19/06/2008
1345	535327.39N	0014152.05W	EP	N	419959.92	443902.94	266.96	875.85	5.16	Approach 14	19/06/2008
1346	535327.76N	0014156.60W	EP	N	419876.71	443913.99	265.61	871.42	2.52	Approach 14	19/06/2008
1566	535822.32N	0014849.27W	TERRAIN OS	N	412319.24	452991.67	360.00	1181.10	4.52	Approach 14	19/06/2008
1567	535832.16N	0014848.74W	TERRAIN OS	N	412328.00	453295.67	392.00	1286.09	36.52	Approach 14	19/06/2008
1568	535826.73N	0014848.52W	TERRAIN OS	N	412332.48	453127.99	374.00	1227.03	18.52	Approach 14	19/06/2008
1569	535838.82N	0014843.28W	TERRAIN OS	N	412426.90	453501.90	404.00	1325.46	48.52	Approach 14	19/06/2008
1571	535836.34N	0014833.29W	TERRAIN OS	N	412609.09	453425.76	390.00	1279.53	34.52	Approach 14	19/06/2008
1572	535843.29N	0014829.65W	TERRAIN OS	N	412675.00	453640.61	394.00	1292.65	38.52	Approach 14	19/06/2008
1573	535834.36N	0014822.68W	TERRAIN OS	N	412802.70	453365.20	372.00	1220.47	16.52	Approach 14	19/06/2008
1575	535844.42N	0014818.68W	TERRAIN OS	N	412874.73	453676.07	380.00	1246.72	24.52	Approach 14	19/06/2008
1576	535831.53N	0014814.95W	TERRAIN OS	N	412943.67	453278.00	358.00	1174.54	2.52	Approach 14	19/06/2008
1577	535846.21N	0014807.13W	TERRAIN OS	N	413085.00	453731.95	360.00	1181.10	4.52	Approach 14	19/06/2008
2093	535223.90N	0014024.96W	HEDGE	N	421558.84	441947.65	211.71	694.59	0.35	Approach 14	20/08/2014
2154	535222.98N	0014030.53W	TREE	N	421457.20	441918.93	223.31	732.64	11.00	Approach 14	16/11/2015
2170	535236.44N	0014023.45W	TREE	N	421584.55	442335.57	218.29	716.17	1.56	Approach 14	16/11/2015
2200	535226.63N	0014038.59W	TP	N	421309.41	442031.04	219.50	720.14	3.54	Approach 14	16/11/2015
2201	535226.78N	0014035.58W	TP	N	421364.52	442035.76	217.91	714.93	2.62	Approach 14	16/11/2015

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt m	Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft			
2214	535236.48N	0014024.98W	TREE	N	421556.62	442336.61	220.15	722.28	3.02	Approach 14	16/11/2015
2240	535239.98N	0014026.42W	TREE	N	421529.92	442444.66	219.45	719.98	0.37	Approach 14	16/11/2015
2291	535336.06N	0014212.08W	TREE	N	419593.01	444169.21	272.03	892.49	0.05	Approach 14	16/11/2015
2293	535336.28N	0014210.29W	TREE	N	419625.70	444176.30	272.38	893.64	0.82	Approach 14	16/11/2015
2294	535336.12N	0014209.72W	TREE	N	419636.19	444171.24	274.04	899.08	2.75	Approach 14	16/11/2015
2295	535336.89N	0014208.52W	TREE	N	419658.04	444195.09	276.95	908.63	5.59	Approach 14	16/11/2015
2296	535336.68N	0014207.98W	TREE	N	419667.90	444188.64	278.12	912.47	7.04	Approach 14	16/11/2015
2297	535336.35N	0014207.20W	TREE	N	419682.12	444178.69	282.15	925.69	11.50	Approach 14	16/11/2015
2298	535336.47N	0014206.18W	TREE	N	419700.64	444182.51	282.74	927.62	12.33	Approach 14	16/11/2015
2299	535335.82N	0014205.65W	TREE	N	419710.49	444162.24	283.45	929.95	13.58	Approach 14	16/11/2015
2300	535336.40N	0014203.80W	TREE	N	419744.23	444180.38	282.59	927.13	12.96	Approach 14	16/11/2015
2302	535335.55N	0014203.09W	TREE	N	419757.24	444154.12	280.66	920.80	11.73	Approach 14	16/11/2015
2304	535335.13N	0014203.50W	TREE	N	419749.76	444141.13	278.25	912.89	9.43	Approach 14	16/11/2015
2305	535335.42N	0014202.75W	TREE	N	419763.39	444150.22	281.44	923.36	12.69	Approach 14	16/11/2015
2306	535332.89N	0014206.04W	TREE	N	419703.76	444071.89	268.61	881.27	0.29	Approach 14	16/11/2015
2307	535332.65N	0014206.02W	TREE	N	419704.12	444064.31	269.42	883.92	1.25	Approach 14	16/11/2015
2309	535332.03N	0014205.99W	TREE	N	419704.85	444045.18	268.61	881.27	0.80	Approach 14	16/11/2015
2310	535331.92N	0014205.84W	TREE	N	419707.48	444041.77	268.10	879.59	0.40	Approach 14	16/11/2015
2311	535333.86N	0014200.25W	TREE	N	419809.38	444102.17	281.92	924.93	14.83	Approach 14	16/11/2015
2313	535333.33N	0014159.95W	TREE	N	419814.94	444085.75	278.90	915.03	12.20	Approach 14	16/11/2015
2315	535333.22N	0014159.91W	TREE	N	419815.69	444082.58	277.63	910.86	11.01	Approach 14	16/11/2015
2316	535332.84N	0014200.44W	TREE	N	419806.01	444070.73	276.81	908.17	10.24	Approach 14	16/11/2015
2318	535332.74N	0014159.52W	TREE	N	419822.80	444067.62	278.34	913.19	12.11	Approach 14	16/11/2015
2319	535332.45N	0014200.14W	TREE	N	419811.59	444058.63	276.23	906.27	9.98	Approach 14	16/11/2015
2320	535332.38N	0014159.15W	TREE	N	419829.55	444056.50	277.81	911.45	11.90	Approach 14	16/11/2015
2321	535331.93N	0014200.05W	TREE	N	419813.22	444042.68	276.52	907.22	10.59	Approach 14	16/11/2015
2322	535331.56N	0014158.66W	TREE	N	419838.58	444031.22	276.06	905.71	10.73	Approach 14	16/11/2015
2403	535323.43N	0014126.38W	TREE	N	420429.07	443782.69	259.40	851.05	5.72	Approach 14	17/11/2015
2404	535323.40N	0014123.74W	TREE	N	420477.28	443781.84	256.66	842.06	3.64	Approach 14	17/11/2015

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt m	Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft			
2455	535226.60N	0014035.23W	TREE	N	421370.77	442030.50	215.64	707.48	0.51	Approach 14	28/03/2017
2456	535225.92N	0014031.24W	TREE	N	421443.78	442009.66	216.52	710.37	2.69	Approach 14	28/03/2017
2459	535225.61N	0014031.62W	TREE	N	421436.89	442000.17	216.18	709.25	2.39	Approach 14	28/03/2017
2460	535225.40N	0014031.76W	TREE	N	421434.48	441993.72	215.83	708.10	2.11	Approach 14	28/03/2017
2462	535225.13N	0014031.99W	TREE	N	421430.20	441985.07	217.87	714.80	4.22	Approach 14	28/03/2017
2463	535224.93N	0014032.11W	TREE	N	421428.10	441979.16	217.12	712.34	3.52	Approach 14	28/03/2017
2465	535224.56N	0014027.07W	TREE	N	421520.25	441968.07	213.54	700.59	1.35	Approach 14	28/03/2017
2476	535222.49N	0014030.70W	TREE	N	421454.23	441903.64	229.53	753.05	17.40	Approach 14	28/03/2017
2490	535221.15N	0014026.02W	TREE	N	421539.78	441862.85	215.23	706.14	4.86	Approach 14	28/03/2017
2491	535221.26N	0014027.97W	TREE	N	421504.24	441866.04	214.71	704.43	3.81	Approach 14	28/03/2017
2492	535221.88N	0014026.22W	TREE	N	421536.12	441885.22	213.77	701.35	3.02	Approach 14	28/03/2017
2494	535221.88N	0014028.28W	TREE	N	421498.36	441884.99	216.68	710.89	5.42	Approach 14	28/03/2017
2495	535222.02N	0014028.78W	TREE	N	421489.26	441889.38	216.41	710.01	4.96	Approach 14	28/03/2017
2496	535222.17N	0014029.21W	TREE	N	421481.40	441893.97	217.13	712.37	5.51	Approach 14	28/03/2017
2497	535222.37N	0014029.60W	TREE	N	421474.28	441900.06	217.19	712.57	5.38	Approach 14	28/03/2017
2588	535236.45N	0014023.81W	TREE	N	421577.96	442335.81	218.06	715.42	1.23	Approach 14	28/03/2017
2732	535336.42N	0014149.31W	MAST	N	420008.77	444182.30	286.34	939.44	21.09	Approach 14	14/03/2018
2734	535335.17N	0014151.84W	TREE	N	419962.64	444143.35	288.72	947.24	23.42	Approach 14	14/03/2018
2738	535220.98N	0014027.09W	TREE	N	421520.29	441857.43	219.35	719.65	8.80	Approach 14	15/03/2018
2745	535222.66N	0014030.80W	TREE	N	421452.34	441908.89	228.29	748.98	16.06	Approach 14	15/03/2018
2755	535225.80N	0014031.35W	TREE	N	421441.90	442005.98	216.95	711.78	3.15	Approach 14	15/03/2018
2758	535223.47N	0014027.43W	TREE	N	421513.76	441934.25	213.34	699.93	1.56	Approach 14	15/03/2018
2759	535222.76N	0014029.65W	TREE	N	421473.21	441912.10	215.06	705.58	3.06	Approach 14	15/03/2018
2760	535223.45N	0014026.11W	TREE	N	421537.87	441933.91	211.82	694.95	0.38	Approach 14	15/03/2018
2761	535222.26N	0014028.11W	TREE	N	421501.53	441896.90	213.66	700.98	2.27	Approach 14	15/03/2018
2762	535222.16N	0014027.77W	TREE	N	421507.69	441893.89	212.53	697.28	1.27	Approach 14	15/03/2018
2763	535221.80N	0014027.93W	TREE	N	421504.88	441882.78	215.82	708.07	4.68	Approach 14	15/03/2018
2764	535221.67N	0014027.66W	TREE	N	421509.78	441878.52	216.34	709.78	5.33	Approach 14	15/03/2018
2766	535226.63N	0014033.76W	TREE	N	421397.77	442031.40	215.08	705.64	0.30	Approach 14	15/03/2018

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt m	Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft			
2775	535236.15N	0014025.18W	TREE	N	421553.07	442326.36	220.07	722.01	3.05	Approach 14	15/03/2018

Penetrating Obstacles For The 32 Approach Surface:

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt m	Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft			
1912	535130.21N	0013905.67W	TREE	N	423014.97	440295.25	208.08	682.68	3.67	Approach 32	20/08/2014
2687	535133.09N	0013910.13W	TREE	N	422933.14	440384.05	213.74	701.25	11.75	Approach 32	28/03/2017
2689	535132.54N	0013909.28W	TREE	N	422948.77	440366.91	211.12	692.65	8.66	Approach 32	28/03/2017
2690	535132.73N	0013909.47W	TREE	N	422945.16	440372.87	209.67	687.89	7.35	Approach 32	28/03/2017
2691	535132.31N	0013908.91W	TREE	N	422955.56	440359.97	208.38	683.66	5.73	Approach 32	28/03/2017
2692	535132.09N	0013908.52W	TREE	N	422962.67	440353.20	211.60	694.23	8.75	Approach 32	28/03/2017
2694	535131.59N	0013907.78W	TREE	N	422976.31	440337.72	207.92	682.15	4.66	Approach 32	28/03/2017
2695	535129.72N	0013907.36W	TREE	N	422984.18	440280.11	211.00	692.26	6.78	Approach 32	28/03/2017
2696	535130.97N	0013906.85W	TREE	N	422993.35	440318.85	210.63	691.04	6.86	Approach 32	28/03/2017
2698	535130.01N	0013905.44W	TREE	N	423019.31	440289.23	209.35	686.84	4.79	Approach 32	28/03/2017
2699	535129.54N	0013904.75W	TREE	N	423031.95	440274.68	209.24	686.48	4.30	Approach 32	28/03/2017
2700	535129.39N	0013904.49W	TREE	N	423036.81	440270.29	209.08	685.96	4.01	Approach 32	28/03/2017
2701	535129.11N	0013904.02W	TREE	N	423045.33	440261.42	208.64	684.51	3.32	Approach 32	28/03/2017
2702	535128.83N	0013903.47W	TREE	N	423055.48	440252.87	206.59	677.79	1.01	Approach 32	28/03/2017
2703	535128.30N	0013902.85W	TREE	N	423066.96	440236.55	206.36	677.03	0.38	Approach 32	28/03/2017
2704	535124.42N	0013900.68W	TREE	N	423107.04	440116.92	209.60	687.66	1.32	Approach 32	28/03/2017
2858	535132.75N	0013909.73W	TREE	N	422940.57	440373.50	214.80	704.72	12.55	Approach 32	15/03/2018

Penetrating Obstacles For The 14 Clearway:

Clearway shape was changed from tapered (CAP168) to rectangular (EASA) in 2015.

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt		Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft	m	m		
2713	535126.69N	0013854.91W	BUSH	N	423212.23	440187.42	200.99	659.42	1.22	1.22	Clearway 14	28/03/2017
2714	535126.80N	0013854.54W	BUSH	N	423219.00	440190.95	201.21	660.14	1.45	1.45	Clearway 14	28/03/2017

Penetrating Obstacles For The 32 Clearway:

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt		Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft	m	m		
1615	535227.94N	0014020.11W	HEDGE	N	421646.86	442072.93	208.31	683.43	0.82	0.82	Clearway 32	17/06/2009

Penetrating Obstacles For The 14 Take Off and Climb Surface:

No penetrating obstacles.

Penetrating Obstacles For The 32 Take Off and Climb Surface:

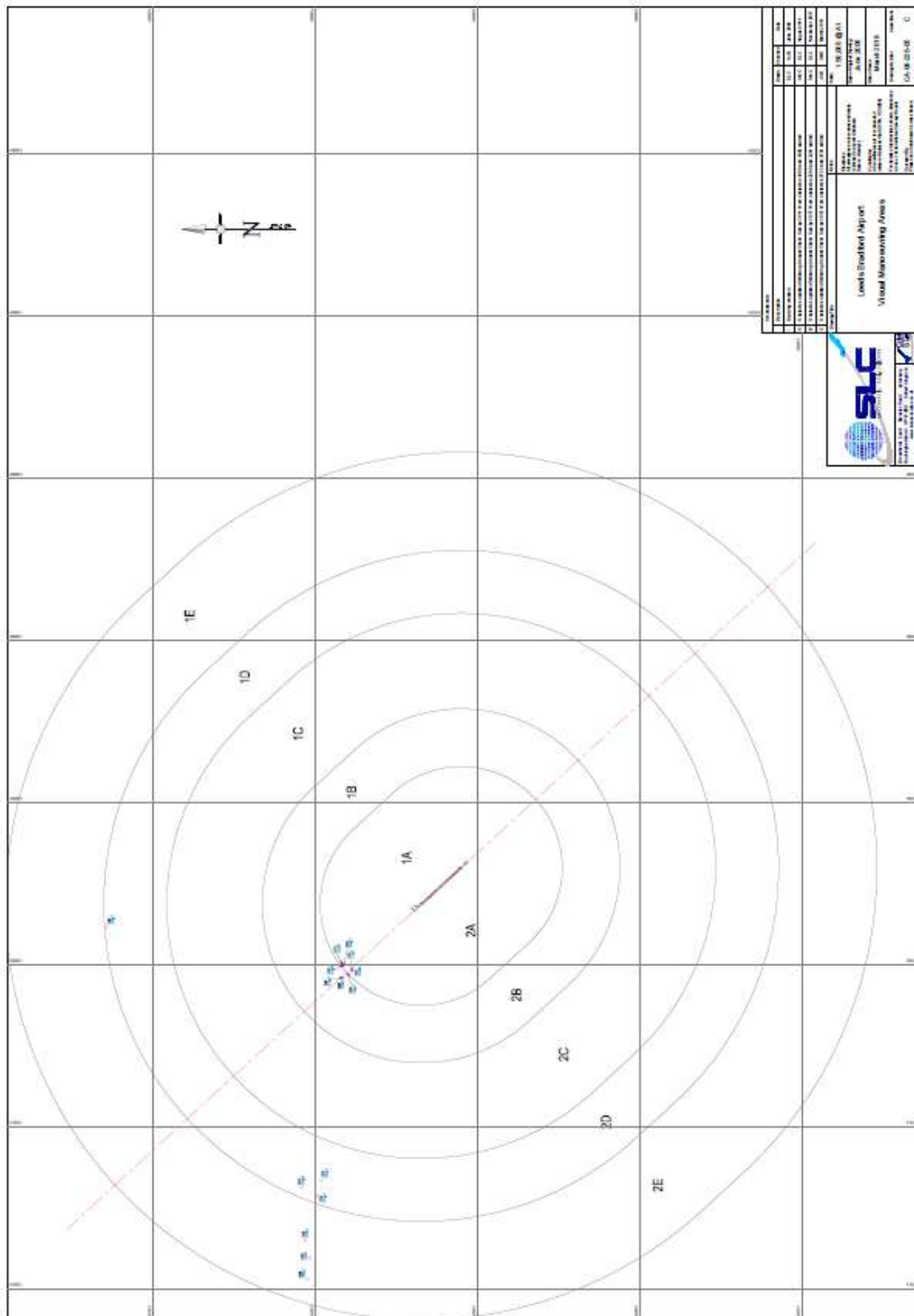
Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt		Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft	m	m		
1183	535336.63N	0014204.64W	TREE	N	419728.79	444187.35	284.00	931.76	20.71	20.71	Take Off Climb 32	19/06/2008
1189	535336.89N	0014147.26W	WALL	N	420046.14	444196.79	281.45	923.39	22.31	22.31	Take Off Climb 32	19/06/2008
1190	535336.26N	0014143.20W	WALL	N	420120.27	444177.66	278.51	913.75	20.66	20.66	Take Off Climb 32	19/06/2008
1255	535325.98N	0014133.46W	PYLON	N	420299.41	443860.69	267.64	878.08	16.88	16.88	Take Off Climb 32	19/06/2008
1256	535326.18N	0014139.92W	PYLON	N	420181.48	443866.48	268.97	882.45	16.53	16.53	Take Off Climb 32	19/06/2008
1257	535326.49N	0014150.29W	PYLON	N	419992.18	443875.22	274.51	900.62	19.38	19.38	Take Off Climb 32	19/06/2008
1258	535331.15N	0014145.98W	EP	N	420070.16	444019.51	272.09	892.68	15.89	15.89	Take Off Climb 32	19/06/2008
1260	535326.84N	0014201.36W	PYLON	N	419789.89	443885.31	272.91	895.37	14.90	14.90	Take Off Climb 32	19/06/2008
1261	535331.20N	0014149.97W	TREE	N	419997.33	444020.67	276.81	908.17	19.61	19.61	Take Off Climb 32	19/06/2008

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt		Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft	m			
1262	535331.31N	0014151.71W	TREE	N	419965.54	444024.11	277.46	910.30	19.78		Take Off Climb 32	19/06/2008
1263	535331.77N	0014151.39W	TREE	N	419971.25	444038.29	278.15	912.57	20.34		Take Off Climb 32	19/06/2008
1264	535332.45N	0014151.38W	TREE	N	419971.41	444059.43	278.46	913.58	20.34		Take Off Climb 32	19/06/2008
1265	535333.82N	0014152.01W	TREE	N	419959.68	444101.50	279.78	917.91	20.88		Take Off Climb 32	19/06/2008
1266	535334.51N	0014151.86W	OBS BEACON	N	419962.44	444122.88	285.00	935.04	25.82		Take Off Climb 32	19/06/2008
1268	535335.79N	0014151.79W	TREE	N	419963.58	444162.61	287.24	942.39	27.49		Take Off Climb 32	19/06/2008
1269	535336.33N	0014149.36W	BUILDING	N	420007.73	444179.38	283.73	930.87	24.33		Take Off Climb 32	19/06/2008
1270	535337.11N	0014151.09W	TREE	N	419976.05	444203.25	285.39	936.32	25.21		Take Off Climb 32	19/06/2008
1271	535337.44N	0014151.66W	TREE	N	419965.64	444213.40	285.06	935.24	24.59		Take Off Climb 32	19/06/2008
1272	535338.16N	0014154.40W	TREE	N	419915.58	444235.54	286.22	939.04	24.75		Take Off Climb 32	19/06/2008
1273	535338.33N	0014150.76W	TREE	N	419981.96	444241.16	283.79	931.07	23.13		Take Off Climb 32	19/06/2008
1323	535328.86N	0014023.76W	LLZ HUT	N	421580.03	442101.08	208.52	684.12	1.01		Take Off Climb 32	19/06/2008
1324	535328.75N	0014023.95W	LLZ HUT	N	421576.46	442097.81	208.54	684.19	1.03		Take Off Climb 32	19/06/2008
1325	535328.55N	0014024.46W	32-LLZ-U/H-OBS	Y	421567.27	442091.51	209.02	685.76	1.48		Take Off Climb 32	19/06/2008
1326	535327.52N	0014026.38W	32-LLZ-R/H-OBS	Y	421532.29	442059.41	209.05	685.86	1.51		Take Off Climb 32	19/06/2008
1339	535330.72N	0014205.39W	EP	N	419715.82	444004.68	263.03	862.96	2.26		Take Off Climb 32	19/06/2008
1340	535330.72N	0014201.88W	EP	N	419780.01	444005.10	266.76	875.20	6.85		Take Off Climb 32	19/06/2008
1341	535330.73N	0014158.37W	EP	N	419844.09	444005.77	269.71	884.88	10.66		Take Off Climb 32	19/06/2008
1342	535330.65N	0014154.52W	EP	N	419914.32	444003.58	271.47	890.65	13.40		Take Off Climb 32	19/06/2008
1343	535330.44N	0014153.97W	EP	N	419924.36	443997.06	273.12	896.06	15.28		Take Off Climb 32	19/06/2008
1344	535330.27N	0014154.14W	EP	N	419921.37	443991.86	272.89	895.31	15.09		Take Off Climb 32	19/06/2008
1345	535327.39N	0014152.05W	EP	N	419959.92	443902.94	266.96	875.85	10.99		Take Off Climb 32	19/06/2008
1346	535327.76N	0014156.60W	EP	N	419876.71	443913.99	265.61	871.42	8.35		Take Off Climb 32	19/06/2008
1347	535326.16N	0014200.71W	EP	N	419801.99	443864.32	262.26	860.43	4.72		Take Off Climb 32	19/06/2008
1348	535322.88N	0014159.19W	EP	N	419830.09	443763.07	258.05	846.62	2.39		Take Off Climb 32	19/06/2008
1349	535322.98N	0014202.13W	EP	N	419776.45	443765.91	256.98	843.11	0.55		Take Off Climb 32	19/06/2008
1350	535322.63N	0014202.23W	EP	N	419774.59	443755.05	259.28	850.66	2.98		Take Off Climb 32	19/06/2008
2286	535336.19N	0014216.47W	TREE	N	419512.95	444172.91	266.73	875.10	0.74		Take Off Climb 32	16/11/2015
2287	535335.93N	0014214.75W	TREE	N	419544.35	444165.13	266.02	872.77	0.57		Take Off Climb 32	16/11/2015

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt m	Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft			
2288	535335.87N	0014214.03W	TREE	N	419557.51	444163.33	265.76	871.92	0.51	Take Off Climb 32	16/11/2015
2290	535335.89N	0014212.87W	TREE	N	419578.66	444164.02	270.99	889.07	6.02	Take Off Climb 32	16/11/2015
2291	535336.06N	0014212.08W	TREE	N	419593.01	444169.21	272.03	892.49	7.17	Take Off Climb 32	16/11/2015
2292	535335.88N	0014211.09W	TREE	N	419611.18	444163.68	270.07	886.06	5.54	Take Off Climb 32	16/11/2015
2293	535336.28N	0014210.29W	TREE	N	419625.70	444176.30	272.38	893.64	7.86	Take Off Climb 32	16/11/2015
2294	535336.12N	0014209.72W	TREE	N	419636.19	444171.24	274.04	899.08	9.74	Take Off Climb 32	16/11/2015
2295	535336.89N	0014208.52W	TREE	N	419658.04	444195.09	276.95	908.63	12.59	Take Off Climb 32	16/11/2015
2296	535336.68N	0014207.98W	TREE	N	419667.90	444188.64	278.12	912.47	13.99	Take Off Climb 32	16/11/2015
2297	535336.35N	0014207.20W	TREE	N	419682.12	444178.69	282.15	925.69	18.36	Take Off Climb 32	16/11/2015
2298	535336.47N	0014206.18W	TREE	N	419700.64	444182.51	282.74	927.62	19.14	Take Off Climb 32	16/11/2015
2299	535335.82N	0014205.65W	TREE	N	419710.49	444162.24	283.45	929.95	20.29	Take Off Climb 32	16/11/2015
2300	535336.40N	0014203.80W	TREE	N	419744.23	444180.38	282.59	927.13	19.61	Take Off Climb 32	16/11/2015
2302	535335.55N	0014203.09W	TREE	N	419757.24	444154.12	280.66	920.80	18.25	Take Off Climb 32	16/11/2015
2304	535335.13N	0014203.50W	TREE	N	419749.76	444141.13	278.25	912.89	15.93	Take Off Climb 32	16/11/2015
2305	535335.42N	0014202.75W	TREE	N	419763.39	444150.22	281.44	923.36	19.17	Take Off Climb 32	16/11/2015
2306	535332.89N	0014206.04W	TREE	N	419703.76	444071.89	268.61	881.27	6.69	Take Off Climb 32	16/11/2015
2307	535332.65N	0014206.02W	TREE	N	419704.12	444064.31	269.42	883.92	7.61	Take Off Climb 32	16/11/2015
2309	535332.03N	0014205.99W	TREE	N	419704.85	444045.18	268.61	881.27	7.09	Take Off Climb 32	16/11/2015
2310	535331.92N	0014205.84W	TREE	N	419707.48	444041.77	268.10	879.59	6.67	Take Off Climb 32	16/11/2015
2311	535333.86N	0014200.25W	TREE	N	419809.38	444102.17	281.92	924.93	20.98	Take Off Climb 32	16/11/2015
2313	535333.33N	0014159.95W	TREE	N	419814.94	444085.75	278.90	915.03	18.28	Take Off Climb 32	16/11/2015
2315	535333.22N	0014159.91W	TREE	N	419815.69	444082.58	277.63	910.86	17.06	Take Off Climb 32	16/11/2015
2316	535332.84N	0014200.44W	TREE	N	419806.01	444070.73	276.81	908.17	16.29	Take Off Climb 32	16/11/2015
2317	535331.21N	0014205.88W	TREE	N	419706.97	444019.98	263.70	865.16	2.58	Take Off Climb 32	16/11/2015
2318	535332.74N	0014159.52W	TREE	N	419822.80	444067.62	278.34	913.19	18.09	Take Off Climb 32	16/11/2015
2319	535332.45N	0014200.14W	TREE	N	419811.59	444058.63	276.23	906.27	15.96	Take Off Climb 32	16/11/2015
2320	535332.38N	0014159.15W	TREE	N	419829.55	444056.50	277.81	911.45	17.81	Take Off Climb 32	16/11/2015
2321	535331.93N	0014200.05W	TREE	N	419813.22	444042.68	276.52	907.22	16.51	Take Off Climb 32	16/11/2015
2322	535331.56N	0014158.66W	TREE	N	419838.58	444031.22	276.06	905.71	16.56	Take Off Climb 32	16/11/2015

Ref No.	WGS-84 Coordinates		Description	Lit Y/N	National Grid Coordinates		Elevation AMSL		Pen Amt m	Surface	Survey Date
	Latitude	Longitude			Easting	Northing	m	ft			
2330	535316.03N	0014128.43W	TREE	N	420392.62	443553.83	247.74	812.80	2.76	Take Off Climb 32	17/11/2015
2331	535315.72N	0014126.07W	TREE	N	420435.73	443544.34	247.15	810.86	2.90	Take Off Climb 32	17/11/2015
2332	535315.90N	0014128.41W	TREE	N	420392.91	443549.51	248.24	814.44	3.33	Take Off Climb 32	17/11/2015
2333	535316.13N	0014130.73W	TREE	N	420350.59	443556.74	245.85	806.59	0.26	Take Off Climb 32	17/11/2015
2336	535312.47N	0014115.46W	TREE	N	420629.96	443444.82	241.63	792.75	1.47	Take Off Climb 32	17/11/2015
2385	535321.47N	0014154.71W	TREE	N	419912.11	443719.71	256.03	839.99	2.11	Take Off Climb 32	17/11/2015
2386	535320.87N	0014151.95W	TREE	N	419962.59	443701.41	253.49	831.66	0.53	Take Off Climb 32	17/11/2015
2394	535323.81N	0014144.11W	TREE	N	420105.23	443792.83	253.78	832.61	1.40	Take Off Climb 32	17/11/2015
2395	535323.72N	0014143.78W	TREE	N	420111.25	443790.05	253.24	830.84	0.98	Take Off Climb 32	17/11/2015
2396	535323.68N	0014143.19W	TREE	N	420122.17	443788.91	252.61	828.77	0.51	Take Off Climb 32	17/11/2015
2397	535323.67N	0014141.85W	TREE	N	420146.50	443788.77	254.14	833.79	2.37	Take Off Climb 32	17/11/2015
2398	535323.60N	0014141.59W	TREE	N	420151.29	443786.73	254.91	836.32	3.24	Take Off Climb 32	17/11/2015
2399	535323.56N	0014141.16W	TREE	N	420159.16	443785.48	255.59	838.55	4.04	Take Off Climb 32	17/11/2015
2403	535323.43N	0014126.38W	TREE	N	420429.07	443782.69	259.40	851.05	11.54	Take Off Climb 32	17/11/2015
2732	535336.42N	0014149.31W	MAST	N	420008.77	444182.30	286.34	939.44	26.91	Take Off Climb 32	14/03/2018
2734	535335.17N	0014151.84W	TREE	N	419962.64	444143.35	288.72	947.24	29.24	Take Off Climb 32	14/03/2018

10.26 APPENDIX 19 – Visual Maneuvering area chart (Obstacles)



10.27 APPENDIX 20 – LBA – Runway 14-32 Declared Distances

Runway designator	TORA	TODA	ASDA	LDA	Remarks
1	2	3	4	5	6
14	2113 m	3169 m	2113 m	1802 m	
32	2190 m	2389 m	2190 m	1916 m	
14	1933 m	2900 m	1933 m		Take-off from intersection with Holding Point E2
14	1802 m	2703 m	1803 m		Take-off from Runway 14 Threshold
14	1508 m	2262 m	1508 m		Take-off from intersection with Taxiway Alpha
14	1433 m	2150 m	1433 m		Take-off from intersection with Taxiway Foxtrot
14	1251 m	1877 m	1251 m		Take-off from intersection with Taxiway Mike
14	963 m	1445 m	963 m		Take-off from intersection with Taxiway Lima
32	1916 m	2113 m	1913 m		Take-off from Runway 32 Threshold
32	1627 m	1826 m	1627 m		Take-off from intersection with Taxiway Delta
32	1118 m	1317 m	1118 m		Take-off from intersection with Taxiway Lima

10.28 APPENDIX 21 - RFFS Vehicle Details

Appliance	Call Sign	Water (Ltrs)	Foam (Ltrs)	Discharge Rate (Ltrs/min)	Monnex Dry Powder (Kg)	CO2 (KG)
Rosenbauer Fire 1	Fire 1	12,500	1500	5000	225	20
Cobra Fire 2	Fire 2	12,000	1680	4500	50 + 9	32
Cobra Fire 3	Fire 3	10,400	1570	4550	100 + 9	0
HRET	Fire 5	11,200	1500	6000	225	0
Total		46,100	6250		600 + 18	52

Part E

OPERATING PROCEDURES, EQUIPMENT AND SAFETY MEASURES

1. Policies Aerodrome Operating

2. Procedures



11 SECTION 11 - Policies

11.1 Aerodrome Reporting

11.1.1 Policy Statement

Any changes made which affect the operational status of the aerodrome will be notified and or promulgated via the Aeronautical information publication (AIP), notices to Airmen (NOTAM), Snow notice to airmen (SNOTAM) and Airport Operational Instructions (AOI).

11.1.2 Operational Procedure

- AOP 08 - Aeronautical, Meteorological and Operational Information
- MATS PART 1 & 2
- AOP 16 - Winter Operations
- AOP 02 - Coordination

11.2 Accessing the Aerodrome Movement Area

11.2.1 Policy Statement

LBA will ensure that only trained, qualified and authorised persons are allowed unescorted access to the movement area and other operational areas of the aerodrome. Escorted access will be provided as required.

11.2.2 Operational Procedure

- AOP 01 Airside Security
- AOP 06 Movement Area, Lighting and Communications Inspections.
- AOP 24 Movement Area, Drainage Inspection and Runway Friction Assessment
- AOP 13 Apron Management

11.3 Movement Area Inspection and Reporting

11.3.1 Policy Statement

LBA operates a maintenance and inspection program of the movement area which is commensurate with the traffic expected at the aerodrome in order to identify any default or potential hazards to the safety of aircraft or aerodrome operations.

The aerodrome movement area will be inspected at regular intervals. Inspections will verify that they are fit for use by aircraft, ground surface equipment, vehicles and pedestrian movements as required.

11.3.2 Operational Procedure

- AOP 13 Apron Management
- AOP 06 Movement Area, Lighting and Communications Inspections
- AOP 24 - Movement Area, Drainage Inspection and Runway Friction Assessment
- AOP 16 Winter Operations

11.4 Nav aids and Aerodrome Electrical Systems – Inspection and Maintenance

11.4.1 Policy statement

LBA operates an inspection and monitoring system of aerodrome ground lights so as to inform ATC when safe operation is no longer possible. LBA has established procedures for the operation of visual aids.

11.4.2 Operational Procedure

- AOP 07 - Navigational Aid and Aerodrome Ground Lighting
- AOP 06 Movement Area, Lighting and Communications Inspections

11.5 Aerodrome Works

11.5.1 Policy Statement

Leeds Bradford Airport operates to detailed procedures when undertaking any construction or maintenance work on the movement area or when work affecting aerodrome operations is planned, established, implemented or approved.

11.5.2 Operational Procedure

- AOP 12 Control of Works in Progress

11.6 Apron Management & Safety.

11.6.1 Policy Statement

Whilst Leeds Bradford Airport will set the framework for safety management, it is fundamental to safe airside working that all airport users work together to ensure the presence of a 'safety culture' and the use of 'best practice' to reduce the risk of accidents. To this end each organisation operating at the airport has a responsibility to ensure that safety standards are maintained and wherever possible improved.

11.6.2 Operational Procedure

- AOP 13 Apron Management
- AOP 11 Low Visibility Procedures
- AOP 14 Foreign Object Debris (FOD)
- AOP 05 Airside Safety Regulation Enforcement Scheme
- AOP 22 Aviation Fuel Management

11.7 Control of Vehicles

11.7.1 Policy Statement

In order to maintain safety in the airside areas, all persons required to drive or operate vehicles must be in possession of a valid Airport Driving Permit. In addition all vehicles should be serviceable and in possession of a valid Airside Vehicle Permit.

11.7.2 Operational Procedure

- AOP 15 Airside Driving & Vehicle Permits
- AOP 05 Airside Safety Regulation Enforcement Scheme
- AOP 11 Low Visibility Procedures
- AOP 13 – Apron Management

11.8 Wildlife Hazard Management

11.8.1 Policy Statement

Leeds Bradford Airport takes all reasonable and practicable measures to ensure that risks to flying operations at the Airport are minimised from birds/wildlife. This is achieved through:

- The provision of trained, well equipped and competent staff to detect and deter birds on and around the airfield.

- The provision of appropriate and effective equipment.
- The provision of appropriate and effective control measures.
- The management of the airfield habitat, so that the airfield is unattractive to hazardous birds.
- The safeguarding of the surrounding area from new bird attractants.
- Warnings to pilots whenever a birdstrike risk is deemed significant by AOU/ATC.
- Continuous risk assessment
- When bird strikes do take place, the Airport Company will report these in line with guidelines provided by the Civil Aviation Authority.

11.8.2 Operational Procedure

- AOP 19 Wildlife Management

11.9 **Obstacle Control and Monitoring**

11.9.1 Policy Statement

LBA will ensure that a safeguarding process is in place to assess what impact a proposed development or construction might have on the safe operations of the aerodrome in line with current regulatory requirements.

11.9.2 Operational Procedure

- AOP 28 Safeguarding
- AOP 06 Movement Area, Lighting and Communications Inspections.

11.10 **Rescue & Fire Fighting and Aerodrome Emergency Plan**

11.10.1 Policy Statement

All aircraft movements at LBA shall be provided with a level of protection, which is no less than the minimum appropriate for that aircraft type. LBA operates an aerodrome emergency plan which includes the ready availability of, and coordination with, appropriate specialist rescue services to be able to respond to emergencies.

11.10.2 Operational Procedure

- AOP 10 Rescue & Fire Fighting Services and Emergency Planning
- LBA Emergency Orders

11.11 **Removal of Disabled Aircraft**

11.11.1 Policy Statement

LBA ensures procedures are in place for the removal of disabled aircraft.

11.11.2 Operational Procedure

- AOP 21 Removal of Disabled Aircraft
- AOP 10 Rescue & Fire Fighting Services and Emergency Planning
- LBA Emergency Orders (Appendix H)

11.12 **Handling and Storage of Fuel and Dangerous Goods**

11.12.1 Policy Statement

Responsibility for the management, storage and in to plane fuelling at LBA is through ASIG and Multiflight (GA). All operatives, irrespective of which operating company is stated above are compliant to airport and

industry (JIG) standards relating to all aspects of aircraft fuelling operations. LBA will monitor and audit the management, quality control and delivery procedures of fuelling activities.

LBA will allocate pre-surveyed stands for the on/off load of dangerous goods. The handling and storage of dangerous goods by air is the responsibility of the relevant airline or their subcontracted ground handling company (as applicable).

11.12.2 Operational Procedure

- AOP 22 Aviation Fuel Management
- AOP 20 Dangerous Goods

11.13 Low Visibility Procedures (LVP's)

11.13.1 Policy Statement

Leeds Bradford Airport operates procedures for providing safe conditions for aerodrome operations in low visibility conditions.

11.13.2 Operational Procedure

- Aerodrome Manual
- AOP 11 Low Visibility Procedures
- AOP 13 Apron Management
- MATS part 2

11.14 Winter Operations

11.14.1 Policy Statement

Leeds Bradford Airport has established procedures implemented for providing safe conditions for aerodrome operations during winter conditions

11.14.2 Operational Procedures

- AOP 16 Winter Operations

11.15 Operations in Adverse Weather (High winds)

11.15.1 Policy Statement

LBA has procedures in place to ensure the safety of operations during periods of adverse weather.

11.15.2 Operational Procedure

- AOP 17 High Wind Warning – Preparation & Response Procedures

11.16 Night Operations

11.16.1 Policy Statement

LBA ensures that visual aids are installed, operated, and maintained to permit aircraft operations to be performed safely at night.

11.16.2 Operational Procedure

AOP 07 Aerodrome Ground Lighting (AGL), Signs, Markings, NAVAIDS and Communication

11.17 Protection of Radar and Other Navigational Aids, Control of Activities, and Ground Maintenance in the Vicinity of These Installations

11.17.1 Policy Statement

LBA ensures procedures are in place to safeguard the radar and other navigational aids

11.17.2 Operational Procedure

- AOP 07 Aerodrome Ground Lighting(AGL), Signs, Markings and NAVAIDS
- AOP 28 Safeguarding

11.18 Procedure for the operation of aircraft with higher code letter at the aerodrome

11.18.1 Policy Statement

LBA has procedures for the use of aircraft with higher code letters than 4E. These are in accordance with ADR.OPS.B.090.

11.18.2 Operational Procedure

- Aerodrome Manual – AOP13 Apron management

11.19 Measures for the Prevention of Fire at the Aerodrome

11.19.1 Policy Statement

LBA ensures that procedures are in place for the prevention of fire. This includes ensuring that no person smokes within airside areas (except in designated smoking shelters) and that procedures are in place to control any hot works which are taking place. The FSM has overall responsibility for the prevention of fire at LBA however some day to day responsibilities are delegated to front line teams such as the AOUS.

11.19.2 Operational Procedure

- AOP 13 Apron Management.
- LBA General Requirements for Contractors and Consultants

11.20 Reducing Declared Distances

11.20.1 Policy Statement

LBA ensures procedures are in place in the event a temporary infringement within the runway strip transitional slope, approach and take off surfaces.

11.20.2 Operational Procedure

- AOP 08 Aeronautical, Meteorological & Operational Information
- MATS part 2

11.21 Safe Integration of Other Aviation Activities

11.21.1 Policy Statement

Procedures for the safe integration of other aviation activities such as gliding, parachuting and banner towing.

11.21.2 Operational Procedure

- AOP 27 Integration of Miscellaneous Aviation Activities
- MATS part 2

AOP 01 – *Airside Security*



12 SECTION 12 - Airside Security

12.1 Aims and Objectives

The Airport Chief Executive Officer is ultimately responsible for the implementation of DfT/EU Regulations at Leeds Bradford Airport and delegates this responsibility through the line management structure to the Head of Security (HoS).

12.2 Primary Access

The only access for Passengers to the airside area is through the Central Search Zone located in the main terminal building. The CSZ may also be used as an access point for staff if unable to use the Gatehouse. Access is controlled by Airport Security in accordance with DfT/EU Regulations

The second access point for Staff and the primary access for Vehicles to the airside area is via the gatehouse (Vehicle Check Point VCP). Access is controlled by Airport Security in compliance with DfT/EU Regulations.

Vehicles and personnel may only be allowed to enter the Critical Part on production of a valid security pass and AVP. Personnel and vehicles are also subject to security screening. It is the responsibility of all personnel in possession of an AVP to report lost, stolen or damaged AVP's to AOU immediately.

All visitors must be in possession of a visitor's pass, have an acceptable means of identification and be accompanied at all times by a valid security pass holder. If the visitor requires vehicular access to airside, they must be in possession of a valid AVP. Failure to comply with LBA escorting requirements will result in the visitor pass being removed and the possible removal of the full pass holder who is escorting.

Vehicles and personnel entering the airside area shall not, under any circumstances, be given approval to enter the manoeuvring area without permission from ATC unless they are authorised drivers under the free ranging driving scheme.

12.3 Security

It is of the utmost importance that all persons employed at the airport observe all the security rules and procedures during the course of their duties and report any suspicious object, activity or any unauthorised penetration of the Critical Part to the Security Duty Manager immediately

Guidance relating to airport security is available via the Airport Security Programme from the Head of Security. Passes will be issued to based operators and crews who require frequent access to the critical part in order to undertake their legitimate business. Charges may be levied for pass issue.

Passes must be visible and worn whenever operating airside. All staff entering the CP must do so by using a recognised access point and undergo the required security screening. Persons who are airside shall, upon request, present their authorisation to security staff during patrols and spot checks.

12.4 Airside Critical Part Boundary Line – Access To/From Critical Parts

The Critical Part (CP) Boundary Line is denoted in APPENDIX 22.

To ensure compliance with DfT/ EU regulations in respect of access control procedures pertaining to the CP, all personnel who exit the airfield Critical Part at any point and for any duration, must PRE arrange with security upon re-entry in to the CP. The two re-entry points will be Stand 21C (previously known as Stand 24) and Stand 1 where personnel and vehicles will be subject to search by a mobile Security Officer. Reference Implementing Regulation 1998 Chapter 1, Implementing Decision 8004 Chapter 1 & SCD Chapter 1.

In the event of poor weather conditions please use Stand 21C as the primary entry point.

It is encouraged that if personnel and vehicles exit the CP at the Southside of the airport, with the exception of Vehicle Tugs, that all road worthy vehicles exit at Multiflight and re-enter the CP via the main access roads to the airport, and enter via the Vehicle Gatehouse. Re-entry at Stand 21C and Stand 1 will be made available if this is not possible, but must be PRE arranged with security in advance.

To pre-arrange clearance to re-enter the CP contact must be made with the Security Duty Manager on 07715630202.

It is encouraged that maximum notice is given to Security when re-entry in to the CP is required. There will be a Mobile patrol officer available on a 24/7 basis for access to and from the CP via the runway/ taxi network.

12.5 Screening Requirements

12.5.1 Staff Screening

All staff seeking to gain access to the CP via the CSZ, Gatehouse and runway/taxi network must undergo screening. Staff are required to present any personal belongings for screening. All staff **MUST REMOVE OUTER COATS** before screening. Further divesting as appropriate. Staff will be screened in accordance with DfT/EU Regulations. In the event of screening at the CP re-entry points 100% physical hand search will apply. All liquids, gels and aerosols will be screened and must comply with the 100ml restrictions. Random searches can also be conducted on staff wishing to gain entry to the runway/taxi network at the request of LBA.

12.5.2 Vehicle Search

Apron and ID pass will be checked by the security officer (all staff and vehicles are to display current apron / ID passes as recognised by Leeds Bradford Airport). A full internal Check of the vehicle is required.

12.5.3 Procedure for the search of Fire Vehicles

All occupants of the vehicle are to disembark. The driver of the vehicle is to open all appropriate compartments on the Fire vehicle which are to be searched. An inventory list of all equipment held on board the fire vehicle must be made available to the searching officer. Where, during screening, the vehicle is required to respond to an operational request, the screening must be stopped immediately.

12.5.4 Procedure for the search of Tug Vehicles when towing an aircraft

AOU to inform Security Duty Manager (SDM) or Supervisor in advance prior to search being required. Tug to park at stand (after the aircraft has disconnected) where security staff must be waiting. Any occupants other than the driver are to disembark. A full security check is required in the presence of the driver. Once the checks have been concluded on the vehicle the driver must stand clear and prepare to be body searched. Any contamination of the vehicle by person/s that has not been searched will result in the vehicle search being deemed void.

12.5.5 Engineering & Runway Works

The above procedure applies with the exception of Critical unplanned runway maintenance/ scheduled maintenance when reduced CP procedure is followed.

12.5.6 Exemptions

Any Emergency Order call-out or Domestic Emergency are exempt from re-entry screening. AOU responding to safety critical incidents are also exempt from re-entry screening. Procedures for Snow clearing and De-icing Operations remain as detailed in the LBA Snow Plan. Any staff not following the above will be subject to investigation and access rights in to the CP will be revoked.

12.6 Critical Part/Airside Foot Patrol

At the start of each foot patrol the Security officer must contact the ATC and AOU to inform them that they are conducting a perimeter patrol on foot. Security Officers must contact ATC when they reach the section of fence adjacent to the yellow 14 IRVR transmissometers (look like two cameras pointing at each other). They must radio the tower and ask for permission to proceed along the fence line towards the ILS Critical Area and over the bridge. The officer **MUST NOT** proceed any further without ATC clearance. Due to aircraft movements there may be a delay before clearance is given and only when there is a safe window in these aircraft movements will permission be given to proceed. ATC should be contacted by radio to say they have vacated the ILS Critical Area once they are following the line of the perimeter fence on the other side of the bridge.

ATC should be contacted again before crossing the bridge on the north side of the airfield (entering the clear and graded area) and notified when over the bridge. When in the ILS Critical Areas or Clear and Graded Area, patrolling operatives must not veer away from the fence line (straying further into the sensitive areas), linger within these sensitive areas without further communication with ATC, forget to notify ATC when vacated these sensitive areas or return to them once vacated. No foot patrols will commence while the airfield is in LVP's. If LVP'S are introduced during a foot patrol then the officers should remain where they are and wait to be collected by AOU who will take them to stand 24.

Security Officers are only allowed to complete foot patrols in the appropriate foot ware provided, wearing yellow hi-vis jacket / tabard and carrying an airfield map with the ILS Critical Areas and Clear and Graded Area marked up.

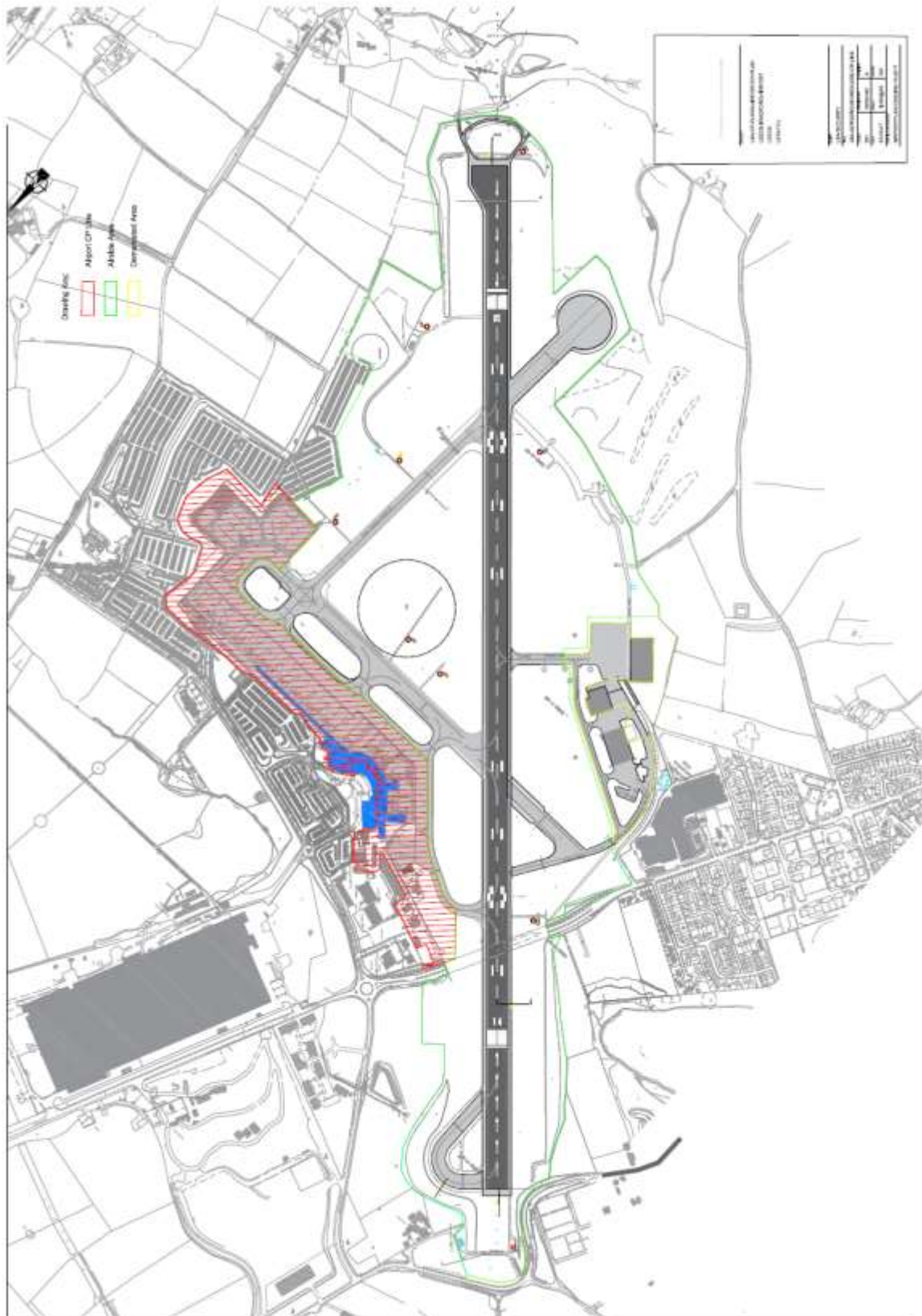
12.7 Control of Access

Information relating to the control of access to the aerodrome and its CP and operational areas, including the location of notice boards can be found in the LBA Airport Security Programme. For Stand 21C access is via Delta or November taxiway through N3. It is encouraged that if you are east side of the airfield e.g. Fire ground/Holding point Juliet then this location is used to re-enter the CP.

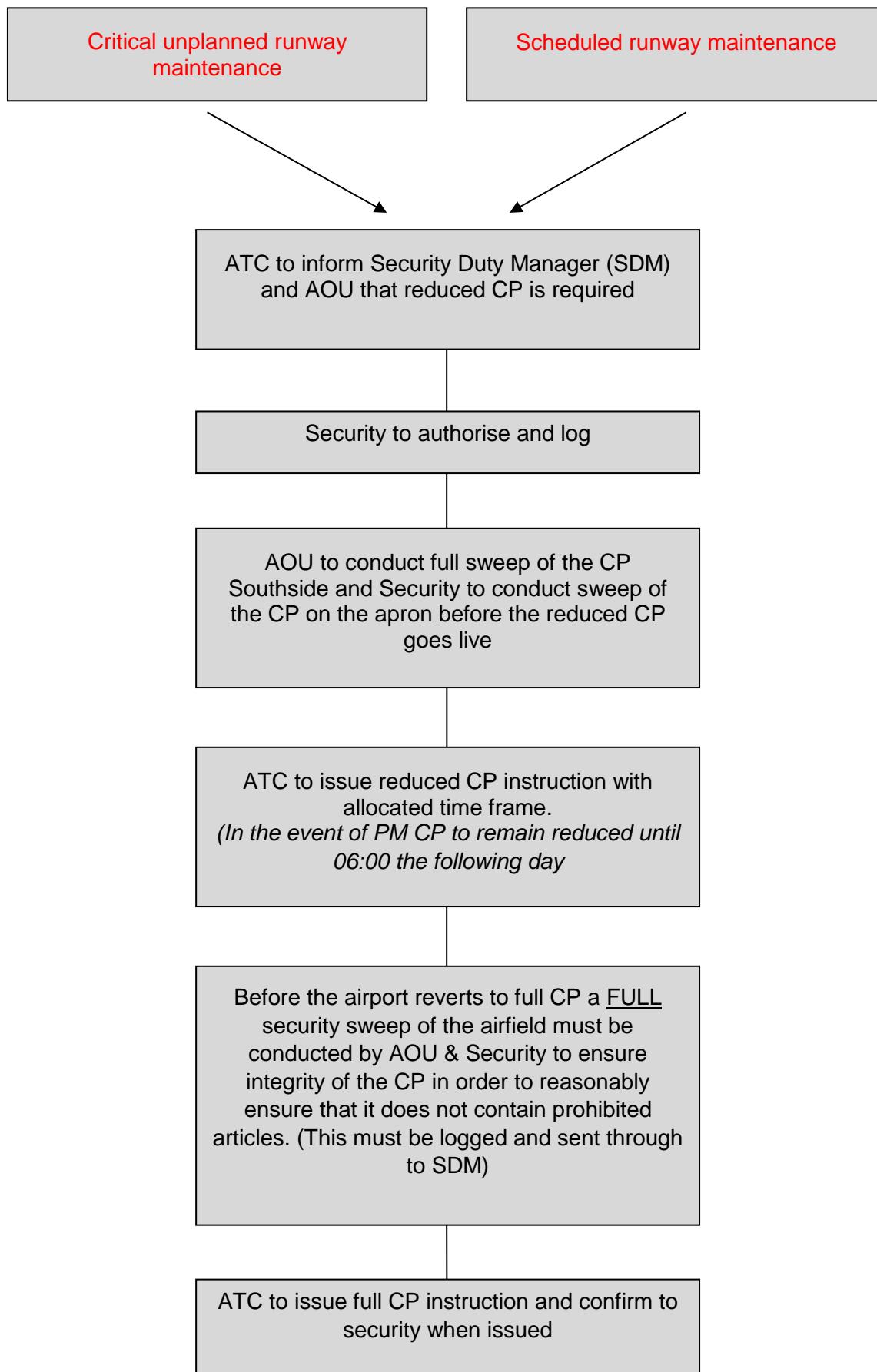
For Stand 1 access is via A2. It is encouraged that if you are positioned at Multiflight via Foxtrot taxiway then you cross the runway and vacate via A2 to re-enter the CP. In the event that a vehicle re-entering the CP has not been cleared by the security team, the vehicle will be halted and the Security Duty Manager will be contacted immediately. In the event of critical runway maintenance and scheduled runway maintenance there will be a temporary reduction in CP to CAT III holding points & Alpha 2 on the north side. Please refer to Image 2 which outlines the reduced Critical Part line. All personnel who exit the reduced Critical Part at any point and for any duration, must PRE arrange with security upon re-entry in to the CP and the above procedure for re-entry points is to be followed

[illegible]

12.9 APPENDIX 23 – Reduced Critical Part




12.10 APPENDIX 24 – Critical Part Reduction Procedure



AOP 02 -

Coordination with Other Organisations, Safety Programmes and Auditing



13 SECTION 13 - Coordination with Other Organisations, Safety Programmes and Auditing

13.1 Aims and Objectives

13.1.1 ADR.OR.D.025 Coordination with other organisations

The aerodrome operator shall:

- ensure that the management system of the aerodrome addresses the coordination and interface with the safety procedures of other organisations operating or providing services at the aerodrome; and
- ensure that such organisations have safety procedures in place to comply with the applicable requirements of Regulation (EC) No 216/2008 and its Implementing Rules and the requirements laid down in the aerodrome manual.

13.1.2 ADR.OR.D.027 Safety programmes

The aerodrome operator shall:

- establish, lead and implement programmes to promote safety and the exchange of safety-relevant information; and
- encourage organisations operating or providing services at the aerodrome to be involved in such programmes.

13.2 Procedures

The LBA Safety Management Manual describes how Safety is managed through a continuous process of education, identification and correction. By addressing safety through Technical and Operational Committees the Airport is able to identify the specialist requirements of all operational teams. Joint membership of these Committees, by certain key personnel, enables a consistency of approach and ensures that issues on the boundary of both groups don't 'fall through the gap'.

13.3 Contracted Activities

All contracted activities at LBA must be conducted in accordance with ADR.OR.D.010.

A written agreement must exist between LBA and the contracted organisation, clearly defining the contracted activities and the applicable requirements. The contracted safety related activities relevant to the agreement must be reviewed as part of LBA's Compliance Monitoring System. The LBA representative responsible for the contract must ensure that the contracted organisation has the necessary authorisation, declaration, or approval when required, and commands the resources and competence to undertake the task; to this end, a prior audit of the contracted party should be conducted to ensure that the contracted organisation meets the applicable requirements, and the requirements specified by LBA.

Regardless of the approval status of the contracted organisation, the contracting manager is responsible to ensure that all contracted activities are subject to hazard identification, safety (risk) assessment and mitigation, as well as compliance monitoring.

When the contracted organisation is itself certified to carry out the contracted activities, LBA's CMS should at least check that the approval effectively covers the contracted activities, and that it is still valid. The following contracts are currently deemed as 'safety related activities' and fall within the scope of the LBA CMS.

13.3.1 Aerodrome Survey Data and the Treatment of Obstacles

CAP 232 sets out the required specification for Aerodrome Licensing Topographical and Obstacle limitation survey. LBA procure these under contract with SLC, a CAA approved provider.

13.3.2 Aeronautical Ground Lighting

ATG provide LBA with expertise in maintaining the software for the AGL system.

IUS provide LBA with expertise on electrical infrastructure

Specialist Power provide operational UPS back systems

AVK provide back up and service for the operational generators

TMS Photometric provide back up, servicing and calibration for lighting test rig and lighting trailers.

Dewhurst provide Theodolite calibration checks of the PAPI plinths

13.3.3 Air Traffic Engineering

Listed in ATE Exposition document SECTION 6.1

13.4 Generic Aircraft Turnround Plan

The Airport Company works with all members of the airside community to promote safety for all airside users. As part of the enhancements to the safety management systems, the airport company has worked closely with the Airport Operators Association (AOA) and the Health and Safety Industry Strategy Group to formulate a Generic Aircraft Turnround Plan. The document does not supersede any statutory regulations and should be read in conjunction with existing Airport Operating Procedures.

The responsibility upon all parties to conduct the turnround procedures safely is enshrined in the Health and Safety at Work Act 1974 that places the duty of care on all stakeholders. Effective safety management will not only reduce the numbers of accidents and incidents but will also improve the efficiency of all concerned.

Individual airline and ramp service providers may well have their own turnround plan in place that should be based around the common framework described in this document. It should be noted that this guidance document provides one element of the way that safety is managed in the airside environment.

13.5 Turnround Processes

The processes involved in ensuring a safe and efficient turnround have a number of key elements that are described within the plan. These range from the planning phases such as risk assessment or resourcing through to the actual tasks identified for specific individuals or companies.

It is recognised that the plan will be used for a “typical” turnround. The processes involved in a turnround already dictate that the general flow of activities will be such as those shown in this document. However, operational circumstances may mean that some activities occur concurrently. The key activities involved in the aircraft turnround are generally accepted as:-

- Aircraft Arrival
- Passenger Disembarkation
- Baggage offload/on load
- Cleaning
- Toilet/water servicing
- Catering
- Refuelling
- Passenger embarkation
- De-Icing
- Aircraft pushback for departure

There are 5 main stages within the plan that are shown below along with guidance notes where appropriate. The lists are not exhaustive but give an indication of what is expected during the turnround. The key individual identified by the Health and Safety Executive through the consultation process was the Turnround Co-ordinator. However, the identification of this person(s) has been the subject of some debate within the airport community. Each airline or handling agent will have a nominated person who adopts the role but the safety considerations within this plan apply to all who are involved in the turnround, irrespective of status. Any person who witnesses an unsafe working practice must take immediate action. If this request is not complied with, the details should be reported to the Aircraft Dispatcher or AOU.

13.5.1 Stage 1 -Resource Planning For Safety

This function will be undertaken at line management level and covers such elements as:-

- Resourcing – to ensure that those undertaking the required activity have sufficient human and equipment resource.
- Serviceability – any equipment that is to be used as part of the turnround is fit for purpose.
- Risk assessment – all functions and elements thereof, should have a risk assessment in place. These should cover the three main elements of the risk assessment matrix, people, activities and environment
- Training – ensure that all staff have received the relevant training for the activities expected of them. This should include basic airside safety awareness, health and safety and driver training where appropriate
- Safety measures – all individuals should have been provided with the appropriate personal protective equipment for the tasks detailed in the plan.
- Emergency procedures – all persons should be aware of the emergency/contingency procedures required should they be required. This should be addressed as part of the induction training for all undertaking airside activities.
- Incident reporting and investigation procedures – these should be documented at a company level with action points where appropriate.

13.5.2 Stage 2 – Preparation and Arrival Process

Before an aircraft arrives onto a stand, there are a number of processes to ensure the area is fit for the purpose. These activities will be undertaken by all stakeholders of the turnround in order to facilitate the safe arrival for the turnround.

- Walking inspection of the stand area to remove potential obstructions, foreign object debris. spillages or other potential hazards.
- Where the airport has been subjected to wintry conditions, ensure that any snow, ice has been removed from the stand area and associated passenger walkways.
- Ensure that where the stand is served by an airbridge, the bridge is positioned in the correct location for the safe arrival of the aircraft.
- Where the stand has stand entry guidance but the particular aircraft type will not utilise the bridge, it has been positioned in its correct “parked” position so as not to create a hazard for the intended aircraft arrival.
- Ensure that the stand entry guidance is illuminated or the marshaller is in position in sufficient time
- Ensure that all those staff awaiting the arrival of the aircraft have the required personal protective equipment and that it is being used in the correct manner.
- Where the stand is utilising stand entry guidance, ensure that the emergency stop button is attended in sufficient time to protect the aircraft arrival
- Once chocked, engines shut down and anti-collision beacons extinguished, servicing activities can be undertaken by designated competent personnel.

13.5.3 Stage 3 – Off Load Processes and Commencement of Servicing

The processes involved at this stage will certainly take place concurrently and the safe management of these elements is critical to both flight safety and the health and safety of all those staff involved in the turnround.

- Subject to the weather and ground conditions, protective cones should be in place ahead of servicing activities being undertaken.
- Ensure airbridge or aircraft steps are positioned in a safe manner with the use of banks person where appropriate.
- Correct deployment of guardrails or safety devices as required to prevent falls from height before any aircraft door is opened.
- Passenger offloading may only commence when the relevant safety measures are in place. These include engines shut down, cones, guard rails, chocks and anti-collision beacons extinguished. Subject to airline requirements, this may also include passenger guidance chains.
- Ensure that passenger movements on the apron are conducted in a safe manner under the guidance of trained escorts.
- Where coaching is required for passengers, the requisite capacities are not exceeded and that sufficient escorts are available to manage the passengers on the apron at all times.
- Banksperson used for all vehicles reversing in the stand area as required as part of safe working practices.
- Positioning of ground servicing equipment at aircraft side is conducted safely with use of brake checks when approaching aircraft.
- Ensure all staff undertake baggage/cargo offload as trained and in accordance with established procedures. This includes the handling of dangerous goods and special cargo as determined by international guidelines.
- Once the offload has been completed, a visible check of the holds is to be made to ensure there are no spillages are evident and that all inbound baggage, cargo, mail has been removed.
- Ensure that aircraft cleaning is undertaken in line with established procedures.
- Perform the toilet and water servicing of the aircraft in a safe manner with bankspersons used to protect aircraft surfaces at all times.
-

13.5.4 Stage 4 – Continued Aircraft Servicing and On Load Procedures

Throughout the turnround, key stakeholders will undertake their assigned duties concurrently and as such this section will take a natural progression from Stage 3

- The aircraft will have its inbound catering offloaded and outbound catering on loaded in accordance with established procedures. Bankspersons will be used at all times when vehicles are manoeuvring close to aircraft surfaces. Guardrails must be in place to prevent falls from height at open servicing doors. The catering change should not produce debris that may become foreign object debris. A visible check around the exterior of the aircraft should be conducted once the activity has been completed.
- External inspection checks may be conducted by flight crew using the relevant personal protective equipment of hi-visibility clothing and hearing protection as determined by company procedures.
- Aircraft refuelling is to be undertaken by the contracted company in line with established procedures in the presence of a fuelling supervisor. Ensure that no fuelling bowser is obstructed at any time. All personal electronic devices (radios, phone etc.) should be intrinsically safe and bonding cables should be in place ahead of any refuelling being undertaken.
- Aircraft flight crew will undertake the required security checks of the aircraft cabin ahead of passenger boarding.

- Aircraft steps or passenger boarding bridges should be checked for height in relation to aircraft door sill level. Turnround activities may well require them to be re-positioned ahead of the passenger and baggage on load.
- Where passenger boarding has commenced and refuelling has not been completed, a refuelling standby should be in place as dictated by airline policy and the specific Airport Operational Instruction relating to the subject.
- Outbound baggage, cargo, mail loading team will make a visible inspection of the holds to ensure there are no items left in the holds. No loading will commence until those performing the loading have the required loading instruction for weight and balance.
- Where remote parking has been utilised, the use of passenger coaches should be conducted with sufficient passenger escorts to provide safety for all concerned.
- All vehicles used in the loading will be operated in accordance with established procedures and staff will perform the required brake checks when approaching the aircraft. Bankspersons must be used at all times when vehicles are manoeuvring close to the aircraft surfaces.
- Having loaded the requisite amount of baggage, cargo, mail, all items should be secured using the ins hold equipment provided (cargo nets, in hold locks and stops)
- The hold doors will be closed in line with the aircraft manufacturers' procedures and a visible check of the areas around the holds must be made to ensure no damage has occurred during the turnround.
- The loading staff will perform a check of the area outside the aircraft and remove any potential foreign object debris that has been produced during the previous activities (baggage tags, straps, fasteners etc)

13.5.5 Stage 5 – Pre Departure Procedures

Once the aircraft has been loaded with passengers, baggage, cargo, mail, catering, fuel, the final phase will take place. This continues to be a critical time as vehicles and personnel may well be manoeuvring away from the aircraft side concurrently.

- Ensure all guardrails are retracted where required to ensure aircraft doors do not contact equipment when being closed.
- Establish two-way communication with flight crew prior to any steps or passenger boarding bridges being removed to prevent falls from height.
- Continue to use bankspersons when equipment is being manoeuvred away from aircraft surfaces.
- Ensure that all equipment removed from the aircraft used in the turnround is relocated to its designated parking area.
- Where de-icing is required, ensure that the flight crew have been made aware of the hold over times. Only conduct this activity when all other personnel have vacated the stand. Always ensure that two-way communication is established between the de-icer vehicle driver and the operative applying the solution. This will ensure that any potential incidents or accidents are avoided during this critical phase of the turnround.
- Having completed the de-icing (if required), the push back team will attach the relevant tow bar and push back tug prior to departure.
- A final walk round check must be completed by the push back supervisor to ensure the stand is clear of foreign object debris and that there are no signs of damage to the aircraft surfaces. He/she will ensure that all hold doors are secured with particular attention to door handles resting flush within the relevant recess.
- Where a self-manoeuvring procedure is taking place, consideration must be given to any requirement for the aircraft to be re-positioned onto a taxiway ahead of engine start. This may only be done in full consultation with AOU and two-way communication with Air Traffic Control. Details relating to nonstandard parking are also contained within the Airport Operational Instruction relevant to the topic.

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- The manoeuvring of the aircraft during the push back and start up procedure must be conducted in line with established company procedure and relevant Airport Operational Procedures.

A key to the turnaround plan is the ability for airlines, handling companies and the airport operator to measure safety and performance. As described earlier, this plan is best described as the minimum requirements expected by the airport company and will complement established practices and standard operating procedures of key stakeholders. The airport company will continue to actively audit compliance with the plan and advise stakeholders of any non-compliance issues.

AOP 03 –

Incident and Accident Reporting



14 **SECTION 14 - Incident/Accident Reporting**

14.1 Aims and Objectives

The Airport Company has overall responsibility for Airside and Landside Safety Management, Environmental Management and matters relating to Aviation Security.

LBAs accident and incident reporting procedures are developed in accordance with ADR.OR.C.005 (d), ADR.OR.C.0.25 & ADR.OR.C.030.

The Safety Management Manual details the Airport Company's approach to incident categorisation and investigation, along with an outline of the Safety Incident Reporting (SIR) system. All stakeholders should have similar policies in place or have adopted this policy as part of its own Safety Management System.

14.2 Safety Incident Report (SIR)

Following any incident/accident or in light of any safety concern, a Safety Incident Report is to be raised (at one of the eight Chroma terminals with SIR access or via AOU) to ensure LBA is notified of the incident. Details of immediate corrective action taken must be provided.

SIR's can be logged as any of the below categories.

Car Park Incident	Passenger Escorting	Fire Domestic Incident
Terminal Incident	Aviation Security Incident	Aircraft Accident
Health & Safety	Hijack	Aircraft Ground Incident
Medical Assistance	Act of Aggression Ground	Local Standby with Attendance
Bird Strike Possible With Remains	Disruptive Person	ATC Incident
Bird Strike Possible No Remains	Apron Pavement-Road Damage	Radio Interference
Bird Strike Confirmed With Remains	Taxiway Damage	Loss of Separation
Bird Strike Confirmed No Remains	Runway Damage	Airspace Infringement
Bird Strike Remains Only No Report	FOD	Level Bust
Runway Incursion	Apron Incident	Laser
Runway Excursion	Airside Driving	Full Emergency
Spillage	Local Standby	Explosive Aboard Aircraft

In the event of a First Aid related incident, a 'First Aid Form' & 'Accident Form' should be submitted with the SIR. Copies of which can be found in APPENDIX 25 & 26.

SIRs should be processed in a timely manner to ensure swift corrective measures can be implemented where necessary.

14.2.1 Anonymous Reporting

Reporters can choose to file an anonymous SIR via one of the remote Chroma Terminals or alternative email CEO@lba.co.uk

When filing an MOR, reporters should pick a personal email address if they do not wish the report to be initially submitted to LBA

14.3 Mandatory Occurrence Reporting (MOR)

Occurrence reporting in the UK and the rest of Europe is governed by European Regulation 376/2014 which requires the reporting, analysis and follow up of occurrences in civil aviation and delivers a European Just Culture Declaration. An occurrence means any safety-related event which endangers or

which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person. The purpose of occurrence reporting is to improve aviation safety by ensuring that relevant safety information relating to civil aviation is reported, collected, stored, protected, exchanged, disseminated and analysed. It is not to attribute blame or liability.

Commission Implementing Regulation (EU) 2015/1018 lays down a list classifying occurrences in civil aviation to be mandatorily reported.

Occurrence Reports are treated confidentially to maintain full and free reporting from the aviation community and to protect the identity of the individual in accordance with EU legislation

All MORs at LBA MUST also be submitted on an SIR for tracking and trend analysis.

MORs can be filed [HERE](#)

14.3.1 Notifiable Accidents

"Accident" means an occurrence associated with the operation of an aircraft which might take place between the time any person boards the aircraft with the intention of flight and such time as all persons have disembarked, in which:

- a person suffers a fatal or serious injury.
- the aircraft sustains damage or structural failure which adversely affects its strength, performance or flight characteristics requiring a major repair or replacement.
- the aircraft is missing or is completely inaccessible.

It does not include engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin.

14.3.2 Serious Incident

An injury which is sustained by a person in a reportable accident and which:

- requires hospitalisation for more than 48 hours commencing within seven days from the date on which the injury was received; or
- results in a fracture of any bone (except simple fractures of fingers, toes, or nose); or
- involves lacerations which cause nerve, muscle or tendon damage or severe haemorrhage; or
- involves injury to any internal organ; or
- involves second or third degree burns or any burns affecting more than five percent of the body surface; or
- involves verified exposure to infectious substances or injurious radiation; and seriously injured shall be construed accordingly.

Notifiable Accidents are those defined above, whether or not an aircraft accident procedure has been initiated in accordance with the LBA emergency orders.

Wreckage of an aircraft (involved in an accident as defined above) shall not be removed or interfered with nor shall any person, other than an "authorised person", be allowed access to it without the authority of the AAIB. HM Customs and Excise authority will also be required if the aircraft was on a flight subject to Customs controls. An exception may be necessary for the extrication of persons or animals, or any mails, valuables or dangerous goods, or to prevent destruction by fire, or preventing any danger or obstruction

to the public, air navigation or to other transport. An “Authorised Person” is any person authorised by the Department for Transport and includes Police Officers and Officers of HM Customs and Excise.

To ensure correct and expeditious completion of post-accident action the provisions of the instruction must always be complied with.

This instruction specifies supplementary reporting requirements to those required by the Mandatory Occurrence Reporting requirements of ANO Article 142/CAP 382.

14.3.3 Reporting Procedures

In the event of a Notifiable accident the ATC WM/SCOD shall be responsible for dissemination of initial reports. The notification is required to be passed to the Department for Transport (in effect the AAIB) by the quickest means and giving, as far as possible, the following information:

- the type, model, nationality and registration marks of the aircraft
- the names of the owner, operator and hirer (if any) of the aircraft
- the name of the commander of the aircraft
- the date and time (UTC) of the accident or serious incident
- the last point of departure and the next point of intended landing of the aircraft
- the position of the aircraft in relation to some easily defined geographical location
- the number of:
 - crew on board and the number killed or seriously injured
 - passengers on board and the number killed or seriously injured
 - other persons killed or seriously injured as a result of the accident
- the nature of the accident or serious incident and the extent of damage as far as is known

The person reporting the accident to the AAIB is also required to inform West Yorkshire Police of the accident and the place where it occurred unless the accident has occurred on the airport and Emergency Order procedures have been activated.

14.4 APPENDIX 25 – First Aid Form

Safety Incident Report

PART A -About the injured person

Name	Female/Male
Address	(delete as appropriate)
Date of Birth -	Passenger/Staff
	(delete as appropriate)

PART B – Type of Injury (please tick all applicable)

Amputation	<input type="checkbox"/>	Asphyxia	<input type="checkbox"/>	Burn	<input type="checkbox"/>	Bruising	<input type="checkbox"/>
Concussion/Internal	<input type="checkbox"/>	Dislocation	<input type="checkbox"/>	Electric Shock	<input type="checkbox"/>	Fracture	<input type="checkbox"/>
Laceration	<input type="checkbox"/>	Loss of sight	<input type="checkbox"/>	Multiple	<input type="checkbox"/>	Strain/Sprain	<input type="checkbox"/>
Superficial	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Additional comments							
Ambulance called Y/N							
Did an accident occur? Y/N (If yes, please attach the accident form).							

PART C– Medical Room/Equipment Details

Medical Room C Corridor	<input type="checkbox"/>	First aid grab bag CSZ	<input type="checkbox"/>	First Aid Grab Bag Gatehouse	<input type="checkbox"/>	Other	<input type="checkbox"/>
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PART D - Medical Supplies Used

Inset number used in the appropriate box/boxes below									
Wipes	<input type="checkbox"/>	Plasters	<input type="checkbox"/>	Pins	<input type="checkbox"/>	Face Shield	<input type="checkbox"/>	Eye Wash	<input type="checkbox"/>
								Ice Pack	<input type="checkbox"/>

PART E – Passenger / Staff advised to seek further medical advice

Passenger Name.....	Signature
Date	Time.....

PART F –First Aider Details

Name
Signature.....
Date.....
Time

ON COMPLETION ENSURE THIS REPORT IS FORWARDED TO THE TDM.
 THE TDM MUST THEN FORWARD IT TO THE RISK MANAGER WITHIN 24 HOURS.

14.5 APPENDIX 26 – Accident Form

☐ Report Number (consecutive)

☐ Report Number (consecutive)

+ Accident Record

1. About the person who had the accident

Name _____
Address _____
Postcode _____
Occupation _____

2. About you, the individual filling in this record

If you did not have the accident write your address and occupation.

Name _____
Address _____
Postcode _____
Occupation _____

3. Details of the accident (Continue on the back of this form if you need to)

When it happened: Date ____/____/____ Time _____
Where it happened: State location: _____
How did the accident happen? _____
Give the cause if possible: _____
If the person who had the accident suffered an injury, give details: _____

4. Sign and date

Person filling in the record:
Print Name _____ Sign _____ Date ____/____/____
Person who has had the accident (as confirmed they agree the accident has been recorded accurately):
Print Name _____ Sign _____ Date ____/____/____

5. For the employer only

Complete this box if the accident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).
How was it reported? _____
Print Name _____ Sign _____ Date ____/____/____

AOP 04 – *Airport Operational Instructions*



15 SECTION 15 – Airport Operational Instructions

15.1 Aims and Objectives

Airport Operational Instructions (AOI's) are issued to reflect changes in operational procedure. The Operations Support Manager has responsibility for issuing operational Instructions, which can take the form of Temporary AOI's (TAOI's), Airport Operational Instructions (AOI's) or Operational Notices (OPNOT's).

15.2 Procedures

These instructions are retained by all manual holders until such time as they are either incorporated in the Aerodrome Manual or are withdrawn.

AOP 05 –

Airside Safety

Regulation

Enforcement

Scheme



16 SECTION 16 - Airside Safety Regulation Enforcement Scheme

16.1 Aims and Objectives

The scheme extends to all airside operators including employers, employees, sub-contractors, representatives, authorised agents, and invitees of LBA.

The scheme primarily regulates and enforces the procedures and regulations contained within:-

- Terms & Conditions
- Airport Operational Procedures (AOP's).
- Airport Operational Instructions (AOI's)
- Aerodrome Manual
- Airport Bylaws
- CAP642 – Airside Safety Management
- CAP393 – The Air Navigation Order
- NOTAMS (Notice to Airmen)

LBA retains the right to take such action, as it considers necessary, to ensure safety especially following serious breaches of regulations or procedures.

The purpose of this scheme is to establish and maintain a system that will ensure that all airside operators are aware of the safety performance of their company and employees, and that when required, fair and corrective actions are taken to remedy any shortcomings.

The scheme operates as a co-operative and consultative initiative. It is not intended that the scheme will replace any operator's existing disciplinary or internal regulatory procedures. Enforcement action under the scheme is consequential only and is restricted to reasonable action to ensure the safety of others in the workplace.

16.2 Procedures

AOU has the primary responsibility for airside safety regulation and administration of the scheme. This is achieved through active monitoring of all airside areas by AOU staff.

On observing, or being advised of, a breach of airside safety, AOU will decide which action to take, from a verbal warning to the issuance of a non-compliance. Should a non-compliance be issued the following action will be taken by the AOU.

16.3 Non Compliance

The AOU will complete a 'non-compliance' form.

The top copy (white) will be given to the operative concerned. The second copy (blue) will be forwarded to the recipient's employer / manager with an accompanying covering letter. AOU will conduct an investigation to consider whether the offence is serious enough for penalty points to be awarded. In deciding to allocate points AOU will take account of all factors contributing to the breach, including the

immediate dangers of the actions. AOU will bring the matter to the attention of the individuals manager where it may be dealt with in accordance with a company(s) own procedures. The third copy (yellow) will be retained by AOU and endorsement made on the driver's record database held within the unit.

The employer is required to:

- Acknowledge receipt of the letter (within 7 working days).
- Notify HAS and AOU of what action has been taken with the employee to ensure the offence is not repeated.
- In the case of 'vehicular non-compliance' (vehicle defect), confirm that the defect has, or will be rectified, before the vehicle is returned to use.
- In the case of driving offences, if penalty points have been awarded, notify the employee of the number of points, and if the total of penalty points is 10 or more, inform the driver that he/she is suspended from airside driving for a period of six months from the date of the latest offence.

In exceptional circumstances, it may be necessary to immediately remove the Airside Pass and / or Airside Driving Permit from an individual, or the Airside Vehicle Permit in the case of 'vehicular non-compliance'. When this takes place, his/her employer, or the vehicle operating company, will be notified as soon as possible. This can be irrespective of the number of written notifications for non-compliance.

When breaches of regulations are deemed to be significant, the HAS may permanently withdraw driving or airside access privileges.

Any person aggrieved by the decision to award penalty points against him/her or suspension of privileges may, through their employer, appeal in writing within 28 days of the award. The written appeal should be sent to the Head of Airfield Services at LBA for the penalty to be reconsidered.

16.3.1 Non-Compliance Notices – Personnel

Both the individual and the employer will be notified of all breaches of regulation in accordance

Penalty points have a validity of two years from the date of the occurrence, after which time they will be rendered 'void' with respect to the 'totting up' procedure. The record of penalty points awarded however will remain on file indefinitely.

A licence/permit/pass will be suspended for a period of six months when the holder is in possession of 10 or more penalty points.

If a license/permit/pass is withdrawn, the individual's employer will be required to justify its reinstatement. When this is the case, the oldest non-compliance notice is revoked. All remaining non-compliance notices are frozen until reinstatement of the licence/permit/pass.

Following reinstatement of a licence/permit/pass, there will be a 14-day probationary period in which any further non-compliance will result in immediate suspension of the licence/permit/pass.

16.3.2 Non Compliance Notices – Vehicles and Equipment

All airside vehicles and equipment found to be in a condition, which LBA reasonably considers, may render it unsafe for operation, or result in damage to property or personnel, will be considered an offence. The Airside Operations Department will revoke (if applicable) the Airside Vehicle Permit and inform the operator immediately. A written notice of non-compliance will be issued as soon as possible

On receipt of notification, operators are to ensure that they take immediate action to remove the vehicle or equipment from the airside or public areas. Permission must be obtained from the Airside Operations Department before it may return to operational service at LBA.

Failure to remove vehicles or equipment in a reasonable time will result in LBA taking direct action to make the situation safe at the operator's expense. Drivers of unsafe vehicles or equipment may be considered to have committed an offence, and will thereby be subject to written notification of non-compliance.

AOP 06 -

Movement Area, Lighting and Communications Inspections



17 SECTION 17 - Movement Area, Lighting and Communications Inspections

17.1 Aims and Objectives

ADR.OPS.B.065 Visual aids and aerodrome electrical systems states the aerodrome operator shall have procedures to ensure that aerodrome visual aids and electrical systems function as intended.

To facilitate the safe operation of aircraft on the movement area and those aids to navigation are subject to regular inspection and condition monitoring.

All surface, AGL and Navigation aids shall be subject to the 'Airport Company' internal audit system.

No persons other than those specified in this chapter shall undertake inspections of aerodrome surfaces, AGL and Aids to navigation.

17.2 Procedures

17.2.1 Movement Area Inspections

ADR.OPS.B.015 requires the aerodrome operator to:

- Monitor the condition of the movement area and the operational status of related facilities and report on matters of operational significance, whether of a temporary or permanent nature to air traffic control and aeronautical information services providers
- The aerodrome operator shall carry out regular inspections of the movement area and its related facilities.

The responsibility for airfield inspections rests with AOU and Fire Operations. AOU is responsible for the training and assessing of airside operations personnel required to undertake the inspection. The AOUS are responsible for initiating the inspection of the movement area.

Movement area inspections are carried out to ensure that:

- ATC is made aware of any unserviceabilities or obstructions that may affect the use of the aerodrome and to supply pilots with accurate aerodrome information essential to operation.
- Unserviceabilities or obstructions that are observed are to receive immediate attention from the appropriate department.

All deficiencies must be reported to ATC who will then advise relevant parties via, NOTAM, ATIS etc.

17.2.2 Frequency and reporting of Movement Area/Surface Inspections

Manoeuvring area inspections shall be completed as a minimum:

- At the onset of first light, and a further inspection before the onset of nightfall.

~~In addition to daily routine inspections, a monthly runway inspection shall be carried out by qualified engineer. The purpose of this inspection shall be to record and monitor the condition of the runway surface with particular emphasis on areas highlighted by the regular daily inspections. The information obtained from this is recorded by the relevant inspector from the engineering team and initiate any rectification work required.~~

An annual inspection shall be carried out by a civil engineer in accordance with the movement area inspection schedule:

The inspection team shall position themselves across the paved area and physically walk the runway. Records of the inspection shall be held by the projects team.

Additional inspections shall be made:

- Following a rejected take-off (RTO);
- Following a bird strike, suspected strike on or adjacent to the manoeuvring area;
- When severe weather conditions prevail;
- On completion of work in progress;
- Completion of snow clearing operations;
- Subsequent to removal from the movement area of a disabled aircraft;
- At any time deemed necessary by the AOUS, ATC WM or SCOD, such as in the event that they observe that the runway state has changed, or birds have been observed which may affect movements.

The inspection under normal circumstances shall be carried out to ascertain whether or not:

- The runways, clearways, taxiways, apron and holding areas are free from obstructions, collections of loose stones, weeds etc.
- Temporary obstructions that exist on, or adjacent to, the runways or taxiways are properly marked or lighted.
- Bad ground is adequately marked.
- Runway indicator boards, traffic signs, boundary markers etc. are serviceable, in position and not obstructed by long grass, weeds etc.

17.2.3 Surface Inspections procedure

The person carrying out the inspection is required to drive slowly over the paved areas, halting as necessary when individual items require closer inspection on foot. Surface inspections are limited to those areas within the airport boundary. Depending on the surface state, inspection of grass areas may be undertaken by vehicle or on foot. Grass areas must not be driven over if the vehicle is likely to cause surface damage.

On completion of an inspection the time is to be logged in the AOU Daily Log. Particular attention should be paid to:

- Surface conditions – including the surface strip and RESA.
- Holding points.

- Painted and illuminated signs, deteriorating and poor paint.
- State of any grass especially around signs and lights and the possibility of grass affecting PAPI indications.
- ILS protected area.
- Weeds that cause surface damage.
- Manovering area and apron paint marking condition
- State of repairs, both tarmac and concrete, lifting of joint sealant.
- Presence of FOD and stones.
- Damage to and the serviceability of lights.
- State of reflective markers.
- Bad ground markers on works area.
- Lighting of works area.
- Poor drainage and drainage state, any areas of standing water.
- Any observed bird/wildlife concentrations.
- Clear of pollutants
- Any observed damage to fencing.
- Any obstructions (permanent or temporary) that exist on, or adjacent to, runways or taxiways, and whether they are correctly lit and marked.
- Monitoring the aerodrome and the vicinity of the aerodrome for any unauthorised obstacles and if necessary, reporting them to ATC and producing a NOTAM or AIP amendment as necessary. (full Safeguarding procedures can be found in AOP 28)
- General condition of all windsleeves.

18 SECTION 18 - Lighting Inspections

The aerodrome lighting should be inspected early morning and at dusk, subject to operational requirements. The inspection should cover the following:

- The serviceability of all runway, taxiway, stop bars, signage, guard and traffic lights. Approach lighting will be checked during morning inspection.
- A check that lighting is not obscured by long grass or other obstructions.

- Precision Approach Path Indicators (PAPI's) are to be as outlined above in consultation with ATC. AGL engineers shall check the vertical alignment of PAPI's on a weekly basis.
- All lighting inspections will be logged by the AGL Engineers and retained by them.

Only trained AGL Engineers shall carry out these inspections.

Responsibility for implementing lighting inspections rests with the Senior Airfield Ground Lighting Engineer SAGLE.

Additional inspections shall be requested by the ATC Watch Manager on duty as appropriate.

All obstacle lighting within the aerodrome boundary is included in lighting inspections. The AGL department shall correct all unserviceabilities.

In addition, there are obstacle lights which shall require to be checked (visibility permitting).

19 SECTION 19 - Aids to Navigation Inspections

To ensure the continued serviceability and operation within specified standards all equipment shall be subject to regular inspection as per the ATE Maintenance Schedule. The Maintenance Schedule is detailed in the ATE Exposition Document, Section 4.

All maintenance is carried out by Air Traffic engineering staff who are in possession of a current CAA Air Traffic Service Ground Equipment Maintenance - Personal Technical Certificate, with current specific type ratings for the equipment to be worked upon.

Requirements for each inspection are set out in the Maintenance Schedule, Compilation and publication of Maintenance Schedules is the responsibility of the Senior Air Traffic Engineer.

There are different levels of maintenance to be completed with varying depths and timescales. These will include Daily, Weekly, Monthly, Quarterly, Six Monthly and Annually.

Flight Inspection of the Runway 14 ILS/DME shall take place every 180 days, with a tolerance of -7 days and +20 days.

Flight Inspection of the Runway 32 ILS/DME shall take place every 180 days, with a tolerance of -7 days and +20 days.

Where inspection may, or will, interrupt or affect the operation of a Navaid or equipment, in use by ATC, the proposed inspection must be coordinated with ATC in advance. If the proposed inspection requires interruption or withdrawal from service of a Navaid, co-ordination shall be affected with as much prior notification as possible. This notice is required to permit ATC to promulgate any appropriate NOTAM.

Records are kept of all inspections; the SATE retains these on file.

The SATE shall monitor inspection records to detect any trends indicated by their results.

Recurring failure, or evidence of a progressive deterioration of any equipment, will result in the SATE determining whether rectification is economically viable, by use of either Leeds Bradford Airport and/or other resources. If rectification is not considered practicable the SATE will, in co-ordination with the

AOP 07 –

Aerodrome

Ground Lighting,

Signs, Markings

& Nav aids



20 SECTION 20 - Aerodrome Ground Lighting (AGL)

20.1 General

ADR.OPS.B.040 Night operations states the aerodrome operator shall ensure that means and procedures are established and implemented for providing safe conditions for aerodrome operation during night operations.

Aerodrome ground lighting provides pilots with location, orientation and alignment information in adverse visibility conditions and at night.

Leeds Bradford Airport is certificated to operate twenty-four hours.

The SAGLE is responsible for the provision of all AGL requirements.

All AGL circuits are controlled and monitored by the AGL\CMS which alerts the Duty ATCO to any faults by means of audible alarm with an associated alarm message. The monitoring and alarm system is duplicated and located in the AGL Engineer's watch room. Any faults shall be reported immediately to the Duty Electrical Engineer.

Runway 14 is a precision approach runway with a CAT 1 Instrument Landing System (ILS).

Runway 32 is a precision approach runway with a CAT 3 Instrument Landing System (ILS).

ATC will display the lighting provided in accordance with the time of day and the prevailing weather conditions this is carried out automatically by the AGL\CMS on selection of the Runway heading and a weather setting.

Standby generators are located at 14, 32, Southside and Workshop Lighting Control Centre's and are permanently available in the event of a mains power failure and are used as primary power for essential services during LVP's.

20.2 Approach, Runway & Taxiway Lighting

The provision of approach and runway lighting system is illustrated in the table below.

20.2.1 Runway & Approach Lighting Table

RW r/w	Approach Lighting	Threshold Lighting	PAPI	Runway Lighting	Runway End
14	<u>High Intensity Centre line with 5 Crossbars</u>	Inset High Intensity Green Twin Module Fittings. With Elevated High Intensity Green Wing bars	3.5° RHS	Runway Edge Elevated High Intensity Bi-directional with LI Omni-directional component. Runway Centerline High Intensity Bi-directional Colour Coded Inset Fitting	High Intensity Red Inset Fittings
32	High Intensity Centre line with 5 Crossbars. Supplementary Approach	Inset High Intensity Green Twin Module Fittings. With Elevated High Intensity Green Wing bars	3° LHS	Runway Edge Elevated High Intensity Bi-directional with LI Omni-directional component. Runway Centerline High Intensity Bi-directional Colour Coded Inset Fitting Touchdown Zone High Intensity 15 Barrette 4 Fittings either side of Centerline	High Intensity Red Inset Fittings

20.3 Approach Lighting

20.3.1 Runway 14 CAT 1

High Intensity Approach Lighting that extends to 872m from the Threshold with five crossbars. Threshold lighting is provided by High Intensity Inset Fittings plus elevated wing bars.

20.3.2 Runway 32 CAT 3

High Intensity Approach Lighting that extends to 815m from the Threshold with five crossbars. Supplementary High Intensity Inset Approach Lighting that extends from Threshold to 262m. Threshold lighting is provided by High Intensity Inset Fittings plus elevated wing bars.

20.4 Precision Approach Path Indicators

Precision Approach Path Indicators are located as follows

- Threshold to 14 PAPI's = 334m
- Threshold to 32 PAPI's = 316m

PAPI Maintenance procedures are located within Leeds Bradford Airport Airfield Ground Lighting Maintenance procedures Job Sheet No 2.

20.5 Runway Lighting

Runway 14/32 has Bi Directional High Intensity Elevated Edge Light with a Low Intensity Omni directional component. With additional High Intensity Inset Bi Directional fittings located at Taxiway intersections.

Runway 14/32 has Bi Directional High Intensity colour coded Runway Centerline.

Runway 32 has 15 Barrettes of 4 Touchdown fittings either side of the Runway Centerline.

20.6 Taxiway Centerline and Stop Bar Lighting

20.6.1 November Taxiway

Centerline lighting interlocked with Stop Bars at November 1, 2 & 3 with additional interlocked Stop Bars at Bravo, Charlie also connecting to Delta Taxiway Centerline. This centerline also provides a colour coded Lead on \ off at its intersection with Runway 14/32.

20.6.2 Delta Taxiway

Centerline lighting interlocked with Stop Bars at Delta 1, 2 & 3 also providing connection to November Taxiway. This centerline also provides a colour coded Lead on \ off at its intersection with Runway 14/32.

20.6.3 Echo Taxiway

Centerline lighting interlocked with associated stop bars at Echo 1 & 2 Stop Bars.

20.6.4 Lima Taxiway

Yellow /green centre line routing lights interlocked with associated stop bars.

20.6.5 Stop bars

Stop Bars are located at Alpha 1, Bravo, Charlie, Delta 1, 2, 3, Echo 1, 2, Foxtrot 1, Lima 1, November 1, 2, 3

20.7 Apron Edge Lighting / Taxiway Edge Lighting

Taxiway Blue Edge is provided at Echo Taxiway, Lima, Southern Edge of Alpha Taxiway and around the junctions with Alpha 1, Bravo, Charlie, Delta 3, Runway 32/November/Mike Intersection and Foxtrot Taxiway to Mike Taxiway, Stands 18 and 1 and stands 19 to 21C.

20.8 Runway Guard Lights

Guard Lights are located at Alpha 1, Bravo, November 1, Delta 1, Juliet, Lima 1, Foxtrot 1 and Echo 1 & 2.

20.9 Runway / Taxiway Road Access

VH1, 32/14 Emergency Access Road (EAR), 14 Glide are all supplied with solar powered guard lights.

20.10 Airfield Illuminated Signs

Airfield Illuminated signs are provided at all CAT 3 Holding points and other areas to provide required airfield information. See drawing TFHLN C/2/111 Rev 0 held in engineering office.

20.11 Traffic Light

A traffic light is in position at 32 Lighting Control Centre. This provides runway protection and is controlled via the AGL\CMS

20.12 Illuminated Windsocks

Illuminated Windsocks are provide for both Runway 14 & 32

20.13 Obstruction Lighting

Obstacle lighting is installed on any permitted structure which penetrates the runway and taxiway planes. The following have obstruction lights fitted:

- 14 Glide path
- 32 Localiser
- 32 Glidepath
- Far Field Monitors (Width Monitor Only)
- Watchman Radar
- 14 Anemometer Pole
- 32 Anemometer Pole
- Receiver Site Masts
- EVCR
- HRDF
- DME
- Apron Floodlight Poles 6,7,8,9,10,11,12,13,14,15,16,17,18
- Air Traffic Control
- Multi Flight Hangers
- 14 Localiser
- 14 Glide Path Monitor
- NDB
- Security Cabin
- Chevin Beacon

There is also an obstacle beacon installed on the high ground at the Chevin.

20.14 Apron Flood Lighting

Main Apron Stands 1 to 18 are illuminated by 13 Floodlight Columns supplemented by mobile floodlight towers.

Eastern Apron Stands 19 to 21C are illuminated by 4 Floodlight Columns

Multi Flight East Apron is illuminated by Floodlights fitted at High Level above the Hanger Doors

All floodlighting is controlled via PE Cell Controllers and records of lighting levels are recorded and held by AGL Department in Apron Lighting Survey files.

20.15 Airfield Ground Lighting Intensity / Brilliancy Settings

The intensity / brilliancy settings for Airfield Ground Lighting are automatically set by the AGL Control and Monitoring System once a controller has selected a runway heading and a weather setting the lights will be selected.

In the event of control system failure airfield ground lighting will be operated locally at each Lighting Control Centre by the duty Electrical Engineer. Details of local switching instructions and intensity \ brilliancy

settings can be found in ATC\AGL\SYSTEM USER MANUAL 3 \ AGL Part, ATS/TEC/SUM/AGL/Annex A and Leeds Bradford Airport Airfield Ground Lighting Maintenance procedures Job Sheet No 5 (hard copies retained).

Please refer also to LBA AGL Control System Operations and Maintenance Manual.

20.16 Secondary Standby Power Supplies

In the event of a mains power supply failure Airfield Ground Lighting services will automatically be supplied by standby generators located each Lighting Control Centre within 10 seconds.

If no alternate power supply is available the aerodrome authority should notify the effect by NOTAM. There is no need to withdraw a system from service or to downgrade it arbitrarily unless the failed power source is not recovered within 2 Hours.

Mains power supply failures exceeding 2 Hours approaches should be restricted to non-precision status and departures precluded when the RVR is 400m or less.

During LVP'S the standby generators will be brought on line via the AGL\CMS to power the Airfield Ground Lighting in the event of Generator failure the system will fail to mains in less than 1 second.

All Electrical Mains Supplies and Generators are monitored by the AGL\CMS.

Full load tests of the standby generators are carried out on a monthly basis with all details of tests carried out in Leeds Bradford Airport Airfield Ground Lighting Maintenance procedures Job Sheet No 3.

20.17 Lighting Inspections

Airfield Ground Lighting Inspections are carried out twice daily by the Duty AGL Engineer before first movement and dusk, as operations permit.

Details of lighting inspections can be found in Leeds Bradford Airport Airfield Ground Lighting Maintenance procedures Job Sheet No 1.

20.18 AGL Flight Inspections

Airfield Ground lighting is subject to a 6 Monthly Flight inspection and is carried out in conjunction with ILS Navigational Equipment flight calibration checks.

It is the responsibility of the Senior Air Traffic Engineer to arrange flight inspections and to analyse the inspection reports in consultation with the flight inspectors and Duty AGL Engineer.

21 SECTION 21 - Aerodrome Signs and Markings

21.1 General

Aerodrome signals, signs and markings provide visual guidance to pilots approaching the airfield and manoeuvring on runway, taxiway and apron surfaces.

21.2 Light Signals

Air Traffic Control has signal lamps capable of producing red, white and green lights to make all signals specified in the Rules of the Air as appropriate.

21.3 Temporary Obstruction Markings

The AOU is responsible for locating and marking temporary obstructions and bad ground on the movement area.

- Obstructions and bad ground will be marked with:
- Red and White reflective Bad Ground Markers.
- Black and White Threshold Bars

21.4 Taxi Guidance Signs

Access to runway 14/32 from all taxiway routes are identified by a series of ground mounted signs. Signs are located at points adjacent to taxiways and beyond which an aircraft or vehicle should not proceed, unless they have been authorised to do so by ATC. Taxiway/runway Hold markings are also located at these points.

21.5 Runway Markings

Markings on Runway 14/32 are as follows:

- Runway centerline (Marking only)
- Runway edge
- Permanent displaced Thresholds
- Numerals
- Aiming Point and touchdown zone

21.6 Taxiway Markings

Taxiway markings are identified by green centerline lights where available.

21.7 Apron Stand Markings

- All apron stands have yellow taxiway centerlines with appropriate aircraft stop distances.
- Apron stand signs are illuminated

21.8 Road Signs and Markings

- Wherever possible and appropriate, road signs and markings on aerodrome movement areas comply with Traffic Sign Regulations.
- The airport has installed uncontrolled crossings on the apron to ensure safe crossing of passengers. All vehicles shall remain clear of the crossings when passengers are crossing and keep to apron speed limitations.

22 SECTION 22 - Communication and Nav aids

22.1 Radio Communication Facilities

Aerodrome, Approach and radar facilities are provided at Leeds Bradford Airport. VHF frequencies in use are:

- Leeds Bradford Delivery 121.805 MHz

– Leeds Bradford Tower	120.305 MHz
– Leeds Bradford Director	125.380 MHz
– Leeds Bradford Radar	134.580 MHz
– International Distress Freq Tx & Rx	121.500 MHz

Radio frequency and hours of operation are set out in the UK AIP. A discrete emergency frequency (Non ATS) is available on 121.600 MHz when RFFS vehicle attending aircraft on the ground in an emergency.

In addition, UHF frequencies are used on the following channels:

- Channel 1: ATC airfield
- Channel 2: Terminal
- Channel 3: ATC/Snow clearing
- Channel 4: Fire Operations
- Channel 5: Fire Operations
- Channel 6: Not in use
- Channel 7: Not in use
- Channel 8: Engineering
- Channel 9: Not in use

Automatic Terminal Information Service (ATIS) is provided on:

- Leeds Bradford Information 118.030 MHz

All communication facilities within the ATS unit are recorded in accordance with the ANO.

22.2 Radio Navigation and Landing Aids

22.2.1 Instrument Landing Systems (ILS)

RWY 14

- Ident I-LBF
- Frequency 110.90.
- Frequency paired DME Channel 46X

RWY 32

- Ident I-LF
- Frequency 110.90
- Frequency paired DME Channel 46X

22.2.2 NDB

- Frequency – 402.5KHz
- Ident – LBA

22.3 Maintenance and Inspection

The SATE is responsible for ensuring that the maintenance and inspection of aids to navigation is conducted in accordance with the LBA ATE Maintenance Exposition.

22.4 Airside Call Signs

Specific call signs are used which have been designed to minimise the risk of call sign confusion.

The system avoids the repetitive use of numbers and allocates departments which have more than one vehicle with a specific series of numbers. No numbers will be allocated more than once.

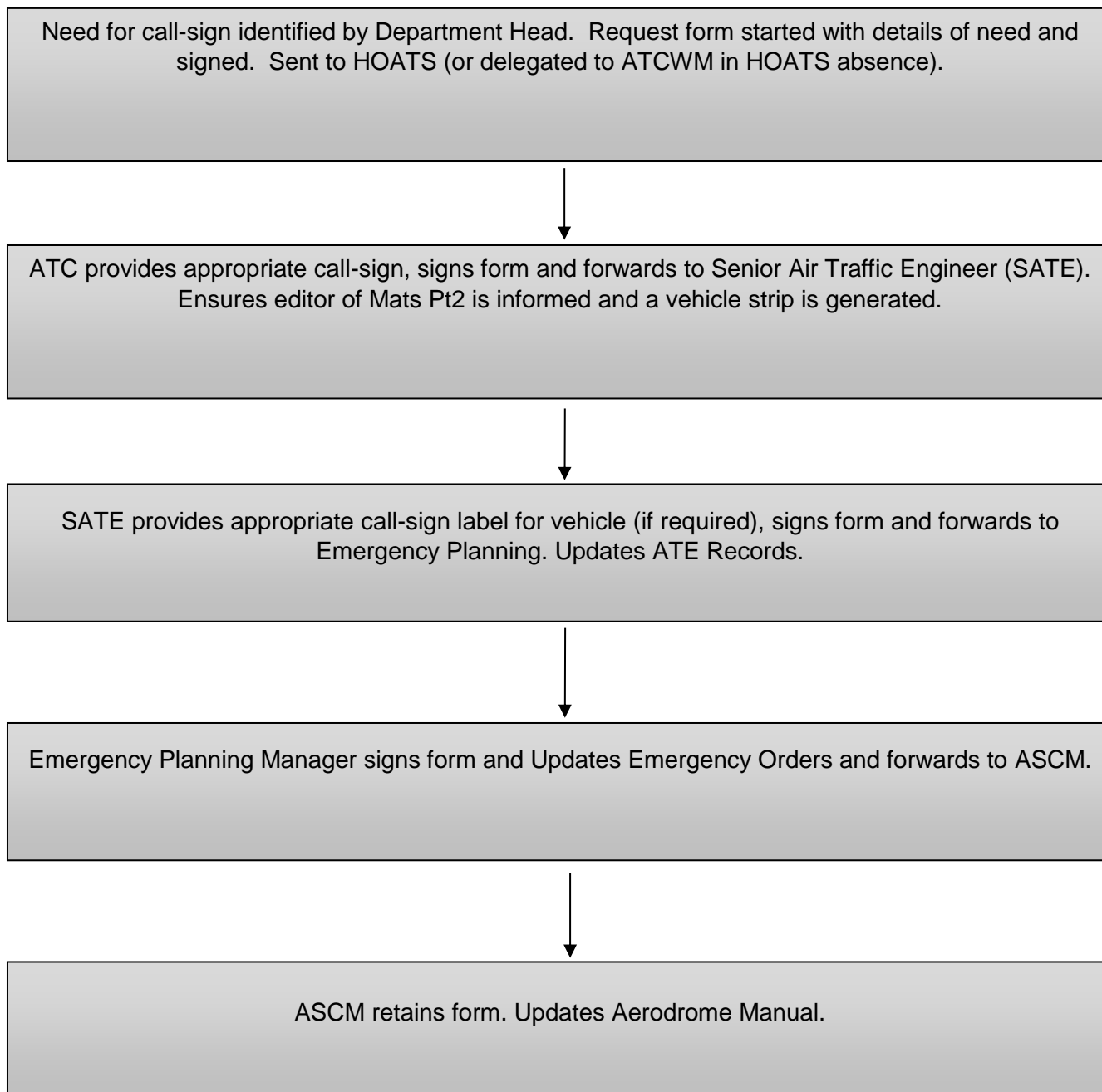
Where a department uses a series of similar (or identical) vehicles, the vehicle call sign number should be displayed prominently on the vehicle to aid ATC recognition.

Where a department has only one vehicle or a unique call sign then no number designator will be required.

The Ops 5 to Ops 9 call signs will be used by the designated individuals at all times (regardless of whether they are on foot or within a vehicle).

Any call using the above Ops Call signs will indicate that the inspection is of an urgent nature and that priority will be given to runway access over training flights or non-commercial VFR private flights.

22.4.1 Generation of New Call Signs



For LBA staff, the call-sign request form can be found on SharePoint at Forms>Airside Operations Unit and for business partners an electronic copy can be requested from LBA Operations Support Manager.

Call-signs 70 – 79 reserved for future growth

Call-signs 14 & 32 not available to avoid possible confusion with runway designation

Call-signs 51 – 54 not available to avoid possible confusion with Fire 1 – Fire 4

Call-signs 98 & 99 not available to avoid possible confusion with HLE 98 & HLE 99

22.4.2 List of Active Call Signs

CALLSIGN	CALLSIGN	CALLSIGN
CHECKER	FIRE CHIEF	SNOWMAN
ROVER	FIRE 1	RAMP HOG 33
SWEEPER	FIRE 2	RAMP HOG 34
OPS 5 (HAS)	FIRE 3	SPRAYER 35
OPS 6	FIRE 4	SPRAYER 36
OPS 7 (AOUS)		SPRAYER 37
OPS 8 (AOUS)	COACH 40	SNOW BLOW 38
OPS 9 (HoATS)	COACH 41	SNOW BLOW 39
	COACH 42	BRUSH 21
SPARKY 10	COACH 43	BRUSH 22
SPARKY 11	COACH 44	BRUSH 23
SPARKY 12		BRUSH 24
	SECURITY	BRUSH 27
TELS 13		BRUSH 28
TELS 15	MULTIFLIGHT TRACTOR	BRUSH 29
	MULTIFLIGHT BOWSER	BRUSH 30
WORKS 16	MULTIFLIGHT MOBILE	
WORKS 20		
TRACTOR 18		
TRACTOR 19		
BOWSER 60	RIG 96 (Jet 2 De-icing Rig)	TUG 80 (Swissport)
BOWSER 61	RIG 97 (Jet 2 De-icing Rig)	TUG 81 (Swissport)
BOWSER 62	TUG 90 (Jet 2)	TUG 82 (Swissport)
BOWSER 63	TUG 91 (Jet 2)	TUG 83 (Swissport)
BOWSER 64	TUG 92 (Jet 2)	
BOWSER 65	TUG 93 (Jet 2)	
BOWSER 80	TUG 94 (Jet 2)	
BOWSER 83	TUG 95 (Jet 2)	
BOWSER 112	JET 2 ENG (Jet 2 Engineering)	

AOP 08 –

Aeronautical, Meteorological and Operational Information



23 SECTION 23 Aeronautical Information

23.1 Introduction

Information regarding the aerodrome and its facilities is published in the UK Aeronautical Information Publication (AIP).

Details for the management of aeronautical data and aeronautical information can be found in Leeds Bradford Airport MATS Part 2 / 3.

Surface movement guidance and control information is detailed in the Leeds Bradford Airport AIP (Aeronautical Information Publication)

23.2 Flight Briefing

There is no remote flight briefing facility.

23.3 Meteorological Information

Meteorological information is received via AFTN and email. The following information is routinely received:

- Leeds Bradford Terminal Area Forecasts (TAFs).
- Regional Pressure Settings.

TAFs are issued by the MET office and are valid for a period of 24 hours.

Local weather observations are made by Leeds Bradford ATC at regular intervals. Observations are made by staff who are qualified MET observers in accordance with standard UK MET office procedures. Information is disseminated via ATIS and AFTN at half hourly intervals.

23.4 Surface Wind Reports

Wind direction is recorded in degrees true for Met register requirements, and degrees magnetic for METCOM and ATIS purposes.

The Vaisala Wind system is compliant with ICAO Annex 3, Section 4.6. Therefore whatever is displaced on the instrument is an essential part of the report that is passed to aircraft.

23.5 METCOM ATIS

METCOM ATIS is used at Leeds Bradford Airport for MET display and ATIS transmits on frequency 118.030 MHz. ATIS is also available on Internal dial Ext 2489 or External on 0871 288 2288 ext. 2489.

23.6 Weather Warnings

The Met Office will issue severe weather warnings when necessary. The Met Observer will disseminate weather warnings to the relevant stakeholders on the aerodrome as detailed in MATS Part 2 /3.

The details of weather warnings shall be recorded in the ATC Watch Log.

23.7 Notification of Unserviceability

Aeronautical information concerning occurrences of operational significance will be disseminated to ensure that all pilots are aware of the irregularity or un-serviceability affecting the aerodrome.

The HAS/AOUS shall be responsible for the origination of all messages concerning the operational state of the aerodrome and its published facilities and for informing all those locally affected.

The HoATS, ATC WM or SCOD shall be responsible for the origination of all messages concerning the operational state of the ATC Unit and its published facilities and for informing all these locally affected.

Any irregularity or un-serviceability is notified via AFTN and / or via ATIS.

24 SECTION 24 – Operational Information

24.1 Re-Declared Distances

24.1.1 Policy

It is the responsibility of the ATC WM / SCOD to notify pilots of the existence of a Temporary infringement within the runway strip transitional slope, approach and take-off surfaces through the medium of ATC and by NOTAM. The runway will be withdrawn from service or its length and declared distances restricted, if there is an obstacle that cannot be removed within the area that is designated 'clear and graded'.

When there is a temporary obstacle within the runway strip but outside the area designated 'clear and graded', the continued use of the runway is permitted subject to pilots being notified of the obstacle. Every effort must be made to remove the obstacle as soon as possible.

It is essential that an assessment be made of the significance of any obstacle to establish defined obstacle limitation surfaces for the affected runway(s).

Use of the runway for landings, when a reduced LDA requires withdrawal of approach lighting and PAPI, (i.e. landing over a temporary obstacle) is only authorised for the operation of aircraft using visual approach procedures.

Two qualified persons shall independently undertake any calculation of temporary reduced declared distances. Resultant distances shall then be compared and agreed before promulgation. If this cannot be achieved on site the Aerodrome Standards Department of the CAA must be consulted before promulgation.

The duty ATE (or the AOUS in their absence) will determine whether the obstacle is located in the ILS Localizer Critical Area. If it is located in the critical area, the ILS instrument approach procedure must be withdrawn.

'Temporary Declared Distances' policy is subject to the Leeds Bradford Airport internal audit system.

At times when temporary declared distances are promulgated records shall be retained as follows:

- A copy of the NOTAM originals shall be retained in the ATC NOTAM file for a period of not less than 6 months, or until any related accident or incident report is completed, whichever is longer.
- The Duty ATCO shall be responsible for inserting a dated entry in the Aerodrome Log specifying the temporary declared distances.

24.2 Operating Procedures

- Plot the position (X) of the obstacle on the aerodrome plan. The location shall be determined in respect of lateral distance from the runway centreline or extended centreline and longitudinal distance from the beginning of TORA.

- An obstacle more than 75 metres laterally from the runway centreline or extended centreline, but within the runway strip, will not require revision of declared distances if the runway is temporarily declared as a visual runway.
- If the obstacle is located within the area to be clear and graded, or penetrates the take-off climb surface or approach surface, temporary reduced declared distances must be determined. A 1:50 take-off climb surface must be protected for take-off over an obstacle. A 1:40 approach surface will be used for landing over an obstacle, and the runway must be promulgated as 'visual' with approach lighting and PAPI switched off.

24.3 Take-off

24.3.1 Away from an obstacle

Due consideration must be given to the type(s) of aircraft intending to use the reduced take-off runway and the effect of slipstream or jet blast on the obstacle. The minimum requirement is wing overhang plus 7.5m or 20% of wingspan, whichever is the greater'. An increase appropriate to the circumstances should be applied to this minimum. It is recommended that a minimum of 150m be used to protect an obstacle from jet blast. The turn distance of the critical aircraft shall be calculated by multiplying the wing span by two.

To determine the revised distance, the following calculation shall be used:

- $RTORA = TORA - OBSTACLE - BLAST - TURN\ DISTANCE$
- $RASDA = ASDA - OBSTACLE - BLAST - TURN\ DISTANCE$
- $RTODA = TODA - OBSTACLE - BLAST - TURN\ DISTANCE$

Type 'A' orange and white ground markers shall be placed, spaced not more than 15m apart, and not less than 5m from the runway edge to indicate the start of TORA; these markers signify the boundary of that part of the runway unavailable for the movement of aircraft.

24.3.2 Towards an obstacle

To determine the revised distance, the following calculation shall be used:

- $RTORA = TORA - OBSTACLE - SLOPE - STRIP$
- $RASDA = ASDA - STOPWAY - OBSTRUCTION - STRIP - RESA$
- $RTODA = TODA - CLEARWAY - OBSTRUCTION$

The end of TORA must never be less than 150m from the obstacle in order to provide the required minimum 60m strip-end and 90m RESA.

The height and position of the controlling obstacle must be included in the appropriate NOTAM. This is essential in order that aircraft operators may accurately determine take-off performance limitations.

24.4 Landing

24.4.1 Landings Over an obstacle (only for aircraft using visual approach procedures)

To determine the revised distance, the following calculation shall be used:

$$RLDA = LDA - OBSTRUCTION - SLOPE - STRIP$$

This revised displaced threshold must never be less than 150m from the obstacle in order to provide the required minimum 60m-strip end and 90m RESA.

PAPI and approach lighting shall be switched off while a temporary visual displaced threshold is in use. The temporary visual displaced threshold shall be marked by black and white boards not less than 5m from the runway positioned abeam the threshold on the grass.

24.4.2 Towards an obstacle

To determine the revised distance, the following calculation shall be used:

$$RLDA = LDA - OBSTRUCTION - STRIP - RESA$$

24.5 Promulgating Temporary declared distances

To be promulgated by NOTAM in the following format:

- EGNM
- Date/time group of NOTAM affect
- Date/time group of termination adding “EST” if necessary for an estimated time
- Due to (temporary obstacle – specify, i.e. disabled aircraft, vehicle etc) located (bearing DEG true from a defined point – i.e. runway end, displaced threshold, ARP)/(distance – metres) height (metres AGL) temporary declared distances in operation *RWY... .. TORA... .. ASDA... .. TODA... .. LDA... .. (and/or) *RWY... .. TORA... .. ASDA... .. TODA... .. LDA... ..

*Type ‘A’ ground markers indicate the start of TORA.

*Black and white runway threshold marker boards indicate the temporary displaced visual THR. PAPI and Approach Lights not available. RWY in operation as a visual RWY only; visual manoeuvring (circling) instrument approach minima apply.

*as applicable

24.6 Protection of Aids to Navigation within Runway Strip

Aids to navigation will only be sited within the runway strip due to operational requirements as a matter of necessity. All such aids are frangible and present minimum hazard to aircraft and their function.

Aids sited within the runway strip include:

- ILS Glidepaths
- IRVRs
- DME
- PAPIs
- Windsleeves

Any new navigational facilities which may be required to be sited within the runway strip will be for discussion with the Head of Air Traffic Services, Senior Air Traffic Engineer and the CAA.

24.7 Temporary Obstacles within the Runway Strips

Temporary obstacles within the runway strip will be kept to an absolute minimum, commensurate with the safe and efficient operation of the Aerodrome.

No temporary obstacles, other than temporary ditches and depressions, will be permitted within the cleared and graded area of a runway strip without re-declared distances being affected.

Temporary obstacles within the strip will only be permitted for:

- Essential work in progress
- Grass cutting
- Bird control activities
- Obstacles which cannot be removed i.e. aircraft accidents subject to AAIB investigation.

Temporary obstacles require prior approval of the HAS or HoATS.

Pilots are to be notified of obstacles and/or re-declared distances by ATC and by NOTAM.

24.8 Promulgation of Aerodrome Operating State

Information relating to changes in aerodrome operating state is promulgated by ATC as essential aerodrome information (as required by MATS Pt1. Information is disseminated via RTF individually to aircraft or collectively via the METCOM ATIS, with individual acknowledgements of receipt obtained.

24.9 NOTAM Action

The ATC WM/SCOD is responsible for the compilation and transmission of all NOTAMs and SNOWTAMs via the AFTN. Standard message format, codes and abbreviations are to be used. The signal is processed and distributed in NOTAM form by the NOTAM office, including a copy to the originator.

24.10 Distribution & Amendments of Operating Procedures

Operational matters affecting the Aerodrome will be advised in the form of a TAOI or OPNOT (other instruction types are available if the document / procedure being amended is not the Aerodrome Manual). Information of significant operational importance may include the following.

- Construction or maintenance work on or immediately adjacent to the manoeuvring area.
- Unserviceable portions of any part of the manoeuvring area.
- The presence and depth of snow, ice or slush on runways and taxiways and their effect on braking actions.
- Runway surface condition when affected by water i.e. damp, water patches or flooded as appropriate.
- Snow drifted or piled on adjacent taxiways.
- The presence of other temporary hazards
- The failure or irregular operation of any part of the Aerodrome main and secondary power supplies
- Failure or irregular operation and changes in the operational status of any electronic equipment or navigation aid or aeronautical communications facility.
- Failures and changes in the IRVR system
- Bird hazard warnings
- RFFS Category

Matters affecting ATC procedures will be advised in the form of a Supplementary or Temporary Instruction to the MATS Part 2. The editor is responsible for incorporating the permanent changes into the document.

AOP 09 –

Compliance

Monitoring System

(CMS)



25 SECTION 25 - CMS General

25.1 EASA Requirements

In accordance with EASA regulation ADR.OR.D.005 (b) (11), LBA is required to implement a compliance monitoring process that enables the aerodrome operator to monitor compliance with the relevant requirements of ADR.OPS, as well as any other applicable regulatory requirements, or requirements stipulated by LBA itself.

In this AOP, LBA will specify the basic structure of the compliance monitoring applicable to the activities it conducts. The compliance monitoring process and regulations outlined in the document should be properly implemented, maintained and continually reviewed and improved as necessary.

The requirements for compliance monitoring detailed in this document are proportionate to the complexity of the operation and are applicable to LBA, its contractors and all business partners.

The results and any subsequent findings highlighted by the process will be fed back to the accountable manager on a Monthly basis in the Monthly Performance Report

25.2 Specific Responsibilities

The accountable manager, with regards to his/her direct accountability for safety has ensured, in accordance with ADR.D.015 (a), that sufficient resources are allocated for compliance monitoring.

The Airfield Safety & Compliance Manager is ultimately responsible for the CMS.

25.3 Independence

The independence of the compliance monitoring system is essential and all audits and inspections must NOT be carried out by personnel not responsible for the function, procedure, etc. being audited.

25.4 Training

Correct and thorough training is essential to optimise compliance at LBA. In order to achieve significant outcomes of such training, LBA will ensure that all personnel understand the objectives as laid down in this AOP.

Those responsible for conducting Audits will receive training on this task. Such training will cover the requirements of compliance monitoring, manuals and procedures related to the task, audit techniques, reporting, and recording

25.5 Compliance Monitoring Areas

LBA's compliance monitoring process is divided into 3 areas

- Regulatory (EASA/CAA)
- Internal (LBA departments and documents)
- External (Third Party/Contracted) Compliance Monitoring.
-

LBA will monitor the compliance of these 3 key areas by means of Auditing and Performance Based Monitoring. This is referred to as the LBA Oversight Planning Cycle (LBAOPC)

25.6 LBA Oversight Planning Cycle (LBAOPC)

LBA has developed an Oversight Planning Cycle (LBAOPC) to enable it to systematically review all areas of the operation to ensure continued compliance with LBA/CAA/EASA regulations. This by extension will allow LBA to assure itself of continued safe practices across all areas of the operation falling into the scope of the LBAOPC. LBA has determined an 'Audit Schedule' that highlights the frequency each area of the operation will be audited. This is documented in SECTION 30 – Audit Schedule.

LBA may at any time, based on information obtained via its Performance Based Monitoring amend the Audit Schedule should it have reasonable grounds to suspect any third party not conforming with LBA/EASA/CAA policies and procedures.

25.7 Audits

1.1.1 Process

Audits will be conducted by persons deemed competent in accordance with, Para 25.3/25.4. Audits may be conducted by one or multiple representatives from LBA. All audits will be carried out in confidence, the results of all audits will remain confidential to those companies or departments having been audited, the results of the audit including any non-compliance with the agreed actions and timescales will be discussed at the audit out brief. All reported non-compliances should be dealt with using the best endeavours by company having been audited, any delay on agreed actions and time scales could however be elevated to the Operations Director.

All Audits will be conducted in accordance with the LBAOPC and the company being audited will be advised in advance of the date and time that LBA intends to conduct the Audit.

1.1.2 Out briefs

Out briefs will provide the opportunity for the results of the Audit to be discussed with the relevant department / organisations manager. Non Compliances will be agreed and time scales on corrective actions signed for.

1.1.3 Follow Up

Should there be any RED or AMBER category findings, LBA will conduct a 'follow up' meeting to ensure that all agreed corrective measures have been actioned in the specified period.

25.8 Non Compliance - Classification

All findings documented during audit will be categorised based on severity. These Categories can be found below. The table outlines the required action period for the relevant department to rectify the agreed non-compliance.

COLOUR	CATEGORY	REQUIRED ACTION PERIOD
RED	LEVEL 1	1 WEEK
AMBER	LEVEL 2	1 MONTH
YELLOW	Observation	BEFORE NEXT AUDIT
GREEN	Compliant	-

25.9 Non Compliance – Definitions

25.9.1 Level 1

Where LBA determines that the level of compliance and/or safety performance of an department or third party has fallen to the extent that there is a potential or significant risk to flight safety, a Level 1 finding will be made. LBA will take action in accordance with the relevant regulation, which may result in provisional or substantive suspension of operating permit, intervention or the party being put under special oversight measures.

25.9.2 Level 2

This action may be taken where we identify a non-compliance but determine that the nature of that non-compliance is such that there is no immediate risk to safety. We will require the organisation or individual to develop an action plan acceptable to us that will restore compliance within 1 month.

25.9.3 Observation

LBA expects the department or third party to take this advice seriously and act on it appropriately. Observations will usually be raised as the result of an audit or inspection when best practice is not being followed, or when it is anticipated that the auditee, although currently in compliance, is unlikely to remain so unless appropriate action is taken. The observation must be addressed prior to the previous audit.

25.10 Performance Based Monitoring (PBM)

LBA will also be conducting performance based monitoring of all of its internal departments third parties that fall within its LBAOPC. Performance based monitoring is a process whereby LBA will develop a comprehensive risk picture across all of its operation to build up a holistic view of the safety and compliance based performance of all respective areas. Data will be continuously gathered by various means, particularly the Safety Incident Reporting System during the specified period that will all be collated on the individual / third parties file. This will enable LBA to have a clear picture of the company's safety performance prior to audit.

25.11 Documentation

25.11.1 Audit Notification Form (ANF)

LBA will issue an Audit Notification Form (ANF) to advise the recipient of the intended date of the audit. This form can be found in APPENDIX 28.

25.11.2 Compliance Audit Review Form (CARF)

All compliance based Audits that are conducted will be recorded on a Compliance Audit Review Form which can be found in APPENDIX 27. This form will be held indefinitely on the individual department/third party's file.

25.11.3 Operating Permits (OP's)

LBA will issue an operating permit for all third parties to operate under if providing services at or for LBA. This permit shows that the company, on audit, has successfully demonstrated to be operating in accordance with the LBA SMS and Aerodrome Manual requirements. This permit will also be held on the companies file. The permit template can be found in APPENDIX 29. All permits issued will be held indefinitely on the companies file.

25.11.4 Follow up Audit Form (FUAF)

If there are any Red or Amber findings during the initial Audit, LBA will conduct a Follow up Audit to ensure that the agreed mitigation has been implemented within the time frames agreed. This will be documented

on a Follow up Audit Form. This can be found in APPENDIX 30. This form will be held indefinitely on the individual department/third party's file.

26 SECTION 26 - Regulatory

26.1 General

Under the requirements stipulated by EASA/CAA, LBA will conducting Audits to ensure compliance against EU Regulation 139-2014 & AMC-GM-ADR. The audit frequency for all relevant areas is reflected in the Regulatory OPC contained in this AOP.

26.2 Documentation Required for Audit

Regulatory audits will be documented on the Generic Audit Form located in APPENDIX 1 of the Aerodrome Manual.

27 SECTION 27 - Internal

27.1 General

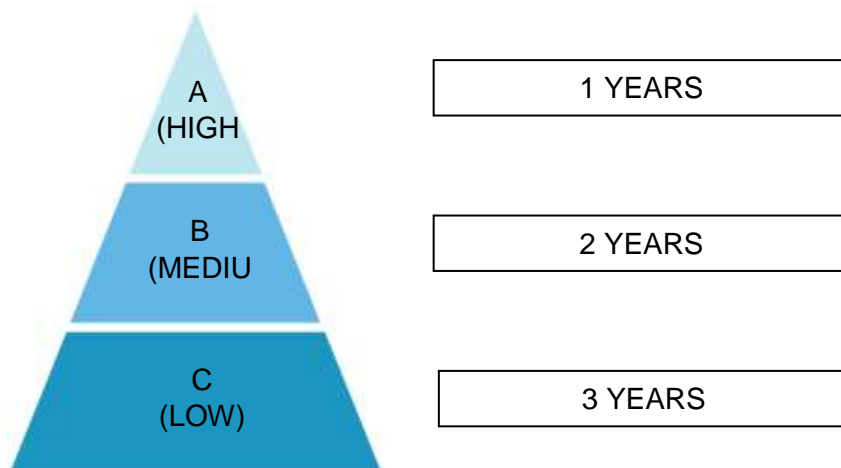
Under the requirements stipulated by EASA/CAA, LBA will be conducting Audits on all relevant internal departments at LBA. Particular attention will be paid to departments that have staff & equipment or providing services to safety critical areas of the operation. The purpose of the audits will be to assure LBA that the individual departments are complying with the rules stipulated in the LBA Safety Management Manual, Aerodrome Manual and any other relevant regulatory documents. LBA will also be looking to ensure the departments are taking an integrated approach to LBA regulations to ensure that all staff and management are familiar with the rules and procedures.

27.2 Internal -Classification

LBA will initially determine the level of oversight required based on the complexity of the individual department and will continually evaluate and reassess to determine if further categorisation is required. The categorisation of department will determine the frequency of Audit as shown in the complexity triangle below. All departments will be made aware of their categorisation. LBA may choose to amend any department's category dependant on its safety performance during the cycle.

Departments are categorised based on numerous factors such as past safety performance and the Safety Critical Nature of the service provided. Irrespective of safety performance, the 5 Core operational teams (AGL, ATE, RFFS, AOU, ATC) will always be categorised as class A departments on the complexity triangle to ensure constant oversight and maintenance of high safety standards.

27.2.1 Complexity Triangle



27.3 Documentation Required for Audit

FORM	YES	NO
Audit Notification Form	X	
Compliance Audit Review Form	X	
Operating Permit		X
Follow Up Action Form	IF REQ	

27.4 Audit Area Examples

LBA will be auditing its own departments against the rules and regulations stipulated within the Aerodrome Manual and Safety Management Manual. Below is a list of potential areas LBA will be auditing on and

provides departments with a reference of where to find the respective guidance to ensure compliance with the respective rules.

SAMPLE AUDITABLE AREAS		
No	Area	Document Reference
1	Staff Training and Competency	SMM – Section 2
2	Compliance Meetings	SMM – Section 3.4
3	Managing Risk (General)	SMM – Section 4
4	Safety Cases	SMM – Section 5
5	Attendance of Relevant Safety Committees	SMM – Section 6.5
6	Staff Training Records	SMM – Section 6.5
7	Staff Awareness of Safety Documentation	SMM – Section 6.5
8	Document Control	SMM – Appendix D
9	If Regulated – Audit Reports	-
10	Training	Aerodrome Manual – Section 5
11		
12		
13		
14		
15		
16		
17		
18		

28 SECTION 28 - External

28.1 General

Under the requirements stipulated by EASA/CAA, LBA will be conducting Audits on business partners, subcontractors and any other third parties supplying services for or at LBA. Particular attention will be paid to third parties who have staff & equipment operating in safety critical areas of the operation. The purpose of the audits will be to assure LBA that the individual company is complying with the rules stipulated in the LBA Safety Management Manual, Aerodrome Manual and any other relevant regulatory documents. LBA will also be looking to ensure the Third Party is taking an integrated approach to the rules to ensure that all staff and management are familiar with the rules and procedures.

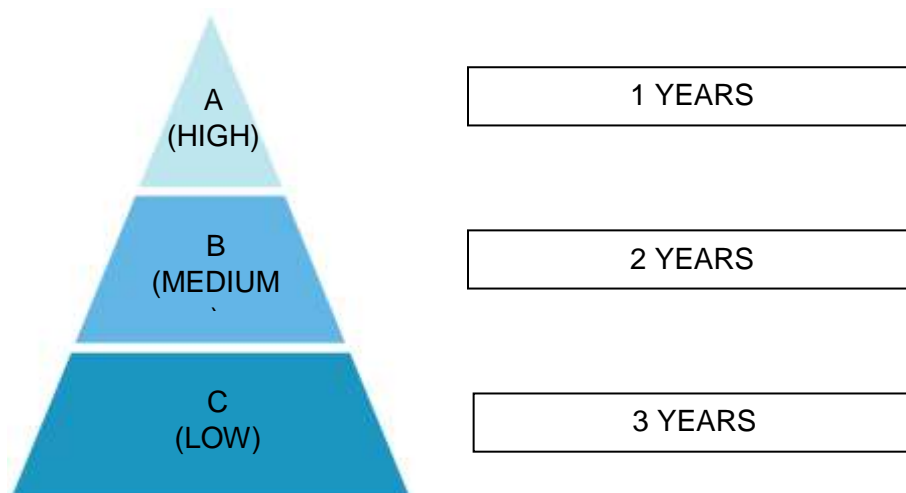
28.2 Third Party -Classification

LBA will initially determine the level of oversight required based on the complexity of the individual companies operation and will continually evaluate and reassess to determine if further categorisation is required. The categorisation of company will determine the frequency of Audit as shown in the complexity triangle below. All companies will be made aware of their categorisation. LBA may choose to amend any company's category dependant on its safety performance during the cycle.

Companies are categorised by LBA based on numerous factors, some of these are listed below:

- Number of staff working in Safety Critical Areas.
- Number of assets operating in Safety Critical Areas.
- Complexity / Safety Critical nature of the service being provided.
- Third parties resilience to cope with seasonal operational pressures.
- Safety and Compliance performance based on the results of the respective PBM

28.2.1 Complexity Triangle



28.3 Documentation Required for Audit

FORM	YES	NO
Audit Notification Form	X	
Compliance Audit Review Form	X	
Operating Permit	X	
Follow Up Action Form	IF REQ	


28.4 Audit Areas Example

LBA will be auditing its Third Parties against the rules and regulations stipulated within the Aerodrome Manual and Safety Management Manual. Below is a list of potential areas LBA will be auditing on and provides business partners with a reference of where to find the respective guidance to ensure compliance with the respective rules.

SAMPLE AUDITABLE AREAS		
No	Area	Document Reference
1	Airside Security	AOP 01
2	Accident and Incident Reporting	AOP 03
3	Apron Management	AOP 13
4	Foreign Object Debris	AOP 14
5	Airside Driving and Vehicle Permits	AOP 15
6	Winter Operations	AOP 16
7	Environmental Procedures	AOP 18
8	Aviation Fuel Management	AOP 22
9	Drugs & Alcohol Policy	Aerodrome Manual - Section 63
10	Amendments of LBA Aerodrome Manual	Aerodrome Manual – Section 1
11	Amendments of LBA SMM	SMM - Section 1
12	Safety Practices	SMM - Section 1
13	Safety Practices	SMM - Section 1
14	Training	Aerodrome Manual – Section 5
15	Vehicle Maintenance Records (General)	-
16	Safety Promotion	Aerodrome Manual - 3.15
17		
18		

29 SECTION 29 – Associated Documents

29.1 APPENDIX 27 - Compliance Audit Review Form (CARF)

 Leeds Bradford Yorkshire's Airport				
LBA - Compliance Audit Review Form (CARF)				
AUDIT SUMMARY				
Company/Department Name				
Company Risk Classification				
Company/Department Representative				
Auditor Name				
Audit Date				
Audit Time (From - To)				
Audit Location				
CARF Completion Date				
PREVIOUS AUDIT 'YELLOW OBSERVATIONS'				
			Requirements Met	
Observation		Comments	Yes	No
AUDIT FINDINGS				
	Item/Area Audited	Finding	Mitigation	Classification
1				
	Item/Area Audited	Finding	Mitigation	Classification
2				
	Item/Area Audited	Finding	Mitigation	Classification
3				

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	Item/Area Audited	Finding	Mitigation	Classification
4				
	Item/Area Audited	Finding	Mitigation	Classification
5				
	Item/Area Audited	Finding	Mitigation	Classification
6				
	Item/Area Audited	Finding	Mitigation	Classification
7				
	Item/Area Audited	Finding	Mitigation	Classification
8				
	Item/Area Audited	Finding	Mitigation	Classification
9				
	Item/Area Audited	Finding	Mitigation	Classification

Copy and paste tables above if more space is required.


NOTES

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FOLLOW UP AUDIT				
Are there any Red or Amber findings / is a follow up audit required? (Circle As Appropriate)			YES	NO
Date scheduled				
SIGNED				
<i>Signing below is to confirm that the audit has been conducted fairly and objectively and the findings and subsequent mitigations / time scales have been agreed by all parties.</i>				
Audited Party				
	Company	Print Name	Date	Sign
1				
2				
Leeds Bradford Airport				
Auditor				
Countersigned				


29.2 APPENDIX 28 - Audit Notification Form (ANF)

 Leeds Bradford Yorkshire's Airport		
LBA Audit Notification Form (ANF)		
SUMMARY		
<p>This form is to notify XXXXXX that LBA intends to conduct an audit on your department/business in line with its requirements stipulated by Commission Regulation (EU) No. 139/2014 and ADR.OR.005 (b) (11). Specific details regarding the Audit, including dates and times can be found below.</p> <p>This Audit aims to provide LBA with the assurance that the respective department/third party is complying with the LBA Safety Management Manual & Aerodrome Manual and by extension, is meeting the requirements stipulated by the European Aviation Safety Agency & the Civil Aviation Authority.</p> <p>Please ensure best efforts are made to accommodate this audit and there is a representative from your department/business to accommodate the Auditor for the duration of the visit.</p> <p>This Audit is conducted in accordance with the LBA Oversight Planning Cycle (LBAOPC) stipulated in the Aerodrome Manual – AOP 9. Please familiarise yourself with this document prior to Audit to ensure you are fully aware of what is required of you.</p>		
DETAILS		
Audit Date		
Audit Start Time		
Audit Finish Time		
Audit Location(s)		
Auditor's Name		
AREAS INTENDED FOR AUDIT		
Area	LBA/EASA/CAA Ref	
<i>Please be advised the above list is not definitive and is only intended to provide an overview of what the Auditor is likely to cover. LBA may amend the audited areas at any time.</i>		

29.3 APPENDIX 29 – Operating Permits (OP)

 Leeds Bradford Yorkshire's Airport				
OPERATING PERMIT (OP)				
SUMMARY				
<p>This permit is issued to</p> <p style="color: red;">XXXXXX</p> <p>by</p> <p>Leeds Bradford Airport Ltd</p> <p>To acknowledge that XXXXXX has satisfactorily demonstrated safe working practices and is complying with LBA regulations and guidance stipulated in the LBA Aerodrome Manual and in accordance with the LBA Safety Management Manual. All third parties remain ultimately responsible for the safe delivery of their contracted service in accordance with their own operating regulations. LBA reserves the right to review, audit and investigate any third party it has reasonable grounds to suspect is not conforming with LBA policies and procedures.</p>				
DETAILS				
Permit Issue Date				
Company Risk Classification				
Third Party				
	Company	Print Name	Date	Sign
1				
2				
Leeds Bradford Airport				
Signed				
Countersigned				

29.4 APPENDIX 30 - Follow up Audit Form

 Leeds Bradford Yorkshire's Airport				
LBA – Follow Up Audit Form (FUAF)				
AUDIT SUMMARY				
Company/Department Name				
Company Risk Classification				
Company/Department Representative				
Auditor Name				
Initial Audit Date				
Follow Up Audit Date				
Audit Time (From - To)				
Audit Location				
FUAF Completion Date				
PREVIOUS AUDIT 'RED/AMBER OBSERVATIONS'				
			Requirements Met	
Observation	Comments	Yes	No	
<i>Copy and paste tables above if more space is required.</i>				
SIGNED				
<i>Signing below is to confirm that the audit has been conducted fairly and objectively and the observations/comments have been agreed by all parties.</i>				
Audited Party				
	Company	Print Name	Date	Sign
1				
2				
Leeds Bradford Airport				
Auditor				
Countersigned				

30 SECTION 30 – Audit Schedule

30.1 Internal OPC

Internal Department	Classification	YEAR 1 (2017)												YEAR 2 (2018)												YEAR 3 (2019)												
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	
Airside Operations Unit	A																																					
Air Traffic Control	A																																					
Fire Operations	A																																					
Air Traffic Engineering	A																																					
PRM Assistance	A																																					
Airfield Ground Lighting	A																																					
Projects/Engineering	A																																					
SMS	A																																					
Terminal	B																																					
NIL	C																																					

30.2 External OPC

Third Party	Classification	YEAR 1 (2017)												YEAR 2 (2018)												YEAR 3 (2019)											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Swissport (Back of House)	A																																				
Jet2 (Back of House)	A																																				
ASIG	A																																				
AlphaLSG	B																																				
Flight Care	B																																				
Multiflight	B																																				
PTT	B																																				
Swissport (front of house)	B																																				

30.3 Regulatory OPC

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AOP 10 –

Rescue & Fire

Fighting

Service

(RFFS)



31 SECTION 31 - Rescue & Fire Fighting Services (RFFS)

31.1 Aims and Objectives

The Fire category at Leeds Bradford Airport is Category 7 with Category 8 and 9 available on request, during the Airport's operating hours as stated in the UKAIP.

All aircraft movements, which require the use of a certificated aerodrome, shall be provided with a level of protection, which is no less than the minimum appropriate for that aircraft type.

The Fire Watch Manager will inform the Duty ATCO of any change from Category 7 and provide details of the fire category available.

Implement policies and plans for emergency and contingency responses

31.2 Safety Accountabilities

The Fire Service Manager (FSM) has specific safety accountabilities which are detailed in SECTION 6 of the LBA SMM.

31.3 Fire Operations Structure

The FSM is responsible for the provision of Fire Operations and medical services and for ensuring a satisfactory standard of training, and provision of equipment.

Overall control of Fire Operations at Leeds Bradford Airport is vested in the FSM whose staff comprises of:

RANK	QUALIFICATION
– 4 x Watch Manager	Supervisor
– 12 x Crew Manager	Crew Commander Incident Command
– <u>24 x Fire Fighters</u>	<u>Fire fighter</u>

31.4 Temporary Depletion of Fire Operations

There may be circumstances when part of the Fire Operations facility is temporarily unavailable due to an unforeseen circumstance e.g. an in-service mechanical failure of a piece of equipment or sudden illness of a member of staff. Details of the procedures to be used are also contained in the Fire Station Standards SECTION 1 – Temporary Depletion of Manpower.

In the event of temporary depletion in rescue and firefighting provision, the Duty Watch Manager shall ensure:

- Inform ATC if the levels of protection fall below the promulgated level of Category 7. ATC must be made clear as to what category of fire cover is available, including the likely duration.
- ATC shall issue a NOTAM to promulgate the available Category to all airline operators who would expect to use Leeds Bradford.
- ATC shall inform all aircraft under their control of the Category available and request their intentions. Aircraft may elect to use the airport at a reduced Category.
- Notify the FSM on Ext 3224 or Mobile 07827 357315.

- Notify the Head of Airfield Services Ext 3382 or Mobile 07711016610.
- Notify the AOUS Leader on Ext 3231 or Mobile 07813 817314.
- Attempt to reinstate levels of service to the normal promulgated Category as soon as is practically possible following guidance in the Fire Station Standards Section 16.
- When the levels of Fire protection are restored to the required Category following the period of temporary depletion, the Watch Manager is to immediately inform the Duty ATCO, FSM and the Head of Airfield Services
- Ensure all actions taken are logged in the Fire Station Watch Room Logbook (Occurrence Log).

31.5 Providing a Higher Fire Category

For aircraft operations requiring a higher Fire Category than published, the aircraft operator shall do so only by prior arrangement.

For movements of aircraft requiring the upgrade of Fire O provision sufficient notification will be required for additional staffing resources to be called in.

In the event of aircraft departures occurring within 15 minutes of airport closure, Fire Operations are to remain fully serviceable until 15 minutes after departure.

31.6 Facilities & Capabilities

31.6.1 Media and Discharge Rates

The quantities of extinguishing media available for use, and the amounts/quantities held in reserve, along with the discharge rates of appliances are found in RFFS Station Standards Section 7.

31.6.2 Appliances

The extinguishing media, rescue equipment and personnel required for Category 7 are carried on the following appliances:

Appliance	Call Sign	Water (Ltrs)	Foam (Ltrs)	Discharge Rate (Ltrs/min)	Monnex Dry Powder (Kg)	CO2 (KG)
Rosenbauer Fire 1	Fire 1	12,500	1500	5000	225	20
Cobra Fire 2	Fire 2	12,000	1680	4500	50 + 9	32
Cobra Fire 3	Fire 3	10,400	1570	4550	100 + 9	0
HRET	Fire 5	11,200	1500	6000	225	0
Total		46,100	6250		600 + 18	52

31.6.3 Manning Levels and Watch Structure

The scale of moving of appliances as agreed with the regulatory authority are detailed in the RFFS Station Standards Section 1.

31.6.4 Level of Supervision

The FSM is responsible for the overall operational effectiveness of Fire Operations. On a daily basis, the Duty Watch Manager is in charge of the station. The accountabilities of the Watch Manager are detailed in SECTION 6 of the Safety Management Manual and Fire Service Standards Document 2.

Leeds Bradford Airport shall maintain a Watch Structure at all times during promulgated operating hours, as per the relevant agreed TRA for that category which has been approved by the CAA.

31.6.5 Fire Station

The fire station is a two story, five bay, purpose built structure designed to accommodate both personnel and appliances. It is located to the north of runway 14/32 (adjacent to Stand 1) and enables response times to be met to all parts of the response area.

The bays house the appliances and equipment and allow for quick egress from the station. Sufficient room is provided around and above the appliances to permit personnel easy access to equipment lockers, cabs and rooftops.

Facilities are provided for technical training, office accommodation, hygiene and rest.

31.6.6 Rescue Equipment

The scale of rescue equipment provided for use by the fire service is detailed in the RFFS Station Standards Section 21

31.6.7 Personal Protective Clothing for RFF Personnel

All fire personnel are issued with their own personal issue of protective clothing for use when carrying out firefighting duties. Details are contained in the Station Standards Section 9 – PPE Assessment Document.

31.6.8 Respiratory Protective Equipment for RFF Personnel

Details are as per the Station Standards Section 03 – Health & Safety

31.6.9 Inspection and Testing of Fire Service Equipment

All equipment will be inspected and tested in accordance with Health & Safety at work Act, Provision & Use of Work equipment Regulations (PUWER) and Manufactures recommendation.

31.7 **Operational Objective**

31.7.1 AMC5 ADR.OPS.B.010(a)(2)

The aerodrome operator should ensure that:

The operational objective is to create and maintain survivable conditions, to provide egress routes for occupants, and to initiate the rescue of those occupants unable to make their escape without direct aid.

Response times to any other part of the movement area, in optimum visibility and surface conditions, are calculated and included in the Aerodrome Emergency Plan;

Any vehicle, other than the first responding vehicle(s), required to achieve continuous agent application of the amount of extinguishing agents specified in Table 1 of AMC4 ADR.OPS.B.010 arrives no more than one minute after the first responding vehicle(s); and suitable guidance, equipment and/or procedures for rescue and firefighting services are provided, to meet the operational objective, as nearly as possible, in less than optimum conditions of visibility, especially during low visibility operations.

See the RFFS Station Standards Section 1 – Levels of Service

31.8 Training

All personnel involved in Rescue, and Fire Fighting duties shall receive acquisition training and are certified by a CAA approved training provider.

All new fire fighters will whenever possible receive training on station prior to their attendance at a CAA approved training course. Recruits will be required to pass the statutory examination and acquire a 'Certificate of Competence'.

All Fire Operations personnel will carry out continuation maintenance training in line with the RFFS training programme as well as twice yearly Crew Training days at an approved training provider as part of the revalidation of competence (ROC). This involves four realistic training scenarios incorporating pressurised fuel fires on various aircraft simulators that represent the category of aircraft present at LBA.

31.9 Certification Requirements

All Fire Operations personnel are required to hold valid 'Certificates of Competence' at an appropriate level.

The following certification requirements are appropriate:

ROLE	QUALIFICATIONS
Fire Service Manager	Fire Service Manager and Supervisor Civil Contingencies, IOSH
Watch Manager	Supervisor
Crew Manager	Crew Commander, Incident Command
Fire Fighter	Fire Fighter
New recruit	Induction training

All certificates of Competence shall be revalidated at periods not exceeding their certificate of competence. Personal records of all technical and practical instruction by an approved training provider and that carried out at LBA are to be maintained in accordance with CAP 699. It is the responsibility of the individual and the RFFS training officer to ensure this is maintained.

To allow flexibility in the employment of new recruits and those awaiting revalidation, Fire Operations will ensure at least 75% of those on duty including Watch Managers, shall hold a 'Certificate of Competence'. It is the intention that all new competent Fire fighter starters will attend an ATP within 6 months of the in-house competence course completion date.

In addition to attending mandatory training courses, all Fire Operations personnel are required to undertake comprehensive practical and technical training on station in order to maintain levels of competence. The Fire Watch Manager is responsible for the daily management of training and the maintenance of personnel trainings record.

Personal Protective Equipment (PPE) shall be provided, as per Fire Service Standards Section 9 PPE Assessment Document, for all personnel to equip them for the full range of practical operations expected of them. All PPE provided shall comply with current British and European Standards and Health & Safety Regulations.

Respiratory protection in the form of positive pressure self-contained breathing apparatus shall be provided to enable Fire Operations personnel to work safely in hostile atmospheres. Operational procedures with respect to breathing apparatus shall be followed in accordance and guidance as detailed in Technical Bulletin 1/97 and Fire Service Standards Section 03.

Fire Operations shall undertake practical exercises in compliance with the requirements of the regulatory Authority with regard to hot fire training and breathing apparatus training. All personnel shall undertake Breathing Apparatus training in heat and smoke at least every 6 months. In addition, realistic fuel fire training shall be carried out by all RFFS personnel. Time periods for recurrent training are defined by means of a 'Frequency Analysis'.

31.1032/14 1000m Response Area

The procedures regarding LBA 1000 m response plan are detailed in the Fire Station Standards Section 1 – Levels of Service, Station Standard 5 SOP 16 & Station Standard 10.

31.11 Domestic Incidents

The procedure for RFFS dealing with domestic incidents are detailed in the Emergency Orders Section 10.

31.12 Procedures for the Terminal Building

31.12.1 Single Stage Alarm:

- Monitor Channel 2 of the airport management radio system.
- Follow the progress of the investigation.
- Contact the TDM (Tango 31), stand by at the fire alarm panel and be prepared to reset if requested to do so.

31.12.2 Full alarm activation/ confirmed Fire:

- Appliances to proceed to pre-determined standby points.
- Do not commit unless ATC confirm all aircraft movements have ceased.
- Coordinate actions with the TDM.

31.12.3 Priorities

- Persons reported
- Disabled customers waiting in safe areas
- Management of assembly points, after cease flying, at the apron road adjacent to stand 14 or at the end of baggage hall B
- Assistance to WYFS

Procedure for Bulk Fuel Installations Fuel Farms – See LBA Fire Service Standard Number 5
Standard Operating Procedures SOP No 1 (Incidents at Bulk Fuel Installations)

31.13 Off Airfield Incident

The procedure for Fire Operations dealing with off airfield incidents are detailed in the Fire Station Standards Section 1 – Levels of Service, Station Standard 5 SOP 16 & Station Standard 10..

31.14 Additional Water Supplies

The procedure for Fire Operations using additional water supplies are detailed in Fire Station Standards, Section 20, Fire Service Water Needs Analysis.

31.15 Freight and Ambulance Flights

Leeds Bradford Airport promulgates Category 7. Subject to prior notice, the category may be upgraded to a maximum of category 9.

The aerodrome handles ambulance flights on an ad hoc basis and provides the minimum RFFS category as required for aircraft type.

31.16 Low Visibility Search Procedures (LVSP)

The procedures for LVSP are detailed in the Fire Station Standards Section 01 – Levels of Service.

31.17 Medical Services

The procedures for Fire Operations use of Medical Services Medical are detailed in Fire Station Standards Section 15 – Medical Equipment Needs Analysis

31.17.1 First Aid

Medical supplies are maintained at the fire station either on the appliances or in the RVP Cabin. The level of supplies has been established consultation with YAS and the TRA against the largest aircraft normally using the aerodrome.

All RFFS personnel hold a first aid qualification. To maintain competencies, an on-going training and assessment plan is in place. The Airport's own clinical governance committee and external advisory team carry out regular meetings in order to ensure best practice. Membership of these groups is outlined in RFFS Clinical Governance Policy (available on SharePoint).

31.17.2 Ambulance

The local Ambulance Service (YAS) are alerted to assist with medical incidents where local First Aid skills prove inadequate to deal with the incident.

31.17.3 Scales of Medical Supplies held at the Aerodrome

Medical equipment to the scale appropriate to an aircraft falling within Category 9, is retained on station and within the RVP cabin under the control of the FSM and is audited regularly via the Equipment Management System.

32 SECTION 32 - Integrated Emergency Plan (Emergency Orders)

32.1 Responsibility

Leeds Bradford Airport Emergency Planning Group is the relevant body for the planning, review and amendment of Emergency procedures.

Only Air Traffic Control may initiate the procedures for an Aircraft Emergency i.e. Aircraft Accident, Full Emergency, Ground Incident or local standby even though the request for precautionary action may originate from the aircraft captain. Should Fire Operations become aware of an aircraft emergency, prior to ATC, then Fire Operations must respond whilst informing ATC who must then initiate the appropriate procedures.

32.2 Alerting, Mobilisation and Stand by Procedures

ATC monitor all apron and manoeuvring areas, any incidents requiring the Fire Operations attendance will be in accordance with the Airport's Emergency Orders.

Some observations are made from the Fire Operations watch room and callout attendance is possible from this location, subject to co-ordination with ATC.

In general the crash siren will be the primary callout system which is tested in conjunction with ATC and AOU. There is a direct line telephone which connects the Fire Operations and ATC. On occasions ATC will use the Fire Station P.A. system. All of which is tested daily. When Fire Operations personnel are not on the Fire Station, RT contact is maintained with ATC. Mobile telephones are also available on each appliance. Further details can be found in the Fire Service Standards Section 01, Levels of Service.

32.3 Routine Test Procedures

A full-scale aerodrome emergency exercise will be held at intervals not exceeding two years. The timing of these exercises (where practical) alternates between daylight and the hours of darkness.

Partial emergency exercises/modules in the intervening year will be conducted to ensure that any deficiencies found during a full-scale emergency exercise are reviewed and the Emergency Orders amended as appropriate.

32.4 Publication of Amendments

Recommendations for changes to the procedures will be made through the FSM. The FSM is responsible for amending the Emergency Orders

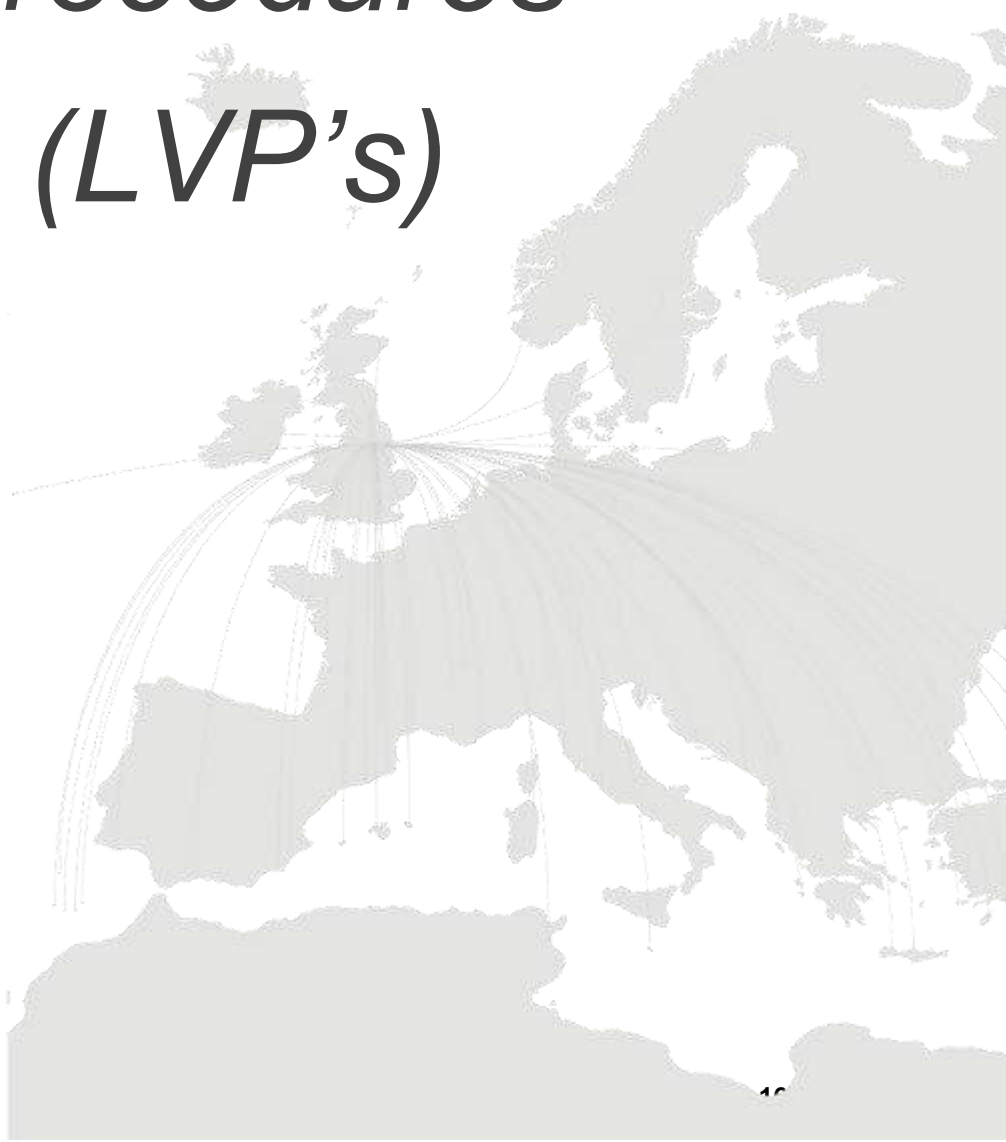
AOP 11-

Low

Visibility

Procedures

(LVP's)



33 SECTION 33 - Low Visibility Procedures (LVP's)

33.1 Aims and Objectives

ADR.OPS.B.045 Low visibility operations states

- The aerodrome operator shall ensure that means and procedures are established and implemented for providing safe conditions for aerodrome operations in low visibility conditions.
- Low visibility procedures shall require prior approval by the Competent Authority.

To provide a safe environment for operation of aircraft in conditions when surface visibility is reduced below 1500m. A serious constraint during these conditions is the inability of the ATC aerodrome controller to see the manoeuvring area. During low visibility conditions, the manoeuvring area shall therefore be guarded against unauthorised vehicle movements. The implementation of LVP's by the ATC Aerodrome Controller shall be a two-phase procedure, LVP1 (Safeguarding) and LVP2 being the enforcement of LVPs.

NB - All changes to LVPs require prior approval from the competent authority in accordance with AMC1 ADR.OR.B.040.

33.2 Background

LVPs are designed to protect:

- The active runway from incursion by aircraft, vehicles or persons.
- The ILS Localiser Sensitive Area from unauthorised entry
- The Obstacle Free Zone

During LVPs, vehicle movements on the manoeuvring area will only be permitted on receipt of an ATC clearance for operationally essential reasons e.g. Emergency services, AOU Inspections, Bird Scaring, and AGL inspections etc.

All vehicles on the manoeuvring area during LVP's shall be equipped with:

- Radio communications to maintain contact with ATC at all times;
- A current map of the aerodrome (Airfield Map)

It is important that all staff operating airside should be aware of the requirement for LVPs and of the implications of Category (CAT) II/III ILS operations. In order to safeguard these procedures it is necessary to adopt certain practices for staff working airside.

33.3 Definitions – Category I, II and III

All criteria and minima for Category I, II and III can be found in ICAO Annex 10 V1 and CAP 670 Part C – Section 2. Further guidance can be found in MATS PT II, Section 1, Chapter 15 – All Weather Operations

33.4 Category II/III requirements

Before an operator is able to undertake a Category II/III approach and landing a number of requirements must be met:

- The aircraft systems must be serviceable to Category II/III standards.

- The weather conditions must meet the operational requirements for the particular type of aircraft being used.
- The aircrews must be trained and currently rated to the standard of procedures being used.
- The aerodrome ground lighting must be serviceable to Category II/III tolerances.
- The aerodrome ILS must be serviceable to Category II/III tolerances.

33.5 Aircraft equipped with Enhanced Vision Systems

- Runway 14 suitable for EVS operations in accordance with ILS03 EU OPS.
- Runway 32 suitable for EVS operations in accordance with ILS03 EU OPS.

33.6 Lower than Standard Category I

- Runway 14 suitable for Lower Than Standard Category I operations in accordance with ILS03 EU OPS.

33.7 Other than Standard Category II

- Runway 32 suitable for Other Than Standard Category II operations in accordance with ILS03 EU OPS.

33.8 LVP Aerodrome Safeguarding

It is a requirement that to safeguard operations in low visibility, special procedures are implemented by Air Traffic Control (ATC) when LVPs are initiated. These procedures are implemented to maintain safe operations of aircraft and vehicles and to safeguard technical installations on the airfield. ATC and/or AOU will authorise the switching on of the LVP warning signs located at strategic points on the airfield and to perform the standard LVP check, which may have to be carried out after LVP's have been announced. An AOU LVP check includes:

- Multiflight West apron Gate 1 (Pedestrian gate by security barrier)
- Multiflight Central apron Gate 4A (Vehicle gate)
- Multiflight Central apron Gate 4B (associated pedestrian gate)
- Multiflight Central apron Gate 5 (Pedestrian gate to Multiflight east building)
- Multiflight east apron Gate 6 (Vehicle gate)
- Multiflight east apron Gate 7 (Pedestrian gate)
- Vehicle Hold Point 1 (VH1)
- LCC traffic lights
- LVP Signs (Stands 19, 17, 8, 7 and Fire Station)
- Close Fuel Farm B Gates that lead onto Alpha Taxiway.

It is essential that in LVPs all staff working airside are aware of the safety implications and proceed with extreme caution at all times. Aircraft will be moving to/from stands in restricted visibility and reaction time and vehicle-stopping time is increased. Vigilance must be increased and a careful look out must be maintained.

In LVPs the following procedures will apply:

- Vehicle movements must whenever possible route via the airside road or if not able to do so via the inner edge of the apron nearest to the terminal building.

- Vehicle operating and lighting requirements must be in accordance with AOP 15.
- Only essential vehicle movements associated with aircraft operations are permitted.
- The apron road speed limit is reduced to 5 mph.
- Access to parked aircraft must be made directly from the airside road at right angles to the aircraft stand.
- The access gate to Fuel compound “B” must be closed to prevent an Alpha taxiway incursion.
- The movement of passengers on the apron must be very carefully controlled at all times. Airline or Handling agent’s ground staff must ensure that safety of passengers is paramount. If the visibility is such that adequate control cannot be maintained, then passengers must be transferred by bus to/from the gates. If necessary, additional staff should be utilised to guarantee the safety of passengers.

The Airport Company will monitor activities in LVPs and should any operator be concerned about operating in LVPs or have any particular concerns they should discuss this with their supervisor who will bring it to the attention of the AOU.

33.9 LVP Procedures for ATC

These are detailed in MATS PT II, Section 1, Chapter 15 – All Weather Operations

33.10 Cancellation of LVP's

The cancellation of LVPs is the responsibility of the ATC Aerodrome Controller – actions as per the checklist referred to in MATS PT II, Section 1, Chapter 15

33.11 Records

The Duty ATCO shall record the time of initiation and cessation of LVP's in the ATC Watch Log together with all associated actions.

The Airport Operator is legally required to provide the CAA with information concerning all aircraft landings and take-offs made during RVRs of 1500m or less. This can be obtained via the ATC Chroma system.

33.12 Follow Me Procedures

In order to provide assistance to aircraft taxiing during LVP conditions, a Follow Me is available. AOU will provide this service and will only be given at the request of a pilot for assistance.

33.12.1 Arrivals

ATC will contact AOU by R/T and pass the Type of Aircraft, Apron Entry Point and Stand Number.

33.12.2 Departures

If requested by the Pilot, ATC will request the Follow Me vehicle through AOU.

33.13 RFFS Search Procedures

For training purposes it is a requirement that the RFFS department conduct LVP Search Procedures during actual LVP conditions. These will be conducted during darkness when there are no ATC movements and the Crew Commander will liaise with ATC before the start of the exercise.

33.14 Assessment of Runway Visual Range (RVR)

In the event that an IRVR measurement is not available, the pilot should be passed the met visibility and advised that RVR is not available.

33.14.1 Runway Visual Range (Human Observation Method)

The measurement of RVR's by the 'human observation method' is unavailable at LBA.

33.15 Secondary Power Supplies

Full details found in Section 10.

AOP 12 – *Control of Works in Progress*



34 SECTION 34 - Control of Works in Progress

34.1 Aims and Objectives

34.1.1 General

All construction or maintenance work airside, particularly on the movement area, or work potentially affecting aerodrome operations whether being conducted internally or by contractors, must be approved by a competent representative from LBA prior to commencement. LBA must ensure appropriate measures are put in place to monitor the safety of the aerodrome and aircraft operations during aerodrome works such that timely corrective action is taken when necessary to assure continued safe operations. LBA ensures these requirements are met by requiring Operational Works Instructions (OWIs) be completed and signed off prior to any works commencing.

LBA must ensure the works site is returned to operational use in a safe and timely manner by ensuring:

- the works site is cleared of personnel, vehicles, and plant in a safe and timely manner;
- The works-affected area is inspected for operational serviceability in accordance with the hand-back procedures;
- relevant authorities or organisations are notified of the restoration of aerodrome serviceability

34.1.2 Marking & Lighting of unserviceable areas

LBA must ensure that:

- Bad Ground Markers are displayed whenever any portion of a taxiway, apron, or holding bay is unfit for the movement of aircraft but it is still possible for aircraft to bypass the area safely
- On a movement area used at night or in LVPs, Glimms should be used. NOTE Consideration should be given to using the 'caps' on glimms when in LVPs to ensure they remain illuminated.
- Glimms & Bad Ground Markers must be placed at intervals sufficiently close so as to delineate the unserviceable area.

When lights are used to mark temporary unserviceable areas at night or during reduced visibility conditions, these lights should mark the most potentially dangerous extremities of the area. A minimum of four such lights could be used, except where the area is triangular in shape where a minimum of three lights may be employed. The number of lights may be increased when the area is large or of unusual configuration. At least one light should be installed for each 7.5 m of peripheral distance of the area.

34.1.3 Operational Works Instructions

As previously mentioned, Operational Works Instructions (OWIs) must be completed for any construction or maintenance works conducted airside irrespective of whether the works is conducted internally or by a third party. The OWI must always be paired with a risk assessment conducted in accordance with the Safety Management Manual and signed off at the appropriate level.

If operational procedures are to be temporarily changed an accompanying Temporary Airport Operational Instruction (TAOI) will be issued.

34.2 Minor Works

The below list must be complied with to ensure safe operations are maintained during minor works:

- No work can take place on the movement area without the knowledge and approval of LBA via the OWI process.
- Permitted times of work must be strictly followed
- All individuals taking part in the work are briefed in detail on, the precise areas in which work may be done, the routes to be followed to and from the working area, the R/T procedures to be used, the safety precautions to be observed, the maintenance of a listening watch and the use of look-outs and the reporting procedure to be followed on completion of work.
- The lights of taxiways leading into working areas should be permanently 'off'.
- Personnel should be briefed for possible hazards whilst working on aerodromes, in particular the jet blast problem and noise.
- Where work is conducted on or traverse aircraft pavement areas, these areas should be inspected thoroughly before they are opened again for aircraft use, with particular attention to the presence of debris and the general cleanliness of the surface.

At the conclusion of work, the works supervisor, LBA representative, or other appropriate staff, should inspect the working area to ensure that it has been left in a satisfactory condition.

NB: A reminder that some works may require prior approval from the competent authority in accordance with ADR.OR.B.040.

34.3 Major Works

- Before the commencement of any substantial work on the movement area, a liaison group comprising representatives from the aerodrome operator, air traffic services if applicable, and subcontractors' agents should be established. The group should meet, as often as considered necessary, to review progress, and consider the need for any change in working practices to meet operational requirements.
- As far as practicable, working areas should be blocked off from the active parts of the movement area by the erection of physical barriers.
- Consideration should be given to the marking and lighting of barriers.
- If work is of prolonged duration, a constant watch is required to ensure that the marking and lighting of obstacles and unserviceable areas does not degrade below acceptable limits.
- The effect of tall cranes on ILS and radar, in conjunction with those responsible for electronic landing aids and steps taken to reduce limitations to the minimum, should be considered.

34.4 Additional Requirements for Contractors

The Airport Company has produced an extensive Control of Contractors procedure that is administered by the Projects Department. Any works to be undertaken in the airside areas must follow the instructions outlined in that document. The list below provides a resume of key areas detailed with the Control of Contractors Document.

- Contractors Requirements and Supplementary Information
- Operation Procedures and Requirements

- Health and Safety
- Site Services
- Environmental Requirements

Prior to any planned works, the airport company will satisfy itself that the contractor undertaking the works has met the requirements of the Control of Contractors procedures. This will be done at a number of pre-contract meetings and subsequently through the internal project team comprising a number of key stakeholders from the airport management team. The team will meet in sufficient time to plan the works and ensure the contractor management team is aware of the expectations of the airport company.

34.4.1 Contractor Briefings

All personnel employed on the project must attend a contractor briefing ahead of any access to the airside areas. This will be conducted by the LBA responsible manager for the contractor or the designated site safety officer for the main contractor where approved by LBA. This briefing will include:

- Relevant safety induction programmes to cover health and safety and airside safety awareness in accordance with Para 3.15
- Project management structure and lines of responsibility
- Project specific hazards that may be unique to the airside nature of works
- Welfare arrangements
- The general layout of the aerodrome including airside access points
- The available works timings including the vacation of any works areas ahead of aircraft movements.
- The location and limits of the work area(s) and the location and limits of contractor's site(s).
- Site discipline and waste management to prevent foreign object debris (FOD)
- Information on the special safety requirements for aircraft operations in the vicinity of works and the methods of control available on the Manoeuvring Area, including RTF procedures (if appropriate).
- Methods of control and access to works sites within the Manoeuvring Area including arrangements for crossing taxiways and runways.
- Storage/parking area.
- The methods and equipment to be used for protecting, marking and lighting the boundaries of works sites. The protection of normal aerodrome operations in the vicinity of the site.
- Lighting of works areas to avoid distractions to aircraft operations
- Any environmental obligations

The Airport Company Control of Contractors Procedures provide all the relevant guidelines and should be read in conjunction with this instruction for those planning any such projects.

35 SECTION 35 - Crane Operations

35.1 General

The operation of cranes in the vicinity of an aerodrome may have a direct impact on the safety of aircraft and aviation. The legislation that controls such activities is the Air Navigation Order 2005 (ANO). The operators of cranes must refer to British Standard Institute Code of Practice for the Safe Use of Cranes (BS 7121). Part 1, paragraph 9.3.3 of BS 7121 refers to Crane Control in the Vicinity of Aerodromes. In addition the Airport Operators Association (AOA) in partnership with the Health and Safety Executive (HSE) have issued a guidance leaflet entitled 'Cranes and Planes, A Guide to Procedures for Operation of Cranes in Vicinity of Aerodromes'.

35.2 Safety Requirements

In order to co-ordinate the safe operation of cranes in the vicinity of aerodromes any proposed crane operation within 6 kilometres of an aerodrome, at heights of 10 metres above ground level or that of the

surrounding structures or trees, is to consult the aerodrome manager. In close proximity to or on an airport these heights may be lower.

35.3 Location and Permission

Crane operators and/or developers should contact the Aerodrome Operator at least one month in advance of any proposed crane operation to find out if there are any limitations or regulatory procedures that may apply to the proposed crane operation. In a minority of circumstances it may be necessary to approach the Civil Aviation Authority (CAA). In these cases it may be necessary for the applicant to develop and co-ordinate a suitable safety case for the proposed operation.

To obtain permission from the Aerodrome Operator to operate a crane within 6 kms of the aerodrome, the following information will be required to be provided by the crane operator at the earliest opportunity, and in any case not later than 3 working days before the proposed operation is due to commence. These details should be provided to the AOU who may be contacted on 0113 391 3231.

35.3.1 Details to be submitted

- The precise location of the crane operation provided as an eight figure Ordnance Survey grid reference together with the elevation of the ground in metres “Above Ordnance Datum” (AOD) at that location. Please note that on some Ordnance Survey maps AOD is displayed as “Above Mean Sea Level” (AMSL).
- The maximum elevation of the crane “Above Ground Level” (AGL) in metres.
- The type of crane or construction equipment to be used e.g. Tower, Mobile.
- The radius in metres of the jib or boom of a fixed crane.
- The area of operation of a mobile crane.
- The dates and times of the operation.
- The applicants name, address and contact details (including telephone, fax number and email address where available).
- Contact details for the crane whilst operating (e.g. mobile telephone number for the crane driver or ‘on site’ supervisor).

Once these details have been considered by the Airport Company it will be determined whether the crane operation can proceed and whether any restrictions need to be applied. Restrictions may include items such as:

- The fitting of red obstacle lights.
- Restrictions on operating times.
- Restrictions on operations dependent upon the runway that is in use at Leeds Bradford Airport.
- Restrictions on crane operating height.
- Restrictions during poor weather e.g. fog or low cloud.

It should be noted that it may be necessary to lower the crane immediately in the event of an Aircraft emergency or similar.

36 SECTION 36 - Works in Progress (WIP) During LVP Conditions

36.1 General

In the past, procedures stated that during LVP conditions, Work In Progress (WIP) may only continue when the Aerodrome Controller can provide visual separation between the work area and active aircraft on the manoeuvring area, unless the area of work is contained within secure fencing.

Many maintenance procedures are time critical in nature resulting in the above procedures been impractical to maintain during LVP conditions.

The following procedures ensure that under clearly defined conditions, Work In Progress may continue where visual separation cannot be maintained by the Aerodrome Controller.

36.2 Procedures

Work In Progress shall continue on the airfield without the requirement for the Aerodrome Controller to maintain visual separation in the following circumstances:

- The works takes place outside the instrument strips & Navaid critical / sensitive areas at all times (the works party shall only proceed to the area, crossing runways or taxiways using the one at a time, or visual separation criteria).
- The details of the work, including location shall be promulgated to Air Traffic Control by an Operational Works Instruction (OWI), or email to ensure that no confusion exists over the location of the work.
- A member of the AOU / RFFS / AGL / ATE / Groundsmen acts as an escort and remains with the works party at all times whilst on the manoeuvring area.
- The works shall only commence when staffing allows other duties (such as runway inspections, bird dispersal activity) to be untaken, allowing uninterrupted escorting of work personnel at all times.

Aerodrome Controllers are reminded that work may continue without restriction when visual separation can be applied by the Aerodrome Controller or gaps between movements allows unrestricted access.

AOP 13 – *Apron Management*



37 SECTION 37 Apron Management General / Safety Responsibilities

37.1 Aims and Objectives

Whilst the Airport Company will set the framework for safety management, it is fundamental to safe airside working that all airport users work together to ensure the presence of a 'safety culture' and the use of 'best practice' to reduce the risk of accidents. To this end each organisation operating at the airport has a responsibility to ensure that safety standards are maintained and wherever possible improved. Therefore the following requirements apply to all organisations operating at the airport:

- Managers must have terms of reference for safety responsibilities.
- All staff must be provided with safe systems of working and be adequately trained to undertake the tasks that they are required to undertake.
- Managers must ensure that risk assessments have been undertaken for all tasks/procedures and that all reasonable steps to reduce risks have been considered and implemented in accordance with the relevant legislation.

37.2 Procedures

It is the responsibility of all managers or section heads to ensure their staff are trained, briefed and understand the requirements of apron/airside safety procedures and that a system is established by each organisation to ensure these procedures are complied with. The procedures must cover such aspects as individual discipline in airside/apron areas, driver and vehicle operations, safety aspects of equipment use, equipment serviceability, equipment parking, control and guidance of passengers and safety aspects close to aircraft, engines and propellers.

37.3 Mobile Telephones

In line with widespread guidance on the potential effects of mobile telephones, LBA requires that no mobile telephones are used in airside areas as follows:

- With 10 metres of a refuelling aircraft or bowser that is refuelling an aircraft.
- Within 10 metres of a vehicle refuelling operation.
- By passengers who are outside of the Terminal Buildings or airbridges.

Handling agents and airlines are to ensure that passengers are instructed to turn off their mobile telephones when outside of the Terminal Building or airbridges.

All staff operating in airside areas and who are required to use a mobile telephone for operational duties may use mobile telephones in compliance with the requirements above. However, when doing so they must exercise care and caution in regard to their surroundings and immediate activities that may be taking place. Under no circumstances must a mobile phone be used whilst driving a vehicle unless it is equipped with hands free capability.

37.4 Airside Driving Permissions

Airside drivers are responsible to ensure they only operate in the areas their driving pass authorises them to do so. All airside drivers with 'manoeuvring area privileges' must obtain permission from ATC (and remain in contact with) before entering the manoeuvring area. Drivers included in the free ranging scheme are excluded from this requirement.

37.5 Smoking

Smoking (including Electronic Cigarettes) in airside areas is NOT PERMITTED.

37.6 Walkways and Crossing Points

Pedestrian walkways and road pedestrian crossing points are clearly marked and all users are to pay particular attention to passenger/pedestrian movements to/from aircraft in the vicinity of vehicle/equipment operations.

37.7 Passenger Escort

Handling agents that are responsible for the safe escort of passengers in airside areas are to ensure that there are sufficient staff available to adequately supervise passengers on the apron. This is to include the safe supervision of passengers walking to/from the terminal building and the issue of appropriate guidance to ensure passenger safety. Escorts are responsible to ensure that excessive build-up of traffic is not caused on the apron road by the crossing of passengers. CAP 642 provides further guidance for airside users. Whilst passengers always take priority over vehicles, passengers should be held short of any designated walkways to allow vehicles to proceed. Discretion should be applied however by all airside users to find a balance between flow of passengers and flow of vehicles.

37.8 Remote Stands

For passengers requiring access to remote stands (Stand 1 and stands 19-21C) passenger transfer coaches will be provided as required. Access to the above stands for those undertaking tasks related to aircraft parked on these stands should ideally be achieved with the use of a vehicle. However, those staff that are familiar with the layout and have the relevant personal protective equipment to meet the requirements below may access these areas as a pedestrian but must pay due attention to vehicular and aircraft movements in the area, ideally utilising the verge around the edge of the apron. Staff are not permitted to walk to this area during hours of darkness or in LVP's

37.9 High Visibility Clothing

The wearing of hi-visibility clothing has long been regarded as one of the key elements of managing safety in the airside environment. The airport company makes it a mandatory requirement for all staff, and contractors entering the area, including contractors to meet this requirement.

Hi Vis clothing must be worn properly fastened so that the wearer is afforded 'all round' protection, the front of Hi Vis waistcoats and jackets must not be left unfastened. The definition of Hi Vis clothing that has been adopted by LBA, as a minimum, is defined as *'a waistcoat that is day-glow yellow or orange in colour (blue for use on GPU) and incorporates retro-reflective material to a standard that meets BSEN 47: 2003'*. Orange apparel is only to be worn by members of AOU and approved operational members of staff. Such waistcoats are readily available from many stockists of safety supplies. Should an organisation wish to use an alternative colour scheme for their Hi Vis clothing, this must be approved by AOU/Head of Airfield Services prior to its introduction.

It should be noted that all persons working in any external airside areas, including walkways, engineering yards, storage areas etc. are required to wear Hi Vis at all times, including transit to/from their place of work when starting or ending their period of duty. Aircraft crews are not exempt from this requirement and are required to comply. Aircraft passengers are the responsibility of the appropriate aircraft crews and/or the handling agent who must ensure that they are escorted by persons correctly dressed in the appropriate Hi Vis clothing.

Staff are responsible for ensuring their PPE is maintained correctly and is in always in clean and good condition.

37.10 Lighting of Apron Activities during the Hours of Darkness

All non-standard activities on the apron, regardless of the time of day, require prior permission from AOU who can be contacted on 0113 391 3231 (internal extension 3231) / 07813 817314.

Upon receipt of permission, it is the responsibility of the party undertaking the activity to ensure that sufficient lighting is in place to provide safety.

37.10.1 Mobile Lighting Columns

Should the need arise; two mobile lighting columns will be available on the apron.

AOU will hold the key and control placement. All requests for access to additional task lighting should be made through AOU.

The maximum operating wind speed is 43 knots and these units should not be used in conditions when the wind speed is likely to exceed this limit.

37.10.2 Lighting Tower Operation Procedures

Instructions for the erection of the tower and switching the generator and lighting are clearly shown on the top of the housing.

It is extremely important to ensure that the two supporting legs are lowered and locked into position with the adjustable locking arms set to ensure that both feet are firmly on the ground (as per the instructions on the unit). The units will blow over very easily if this is not done.

The units must only be placed on level ground to ensure stability.

When positioning the units, it is far easier to move the units with the telescopic assembly (fully retracted when in storage) in the vertical position to balance the weight of the unit evenly.

If additional fuel is required, the units operate on red diesel.

37.11 Aircraft Arriving on Stand

Staff must not approach an aircraft that has maneuvered on to stand until:

- All engines have been shut down
- The anti-collision beacons and strobe lights have been turned off.
- The engineers or the handling agent has applied chocks to the nose or main wheels.
- Protective cones been deployed
- The only exception to this rule is noted - Connection of Ground Power Unit with Engines Running Procedures

37.12 Use of Cones

It is MANDATORY to use protective cones across all apron parking stands and the cones to be used should be of sufficient weight and design that they do not present a hazard to vehicles, aircraft or pedestrians if wind blown on the apron. Cones must comply with British Standard BS873 and the average weight of each cone is approximately 5Kg.

The high visibility reflective jacket attached to the cone should be adequately secured to the cone and replaced if it becomes significantly damaged.

The ground handler is responsible for the immediate return of the cones to the designated safe storage area after use. The airline handlers' procedures should determine the use of cones during strong wind warnings and apply them accordingly if the wind speed restrictions are lower than that stipulated by LBA.

37.12.1 Positioning of Cones

For guidance purposes, cones would normally be placed 1m outside the plan profile of each wing tip, the tail and each engine.

Airlines and ground handlers should develop their own procedures to achieve this and, if their risk assessment identifies, introduce additional cone positions around the aircraft.

37.12.2 Storage and Transportation

All cones are to be stored in such a way so as not to create a FOD hazard or impede passenger movement. Consideration must also be given to any weather warnings that could affect the storage/use of the cones (e.g. strong wind warnings).

Once the cones have been used and are no longer required after an aircraft turnround has been completed they are to be transported immediately to their designated storage area.

37.12.3 Weather Limits

Due to the risk of cones becoming a FOD hazard they are not to be used when winds exceed 30kts.

37.13 Passenger Inert Guidance Systems (PIGS)

Irrespective of whether the aircraft is being boarded by the rear steps, PIGS should always be deployed.

PIGS deployed on the ramp should be in serviceable condition. We would request that operators introduce a system to keep track of PIGS and their condition.

37.14 Storage of Aircraft Chocks

There should not be more than two chocks on any vehicle that enters any taxiway.

Vehicles moving on apron roads should only carry sufficient chocks so as to enable an aircraft to be fully chocked in accordance with the appropriate airlines handling instructions.

Spare chocks should be securely stored with a chock bin or other suitable storage container.

37.15 Airside Warning Lights – Fire Station Warning Lights

There are a number of reasons why the red warning lights on each side of the fire station may be illuminated. The specific purpose of the lights is to provide an alerting system for pedestrian or vehicular traffic of the potential for fire vehicles to be leaving the fire station for a number of scenarios. These could include:-

- Aircraft Emergency
- Whenever the airport siren is activated
- Emergency Exercise Response

There are two sets of warning lights in relation to the fire station. One set are located on the apron side corner of the baggage hall B airside facility. The second set is located on the western side of the fire station.

All lights are located on raised steelwork that can be seen by both pedestrian and vehicular traffic using the route across the front of the fire station.

A visible check of the hatched area is required to ensure it is safe to proceed if the lights are not illuminated. When the Red warning lights are flashing all vehicles **must stop** as fire vehicles are likely to be exiting the fire station or about to do so. Vehicles must not proceed across the hatched area unless permission has been obtained from one of the fire vehicles that it is safe to do so. Once the fire vehicles have responded to an incident, the hatched area will be designated as the Rendezvous Point (RVP) for external emergency services. Airside drivers must be aware of this and operate with extreme caution, paying particular attention to any directions given by the RVP co-ordinator

37.16 Low Visibility Procedures (LVP) Indication Lights

There are a number of LVP warning signs located on the aerodrome. On the main aircraft apron side of the airfield, these are located as follows:

- Western side of the fire station mounted on the facing wall as vehicles and staff proceed from the main security control.
- On the structure of the stand 7 passenger boarding bridge
- On the structure of the stand 8 passenger boarding bridge
- On the centre of the remote gate building abeam stand 15
- On the corner of the apron road as you approach stand 19
- On the Southside of the airfield, a sign is located adjacent to the Multiflight security entrance.

AOU are responsible for illuminating and extinguishing LVP beacons as appropriate (with the exception of the beacon on the West Side of the Fire station which is illuminated by Security)

At the initiation of LVP conditions, ATC will complete a check-list of the following parties.

- AOUS
- Fire Operations
- Fuellers
- Southside Security Gatehouse
- Security Gate House
- Multiflight
- Jet2
- AGL
- ATE
- Swissport
- Groundsman

Similarly, on cessation of LVP procedures, those above will be advised in order that the signs can be extinguished.

37.17 Connection of Ground Power Unit with Engines Running

37.17.1 General

There have always been situations where airside workers need to be in the vicinity of aircraft with engines running (e.g. connection of GPU when the APU is unserviceable or during pushback). However there has been a general understanding that no-one should approach an aircraft until engines are spooled down and the anti-collision lights have been switched off, unless specifically trained and authorized to do so.

This procedure is required to be used when there is an operational requirement to connect the Ground Power Unit (GPU) whilst the engines are running.

The basic rule of not approaching an aircraft with engines running and anti-collision lights on cannot be applied in nonstandard situations such as an unserviceable APU on an arriving aircraft. The following procedures will be carried out by fully trained and competent employees.

All workers in the vicinity must have a comprehensive understanding that there is a nonstandard operation underway, and who has overall responsibility of this procedure when carried out.

All signals should be given in line with the requirements of CAP 637 Visual Aids Handbook.

It is strongly recommended, to maximise visibility, that the GPU Supervisor is wearing a long sleeved yellow hi-vis jacket beneath the blue tabard.

37.17.2 Procedures

Once the flight crew give the “brakes on” signal, see diagram (A) the GPU SUPERVISOR (identified by a blue Hi-VIS tabard printed with APU on the front and back, see diagram (B)) will check the blades of the engines to establish which engine is still running and subsequently, the GPU SUPERVISOR will approach the aircraft by the safe route on the opposite side. The safe route is to approach the aircraft from the front and walk down relevant side no further than the GPU connection point. Under NO circumstances should an individual walk down the live side of the aircraft as engine will be running. See diagram (C) and place two chocks (one to front and one to rear) of the nose wheel of the aircraft.

No-one else is to approach the aircraft at this time. All other staff to watch the aircraft for movement and to watch out for anyone else approaching the aircraft.

Once the aircraft is chocked, the GPU SUPERVISOR can then attach the GPU lead to the aircraft using the safe route.

Once the power is connected, The GPU SUPERVISOR will return to the head of stand and give the signal to flight crew that the power is attached, see diagram (D) The GPU supervisor will then remove the blue tabard.

If the power does not work when connected, give the “power not available” signal. Diagram (E). The flight crew will then shut down the running engine and anti-collision lights.

Once the anti-collision lights have been turned off, the engines have spooled down and the aircraft protection cones have been deployed, it is safe for everyone else to approach the aircraft.

If the aircraft is required to depart with the APU problem unresolved, the aircraft will be allowed to start its engines on stand with the assistance of an air start and be pushed back and towed to the breakaway point, before the tug releases and the aircraft moves off under its own power.

Equally, if an aircraft develops a problem/failure with its APU on stand, then the same parameters will apply

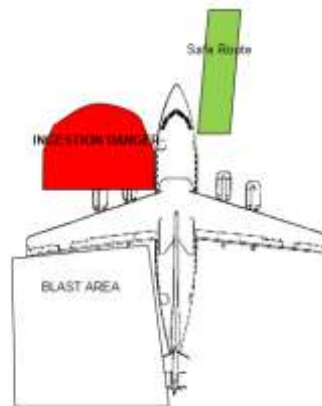
37.17.3 Diagram (A) "Brakes On" signal



37.17.4 Diagram (B) GPU Supervisor Tabard



37.17.5 Diagram (C) Example Safe Route



37.17.6 Diagram (D) "Power connected" signal



37.17.7 Diagram (E) "Power not Available" signal



Followed by

37.18 Towing/Taxiing of Aircraft

Whilst an aircraft is under tow, the tug driver is responsible for the safety of the aircraft just as the aircraft commander is when it is taxiing. It should be remembered that, irrespective of any instructions issued by ATC, the tug driver is responsible at all times for ensuring that the aircraft does not collide with vehicles, aircraft, building or any other obstructions.

When towing an aircraft, it is particularly important to be aware of the extent of the extremities, such as wingtips, of the aircraft and their proximity to obstructions. In the event that a tug driver is unsure whether there is sufficient space for an aircraft under tow to be moved safely, he or she should safely bring the aircraft to a stop and request assistance. If the aircraft stops on the manoeuvring area, ATC should be advised accordingly.

38 SECTION 38 – Parking

38.1 Stand Dimensions

The table below shows each stand dimension, maximum aircraft size allowed plus if the stand has an Inter-stand Clearway.

Stand	Stand Length (M) (m)	Stand Width (M)	Interstand Clearway (m)	Maximum Aircraft
1L	20	2x 19.0 Or 1x 34.0	n/a	J41
1	36.6		n/a	B733W
1R	20		n/a	J41
3	38	21	n/a	SF340
5	36	28.9	n/a	F100/B733
6	34	28.9	n/a	B733W
7	42	36	7.0	A320
8	63	40	7.0	B752W (B763W*)
9	52.0	41.9	7.15	B752W
10	52.0	36.6	7.15	A321/B738
11	52.0	41.9	7.15	B752W
12	52	36.6	7.15	A321/B738
13	52	36.6	7.15	A321/B738
14	56.0	41.9	7.15	B752W
14A				CODE E **
15L	52	M.A.R.S 1x 36.0 & 3 x 32.0 or 3 x 42.0	n/a	A321/B738
15R	52		n/a	B752
16L	52.0		n/a	B733W
16R	52.0		n/a	B752W
17	52.0		n/a	B733W
18L	52.0		n/a	B752W
18R	52.0		n/a	B733W
19	48	42	n/a	B752W
20A	40	36	n/a	B738W/A320
20B	48	42	n/a	B752W
21A	48	42	n/a	B752W
21B	40	36	n/a	B738W/A320
21C	48	42	n/a	B752W

**Restrictions on size of CODE E A/C due equipment bays etc. Consultation with AOU required before use.

38.2 M.A.R.S (Multi Aircraft Ramp System)

Stands 15L-18R have been designed to give greater flexibility for increased parking capacity of larger aircraft through installation of a Multiple Aircraft Ramp System (M.A.R.S) across these stands.

The following tables show the various aircraft parking options available across stands 15-18 with the aircraft type currently operating from LBA.

38.2.1 Option 1

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15L	36.0	52.0	B738/A321
16L	29.7	52.0	B733W
17	29.7	52.0	B733W
18R	29.7	52.0	B733W

38.2.2 Option 2

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15 R	41.50	52.0	B752
16R	47.0	52.0	B752/A320/B738
17	0	0	UNAVAILABLE
18L	47.0	52.0	B752/A320/B738

38.2.3 Option 3

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15L	36.0	52.0	B738W/A321
16R	47.0	52.0	B752/A320/B738
17	0	0	UNAVAILABLE
18R	29.7	52.0	B733

38.2.4 Option 4

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15R	41.5	52.0	UNAVAILABLE
16L	29.7	52.0	B733
17	0	0	UNAVAILABLE
18L	47.0	52.0	B752/A321/B738

38.2.5 Option 5

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15R	41.5	52.0	B752
16L	0	0	UNAVAILABLE
17	0	0	UNAVAILABLE
18L	47.0	52.0	B752/A321/B738

PLEASE NOTE THAT AIRCRAFT CANNOT PARK ON STAND 15R AND STAND 16L SIMULTANEOUSLY.

38.3 Standard Nose-In Parking

It is LBA policy that all aircraft parking on the main apron will be parked nose-in except when:

- Strong current or forecast winds that may require “into-wind” parking
- No suitable tow/push bar is available
- The aircraft exceeds the stand dimensions

All aircraft parking on the main apron shall receive guidance, either from a Marshaller or from a Visual Docking Guidance System (VDGS).

Parking stand allocation is at the discretion of the AOU. Any applications for changes to stand allocation must be made to AOU by telephoning 0113 391 3231 or internal extension 3231.

Stand dimensions vary. Full details of the current stand dimensions and typical aircraft types that may utilise the stand can be obtained from AOU.

Larger aircraft may be parked where suitable safety measures are employed to the satisfaction of the AOU. These may include measures such as closing the inter-stand clearway, use of wing tip markers etc. However, the minimum wing tip clearances for aircraft utilising a marshaller or approved stand entry guidance of 4.5 metres should never be compromised.

38.4 Into Wind Parking

Whilst nose-in parking is the standard policy at LBA, it is understood that occasions may exist when this cannot be achieved. Primarily these will be when:

- Strong existing or forecast winds could result in structural damage to aircraft
- It is not possible to push the aircraft back due to tow bar failure or incompatibility.
- Aircraft size precludes standard parking.
- Engineering maintenance work requires the operation of aircraft weather radar on stand.

In such circumstances, the AOU will advise Air Traffic Control (ATC) that non-standard parking is to be employed, the stand to be used and the orientation required (i.e. facing east / west / south / north).

During non-standard marshalling manoeuvres, the marshaller must use a ‘wingman’ to assist and ensure adequate obstacle clearance is achieved.

Any requests for nose out parking must be made to the AOU.

On receiving such request, AOU must consider the effects that non-standard parking will have on adjacent stands. Points to consider include:

- Jet blast on adjacent stands and apron road during the arrival or departure phases of the turnround.
- The possibility of rendering adjacent stands unusable due to wing, nose or tail over-hang.
- The aircraft size in relation to the stand dimensions.

- Safety measures to protect both personnel and aircraft during the arrival and departure phases of the turnround.

38.5 Aircraft that Exceed Stand Dimensions

In such circumstances, the AOU will plan carefully whether to park nose-in or non-standard ensuring:

- The proposed parking location does not infringe any part of the taxiway system delineated by a double white line.
- No aircraft surfaces (especially the tail) infringe the runway transitional surface
- Sufficient distance exists between wing tips, tail, nose etc. and aircraft on adjacent stands.

In the event that any parts of the aircraft extend beyond the marked limits of a stand, these extremities must be protected immediately after parking by marker boards (lit at night) to prevent the danger of collision. Where appropriate inter-stand clearways should be closed or restricted using appropriate marker boards to prevent equipment coming into contact with an aircraft. The additional use of aircraft protection cones in vulnerable areas should be used to supplement the marker boards

38.6 Parking B767W on Stand 8

The inter-stand clearways between stands 7-8 and 8-9 must be barriered off by the means of bad ground markers at the apron road end for the arrival and the departure of the B767W.

The use of the interstand clearway between stand 7-8 is to be kept to a minimum. This is due to the reduced clearances available whilst the B767W is parked on Stand 8. Also, the B767W takes its fuel on via the port side wing so the refueller will need to be parked there until fuelling is complete.

Stand 9 is not to be used for aircraft parking during the turnaround of the B767W. Stand 9 is to be held solely for the use of vehicles involved in servicing the aircraft.

Stand 7 can still be used for aircraft turnarounds up to aircraft size B733.

38.7 Aircraft Parking on Stand 1

Stand 1 is designated a bussing stand for all arrivals and departures.

In exceptional circumstances, aircraft may be marshalled nose out onto stand 1. This caveat should only be utilised in the event a visiting aircraft that requires a tow bar not available at LBA. AOU is responsible for the safe coordination of this activity and are responsible to ensure that the aircraft dimensions and operating parameters are compatible with the stand. Two marshallers will be required to be in attendance for this procedures.

38.8 Stand 1 Parking Options

38.8.1 Option 1

Stand	Aircraft Type	Aircraft Position
1 Left	UNAVAILABLE	UNAVAILABLE
1	Up to B733W	Nose In
1 Right	UNAVAILABLE	UNAVAILABLE

38.8.2 Option 2

Stand	Aircraft Type	Aircraft Position
1 Left	J41	Nose In
1	UNAVAILABLE	UNAVAILABLE
1 Right	J41	Nose In

38.9 Marshaller Responsibilities

On Stands 7 the VDGS is the primary source of parking guidance.

It is the **responsibility of the marshaller** to ensure that:

- They are in position at the head of the stand in good time to meet the arriving aircraft.
- A thorough visual check of the stand is made to ensure it is free of FOD and equipment prior to the aircraft arrival.
- Safe wing tip and tail clearance is maintained throughout the parking manoeuvre.
- Standard marshalling signals are employed at all times.
- In the event that the stand becomes unsafe at any time (e.g. pedestrian, vehicle or FOD incursion) during marshalling, the aircraft is stopped and held until the stand has been made safe.
- If operating on stand 7/8, to ensure that the air bridge is fully retracted.

39 SECTION 39 – Pushbacks

39.1 Procedure

When a controller issues a pushback clearance the ground crew will ensure that the pushing aircraft does not push further than the adjacent stand. The option of a longer push to exit via a specific holding point still exists at the controller's discretion.

A minimum of 4 stands must separate 2 aircraft that are pushing back to face in opposite directions and are converging on taxiway Alpha.

The option of a longer push back / non-standard pushback to exit via a specific holding point still remains at the controller's discretion.

All push-back drivers must be fully trained, competent and possess documentary evidence of the training for the push back operation. Such evidence must be available for inspection by the Airport Company (AOU), or any other regulatory body, at any reasonable time.

Tail guards should be employed to safeguard the rearward movement of the aircraft and also prevent collisions with other aircraft, vehicles and personnel.

A competent "wing walker", in constant two-way communication with the aircraft commander, must be used during push-back procedures. Use of a headset and microphone provides the best communication and is the normal requirement for push backs at LBA. Where such equipment is exceptionally not available, the

use of recognised hand signals is acceptable where appropriate training has been provided and documented.

Two-way communication between the aircraft and ATC must be established prior to moving the aircraft. Where an aircraft is being moved with the use of an Aircraft Engineer the engineer must comply with the provisions for the Taxying of Aircraft by Engineers. Where a tug is being used and an engineer does not possess the relevant R/T qualifications, the push back tug operator must ensure that full and proper R/T communication is used with ATC at all times. This should follow standard radio procedures as below:

- Aircraft (or tug) call ATC and await acknowledgement.
- Aircraft (or tug) state call sign, position and request.
- ATC will give permission (or otherwise) for the requested manoeuvre.
- Aircraft (or tug) will read back the ATC clearance and await confirmation.
- On receipt of confirmation, details of the clearance will be passed to the wing walker and tug driver who will then follow approved company push-back procedures.

Standard push back instructions will include the direction for aircraft to face once the push back has been completed. Exceptionally, for smaller aircraft, up to and including the DH8D, the requirement may be to “Push Straight Back”. The subsequent turn on the taxiway will then be made under the aircraft’s own power after the tug has been disconnected and returned to the stand that has been vacated. ‘Wingtip walkers / headset man’ should remain abeam the apron road to ensure clearance whilst the aircraft taxis left of right onto the taxiway.

Push back drivers should aim to complete push back with the aircraft nose wheel straight and on the centre line of the taxiway (except on straight pushbacks), thereby minimising the amount of engine power required to move the aircraft.

1.1 Cross Bleed Starts

In the event that an aircraft asks for a cross bleed start on taxiway Alpha this may only be approved where there is the equivalent of a 4 stand sterile area behind the aircraft.

No cross bleed start from stands 14,15,16,17 or 18 facing west will be permitted unless the aircraft is pulled to abeam stand 14 prior to commencing the cross bleed.

39.1.1 Cross Bleed Starts from Stands 19-21C

Cross bleed starts (from pushback into N4) from stands 19-21C are not permitted.

Aircraft up to 737 sizes off stands 19-21C must be pushed to face east into the neck of November 3. Aircraft larger than 737’s will be instructed to push back along November until the tug is past N2 or D2.

1.2 Aircraft “Push and Park”

The optimum use of prime stands close to the Terminal Building, especially those equipped with airbridges, is essential for efficiency. Where an aircraft is fully ready for departure but awaiting an ATC slot allocation it may be preferable to relocate the aircraft away from the prime stands. The aim is for an aircraft to be pushed back to a remote location where it is available for engine start, and to facilitate a more expeditious departure should the slot time improve at short notice.

AOU has the responsibility for apron stand planning and will initiate any ‘Push and Park’ requirement.

Where a decision to initiate “push and park” procedures, the AOU and the duty Air Traffic Controller will identify the most suitable location for the aircraft to be re-located to. Consideration must be given to other aircraft parked on the apron and any current departure delays in place for other customer airlines. The location should allow the aircraft to taxi away from its position without a further push back being required.

The AOU will advise the airline handling agent of the requirements and the expected time that the current stand must be vacated.

Prior to repositioning, the aircraft will be required to make radio contact with ATC who will approve the manoeuvre 'Push and Park'. The Air Traffic Controller will already be aware of the position and orientation of the aircraft prior to any move being made.

Once the aircraft has reached its new location, the tow bar will be removed and the aircraft commander will be responsible for safe engine start up, either with or without ground crew assistance, according to individual airline policy. Should subsequent access to the aircraft be required, this must be done with a vehicle and driver in two way communication with Air Traffic Control.

40 SECTION 40 - Gate and Stand Planning Protocol

40.1 Gates

On schedule Departures take priority over on schedule Arrivals.

On schedule Departures have priority over off schedule Departures.

On schedule Arrivals have priority over off schedule Departures for turnaround purposes. An on schedule Arrival is defined as a flight that is on blocks between STA -10 mins and STA + 10mins.

In order to reduce the risk of FOD, Gate staff should remind all passengers to dispose of items in the bins provided, prior to exiting the Gate.

40.2 Stands

Aircraft arriving off schedule +/-20 mins cannot be guaranteed the allocated stand.

Aircraft arriving in advance of STA (-20) when their allocated stand is still occupied shall hold for their allocated stand. After STA -20 a new stand will be allocated. Early aircraft that are parked remote become off schedule departing aircraft for the purposes of this instruction.

AOU may request some airlines to tow aircraft after first departures from remote areas to contact stands.

Stand occupancy of greater than 2 hours will render an aircraft liable to be towed to a remote stand.

Aircraft arriving after their STA shall not be allocated to their planned stand if allocating them their planned stand causes consequential stand allocation problems for other aircraft.

Aircraft will from time to time be required to tow to contact stands to accommodate a balance between walking & coaching operations.

Aircraft without a tow bar will not be prioritised for contact stands

41 SECTION 41 - Aircraft Ground Engine Runs

41.1 General

The use of the term 'Engine Run' is a generic term that applies to any combination of the following

- Aircraft Engine Ground Run - Any engine start up not followed immediately by the departure of the aircraft concerned.

- Auxiliary Power Unit Run - Any APU start up that is not immediately connected with the pre-flight sequence for an aircraft departure.
- Ground Power Unit Run - Any GPU start up that is not immediately concerned with the pre-flight sequence for an aircraft departure. This includes GPU maintenance runs of greater than 1 hour.

41.2 Procedures

Due to strict noise restrictions aircraft engine runs will not be permitted within the following periods:

- Nightly between 2300-0700 hours local
- Armistice Day between 1055-1105

Note: In exceptional circumstances when the aircraft concerned is required to operate a scheduled LBA service and significant operational disruption would occur permission may be given at the discretion of the Head of Airfield Services to carry out a ground engine run up to 1 hour prior to the scheduled departure time. Positioning flights are excluded from this proviso.

Approval for any engine run at greater than idle power, must be obtained IN ADVANCE from LBA AOU (Airside Operations Unit) who can be contacted by telephone on 0113 391 3231.

Approved ground engine running operations will be monitored by ATC and LBA AOU. If the parameters contained within the approval detail are not adhered to, the operation will be terminated by LBA AOU through ATC.

41.3 Safety

All personnel concerned with engine ground running must be fully conversant with this instruction, which must be complied with at all times. Aircraft shall be positioned such that noise and engine efflux are directed away from the noise sensitive areas or areas prone to ignition or any loose surfaces that may produce debris, this would usually be dictated by prevailing wind conditions.

A trained member of airline, operating company or handling agent staff is to be positioned on the stand in verbal contact with the flight deck. They will communicate by the R/T or inter-phone with the flight deck to ensure that the engine(s) are shut down if persons or vehicles move into the danger area in front of, behind or in the vicinity of a live engine. For this purpose and if the R/T or inter-phone link is unserviceable, hand signals by day and light signals by night may be used.

All persons involved in engine runs are to utilize appropriate safety clothing and equipment. The minimum standard of high visibility clothing on the aircraft manoeuvring area is a waistcoat incorporating retro-reflective materials that meets the standard BSEN 471:2003.

The person managing the ground run must ensure that the aircraft is adequately restrained so that it cannot move under any circumstances. Details will be dictated by the ground operations manual of the relevant operator.

41.4 Aircraft Positioning Criteria

41.4.1 Apron Areas

On stands 6 -18R, engine ground runs will be limited to check-starts that do not exceed ground idle power. For checks requiring the use of higher power settings, a move to a suitable location will be required. Location details will be contained within the approval and coordinated by AOU. The aircraft must be positioned correctly at the location stipulated in such a way that the engine running will not present any danger to persons, aircraft, vehicles, buildings or installations.

On stands 3 and 5, idle aircraft engine ground runs will Not be permitted due to the volume of traffic and proximity of the apron road at the rear of the stands unless approved and supervised by AOU.

On stand 1 idle aircraft engine ground runs will not be permitted if the aircraft is facing nose out on stand.

If applicable, where runs are approved on stands 19 -21C or the area between N3 and N4, the rear of stand road must be closed to safeguard vehicular traffic, before any approved engine run is permitted.

Any ground equipment must be placed at a safe distance from the aircraft.

Ground running must not take place when passengers are being embarked / disembarked on any adjacent stands.

41.4.2 Manoeuvring Area

Engine running in other parts of the manoeuvring area will be carefully coordinated between AOU and Air Traffic Control before any approval is given. This may include parts of the taxiway system that may need to be closed to facilitate the engine(s) run accordingly.

42 SECTION 42 – Power Units & Line Maintenance

42.1 Auxiliary Power Units (APU)

Wherever possible, airlines / operators and handlers are to ensure that APU's are used for no more than 5 minutes after arrival on stand and no more than 30 minutes before planned departure. Also, wherever possible, APU's are not to be used whilst passengers are embarking / disembarking.

GPU's are to be used in preference to APU's wherever possible.

42.2 Ground Power Units (GPU)

Operators are to ensure that when GPU's are in use, that the connection cable between the GPU and the aircraft is routed, so that as far as is reasonably practicably, it does not present a trip hazard to persons. Additional identification measure such as hi-visibility tape should be considered as part of a further hazard reduction technique.

42.3 Line Maintenance

When aircraft maintenance is undertaken on an apron stand, which may inhibit the ability to remove that aircraft from the stand, the flexibility for allocating that particular stand to an arriving / departing aircraft is lost. To avoid this, no such maintenance is to be started without the prior permission from the AOU who can be contacted on 0113 391 3231. (Internal Ext 3231)

43 SECTION 43 – Airbridge / Visual Docking Guidance System (VDGS)

43.1 VDGS Operations

Stand 7 is equipped with Visual Docking Guidance Systems (VDGS) that operate in conjunction with the Airbridge located on the stand in question.

43.1.1 Responsibility

It is the responsibility of the airbridge operator to activate the VDGS at least 10 minutes prior to the arrival time of the inbound aircraft.

After the VDGS has been activated and has successfully performed a self-test function, the VDGS display then indicates to the aircraft commander that it is safe for the aircraft to enter the stand by displaying the arriving aircraft type.

43.1.2 Marshalling with VDGS INOP

If the VDGS is unserviceable, it is the responsibility of the handling agent to arrange for the provision of a marshalling service for aircraft arrival on that stand.

Should the VDGS be unserviceable and the airbridge operational, nose wheel stop positions are marked on the stand centreline. The marshaller will bring the nose wheel to rest on the relevant mark and the airbridge can then be connected in manual mode to the aircraft side.

43.1.3 Stop Short Procedures

The need to “stop short” will be indicated to the flight crew by one of the following methods:

- Pressing the Emergency Stop button on the airbridge operator panel before the closing rate indicator is fully extinguished during aircraft docking.
- Marshalling signals

It is the responsibility of the airbridge operator to immediately inform AOU of any airbridge un-serviceability or condition that may affect the safe parking of aircraft on the stand.

43.1.4 Emergency Stop Procedure

The emergency stop facility provided within the airbridge 7 cabin and on the airbridge Apron Drive Unit are to facilitate an instant warning system. This is to be used to provide pilots with an immediate safety instruction to STOP if there is either an immediate safety threat to their aircraft or to personnel on the apron. In the event of activation the aircraft should be stopped immediately.

The red emergency stop buttons are TO BE USED IN AN EMERGENCY ONLY. When one or more of the buttons is depressed all power to the airbridge will be isolated and all airbridge movements will stop.

Should an emergency stop button be depressed during airbridge operation that results in an aircraft being stopped during the docking procedure, it is the airbridge operator's responsibility to immediately contact AOU and state the reason why an emergency stop has been activated.

43.1.5 Vehicle Driving

When any information is displayed on VDGS, the system can be assumed to be activated and ready to provide guidance to an aircraft.

When activated, the VDGS unit utilises a laser beam to scan the stand centreline for the presence of the arriving aircraft. Therefore, it is essential that no vehicle, equipment or personnel enter or cross the stand when the VDGS is activated. A vehicle moving towards the VDGS may be recognised as an aircraft which will then require VDGS to be fully reset by the airbridge operator.

The apron surface on which an airbridge will manoeuvre is hatched with white markings.

Regardless of whether or not the airbridge is being used, the hatched area beneath the airbridge must be kept free of equipment and vehicles at all times.

1.3 Airbridge Operation

The issue of an airbridge operator's access code is subject to successful completion of the airbridge training course followed by a practical airbridge driving test, where candidates must be able to demonstrate a high standard of proficiency in the operation of the airbridge.

43.1.6 Operating Conditions

An airbridge must not be operated at wind speeds above 58 knots.

A thorough check must be made to ensure that the airbridge is free from debris both prior to aircraft arrival and after aircraft departure.

The airbridge must be correctly parked before an aircraft enters the stand. This is defined as:

- During airbridge operation in “Automatic mode”, when the airbridge has moved to the pre-set position following selection of the aircraft type.
- During airbridge operations in “Manual mode” when the airbridge drive wheels are within the parking box contained within the hatched area on the apron surface.

Under no circumstances should the airbridge operator attempt to preposition an airbridge using the Manual Operation Mode prior to aircraft arrival on stand. Only when the aircraft has stopped, the wheel chocks are in place, the anti-collision beacon have been extinguished and the engines have been run down, may an airbridge be moved from its pre-set position in Automatic mode or parked position in Manual mode to dock to the aircraft.

After an airbridge has docked to the aircraft in Manual or Automatic mode, it is the airbridge operator's responsibility to ensure that:

- The cabin door is in the up position.
- The auto-leveller device is extended and is in contact with the aircraft fuselage.
- The canopy is extended and is in contact with the aircraft fuselage.
- The safety shoe is placed under the aircraft door for outward opening aircraft doors.
- The safety chain is removed and is correctly stored on the hook provided.

The adjustable cabin floor must be positioned in order that there is only a minimal gap between the cabin floor and aircraft fuselage. In the event of the loading or unloading of heavy cargo, the airbridge must be withdrawn from the aircraft. The instantaneous trim change of the aircraft is beyond the capability of the airbridge auto-leveller system.

43.1.7 Removal of Airbridge

Prior to the removal of the airbridge from an aircraft it is the airbridge operator's responsibility to ensure that:

- The aircraft door is closed or the bridge has been retracted to allow the air stairs to be lifted and the aircraft door to be closed.
- The safety chain has been placed across the front of the cabin.
- The safety shoe is correctly stowed.

- The auto-leveller has been retracted.
- Only the airbridge operator is to remain within the cabin area of the airbridge during any movements of the bridge when the bridge door is open. All other staff should remain behind the relevant barrier that should be in place across the tunnel area of the bridge ahead of the bridge door being closed.

It is the airbridge operator's responsibility to ensure that the airbridge has been retracted to its standard parking position.

Prior to leaving the airbridge, it is the airbridge operator's responsibility to ensure that the airbridge is fully retracted into the parking box marked on the apron and the cabin door is in the "down" position. The airbridge operator is also to ensure that they have logged off at the airbridge control panel.

43.1.8 Side Stairs

The side stairs attached to the airbridge are for the use of the airbridge operator and other ground staff. The stairs are not to be used while the airbridge is moving, or by persons carrying large or bulky items.

43.1.9 Fault Reporting

In the event of any fault/malfunction/failure occurring on an airbridge, a message will be displayed on the airbridge control panel requiring "Service Personnel" to be contacted. It is the airbridge operator's responsibility to immediately contact the AOU by the quickest possible method (usually by radio or telephone).

44 SECTION 44 – Aircraft Operations higher than CODE 4E

When assessing the possibility of operation of aircraft whose code letter is higher than the code letter of the aerodrome reference code, LBA must, amongst other issues, assess the impact of the characteristics of the aircraft on the aerodrome, its facilities, equipment and its operation, and vice versa.

Aircraft characteristics to be assessed include, but are not limited to:

- (a) fuselage length;
- (b) fuselage width;
- (c) fuselage height;
- (d) tail height;
- (e) wingspan;
- (f) wing tip vertical clearance;
- (g) cockpit view;
- (h) distance from the pilot's eye position to the nose landing gear and to the main landing gear;
- (i) outer main gear wheel span;
- (j) wheelbase;
- (k) main gear steering system;
- (l) landing gear geometry;
- (m) engine data;
- (n) flight performance; and
- (o) technology evolution.

Further guidance on this issue is contained in ICAO Circular 305-AN/177 and ICAO Circular 301-AN/174. In any case, the elements that have to be taken into account for the safety assessment are, without prejudice to other assessments that may have to be conducted, in accordance with other applicable requirements contained in Part ADR.OPS.

Such assessments should include, but are not limited to:

- (a) the aircraft mass, tire pressure and ACN values — with regard to overload operations; and
- (b) maximum passenger and fuel carrying capacity — with regard to level of RFFS protection to be provided and the aerodrome emergency planning.

Only competent persons should conduct this assessment and in accordance with GM1 ADR.OR.B.040 (a) ; (b) (h), the operations of aircraft exceeding Code 4 E parameters must be approved by the CAA.

45 SECTION 45 - Non Standard Parking

45.1 General

When making the decision to park on elements of the taxiway system AOU should take account of a number of key operational matters. The list below is not exhaustive but an indication of the complexity of parking on parts of the manoeuvring area:

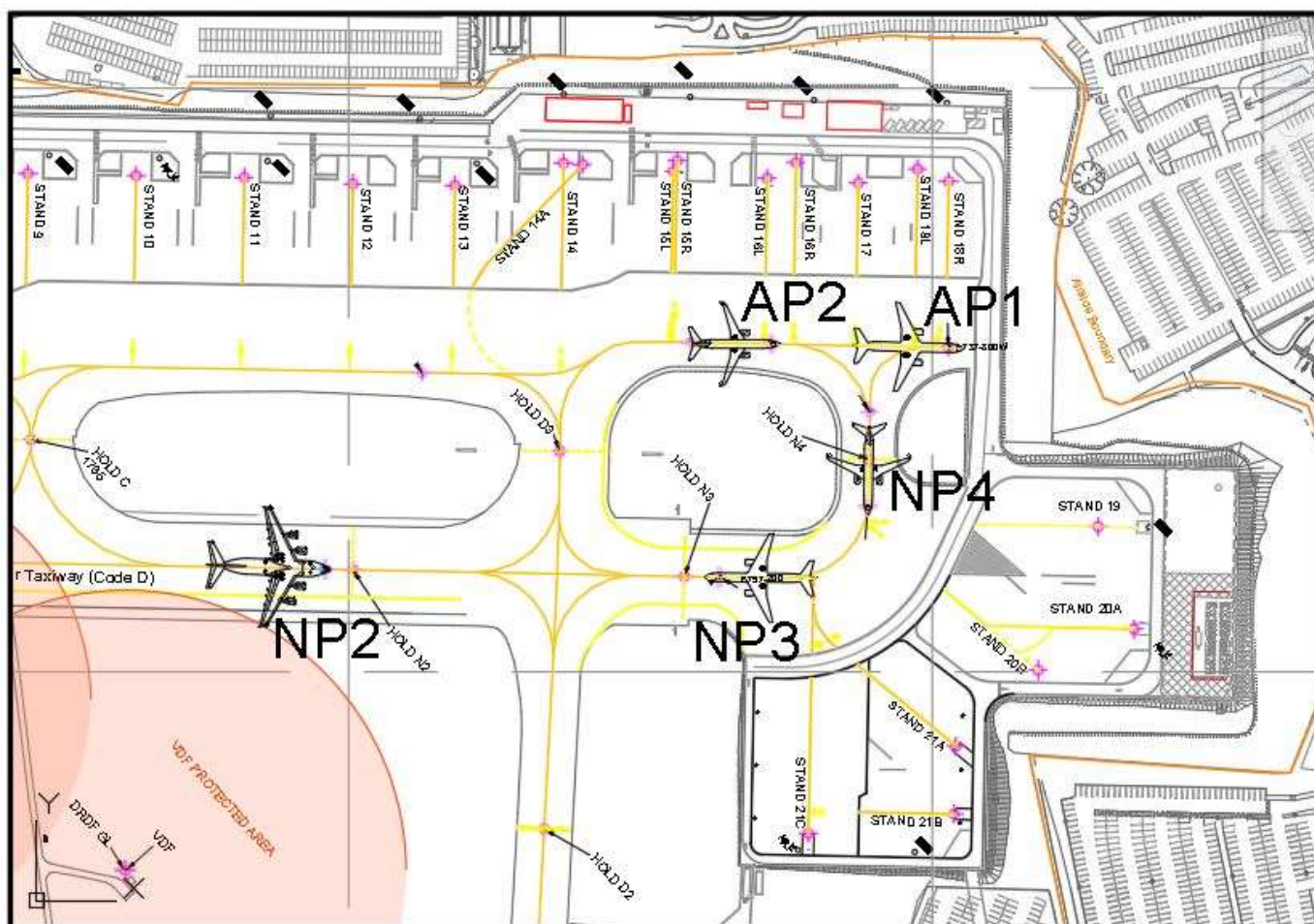
- The minimum taxiway separation distances from the parked aircraft and the related taxiway junction to protect the use of the secondary taxiway for the most critical aircraft type.
- Any infringements that the aircraft will have on the protected surfaces of the Aerodrome (particularly the Instrument Strip and critical areas)
- The access and egress route for the aircraft to be parked on the taxiway ensuring that the orientation of the aircraft on the taxiway does not require it to taxi via a taxiway of insufficient width to exit
- The area required around the aircraft to facilitate ground servicing equipment such as mobile steps, baggage vehicles, passenger transfer coaches and fuel bowsers
- The lighting available for the side of the aircraft that is not directly lit from the apron high masts
- Access to/from the aircraft for emergency vehicles.

All non standard parked aircraft must have BGM markers placed at the front and rear of the aircraft in during night time & LVPs.

All vehicle movements to and from the parked aircraft are to be essential movements only.

Any vehicle proceeding to or from the parked aircraft may only do so if equipped with a radio competent individual on board and the driver has a valid Airside Driving Permit for the Manoeuvring Area.

45.2 Location Map



45.3 NP4

45.3.1 Max Aircraft Size

B737-300W

45.3.2 Vehicle Movements & Servicing

Apron Ops will commence once the aircraft is in position at NP4 and AOU confirm with ATC via channel 1 that the aircraft is correctly parked. If the aircraft has been towed to NP1, when the tug calls complete apron ops will commence.

Excluding vehicles operating according to the free ranging procedures, all vehicles are confined to roadways / stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is R/T licensed and a clearance is received from ATC. When the area of Taxiway November is secured for apron use (Bad Ground Markers are in place at N3 and N4) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. AOU will advise ATC when areas of Taxiway November are closed or subsequently reopened.

Aircraft engineering and basic servicing for crew operations is approved at NP4 however fuelling and passenger operations is not approved..

45.3.3 Miscellaneous

Aircraft are permitted to arrive under their own power whilst under the guidance of an aircraft marshaller.

45.4 NP3

45.4.1 Max Aircraft Size

B753-200W

45.4.2 Vehicle Movements & Servicing

Apron Ops will commence once the aircraft is in position at NP3 and AOU confirm with ATC via channel 1 that the aircraft is correctly parked. If the aircraft has been towed to NP2, when the tug calls complete apron ops will commence.

Excluding vehicles operating according to the free ranging procedures, all vehicles are confined to roadways / stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is R/T licensed and a clearance is received from ATC. When the area of Taxiway November is secured for apron use (Bad Ground Markers are in place at N3 and N4) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. AOU will advise ATC when areas of Taxiway November are closed or subsequently reopened.

Full servicing and passenger operations are approved at NP3

45.4.3 Miscellaneous

Aircraft are permitted to arrive under their own power whilst under the guidance of an aircraft marshaller.

45.5 NP2

45.5.1 Max Aircraft Size

CODE E

45.5.2 Vehicle Movements & Servicing

NP2 is not available in LVP's, if a Fog warning has been issued or if fog is on the TAF except in exceptional circumstances such as to accommodate an emergency etc.

Aircraft engineering and basic servicing for crew operations is approved at NP4 however passenger operations is not approved.

Aircraft cannot be fuelled, de-iced or serviced in this position during night time hours.

Only full manoeuvring area pass holders may proceed to any aircraft parked at NP3. All requests to proceed to NP3 / return to the Apron must be made with ATC via Channel 1 unless operating under a free ranging licence. Should there be a requirement for any non-manoeuvring area drivers to operate/serve the respective aircraft parked at NP3 (such as fuellers); they must be escorted to and from the area by suitably qualified drivers. Once inside the confines of the BGM's, Non-manoeuvring area drivers may position to service the aircraft as necessary.

45.5.3 Miscellaneous

Aircraft are permitted to arrive under their own power at NP2

The parking position of NP2 allows aircraft up to and including Code E to park on taxiway November whilst continuing normal taxiway operations on the surrounding taxiways of Delta/Charlie and Alpha

45.6 AP1

45.6.1 Max Aircraft Size

B757-200W

45.6.2 Vehicle Movements & Servicing

Excluding vehicles operating according to LBA free ranging procedures, all vehicles are confined to roadways/stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is qualified to drive on the manoeuvring area (therefore proficient on RT) and a clearance is received from ATC.

When the taxiway is secured for apron use (when BGM are in place) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. This requirement is only applicable to Aircraft parked in AP1/AP2.

45.6.3 Miscellaneous

Aircraft are permitted to arrive under their own power at AP1

45.7 AP2

45.7.1 Max Aircraft Size

B737-800

45.7.2 Vehicle Movements & Servicing

Excluding vehicles operating according to LBA free ranging procedures, all vehicles are confined to roadways/stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is qualified to drive on the manoeuvring area (therefore proficient on RT) and a clearance is received from ATC.

When the taxiway is secured for apron use (when BGM are in place) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. This requirement is only applicable to Aircraft parked in AP1/AP2.

45.7.3 Miscellaneous

In the event another aircraft is parked at AP2 the BGM from AP1 shall be repositioned to the rear of the aircraft at AP2 after the aircraft engines are shut down and anti-collision lights have been extinguished.

Aircraft are permitted to arrive under their own power at AP2

46 SECTION 46 – Tug Release Points

46.1 General

To improve efficiency and reduce complexity, Leeds Bradford Airport (LBA) utilises Tug Re-lease Points (TRPs) for the use from stands 12 – 21C.

46.2 ATC Clearances

The use of TRPs is at the discretion of ATC. All standard pushback instructions from stand 14 – 21C will be given using the TRPs.

Standard ATC clearances for the use of these stands will be given in the following format.

“CALL SIGN, PUSH BACK & START UP APROVED, TUG RELEASE POINT ‘X’”

NOTE: No direction of push will be advised as all TRPs are uni directional. Ground crew will need to be familiar with the location and direction of the TRPs.

Subject operational reasons ATC may at any time use a ‘nonstandard clearance’ to continue the safe, orderly and expeditious flow of traffic.

46.3 Positioning the Aircraft

When a clearance has been obtained from ATC, the pushback crew are to push the aircraft back and position it as required (pulling it forward as necessary) onto the relevant TRP. This is always achieved by pushing the aircraft back and establishing it at 90 degrees to the stand on the taxiway centreline via the shortest route. The exception to this can be found where ground crews are permitted to use the neck of N4 to enable them to pull forward onto the cleared TRP, for example Stand 18R pushes for TRP 7 - the ground crew will push north initially towards N4 before pulling forwards.

Any pushbacks where more than one potential route is available, ATC will specify the route to be taken in the pushback clearance.

46.4 Push & Park

Push and parking of aircraft is available. This is to better improve stand usage during busy periods and where applicable to assist airlines in meeting their own operational requirements. All requests to push and park are at the explicit approval of ATC with consultation of the Airside Operations Unit (AOU). Should a crew wish to push and park, the crew should make the request as soon as possible to allow ATC and AOU to assess feasibility. Once approval has been given from ATC, the aircraft is to be positioned to the relevant TRP, disconnected and push back crew return to the Apron. Should the specific airline operating procedures require ground handling presence during start up, crews are permitted to remain with the aircraft either in contact with ATC or with ATC via constant communication with the flight deck.

46.5 Pushback crew returning to Apron

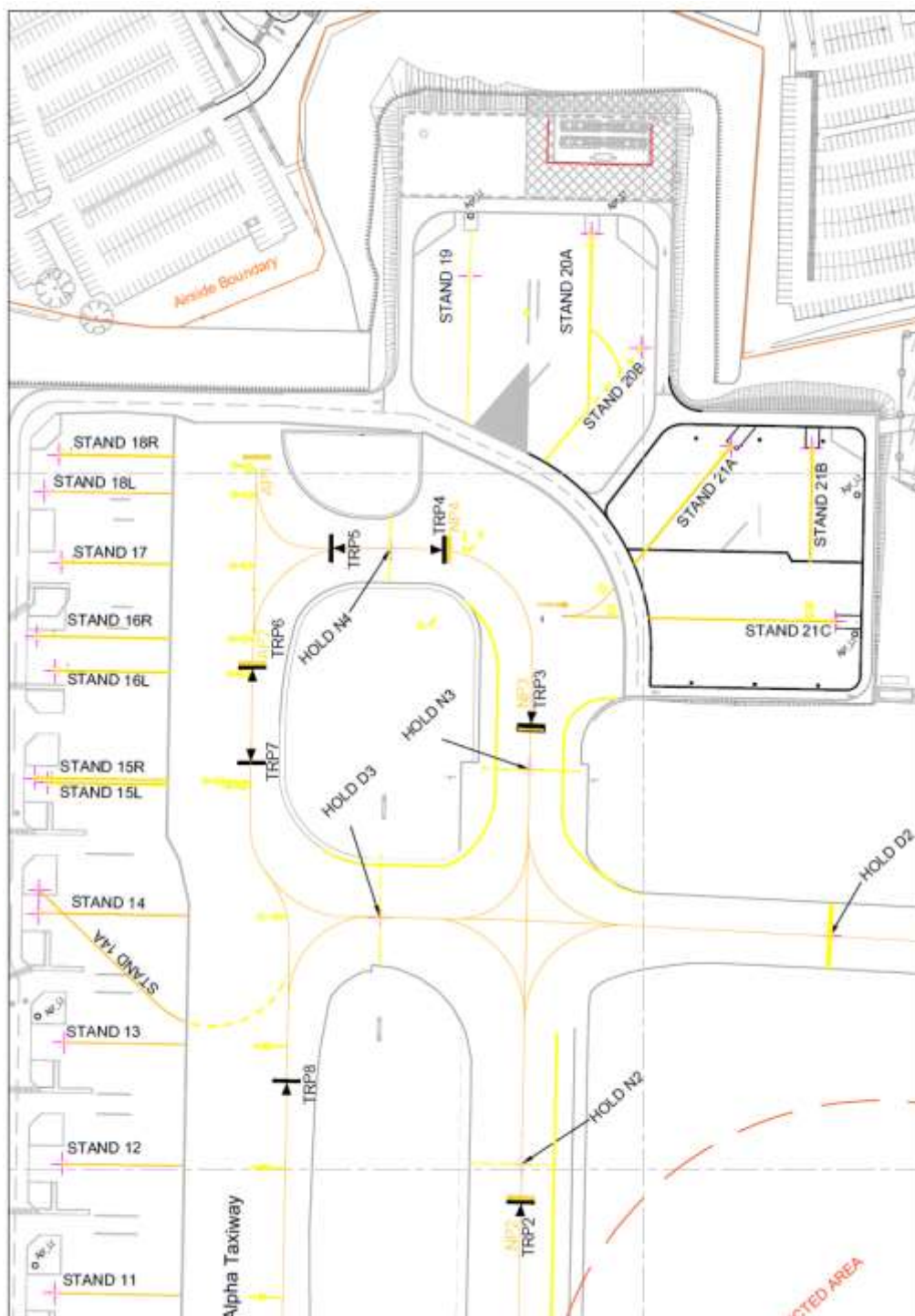
Once the aircraft is correctly positioned onto the relevant TRP, the pushback crew are to vacate the manoeuvring area by the shortest possible route.

NOTE requirement for crews to obtain permission from ATC for all pushbacks to TRP 2

46.6 Cross Bleed Starts at TRPs

ATC will adhere to the standard 4 stand clearance behind an aircraft wishing to conduct a cross bleed start. In accordance with this rule, cross bleed starts are not approved at TRP3, TRP4, TRP5, and TRP7. This is further highlighted by the pushback tables. Should an Aircraft need to Cross Bleed Start, It will be instructed by ATC to position in a suitable location as to adhere to this rule.

46.7 Airfield Map - TRPs & amended Non Standard Parking Positions



46.8 Standard Pushbacks Table

TRPs available from each stand with **no aircraft in the adjacent taxiways**.

All stands will naturally have their default TRPs - pushes to TRPs located away from the vicinity of the stand will only be requested if operationally necessary.

TUG RELEASE POINTS (TRPs)							
STAND	TRP 2	TRP 3	TRP 4	TRP 5	TRP 6	TRP 7	TRP 8
		NO CROSS BLEED START	NO CROSS BLEED START	NO CROSS BLEED START		NO CROSS BLEED START	
12-18R	✓	✓	✓	Code C or less	Code C or less	✓	✓
19	✓	Code C or less	Code C or less	Code C or less	Code C or less	✓	✓
20A-21C	✓	✓	✓	Code C or less	Code C or less	✓	✓

46.9 Multiple Pushbacks Table

TRPs available when other TRPs are active. The top row of white boxes represents the TRP that is blocked and the coloured squares represent the availability from the relevant stand.

LIVE AIRCRAFT							
STAND	TRP 2	TRP 3	TRP 4	TRP 5	TRP 6	TRP 7	TRP 8
		NO CROSS BLEED START	NO CROSS BLEED START	NO CROSS BLEED START		NO CROSS BLEED START	
12 - 13	✓	4 UNAVAILABLE	5 UNAVAILABLE	4 UNAVAILABLE	✓	✓	X
14	✓	4 UNAVAILABLE	5 UNAVAILABLE	4 UNAVAILABLE	7 UNAVAILABLE	6 UNAVAILABLE	2 / 7 ONLY
15L/R	✓	4 UNAVAILABLE	5 UNAVAILABLE	4 UNAVAILABLE	X	X	✓
16L/R	✓	4 UNAVAILABLE	5 & 7 UNAVAILABLE	6 & 7 UNAVAILABLE	X	X	✓
17 – 18R	✓	4 UNAVAILABLE	X	X	2 ONLY	X	✓
19 – 20B	✓	X	X	X	7 UNAVAILABLE	6 UNAVAILABLE	✓
21A – 21C	✓	X	3 & 5 UNAVAILABLE	X	7 UNAVAILABLE	6 UNAVAILABLE	✓

46.10 Parked Aircraft Pushbacks Table

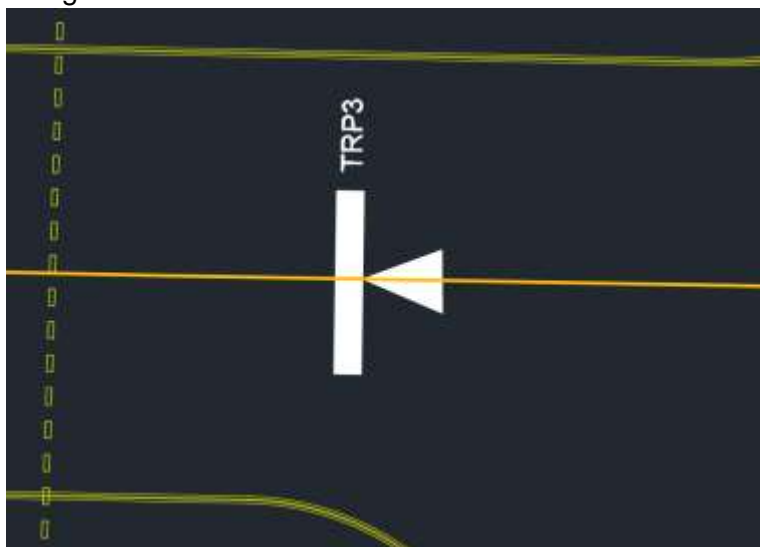
TRPs available from each stand when aircraft are parked in the taxiways.

PARKED AIRCRAFT					
STAND	AP1	AP2	NP2	NP3	NP4
14	2, 3, 8	2, 3, 8	✓	2, 7, 8	2, 7, 8
15L/R	2, 3, 8	X	✓	2, 7, 8	2, 7, 8
16L	2, 3, 8	X	✓	2, 7, 8	2, 7, 8
16R	(IF AP1 = 752 = N) (IF AP1 = 733 & 16R = 733 (or less) TRP 2, 3, 8) ***	X	✓	2, 7, 8	2, 7, 8
17	(IF AP1 = 733 & 17 = 733 (or less) TRP 2, 3, 8) *** All larger = N	X	✓	2, 7, 8	2, 8
18L/R	X	X	✓	2, 7, 8	2, 8
19 – 20B	2, 3, 8	2, 3, 8	✓	X	X
21A – 21C	2, 3, 8	2, 3, 8	✓	X	2, 7, 8

*** If AP1 = B738 & 16R = B738, PUSHBACK ONLY WITH AOU CONFORMATION IS APPROVED, TRP 2 / 3 / 8, WING TIP MARSHALLERS REQUIRED

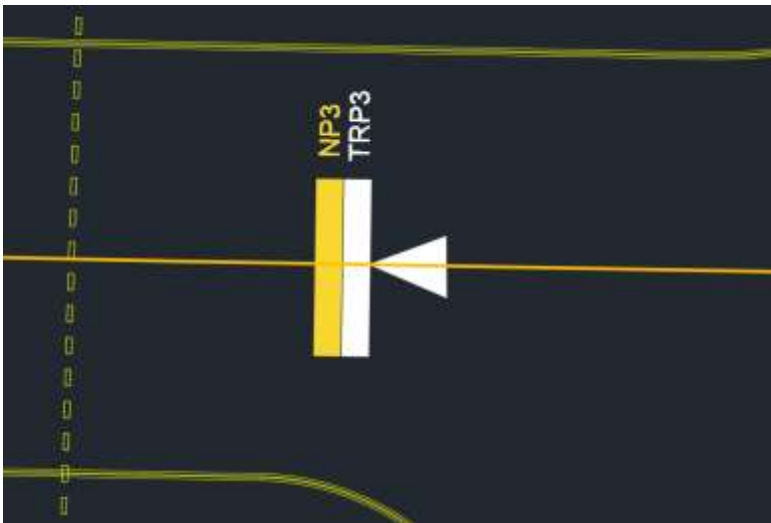
46.11 TRP markings

TRPs are marked on the taxiway surface in WHITE with a BLACK border and the TRP Number detailed alongside.



46.12 TRP & Non Standard Sarking position markings

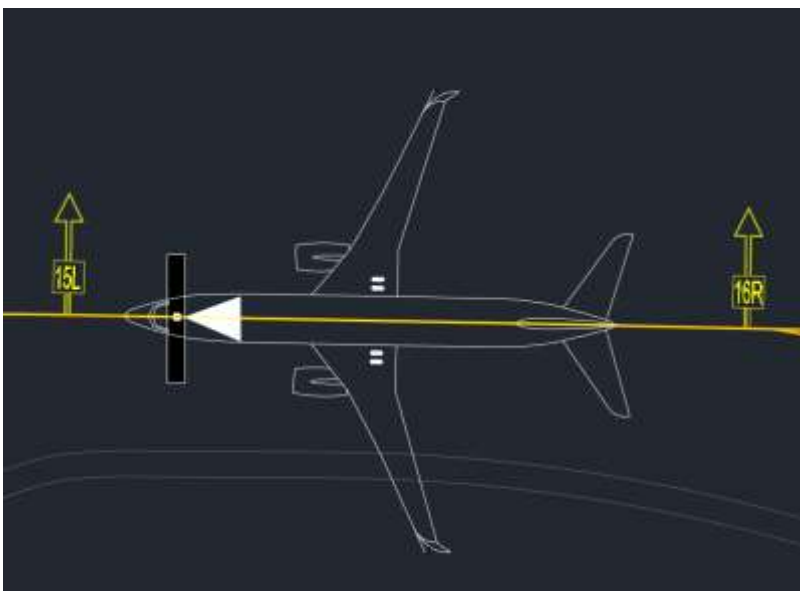
TRPs that are also aligned with a Non Standard Parking Position will contain an additional YELLOW rectangle to indicate it is also an aircraft parking position.



46.13 Aircraft positioning on TRPs (General)

All TRPs are uni-directional (Aircraft can only push onto them in one direction). This is indicated by the arrow head that points towards the 'T' Bar.

NOTE: The colours have been changed in this technical drawing to show contrast and existing apron markings have been removed for clarity.



46.14 Aircraft positioning on TRPs (Nose Gear)

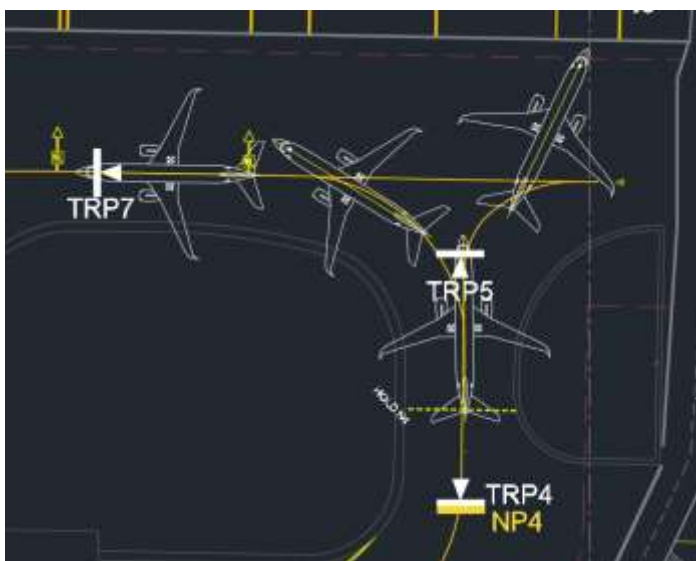
When an aircraft is instructed to pushback, the nose of the aircraft must be positioned so that the nose gear is positioned on the relevant TRP.

46.15 Pushback crew guidance table.

TRP	LOCATION	GUIDANCE
2	Near holding point N2 facing EAST	Pushback crews must contact ATC on Chanel 1 to obtain clearance before returning to stand.
3	Near holding point N3 facing WEST	If pushing tail towards Holding Point N4 – DO NOT push nose gear back past TRP4/NP4
4	SOUTH side of holding point N4 facing SOUTH	DO NOT push nose gear back past TRP4/NP4
5	NORTH side of holding point N4 facing NORTH	DO NOT push nose gear back past TRP5
6	Abeam Stand 16L facing EAST	-
7	Abeam Stand 15R facing WEST	If pushing tail towards Holding Point N4 – DO NOT push nose gear back past TRP5
8	Abeam Stand 13 facing EAST	-

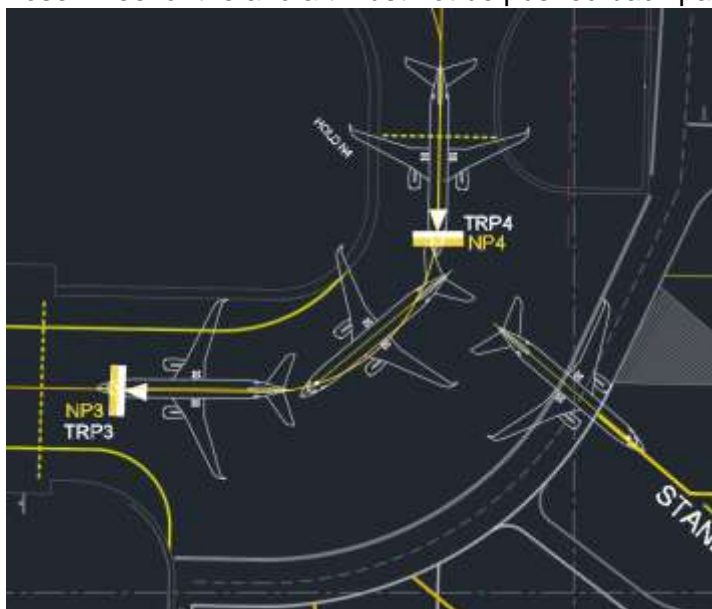
46.16 Push back using N4 - Main Apron

If ground crews are required to use the neck of N4 holding point, either to position on TRP 5 or 7, the nose wheel of the aircraft must not be pushed back past TRP 5.



46.17 Push back using N4 – East Apron

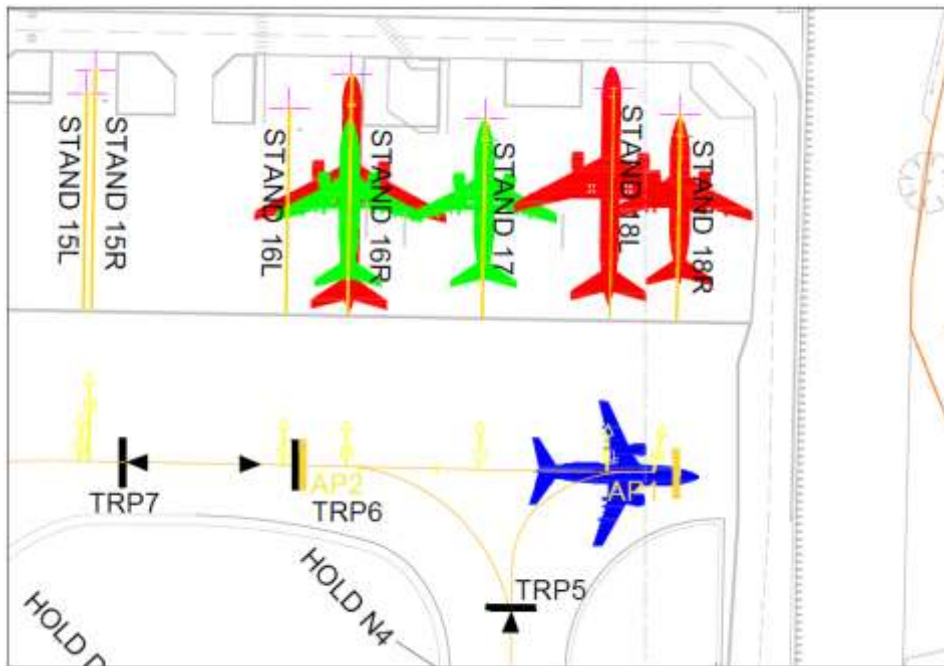
If ground crews are required to use the neck of N4 holding point, either to position on TRP 4 or 3, the nose wheel of the aircraft must not be pushed back past TRP 4.



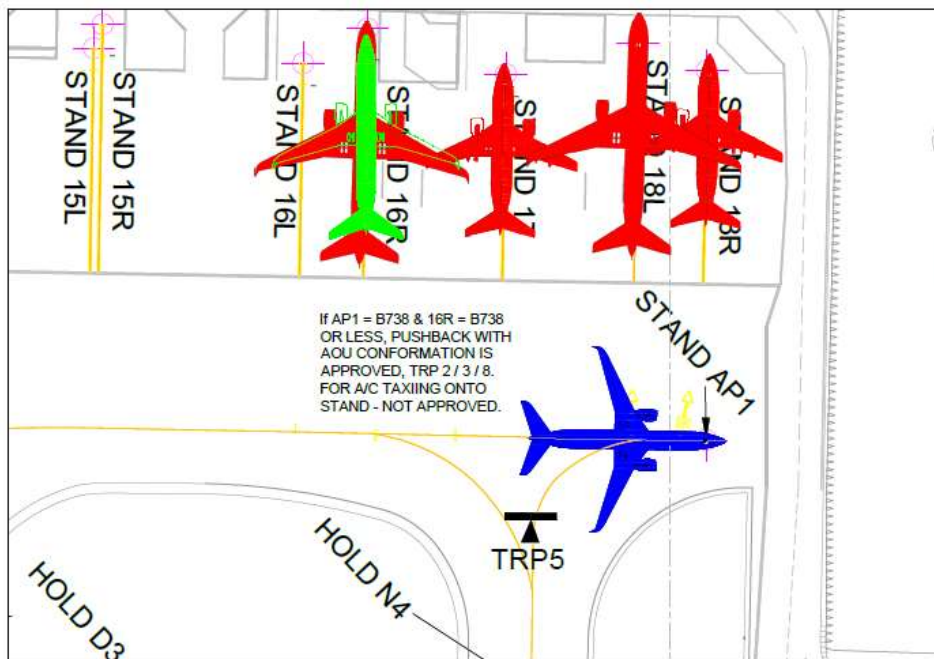
46.18 APPENDIX 31 – Parking Maps

(BLUE = Parked | RED = Blocked | GREEN = Available)

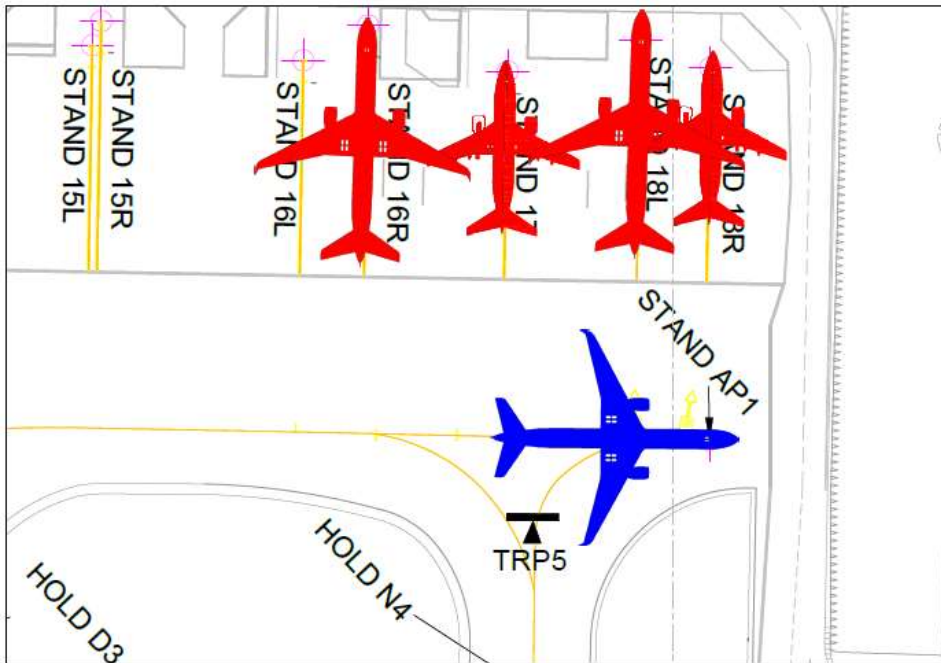
46.18.1 AP1 - B733



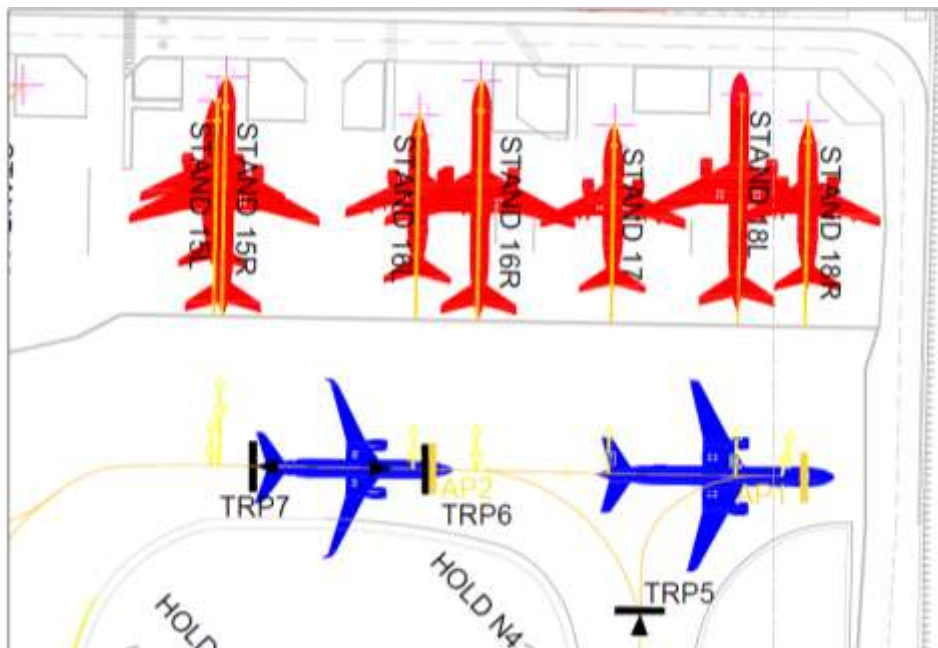
46.18.2 AP1 - 738



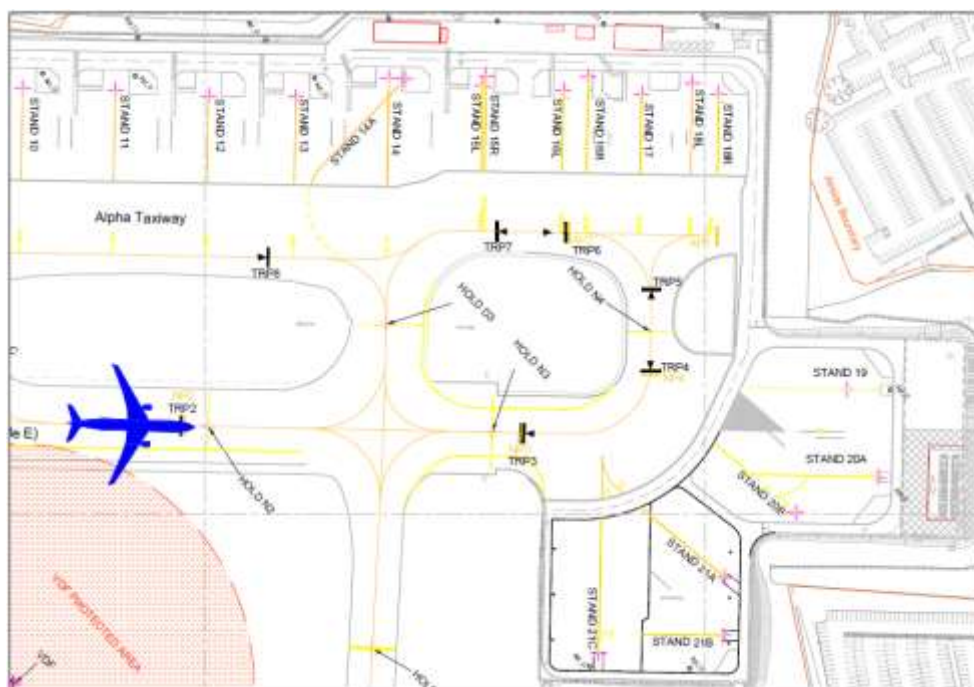
46.18.3 AP1 – B752



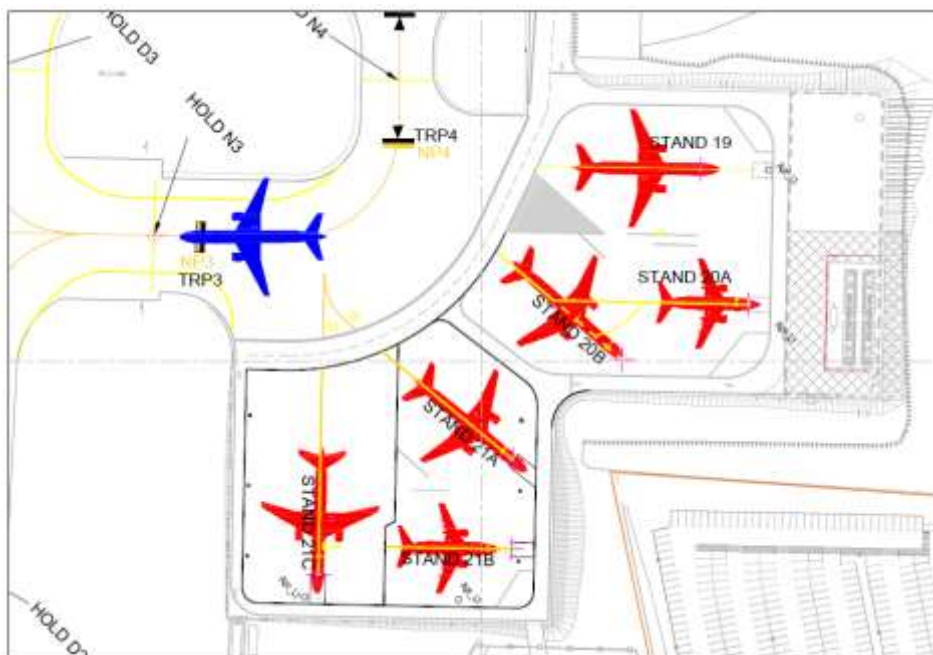
46.18.4 AP2 - B738



46.18.5 NP2



46.18.6 NP3



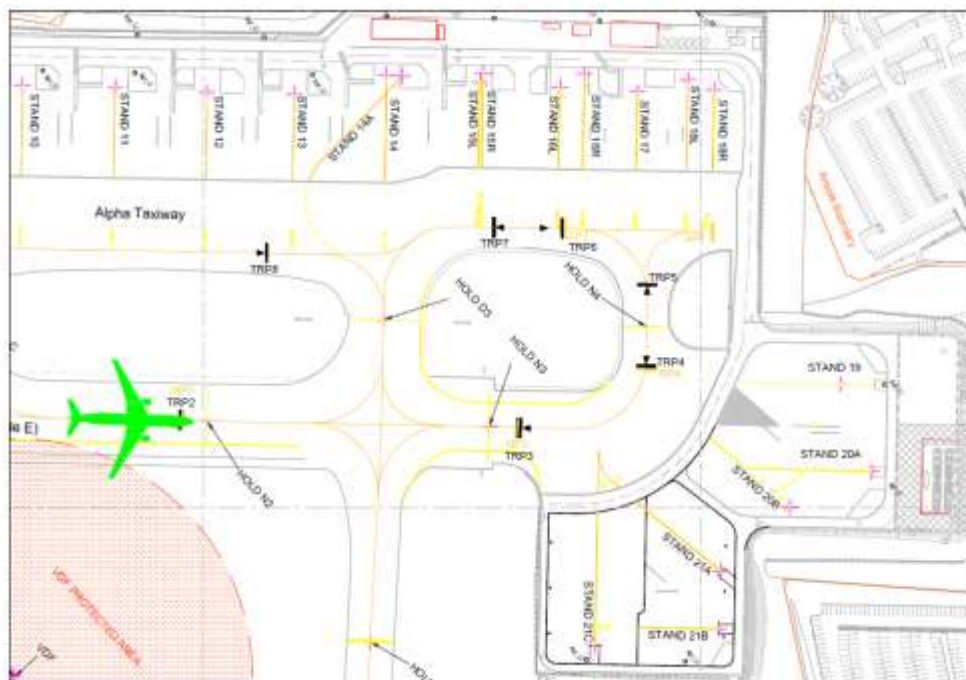
46.18.7 NP4



46.19 APPENDIX 32 – TRP Maps

GREEN = Active | RED = Blocked

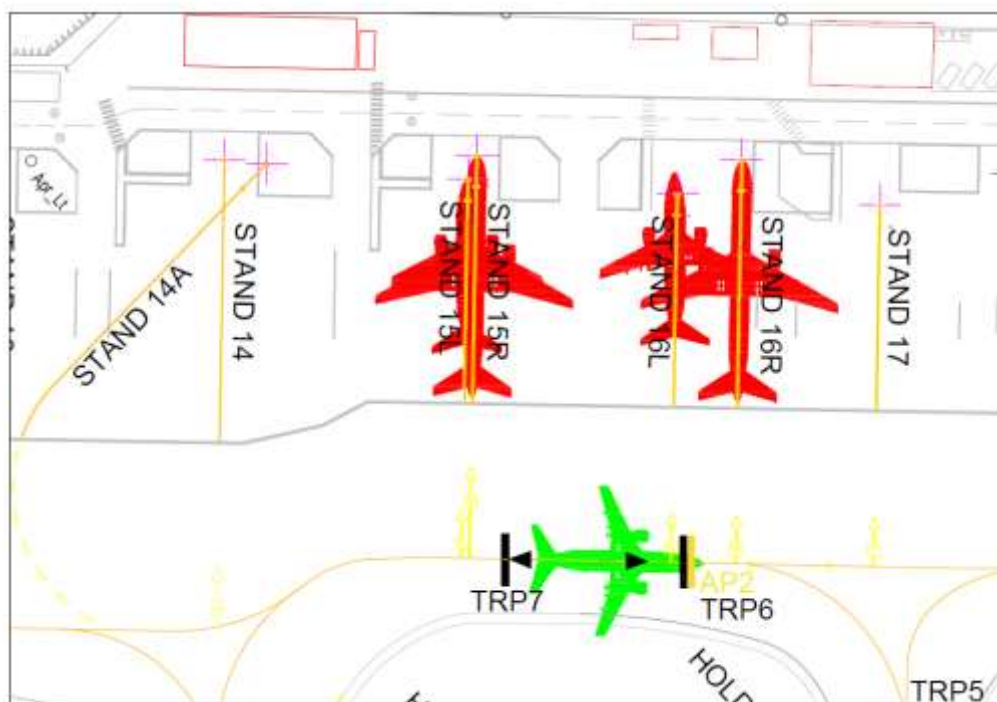
46.19.1 TRP 2



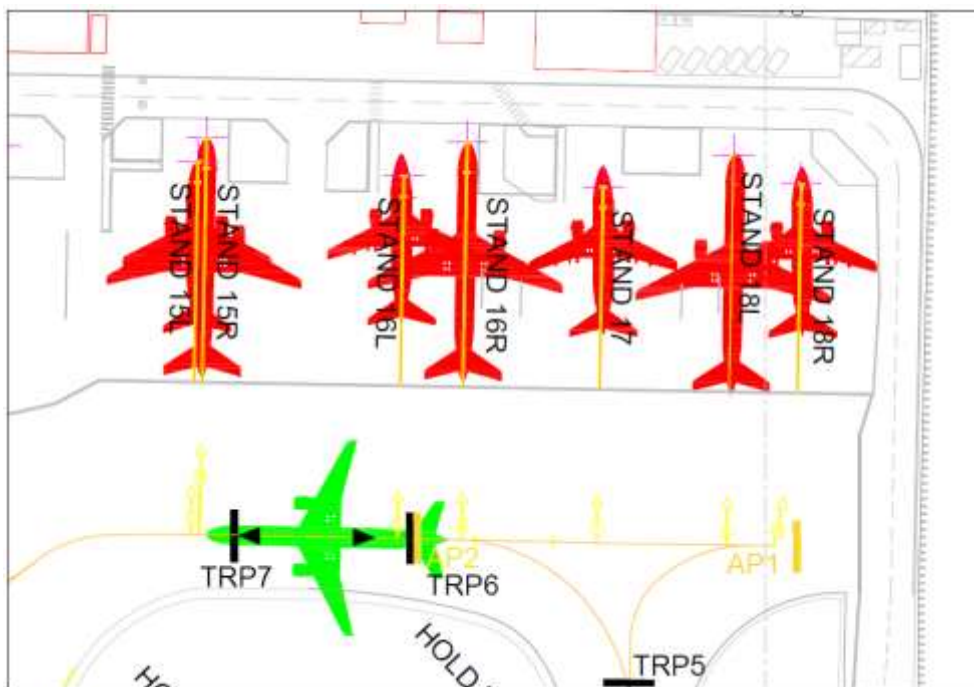
46.19.2 TRP 3



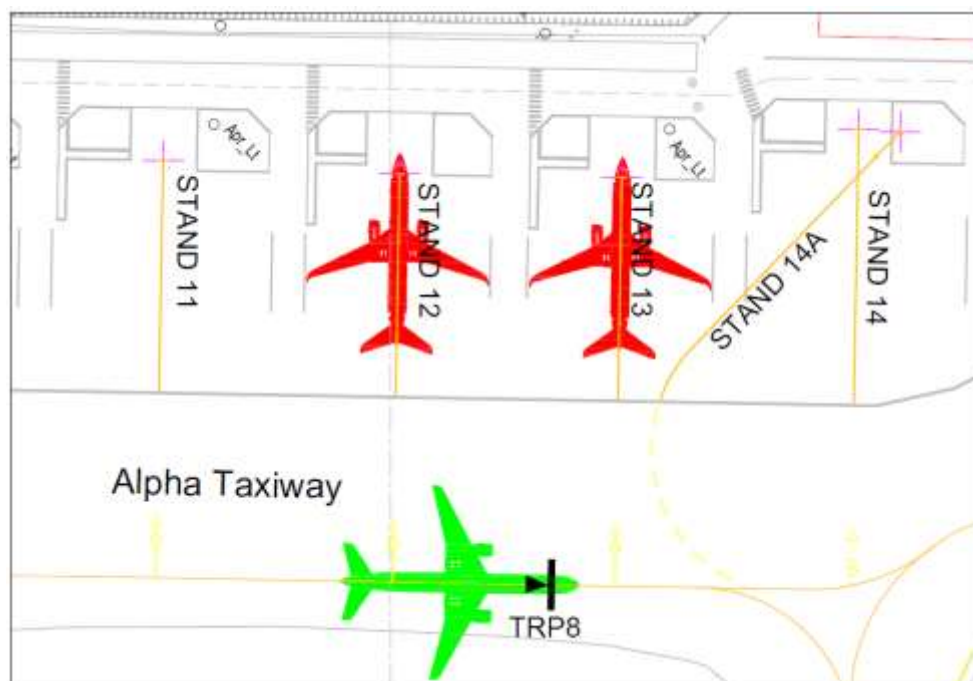
46.19.5 TRP 6



46.19.6 TRP 7



46.19.7 TRP 8



AOP 14 –

Foreign Object Debris (FOD)



47 SECTION 47 - Foreign Object Debris (FOD)

47.1 Aims and Objectives

It is the responsibility of the Airport Company to ensure the safety of aircraft, vehicles and persons using the airside area by ensuring it is not affected by the accumulation of Foreign Object Debris. A fundamental element of the safety effort is to ensure that all movement surfaces remain in a clean condition and free from obstructions.

47.2 General

Foreign objects are sometimes deposited on the maneuvering area and it is essential that all airport personnel understand the danger to flight safety that such objects represent. FOD may be ingested into aircraft engines, causing damage leading to engine failure, which is especially critical if it occurs in flight, particularly if it occurs during the take-off and landing phases. In addition, damage can be caused to tyres, undercarriages, airframes and control surfaces. All foreign objects are a threat to aircraft safety.

FOD is a general term which applies to all loose objects which are a danger to the safety and integrity of an aircraft and which, therefore, must not be left in any area so as to constitute a hazard. The list of FOD items most frequently found on the apron is long and principally includes:

- Catering rubbish
- Baggage labels and tags
- Oil cans
- Tools and equipment
- Aircraft parts e.g. nuts, bolts, cables, rivets, filler caps etc.
- Tow bar pins
- Tools e.g. spanners, screws drivers etc

The presence of FOD is due mainly to the carelessness of people and their lack of understanding of the consequences.

47.3 Preventative Measures

It is the direct responsibility of airlines, ground handling agents, refuellers, cleaners, caterers, engineers/contractors, other airside staff and all other users of the aerodrome to ensure that the aerodrome is maintained in a clean and safe condition, and that all FOD is removed as soon as it is found and placed in the appropriate FOD bins.

47.4 Use of FOD Bins

FOD bins are located around the apron and head of stand for general FOD items only, and are not to be used for catering or hazardous waste materials.

47.5 Inspection Procedures

The maneuvering area and apron is inspected by AOU as part of their daily inspection including:

- Following an aircraft incident/accident on the manoeuvring area.
- Routine FOD runs are undertaken by AOU personnel.
- All airside staff shall be responsible for being vigilant and on the lookout for FOD.
- Airport FOD bins shall be emptied on a weekly basis

Apron areas are inspected on a daily basis by AOU Staff and are frequently swept.

The Ground Handling Agent shall inspect the aircraft stand for any sign of FOD prior to any aircraft arriving on stand and immediately after an aircraft has departed.

Any significant items found e.g. aircraft components, shall be passed onto the Airside Operations Unit to try identify the component and its origin by the procedure below.

All airlines and engineering departments have submitted e-mail addresses of contacts who would be able to assist in the identification process of suspected aircraft related FOD. A list of these contacts can be found on the LBA Intranet system in the below location:

- Home
- Airside Operations Unit
- Health & Safety
- FOD

In the event of a piece of aircraft FOD being found please copy and paste column “F” in to the “To” cell on a new e-mail in Outlook, attach photos of the FOD and send to the full list.

The related SIR should be updated with any positive responses.

47.6 Sweeping of the Manouvering Area

The AOU are responsible for ensuring that all movement areas are regularly swept to remove any FOD or loose debris, which may affect the safe operation of aircraft movements.

Sweeping may be required following a routine movement area inspection and following remedial works on the movement area.

Sweeping is carried out by a member of the AOU team using the following equipment:

- Johnson Beam Sweeper
- Hand Brooms

All sweeping is recorded on the AOU daily log.

AOP 15 –

Airside Driving & Vehicle Permits



48 SECTION 48 - Airside Driving General

48.1 Aims and Objectives

ADR.OPS.B.025 Operation of vehicles states the aerodrome operator shall establish and implement procedures for the training, assessment and authorisation of all drivers operating on the movement area.

The applicable legislation is the Air Navigation Order 2016 (ANO) which provides for penalties up to 5 years imprisonment or a substantial fine or a combination of both.

Additionally, the Airport Byelaws (Airport Operational Procedures AOP's) contain specific rules governing behaviour airside. Infringement of the Byelaws can lead to airside driving privileges suspended or terminated dependent on the nature of the offence.

Detailed information for all requirements to drive airside at Leeds Bradford Airport are contained within the LBA Airside Driving Policy.

48.2 Requirements for Drivers - Airside

Employers are to ensure that:

- All drivers have successfully completed the LBA Airside Driver Training as detailed in the LBA Airside Driving Policy.
- All drivers carry and display an approved LBA Airside Driving Permit (ADP) and produce it on demand.
- Every airside driver is in possession of a full (i.e. not provisional) current driving license, valid in the UK entitling them to drive a motor vehicle, of at least Category B (i.e. motor cars or light vans with up to 9 seats and up to 3500 KGs), on a public road.

In the case of heavy or specialist vehicles, the driver hold:

- The relevant category of LGV or PCV license which would apply to that vehicle should it be driven on a public road.

Additionally, employers must ensure that personnel whose duties require them to drive on the Manoeuvring Area are fully trained and competent in the use of Radio Telephony (R/T) equipment and have been trained in manoeuvring area driving as detailed in the LBA Airside Driving Policy. Drivers must, at all times, carry with them identity documents and driving permits detailing the areas for which they are permitted to drive. Driving licences and certificates of competence are to be available for inspection within 48 hours when required by LBA.

All drivers are required to undertake an annual apron familiarisation assessment, in accordance with Annex 2A of the LBA Airside Driving Policy. An individual should be assessed by their Manager and the document signed and retained on site by the individual's employer. Contractors (including delivery drivers) should be assessed prior to their work commencing on their first visit and again after a period of 12 months absence.

48.3 Description of Airside Areas

48.3.1 Manoeuvring Area

Part of the aerodrome provided for take-off and landing of aircraft and for movement of the aircraft on the surface including taxiways. The area excludes the parking stands for aircraft. Drivers are required to hold a

pass valid for all areas and have completed the necessary driver training for all areas. They should also be R/T competent or have such a person in the vehicle to operate the radio.

48.3.2 Apron

Comprises of all aircraft parking stands, equipment and associated service roads. Drivers are required to hold an Apron and Service Roads driving pass.

NOTE: A continuous double white line delineates the boundary between the Apron Area and the Manoeuvring Area.

48.4 Apron Markings

- Surface markings for the use of aircraft are painted YELLOW.
- Surface markings for the use of vehicles/equipment are painted WHITE.

NOTE: No ground markings or signs are permitted airside unless authorised by LBA.

48.5 Control

48.5.1 Manoeuvring Area.

LBA ATC.

48.5.2 Apron Areas.

LBA AOU.

48.6 Taxiway / Taxi-Lane Access

No person or vehicle is permitted to enter the manouvering area unless specific authority has been given by ATC or the driver is Free-ranged qualified.

48.7 Traffic Rules

48.7.1 Speed limit

Apron roads - 10mph (5mph in LVP's),
Taxiway - 30mph
Runway - 50mph (Unless told to expedite or operationally required)

48.7.2 General

Overtaking is not permitted on the apron road unless operationally critical or in an emergency.

No vehicle is to be left unattended with its engine running on any airside area.

Vehicles must only remain airside for the minimum amount of time that is required to complete their legitimate business.

Vehicles must not be driven airside with any door, window or shutter open.

It is recommended that seat belts are to be worn at all times when vehicles are in motion.

All loads are to be effectively secured to vehicles..

48.7.3 32 Emergency Access Road

All drivers must ensure that they enter the emergency access road from the left (as shown on the diagram below), and follow this around clockwise, exiting from the right. The exception to this is when emergency vehicles are accessing the airfield from Crash Gate 1. Vehicles will need to contact ATC at the gate and once permission is given to enter, enter via the entry point.

The holding point on the Emergency Access Road is known as Vehicle Holding Point 2 (VH2 on diagram).



48.8 Vehicles Operating Close to Aircraft and Stands

The apron and aircraft stands are for the unhindered and unimpeded use of aircraft and those vehicles and equipment essential for the operation and turn round of those aircraft.

Vehicles must give way to aircraft at all times.

Vehicles must not be driven across any aircraft stand, even when the stand is empty. Vehicles in transit must use the airside service roads at all times. Free ranging drivers are exempt from this rule when the task is operationally necessary.

Vehicles must not move across an aircraft stand when aircraft are being positioned, preparing to leave the stand, have their engines running or anti-collision lights on.

Vehicles must not be driven across the rear of aircraft stands, unless the nature of the task precludes the use of airside roads and prior approval has been given by LBA AOU. The only exception to this is the apron stands designated as 3, 5, 19-21C that have a rear of stand road system. Persons operating on these stands must be familiar with the layout and their operation.

Vehicles must not move behind an aircraft unless involved in the operation of that aircraft and NEVER when aircraft are being positioned onto stand, preparing to leave the stand, have their engines running or anti-collision lights on.

Vehicles must not be driven onto, parked or positioned on an aircraft stand in such a position or manner as to present a surface to aircraft engine jet blast or propeller slip-stream during aircraft arrival, start up or departure.

Vehicles must not be driven in reverse gear on any part of the Manoeuvring Area or Apron except when directly engaged in aircraft Manoeuvring or servicing. If any vehicle is required to reverse they must adhere to the following requirements:

- Driving in reverse gear must be kept to the minimum distance and speed necessary to accomplish the task
- Drivers must have guidance from at least 1 person outside the vehicle.
- Drivers must not reverse if they lose sight of the banksman.

Pedestrian movements should be kept strictly to the marked pedestrian walkways under the control of the handling agent.

Any ground servicing equipment that is not directly related to the aircraft on a particular stand should be stored on the marked equipment areas located adjacent to the stands. NOTE: Only low level equipment (tow bars and Bad Ground Markers) may be stored in the area outside Baggage Hall B, in the area between Stand 3 and the large black freestanding sign (vehicles can be parked by agreement with the airport to the rear of the sign). This is indicated by the paint markings on the ground in this area.

When manoeuvring any aircraft on the apron, all drivers must be aware of the potential for accidents involving personal injuries for ground crews or damage to aircraft, vehicles or equipment.

At all times, aircraft will have the right of way on the apron.

Stop positions on the 2-way airside road are provided to both sides of Stands 3 and 5. These must be used at all times.

Vehicles must hold in the stop position when:

- The anti-collision lights of an outbound aircraft are illuminated, prior to pushback, until the aircraft has crossed the double white lines en-route to the taxiway.
- Aircraft are inbound to Stand 3 or 5 until the anti-collision lights of the inbound aircraft have been switched off.

Push back crews that are preparing the aircraft to manoeuvre off the stand must have the following:

- Positive two-way communication between the tug driver and the flight deck. The push back supervisor should ideally be in speech contact with the flight deck. Where there is a possibility that speech communication will not be available, the supervisor should be trained in internationally agreed hand signals. However, a lack of speech communication should be the exception and not the norm.
- Wing-tip guidance to protect the aircraft against associated activities on an adjacent stand

Push back instructions given by Air Traffic Control via the flight deck to the ground crew will detail the direction for which the aircraft will face after the push is complete.

Where a “start on stand” is required for operational reasons, the rear of stand road must be managed by the pushback supervisor or tail guide to prevent vehicles crossing behind the aircraft with its engines running. This will generally involve the closure of the rear of stand roadway for the duration of the engine start and subsequent push back

48.9 Compliance

48.9.1 Parking

Vehicles and equipment may only park in authorised parking or equipment areas. Action will be taken against any driver whose vehicle is found parked on double yellow lines or white/yellow hatched areas. Vehicles must not be left unattended on taxiways, vacant aircraft stands, between aircraft stands or on airside roads. Vehicles are not to be parked in such a manner as to prevent or restrict the access/exit of other vehicles/equipment. Vehicles that are parked and unattended are to have the ignition keys left in the vehicle in case of emergency.

48.9.2 Vehicle Lighting – Operations at night/in LVPs/on Apron Area/ on Manoeuvring Area

Vehicles must not be driven on any part of the Manoeuvring Area, Apron Area or airside roads during the hours of darkness or when low visibility procedures (LVPs) are in force, without 2 front white DIPPED headlights and 2 rear red lights being illuminated.

Vehicles must not be driven on any part of the Manoeuvring Area, Apron Area Airside roads without having obstruction lights or hazard lights illuminated at all times.

48.9.3 Vehicle Requirements

Vehicles must be maintained to MOT public road standards.

Details concerning the identification, markings, specifications, trailers, lighting, and maintenance standards are available in the CAA publication CAP 642, Airside Safety Management.

48.9.4 Airside Driving Permits (ADPs)

All drivers must have completed the LBA Airside Driving course in order to obtain the LBA airside driver permit.

LBA may suspend or revoke an airside driving authorisation if an individual does not fulfil the minimum operating standards.

LBA will suspend or revoke an airside driving authorisation if it has been proved that the individual has been driving under the effect of alcohol or drugs.

The Airside Drivers Permit will provide evidence that the holder has undergone a formal training course in Airside Driving and has demonstrated their competence to a set standard. The permit is not a licence. The holder must also possess a full (i.e. not provisional) current driving licence, valid in the UK entitling them to drive a motor vehicle, of at least Category B (i.e. motor cars or light vans with up to 9 seats and up to 3500 KGs), on a public road. This must be valid under Article 2 (1) Motor Vehicle (International Circulation) Order 1975 and Regulations 25 (1) Motor Vehicle (Driving Licences) Regulation 1987, together with specialist qualifications (i.e. HGV, PSV licences or certificates of competence as appropriate).

The Apron permit is valid for a period not exceeding 3 years from the date of issue. The permit remains the property of the issuing Airport Authority and must be returned:

- On demand by the issuing Airport Authority.
- If the holder has their UK driving licence revoked, withdrawn or demanded as a penalty for a driving offence.
- When a change of employer occurs at the airport of issue.
- When the holder ceases to be employed at the issuing airport.

The permit will be issued only after the satisfactory completion of the LBA Airside Driving Course and associated paperwork.

The employing company is responsible for providing 2 passport size colour photographs to be incorporated in the permit and records.

The employing company is responsible for providing formal medical certification in respect of:

- Colour Perception
- Distance Vision
- Hearing

Details of the medical requirements are attached to the application forms and contained within the LBA Airside Driving Policy.

This permit allows the holder to drive on Aprons and Airside Service Roads only, at the airport of issue.

This permit does not entitle the holder to drive within the Manoeuvring Areas at LBA.

Manoeuvring Area training is encompassed into a separate course delivered independently. Details are contained in the LBA Airside Driving Policy.

49 SECTION 49 - Airside Safety and Driving Course

49.1 Apron

LBA Fire Operations conduct the Airside Safety and Driving Course using competent instructors.

The course consists of a half day of instruction that comprises:

- Formal Classroom Instruction.
- Visual Familiarisation with driving areas (undertaken in advance of course with own company / colleagues).
- Written examination.

All delegates will be provided with the following literature (not necessarily as part of the course but in preparation for the course, with some materials coming from their own company / team):

- LBA Airside Driving Policy.
- Maps of Airside Roads / Apron.
- Local Information unique to Leeds Bradford Airport
- Relevant LBA Airport Operational Procedures.

Courses will be held at regular intervals with a maximum number of 12 candidates per course. Where possible, frequency of courses will be tailored to meet demand.

49.2 Manoeuvring Areas

Those persons wishing to obtain further qualification to allow driving on Manoeuvring Areas will be required to undertake a further period of instruction. On successful completion of this additional training and testing, the Airside Driving Permit will be endorsed to display the "all areas" entitlement.

Having qualified to drive in the Manoeuvring area and operated without issue for a period exceeding six months or less if authorised by the Head of Airfield Services, an LBA operative has the option of taking the "Free ranging" driving course, which when LVP's not in force, entitles the driver to access the Manoeuvring area (but not the runway and other specified non-Free ranging areas) without any contact with ATC.

Manoeuvring Area and "Free ranging" driving course training is provided by Fire Operations with support from AOU. Both teams are able to provide further information.

49.3 Costs

The costs for the course are reviewed periodically with organisations advised accordingly. These fees are payable in advance or by invoice to approved organisations.

49.4 Application

Details of dates and times of courses will be advised periodically and those wishing to attend should apply in advance using the appropriate forms.

50 SECTION 50 - Airside Vehicle Permits (AVP's)

Vehicle access to the airside area at Leeds Bradford Airport is controlled by the AOU through the issue of Airside Vehicle Permits (AVP).

AVP's are valid until 31st March subsequent to the date of issue.

All vehicles must have a valid AVP whilst airside. An AVP does not confer the right of entry and does not identify the driver or passengers.

50.1 Function of an AVP

An AVP serves to identify the vehicle and its operator and is an acknowledgement by Leeds Bradford Airport that the vehicle needs to be used in the critical part (CP) and restricted areas specified on the permit.

50.2 Types of Permit

There are two types of AVP's issued:

50.2.1 Annual AVP

Valid until the following 31st March for a specified vehicle. An annual AVP will only be issued for vehicles needing essential access to all restricted and controlled apron areas and airside roads on a regular basis. It is the responsibility of the vehicle operator/owner to apply for renewal of an annual AVP.

50.2.2 Short Term AVP

Valid for a specified period at the time of issue.

50.3 Display of AVP

An AVP must at all times be clearly displayed on the vehicle windscreen. Emergency vehicles, called to an emergency or major training exercise are exempt from the requirement to display an AVP.

50.4 Conditions of Use

A permit is issued subject to a "Declaration by the Applicant" indicating that the details provided are accurate and in order. The pass is issued to a specific vehicle and is by no means transferable.

The applicant or sponsor is responsible for returning the AVP for cancellation under the following circumstances:

- When the purpose for which the pass has ceased.
- When the vehicle ownership changes.
- When the vehicle is scrapped or sold.

On request by the Airport Company the AOU may cancel the AVP if:

- The pass has been defaced or altered in any way.
- The pass is found on a vehicle to which it was not issued.

50.5 Acceptance of Conditions of Issue

The submission of an application form, duly signed shall be regarded as acceptance of the instructions contained in this instruction, as well as those contained in the Declaration on the application form.

50.6 Vehicle Requirements

The applicant or sponsor is responsible for the safe operation and fitness of the vehicle or equipment it uses airside and is required to certify:

- That the vehicle/equipment for which the pass is required has been properly inspected, maintained and serviced by an appropriately qualified person within 12 months prior to the date of application and will continue to be inspected, maintained and serviced by an appropriately qualified engineer throughout the period of validity of the pass. This is to ensure that the minimum safety and performance standard is maintained.
- The applicant or sponsor will ensure that the frequency of inspections, maintenance and servicing is appropriate to the type and age of the vehicle and it is used in accordance with the manufacturers' recommendations.
- That a record of the maintenance, servicing and inspections are readily available for inspection.
- That only persons trained and competent to drive/operate that vehicle/equipment will drive it.
- That an electrical and mechanical inspection has been made by a qualified person and confirms that it would reach the required standard for an MOT. Where appropriate the vehicle must hold a valid MOT certificate whilst it is airside.

NOTE: A copy of the MOT certificate must accompany the Vehicle Airside Permit Application form for each vehicle. In the case of a vehicle not requiring a MOT certificate, the current appropriate vehicle service Inspection certificate must be submitted along with the application form.

50.7 Obstruction Lights

The vehicle must be fitted with an Omni-directional flashing obstacle light as stated in AMC1 ADR.OPS.B.080 Marking and lighting of vehicles and other mobile objects. In conditions where emergency vehicles not normally based at the airport are operated on airside areas, flashing blue lights, where fitted will be used. If obstruction lights are not fitted or unserviceable, hazard warning lights must be used.

50.8 Other Requirements

- The vehicle exhaust system must be in good order.
- The vehicle must be free of oil and fuel leaks.
- Any vehicle or trailer over 2.46m in length must have red or amber reflectors at or near each end, clearly visible in poor visibilities or darkness. High intensity reflective sheet material or reflective paint is an acceptable alternative.
- The vehicle must have lights illuminated at both ends during low visibility or hours of darkness.
- Trailers must have a proper parking brake system.
- Tow bars, even when not in use must be made clearly visible when being moved.
- Any load, loose baggage or freight must be securely fastened to ensure it does not fall onto aprons or airside roads.
- Consideration should be given to installing an effective fire extinguisher on vehicles that will be operating airside.

50.9 Employers Responsibility

It is the employer's responsibility to ensure that any employee or person who drives the employers' vehicles meets the following requirements:

- The driver must be in possession of a full UK driving license (i.e. not provisional) that entitles the holder to drive a motor vehicle on a public road. The driver must hold a valid Airside Driving Permit, issued by Leeds Bradford Airport. The driver must also be in possession of a company driving permit proving that he or she has been trained and is competent to drive that vehicle. Access to those training records must be made available on request.
- Periodically, instructions and notices are issued which regulate or amend procedures for the movement of vehicles airside. The employer must inform employees of any changes in these instructions or amendments and ensure they are adhered to.

50.10 Insurance Requirements for the Issue of an AVP

The applicant must fulfil the following requirements before an AVP can be issued:

- Leeds Bradford Airport requires the holder of an AVP to carry adequate insurance covering all actions claims, cost and demands in respect of any loss, damage or injury to property or persons (including fatal injuries) which may be made them or their contractors arising in connection with the use of a vehicle or equipment at Leeds Bradford Airport.
- The policy or policies of insurance must remain in full force and effect during the currency of the AVP.
- Applicants must provide proof of insurance cover of £50,000,000 this must indemnify Leeds Bradford Airport.

- The sponsoring company must certify that the sponsored companies' vehicles have the above insurance.

50.11 Application Procedure

Application forms are available from Leeds Bradford Airport Airside Operations Unit. Applications must be made using approved forms only.

NOTE: Applications for privately owned or non-operational vehicles will not be authorised.

NOTE: The issue of an AVP during the previous year carries no automatic re-issue.

NOTE: The issue of an AVP does not confer the right to park airside.

50.12 Validity of AVP's

50.12.1 Annual AVP's

These will become valid at 0001 hours on the 1st April and remains valid until 2359 hours 31st March.

50.12.2 Short term AVP's

This period will be agreed at a time of issue dependent on the requirement.

50.13 Charges for AVP's

The charge for AVP's are reviewed periodically with organisation advised accordingly.

50.14 Lost or Stolen AVP's

If an AVP is lost or stolen it must be reported immediately to the AOU. Replacement will incur an administration fee.

50.15 Personnel Identity and Escorts

The issue of an AVP does not grant permission for any individual to go airside. The driver must have a valid Airport security pass and if he or she does not have a valid Airside Driving Permit, then they must be escorted whilst driving by someone who does.

50.16 Authorised Signatures

The application form for an AVP must be signed at the time of issue by a person from the sponsoring company who has been approved by Airside Operations.

50.17 Low Visibility Operations

On entry airside drivers should check whether or not there are low visibility conditions as this may impose further restrictions. Drivers with short term AVP's shall not be permitted to enter the Manoeuvring area during these conditions.

50.18 Legal Aspects

It is an offence under Section 21B and 21C of the Aviation Security Act 1982, as amended by the Aviation and Maritime Security Act 1990 to:

- To give false information either for the purpose of or in connection with an application for an AVP or in connection with continued holding of an AVP that has already been issued.
- Go with or without a vehicle onto any part of the restricted airside areas of the airport without permission from LBA.

Failure to meet the requirements above of the requirements in this guidance document can result in the removal of the offending vehicle from the airside area.

50.19 Illegally Parked Vehicles

The AVP will be removed from vehicles parked in unsafe areas. The AVP may be returned but an administrative cost will be incurred.

AOP 16 – *Winter Operations*



51 SECTION 51- Winter Operations

51.1 Aims and Objectives

ADR.OPS.B.035 Operations in winter conditions states the aerodrome operator shall ensure that means and procedures are established and implemented for providing safe conditions for aerodrome operations during winter conditions.

As part of the safety management system in place at LBA these instructions exist for the guidance/direction of staff involved in the operation of winter procedures at LBA. In addition, these procedures inform other interested parties of the measures to be employed to minimise disruption to operations at LBA during winter conditions.

Anti-icing operations are necessary in order to prevent the formation of ice on ground surfaces. Where appropriate, de-icing may be necessary. Unlike landside areas, rock salt cannot be used to treat areas in advance of forecast ice or snowfall. It is therefore essential that all airside users are constantly aware that snow and ice may be present and take extra precautions as appropriate.

LBA monitors the performance and actions of aircraft operators, handling agents and tenants who employ their own procedures for the anti-icing of aircraft, equipment or leased areas.

Objectives

- To achieve and maintain a safe aviation environment complying with all relevant rules and regulations associated with the operation of aircraft.
- To achieve and maintain adequate road and footpath conditions on airport properties to assist the safe transit of passengers, visitors, employees, tenants, concessionaires and associated vehicles.
- To ensure maximum utilisation of the airport during the winter season by effective clearance of snow, slush, ice and water from the manoeuvring areas, associated taxiways and aprons.
- To inform all participating personnel of their responsibilities and of the availability and disposition of equipment.

51.2 Procedures

LBA publishes a Snow Plan annually and distributes it to all aerodrome manual holders detailing:

- Roles and Responsibilities
- Objectives
- Contact Numbers
- LBA Winter Measures Planning Committee
- Response Initiation
- Surface Inspections
- Snow Closure
- Clearance Programme
- Communications
- Assessment and Reporting of Conditions
- Operating Requirements
- Snow Clearance Procedures
- Landside Winter Gritting Procedure
- Equipment
- SNOWTAM Form

- Snow State Distribution List

51.3 Snow Warning

Snow warnings are issued by the MET office and normally received via the AFTN.

In the event of receipt of a snow warning, procedures as set out in the Seasonal Snow Plan are to be adopted.

SNOCLO (Snow closed) will be issued by air traffic control under extreme circumstances:

- If the amount of snow lying on the runway is sufficient to effect aircraft operations (usually 3mm) over the majority of the runway surface)
- If snow is falling to such an extent that the runway clearing operations are unable to make significant progress in achieving a usable runway surface.

SNOWTAM's shall be issued by ATC as follows:

- SNOWTAM shall be consecutively numbered throughout the winter period
- Shall be issued when the manoeuvring areas are contaminated.
- Issued when there is a significant change of surface conditions.
- Issued at intervals not greater than 24 hours unless an overnight period is involved. In this case a new SNOWTAM shall be issued prior to aerodrome opening.
- All snow banks over 30 centimetres (60cm runway, 30cm taxiway) shall be reported.

51.4 Frost Warnings

On receipt of a frost or snow warning the AOUS (or Fire Operations in AOU absence) should:

- If necessary, liaise with ATC regarding the warning, i.e. forecasted temperatures freezing rain, snow etc.
- If necessary and applicable, carry out a Mu-meter run to ascertain runway-braking action.
- Carry out an inspection of all taxiways and apron areas paying particular attention to ice forming on puddles etc.
- Check all passenger walk-ways are free from ice.
- Liaise with ATC about aircraft movements to allow time to complete de-icing in one go (if possible)
- Liaise with ATC to ensure the crewmembers carrying out the de-icing runs are back on station to maintain the correct fire service category before any movement takes place.

51.5 Anti/De-Icing Procedures

Inspection to be carried out by AOU (or Fire Operations in AOU absence)

Anti/De-icing to be carried out by trained AOU/ RFFS staff and generally spraying of anti-icing fluid is undertaken late afternoon to allow holdover time to last throughout the night.

Friction testing to be carried out by trained staff if necessary.

51.6 The Use of De-Icing Products on the South Side

Due to continuing environmental concerns, the use of any de-icing product on Taxiways F,G,L M and Multiflight aprons to the south of the airfield is NOT permitted.

Approved de-icer /anti icing fluid may be used on Multiflight Central Apron.


If freezing weather/snow conditions are forecast, Multiflight operations will liaise with AOU with regard to their forthcoming programme and possibly relocate aircraft to the apron/stands on the northern side of the runway. Consultation between Multiflight and AOU will be required to ensure a smooth transition of any aircraft.

Aircraft transferred into the Critical Part (CP) will be required to be searched in accordance with DfT regulations.

Jet 2.com operations should be advised as they may wish to relocate aircraft away from the hangar area.

AOP 17 –

Operations in Adverse Weather – Preparation –& Response Procedures



52 SECTION 52 – Operations in Adverse Weather – Preparation & Response Procedures

52.1.1 Aims and Objectives

LBA has establish and implement procedures required to mitigate the risk of operation of the aerodrome under adverse weather conditions such as strong winds, heavy rain, and thunderstorms, including the suspension of operations on the runway(s) if deemed necessary.

LBA receives an enhanced weather warning service direct from the UK MET office. This service provides ATC with advanced warning of any adverse weather that may affect the aerodrome. This is received via email and distributed to all relevant stake holders via email.

52.2 Strong Wind

Strong wind is defined as over 24 kts, though it is for airlines and / or handling agents to liaise with AOU/Fire Operations should it be deemed appropriate by any party to instigate these procedures.

52.2.1 Aircraft Engineers and / or Handling Agents are responsible for:

Ensuring aircraft are fully chocked and the parking brake reset at regular intervals in accordance with company and aircraft manufacturer requirements.

52.2.2 Handling Agents and other ramp staff are responsible for:

Prompt liaison with AOU to ensure the into wind parking requirements of the individual aircraft are known. Aircraft must not be re-positioned or parked in non-standard position without approval from ATC.

On receipt of a warning, handling agents are to initialize their strong wind warning procedures.

- Unit Load Device's to be checked to ensure they are correctly loaded with stops raised. Where possible towing EMPTY ULD containers should be avoided during strong winds
- All equipment must be stored in the designated red marked parking bays at the head of stand, with consideration given to wind direction, ground handlers in-house procedures and any specifications laid down by the airline.
- Steps must be lowered (before being moved) and, where possible, turned into wind with stabilisers down and brakes ON.
- Ensuring that all covers on trailers are lashed down
- Check that all equipment is correctly parked and secured
- Removing any items of litter or debris that are likely to constitute a FOD Hazard.

52.2.3 LBA is responsible for:

ATC will promulgate weather warnings via email.

AOU/Fire Operations will carry out an initial inspection ensuring aircraft are adequately chocked and / or tied down to prevent weather-cocking and air bridges are retracted (if wind exceeds 40kts), lowered and correctly parked with shutters down and doors closed. AOU/Fire Operations will report any concerns to the appropriate individual departments / business partners. AOU/Fire Operations will carry out regular inspections during the period of the wind warning.

LBA Head of Projects for any ongoing works will ensure that contractors in airside areas take appropriate action to secure equipment and materials, as well as lowering cranes etc. when appropriate.

52.2.4 Parking Into Wind - General

Handling agents/Airlines will contact AOU/Fire Operations informing them that aircraft require parking into wind.

Handling agents are to refer to their own / airline operating limits when ensuring safe marshalling in high winds

52.2.5 Parking Into Wind - Stands 7 to 21C

Aircraft up to the size of DH8D can be marshalled directly onto stand (7-21C) when available. There must be a minimum of one empty adjacent stand to facilitate this operation. Aircraft larger than DH8D wishing to be parked into wind must stop on the taxiway and be pushed on to the stand. Aircraft will shut down their engines prior to the pushback tug being connected. All marshallers are ultimately responsible to ensure sufficient clearance is available for the safe maneuvering of their aircraft'

52.2.6 Parking Into Wind - Stands 1, 5 & 6

Stand 1, 5 and 6 can accommodate aircraft up to DH8D size parked nose out. Stands 5 and 6 will require the aircraft stopping on the taxiway and being pushed on the stand. Handling agents please refer to your written procedures.

Nose out parking on Stand 5 for DH8C and D could prove problematic for fuelling purposes so AOU will need to bear this in mind for stand planning purposes.

52.3 **Thunderstorms / Heavy Rain**

52.3.1 Thunderstorms

The Airside Operations Unit maintains a general awareness of weather prospects by monitoring the prevailing weather Forecasts.

Thunderstorms represent a hazard to airport operations due to the potential for: Lightning striking aircraft, vehicles, buildings or persons.

Handling agents are advised to avoid the use of headsets during pushback.

Fuelling operators will suspend fuelling operations in accordance with their own operating procedures.

Thunderstorms also bring additional hazards such as:

- Very heavy rain or hail
- Poor visibility
- Strong gusting winds
- Wind shear
- Interference with radio transmissions and compasses
- Electrical outages

All operators at LBA are to ensure thunderstorm warnings are disseminated to all relevant staff.

52.3.2 Heavy Rain

Heavy rain has the potential to cause pooling of water, slippery surfaces and overloading of drainage. The Airside Operations Unit will monitor prevailing weather conditions and take all appropriate migratory actions

to prevent any operational disturbances. Aerodrome inspections will be carried out in accordance with AOP 24.

'Sweeper' is also available if required to remove any significant areas of standing water.

Handling agents are required to pay particular attention to the management of their passengers during periods of heavy rain and if there are any delays to boarding or offloading of flights, LBA must be informed in the first instance.

AOP 18 – *Environmental Procedures*



53 SECTION 53 - Environmental Procedures

53.1 Aims and Objectives

This purpose of this Airport Operational Procedure is to remind all airport users of the actions that are required following any spillage on or around airport property. Examples of substances include fuel, oils, waste products, chemicals, sewerage etc. (this is not a comprehensive list).

Leeds Bradford Airport (LBA) has a legal obligation to ensure that the areas around the airport are fit for purpose and meet all the regulatory requirements for the safe operation of the airport. Legislation places a duty on LBA to take all reasonable precautions to ensure that water pollution does not occur. One of the many potential sources of pollution is from fuel, oil and chemical spillages.

In the event of an accidental spillage, there is a potential danger, that the pollutant could be discharged into the local watercourses. It is therefore essential that all spillages be dealt with and reported as soon as possible.

53.2 Storage Requirements

All storage of liquid materials should consider the potential for spillage. They should be stored away from open drains and protected by secondary containment or bunding.

Where bunding is provided, it should be maintained in a serviceable condition. Rainwater should be regularly removed. However, any contaminated rainwater that has accumulated in a bunded enclosure should be disposed of separately and should not be allowed to enter the airport drainage system. Where stakeholders dispose of their own special waste, they should be able to provide the relevant waste transfer documentation to the Airport Company or external agency as required.

53.3 Spillage clean up procedures

Spillages are to be contained and cleaned up immediately. If a company/organization cannot clean up any spillage immediately, or has no facility for a clean-up operation, the Airport Company will carry out this task and charge the responsible company/organisation accordingly. Unless a specific dispensation has been made, no spillages (irrespective of their size) should be left unattended or untreated. Where possible, the spillage should be guarded by a second individual while help is summoned to prevent airside drivers accidentally driving over a spillage and creating a greater problem.

Absorbent materials used to contain any spillage are to be removed immediately and disposed of safely. Oil impregnated rags should not be disposed of in office trash bins or stored together in bulk. They should be disposed of in the special waste bins provided. All stakeholders should ensure that they have written procedures in respects of required actions in dealing with spillages. The airport company may request details of these procedures as part of an internal audit regime.

Further information on spillage requirements and procedures are contained within Section 12 the Emergency Orders – “Airport Spillages”.

53.4 Reporting

Following any spillage, it is the responsibility of the organisation to notify the airport company in order that remedial action may be taken at the earliest opportunity to meet our obligation to the Environment Agency and maintain a safe working environment for all concerned

Notification should be made via Extension 2299 (0113 391 3399), who will contact AOU. This is an additional action and in no way relieves the responsible organisation, agent or company from their obligations to affect the clean-up process if possible.

53.5 Notification and Follow up Action

When all appropriate actions have been taken and the spillage has been successfully cleaned up, the responsible organisation should complete the relevant spillage form as included in the Airport Emergency Orders.

Any spillage as a result of mechanical breakdown of component parts should be investigated immediately and repairs undertaken on the equipment or vehicle to prevent any repeat of the incident. Such equipment should remain out of service until the necessary repairs have been completed.

53.6 Aircraft Engine Component and Exterior Washing

Currently not available at LBA.

53.7 Dry Aircraft Washing

Must not interfere with the activities of any other airline or airside business partner.

Any residue must be removed using vacuum or sweeping methods.

Waste generated from dry washing activities must be disposed of properly. Where appropriate, these should include any relevant waste transfer documentation.

54 SECTION 54 Waste Policy & Procedures

A map of all the waste facilities on-site can be found in APPENDIX 33

54.1 Recycling

54.1.1 Mixed Recycling

In order to comply with the Waste (England & Wales) Regulations 2011, waste should be segregated at source and the following types of waste can be disposed in the same bin (mixed recycling):



- Plastics (all grades)
- Cans (steel and aluminum)
- Paper / Newspapers / Magazines
- Packaging (e.g. clean sandwich wrappers / cereal boxes)

54.1.2 Cardboard



If you use the landside service yard, cardboard boxes should be placed in the cardboard compactor only. If you use the waste facilities located airside or the cargo area, cardboard boxes should be flattened prior to disposal in the mixed recycle skips to maximize the use of space in the skips.

54.1.3 Glass



Glass should be placed in the bottle banks located in the landside service yard

54.1.4 Waste Electrical and Electronic Equipment (WEEE)



All waste electronic equipment (e.g. TV's, kettles, computers etc.) has to be segregated and collected separately from all other wastes in order to maximise its reuse and recycling under the WEEE Directive. If you have any waste electrical equipment to dispose of please contact the airport's Environmental Manager, who will advise where it can be stored for disposal. No WEEE should be disposed in any skip on the airport site.

54.1.5 Scrap Metal

A scrap metal skip is available in the cargo area. Business Partners should obtain permission from the Environmental Manager before disposing of items in this skip

54.1.6 Hazardous Waste



The following are examples of hazardous waste and should not be disposed in any skip on the airport site. If unsure please contact the airport's Environmental Manager.

- Fluorescent tubes
- Oil drums / tins
- Paints / paint tins
- Chemicals

Please note, dedicated bins are provided for 'aerosols' and 'used spill kits' (please refer to the waste map).

54.1.7 Non-Recycling



The only waste that should be disposed of in the non-recycle skips is food waste or wastes heavily contaminated with food.

A reminder to staff that a non-compliance scheme is in force and fines will be issued to those businesses that do not adhere to the above. In addition, if you have contractors working on-site, they are responsible for their own waste removal and should not be using any of the airport's skips.

54.2 Aircraft Waste (FROM NON EU)

54.2.1 International Catering Waste (ICW)

International Catering Waste (ICW) is defined under the EU Animal By-Products regulation (1069/2009/EC) as 'catering waste from means of transport operating internationally'.

ICW is classified as a Category 1 Animal By-Product (ABP), meaning that it is 'High Risk' as a means of importing exotic notifiable diseases such as Foot and Mouth Disease. Therefore, any food or food waste

(including packaging or utensils with food residue) from an aircraft that has travelled outside of the EU is considered ICW, even if the aircraft was stocked up for the entire journey in the EU.

Any other waste that has been mixed with ICW, must be disposed of as if it were ICW. It is for this reason, that all waste from on-board an aircraft that has travelled to a non-EU country, must be disposed as ICW.

Countries which are not part of the EU but are part of Europe geographically, for example Iceland, Liechtenstein and Norway, are treated as member states. Countries where the ABP regulation would apply include Turkey and USA.

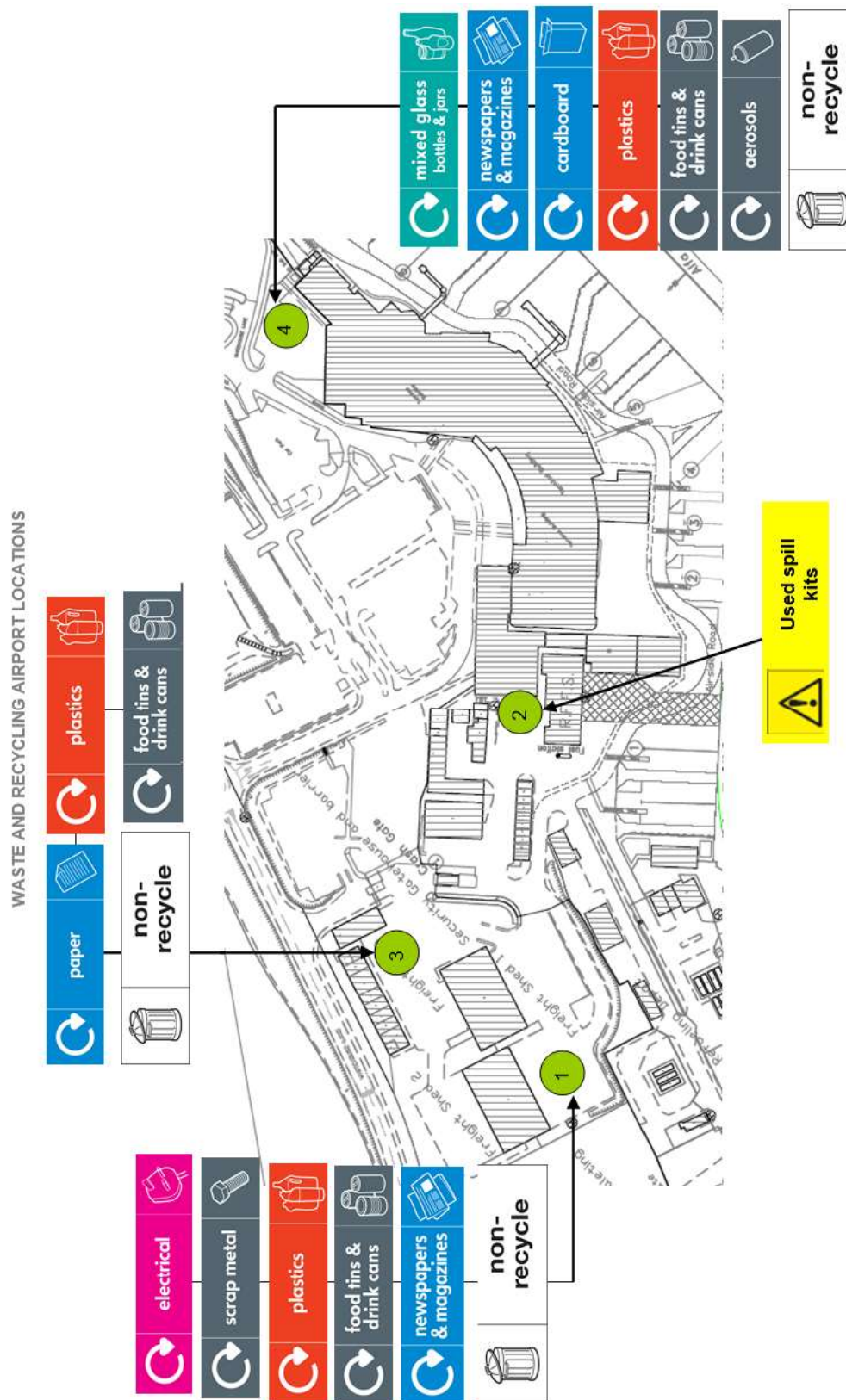
54.2.2 Storage, Transportation and Disposal of ICW

Responsibility for disposing of ICW lies with either:

- The private owner of the aircraft
- The company that owns the aircraft

If a third party is used to transport ICW from an aircraft, the airline company/owner is still responsible for making sure ICW is identified and disposed of legally. ICW must be sent for disposal as quickly as possible after the aircraft has landed. The vehicle used to transport the waste to the skip must be clearly labelled 'Category 1, ICW'. The vehicle must be cleaned and disinfected (with a Defra-approved disinfectant) after each use. The waste must be stored in a dedicated container that is covered, leak-proof and clearly labelled 'Category 1 – for disposal only'. The only accepted methods for disposal of ICW are incineration or disposal by deep burial at a Animal & Plant Health Authority approved landfill site. The carrier used to transport the waste for disposal must be approved by the Environment Agency.

54.3 APPENDIX 33 – Waste and recycling locations.



54.4 APPENDIX 34 – Catchment Areas



AOP 19 – *Wildlife Management*



55 SECTION 55 - Wildlife Management

55.1 Aims and Objectives

ADR.OPS.B.020 states the aerodrome operator shall:

- assess the wildlife hazard on, and in the surrounding, of the aerodrome;
- establish means and procedures to minimise the risk of collisions between wildlife and aircraft, at the aerodrome; and
- Notify the appropriate authority if a wildlife assessment indicates conditions in the surroundings of the aerodrome are conducive to a wildlife hazard problem.

Leeds Bradford Airport takes all reasonable and practicable measures to ensure that risks to flying operations at the Airport are minimised from birds/wildlife. This is achieved through:

- The provision of trained, well equipped and competent staff to detect and deter birds on and around the airfield.
- The provision of appropriate and effective equipment.
- The provision of appropriate and effective control measures.
- The management of the airfield habitat, so that the airfield is unattractive to hazardous birds.
- The safeguarding of the surrounding area from new bird attractants.
- Warnings to pilots whenever a bird strike risk is deemed significant by the Bird Controller/ATC.
- Continuous risk assessment
- When bird strikes do take place, the Airport Company will report these in line with guidelines provided by the Civil Aviation Authority.

Birds will be dispersed in accordance with the methods and recommendations of CAP 772 and the Wildlife & Countryside Act 1981.

Bird control procedures shall be subjected to the 'Airport Company' internal audit system.

55.2 Responsibility

The HAS/AOU are responsible for the establishment, administration and review of the LBA Bird/Wildlife hazard control plan.

The day-to-day responsibility for bird hazard control rests with the AOU/RFFS

Only those persons who have attended the appropriate bird control courses and are familiar with the requirements of the LBA Bird/Wildlife hazard management plan and CAP 772 or Airside Operations shall undertake bird control duties.

55.3 Operating Procedures

Measures are taken to limit activities which could be attractive to birds, and to avoid careless disposal of edible matter and waste material. The immediate environs are monitored to detect any activities which could also prove attractive to birds.

55.4 Techniques

The following techniques are used at Leeds Bradford Airport to reduce the bird population on the aerodrome:

55.4.1 Bioacoustics Bird Scaring:

Birds will react to the distress calls of other birds (particularly if from their own species) by taking flight and approaching the source to investigate, and will be left vulnerable to attack when the broadcast is stopped.

Not to be used during the hours of darkness.

55.4.2 Bird Scaring Cartridges (BSC):

Cartridges can be used to disperse the presence of birds on the aerodrome. A firearm licence is required.

Not to be used during the hours of darkness.

55.4.3 Visual Techniques:

Arm waving and lures shall only be used occasionally, either to support Bioacoustics methods or at night.

55.4.4 Lethal Methods:

The culling of bird species is subject to Natural England regulations. Only species listed in Airport Class License WML – CL12 may be culled. For any other species a specific license must be acquired from Natural England. A shotgun and air rifle will be used for lethal wildlife control. They should be employed as a last resort if other non-lethal methods fail to remove the presence of birds on the aerodrome.

55.4.5 Habitat Management

Leeds Bradford Airport employs a grass management policy in accordance with the principles outlined in CAP 772. Long grass is maintained at 150mm, not exceeding 200mm. The administration of the Grass Management Policy rests with the HAS. See also, Leeds Bradford Airport: Bird/Wildlife Hazard management Plan.

55.5 Patrols

It is recommended that bird control patrols shall be carried out in the following circumstances:

- At first light and at dusk. Regular patrols throughout the day are also required.
- Whenever ATC observe significant numbers of birds on or in the immediate vicinity of the Aerodrome, they shall request a bird patrol. It continues to be an ATC responsibility to warn aircrews whenever a bird hazard is considered to exist.

55.5.1 Night Patrols

Bird Control patrols at night shall be restricted to the movement area to ensure the movement area is free from the presence of birds.

AOU will undertake night patrols 30 minutes ahead of an aircraft movement assuming it follows a break in movements exceeding this period. ATC can request a patrol having identified a hazard.

See also Leeds Bradford Airport: Bird/Wildlife Hazard Management plan.

55.6 Bird Strike

A full runway check will be made following any report of a bird strike or suspected bird strike. Any debris (feathers alone are insufficient) will be removed, placed in a plastic bag, and if necessary, sent for an analysis.

If the bird remains cannot be fully removed before the next aircraft movement then essential information will be given to all pilots of landing or departing aircraft as soon as possible, including:

- Whether it is a single or multiple strike
- Position on the runway or airfield if known
- Any delay involved
- Details of any other birds settling on the affected area; and
- Any adverse braking action reported.

55.7 Record Keeping

A bird control log is provided and maintained. This should be completed every time a bird control run or activities are carried out. In the event of a bird strike occurring, being reported, or a bird carcass or remains found then an internal Safety Incident Report (SIR) shall be completed along with a Mandatory Occurrence Report MOR. This is submitted to the CAA and the automatic email receipt is saved to the relevant email folder. Bird strike reports are added to the SIR analysis spreadsheet and reviewed in the LBA ASC.

Bird control records are continually evaluated and used to build up a local intelligence of bird movements to help pre-plan bird control duties.

All bird strike records will be reviewed annually by the Head of Airfield Services

AOP 20 – *Dangerous Goods*



56 SECTION 56 - Dangerous Goods

56.1 Aims and Objectives

Aircraft operators approved under 'The Air Navigation (Dangerous Goods) Regulations 2002 for the loading and carriage of dangerous goods, must comply with certain conditions, some of which have aerodrome ramifications. In particular there may be conditions applied that requires the aircraft to be positioned at a certain location on the Airport i.e. the Compass Base or Holding Point J. During loading and/or unloading certain minimum isolation distances shall be maintained in respect of such goods.

Loading of Dangerous Air Cargo policy and procedures are subject to the 'Airport Company' internal audit system.

The Aircraft Operator concerned is solely responsible for ensuring compliance with 'The Air Navigation (Dangerous Goods) Regulations 2002. In the case of Leeds Bradford Airport-based operators they, or the handling agent, will advise AOU of the required loading position, which will be based on the type and quantity of dangerous goods involved. Non-based operators will be required to furnish the Airport Company and the Handling Agent with a description and quantity of dangerous goods prior to loading or unloading. This will be copied to ATC and RFFS for information purposes.

56.2 Compliance Procedure

The aircraft operator and handling agent must comply with all applicable Regulations. It is their responsibility to ensure that the RFFS category is not less than 2 categories below that which would be appropriate were the aircraft to be employed for the public transport of passengers. The minimum RFF category shall be not lower than RFFS category 3.

56.3 Operational Procedure

All Dangerous Goods operations require a minimum of 72 hours' notice to be given to the Airport Company for approval. The Airport Company shall contact AOU to advise them of the:

- Date and time that aircraft shall be positioned into its loading / unloading area.
- The aircraft type and operator.
- The planned location of the loading / unloading.

AOU will consider each request on its own merits and liaise with other teams accordingly.

56.4 Carriage of Electric Mobility Aids

56.4.1 General

In order to fulfil its obligations as outlined in SN-2012/003 issued by the CAA on 23/03/12, LBA requires that all such devices are accompanied by a copy of the form seen below which are provided by the Airport company or the form supplied by the Airline.



56.4.2 Procedures

Completing Airport Company form below;

- Section 1 to be completed at the Check-In Desk or the PRM reception desk.
- Section 2 to be completed by PRM provider in the presence of the passenger, and with EMA manufacturer details as supplied by the airline
- Section 3 to be signed by the passenger

- Section 4 to be signed by the PRM provider
- Section 5 to be signed by Loading Supervisor / Turnaround Coordinator.

Printed pads will be issued to the Ground Handler and PRM provider with triplicate copies. Yellow Copy to be attached to the Electric Mobility Aid, Blue Copy to be returned to LBA TDM and White Copy to be retained for the Flight File (held by the Handling Agent).

  ELECTRIC MOBILITY AID			
SECTION 1 – PASSENGER HANDLING			
PAX Name: _____	Reservation no: _____		
Flt No: _____	Seat No: _____		
Make / Model: _____	Tare Weight (Kg): _____		
Battery Type: Wet Acid <input type="checkbox"/> not accepted chair may go without Battery Dry <input type="checkbox"/> Gel <input type="checkbox"/> Lithium <input type="checkbox"/>			
Are you aware and able to disconnect the battery: Yes <input type="checkbox"/> No <input type="checkbox"/> if no able chair will not be carried			
Instructions for protecting from short-circuit:			
The battery is fully encased with no exposed terminals: Yes <input type="checkbox"/> No <input type="checkbox"/>			
SECTION 2 – OCS / OMNISERV IN CONJUNCTION WITH PASSENGER			
Instructions for inhibiting electrical circuits:			
<input type="checkbox"/> Passenger switch off and remove key. <input type="checkbox"/> Separate battery cable connector by: _____ <input type="checkbox"/> Non- spillable batteries specifically designed to be removed for ease of transport, contained in strong, rigid packagings (hold stowage only). <input type="checkbox"/> Lithium batteries specifically designed to be removed for ease of transport, protected from short circuit and taken by Pax for cabin stowage. <input type="checkbox"/> Other: _____			
PLEASE NOTE: Wet acid batteries will not be carried. Chairs with batteries removed can be carried.			
SECTION 3 – PASSENGER			
I confirm that I have protected the device from short circuit and have inhibited the electrical circuits as specified above.			
Name (print) _____	Sign: _____		
SECTION 4 – OCS/ OMNISERV OPERATIVE			
I confirm that I have witnessed that the mobility aid does not operate electrically.			
Name (print) _____	Sign: _____		
SECTION 5 – LOADING SUPERVISOR/TURN AROUND COORDINATOR			
I confirm that all relevant sections are completed and the electric mobility aid is securely loaded.			
Name (print) _____	Sign: _____		
DISTRIBUTION <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">WHITE COPY TO BE RETAINED FOR FLIGHT FILE</td> <td style="width: 50%;">YELLOW COPY TO BE ATTACHED TO ELECTRIC MOBILITY AID BLUE COPY TO LBIA PODM</td> </tr> </table>		WHITE COPY TO BE RETAINED FOR FLIGHT FILE	YELLOW COPY TO BE ATTACHED TO ELECTRIC MOBILITY AID BLUE COPY TO LBIA PODM
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AOP 21-

Removal of Disabled Aircraft



57 SECTION 57 - Removal of Disabled Aircraft

57.1 Aims and Objectives

For the purposes of this instruction a 'Disabled Aircraft' is an aircraft located on the aerodrome that is unable to move under its own power.

Leeds Bradford Airport may require the removal of any aircraft from any part of the aerodrome, if in the opinion of the Head of Airfield Services it is in any way impeding the safe and efficient operation of the airport.

Movement of any aircraft involved in a Notifiable Accident for the purposes of Civil Aviation (Investigation of Accidents & Incidents) Regulation is to be subject to an approval given by AAIB. However, Leeds Bradford Airport may on safety grounds exercise the provisions of Regulation 7(2) (a) in respect of removing an aircraft without prior approval.

The Airport promulgates RFFS Category 7, with up to Category 9 available on request during published opening hours. If an aircraft departs the paved surfaces and comes to rest on the grassed areas, Fire Operations would be expected to respond and make the area safe. However, with the limited staffing and equipment resources, Fire Operations would be unable to recover the aircraft without additional assistance. Subject to the type and weight of aircraft involved, a specialist recovery organisation may be required.

Full details can be found in Appendix H of the Emergency Orders "Aircraft Salvage Orders".

57.2 Responsibility

Unless authority has been delegated, the aircraft operator shall be responsible for taking steps to remove an aircraft as quickly as possible upon receiving written notice from Leeds Bradford Airport.

Determination on the need to remove a disabled aircraft and initiation of action to remove it is the responsibility of the Director of Operations or his designated deputy.

Authority to remove an aircraft that is involved in a Notifiable Accident shall be obtained from AAIB by the HoATS or ATC WM or the SCOD in their absence.

Any recovery of an aircraft should be carried out under the direct supervision of a qualified aircraft engineer. It may be necessary to install undercarriage locking-pins, jack the aircraft and attach towing strops, lines or chains. Any vehicles used for recovery must be designed and fit for the purpose of towing an aircraft of the relevant size and weight.

57.3 Operating Procedures

Fire Operations is required to ensure fire security of the area, and render assistance to the recovery specialists when required. A foam blanket may be necessary to prevent the ignition of spilled aircraft fuel from a ruptured fuel tank, before other personnel may approach the aircraft.

The need to remove a disabled aircraft is determined by the Director of Operations subsequent to information provided by the HoATS, ATC WM or SCOD if the aircraft is on, or immediately adjacent to the manoeuvring area. The Director of Operations must determine the effect on runway operations caused by the continued presence of the disabled aircraft.

If the aircraft is still supported by its undercarriage, this assembly **MUST** be made safe prior to any work being undertaken or the aircraft being moved. Metal matting may have to be laid to effect safe passage on to the paved surface.

If the position of the aircraft is such as not to interfere with normal flying activities, then the RFFS are not to commit any resources that would delay a response to an aircraft accident or incident. If, however, the Airport is closed due to the proximity of the accident to the runway, then Fire Operations are to give assistance to enable a safe and expeditious removal of the aircraft.

When Leeds Bradford Airport is empowered to undertake removal, on-airport and external resources are to be used to affect a safe and timely recovery. In the case of off-airport resources, specialist recovery companies or contractors should be utilised. The details of contractors with specialist equipment can be found in Appendix H of the Emergency Orders.

It is essential to ensure that only the minimum number of staff are utilised in the area whilst the aircraft is being prepared for towing or being towed. To prevent serious injury, staff **MUST** remain well clear of chains or wire ropes whilst these are under tension.

If it is necessary to exercise the provisions of Regulation 7, (2) (a), the Director of Operations shall ensure that a report is completed specifying reasons requiring removal including:

- Summary of action taken
- Diagram of the location of wreckage
- Exact location of accident site
- Photographs of aircraft/wreckage prior to removal

If such early removal is required all reasonable measures shall be taken to preserve as far as possible marks made on the ground by the aircraft. Additionally, the position of the aircraft shall be marked on the manoeuvring area surface and photographs and diagrams shall be taken and drawn before any switch is moved or any piece of wreckage disturbed.

When removal is undertaken on behalf of the aircraft owner/operator the applicable conditions for removal, shown in APPENDIX 35, shall be presented to the owner/operator and his signature obtained to signify agreement.

57.4 Management

The FWM or AFWM responding to the accident will remain in charge of the accident scene until relieved by a Police Officer or, when recovery is by a qualified or competent aircraft recovery specialist. Fire Operations will then either assist with recovery under the direction of the engineer or return to the Fire Station and revert to normal duties.

Any person working in the incident area shall wear appropriate personal protective equipment (PPE).

57.5 Records

The FWM or AFWM present shall keep an accurate written record of the action taken to recover the aircraft. Copies of statements are to be attached to the personal file of all Fire Operations staff attending the accident.

The Operations Director shall retain indefinitely all documentation relating to ATC and Fire Operations action during the removal process.

Copies of all documentation relating to individual removal of disabled aircraft are retained indefinitely and may be used at a subsequent inquiry into the incident and into the actions taken to recover the aircraft.

57.6 Follow Up Action

As part of the audit process, the Operations Director will conduct a post incident/accident review to assess Leeds Bradford Airport response and actions.

57.7 APPENDIX 35 - Notice of condition applicable to hire Leeds Bradford Airport employee(s) or equipment for aircraft salvage operations

The hiring of Leeds Bradford Airport employees, vehicles or equipment is subject to acceptance by the hirer of the following conditions and the use of such labour, vehicles or equipment by or on behalf of the hirer shall be deemed to constitute acceptance by the hirer of such conditions.

The use of labour, vehicles or equipment is subject to its availability on the Airport and not being required for the purposes of Leeds Bradford Airport. The decision as to whether it is so available being at the sole discretion of the Head of Operations or his representative.

The period during which any labour, vehicles or equipment can be hired shall be at the sole discretion of the Director of Operations or his representative.

In consideration of the permission relating to the hire being granted, the Hirer undertakes and agrees:

To make no claim against Leeds Bradford Airport or any of its servants in respect of personal injury (including injury resulting in death) which may arise out of, or in connection with the use of the Leeds Bradford Airport labour, vehicles or equipment;

To indemnify Leeds Bradford Airport and all its servants against all legal liability incurred in respect of claims (including claims by servants of Leeds Bradford Airport or of the hirer) for the loss of or damage to property or for personal injury (including injury resulting in death) which may be made against Leeds Bradford Airport or any of its servants arising out of or in connection with the use of labour, vehicles or equipment.

To indemnify Leeds Bradford Airport in respect of any loss of or damage to the property of Leeds Bradford Airport, or property for which Leeds Bradford Airport is responsible, which may arise out of or in connection with the use of Leeds Bradford Airport labour, vehicles or equipment, and which is properly attributable to the wilful misconduct or negligence of any servant of the hirer.

To pay charges in accordance with Leeds Bradford Airport's scale of charges in force at the time of hire.

In condition 3 –

“Claim” means action, proceeding, demand, costs, charges, and expenses of whatsoever kind of nature.

“Injury” includes sickness.

“Servant(s)” means any officer(s), servant(s) or agent

Aerodrome Manual

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Request for hire of Labour, Vehicles or Equipment for Aircraft Salvage Operations

PART A

This part must be completed and signed by the applicant before any labour, vehicle or equivalent is placed at the disposal of the hirer.

Request for hire of:	
To report to:	
Date of hire:	Time to report:

I agree on behalf of _____

- To pay Leeds Bradford Airport in respect of such hiring a charge calculated at the rate(s) detailed in the published scale of charges in force at the time of hire.
- That the period of hire of Leeds Bradford Airport employee(s) shall begin when they leave their normal place of employment and shall end on their return thereto on completion of the service.
- That the period of hire of vehicles and equipment shall begin when the vehicles or items or equipment leave their normal location and shall end on their return thereto on completion of the hire.
- That the "conditions Applicable to the Hire of Leeds Bradford Airport employees, Vehicles, or Equipment, for Aircraft Salvage Operation", a copy of which I have read, shall apply to this hiring.

Signature of Hirer or his agent _____

Name & position of signatory _____

Date _____

PART B

The application at Part A has been checked and the request for hire is duly authorised.

Signed _____

Position _____

Date _____

PART C – for use by Leeds Bradford Accounts only

I certify that Invoice No. _____ has been raised for the sum of £ _____ in respect of the above hiring.

Signed _____ Position _____

Date _____

AOP 22 – *Aviation Fuel Management*



58 SECTION 58 - Aviation Fuel Management

58.1 Aims and Objectives

All fuel stored and handled at LBA must be via one of the approved tank storage facilities, which are dedicated to the task, and no 'truck to truck' deliveries are allowed at any time due to the inherent risks associated with the practice.

There are currently two approved operators of fuel storage facilities at the airport which are:

- ASIG: Main Apron and airport owned fuel storage facilities.
- Multiflight: General Aviation Apron and associated storage facilities.

All operatives, irrespective of which operating company is stated above, must be compliant to airport and industry (JIG) standards relating to all aspects of aircraft fuelling operations, and must be trained in accordance with procedures agreed with the airport company, and detailed training records for each individual operator shall be available for audit by the airport, or its approved auditor at any time. Due to the nature of the work, the size of the vehicles, the proximity to aircraft, and the inherent risks associated, only qualified refuelling operators, shall be authorised to refuel aircraft on the main airport apron, and must as a minimum hold a current LGV/HGV Class 1 (C+E) licence where they operate articulated refuelling vehicles, and a LGV/HGV Class 2/3(C) for the operation of rigid Class 2 vehicles. No other licence/s or certificates will be accepted for airside operations

Airline operators are responsible, in accordance with JIG Regulations, for provision of Switch Training for each aircraft type operated at LBA. The training must be provided by the airline to ASIG in advance of any fuelling requiring Switching. Written procedures and certification shall be provided by the airline to ASIG personnel. This will include retraining on an annual or other agreed frequency and all training shall be recorded.

58.2 Fuel Suppliers

All fuel suppliers wishing to sell fuel on the main apron at the airport are required to sign up to the following agreements by way of deeds of adherence:

58.2.1 Airport.

FUEL STORAGE USER AGREEMENT
INDEMNITY AGREEMENT

Details of the agreements can be obtained from Leeds Bradford Airport.

58.2.2 Airport storage operating company.

INTO PLANE SERVICES AGREEMENT

Details of the agreement can be obtained from ASIG.

58.3 Oversight and Audit

In accordance with the statutory obligations arising from EASA implementing rule ADR.OPS.B.055 fuel quality, CAA requirements detailed in CAP 700, CAP 393 and CAP 748, the airport utilises independent oversight to ensure compliance. The review is primarily based on the relevant parts of 'JIG Standards', Airport Instructions, HSE requirements and wider industry 'best practice'.

All organisations undertaking aircraft fuelling activities will be subject to a regular audit programme proportionate to the scale and or perceived risk of the operation, as required by the airport, and no new

operator will be permitted to commence aircraft fuelling at LBA until the Airport and its independent fuel oversight advisor have confirmed that the operation meets the appropriate industry standards and new operators will be audited more frequently until the airport is satisfied that the appropriate standards are being delivered consistently.

Fuel operators will also be subject to regular oversight by the Airside Operations Unit who monitor ramp activity daily and carry out regular turn around checks and the airport independent compliance auditor who carries out Ramp Audits of all third-parties operating on the ramp to an agreed schedule.

The Airport reserves the right to suspend any fuelling activity that fails to adequately and appropriately address identified serious deficiencies within an appropriate timescale.

A Copy of all third party audit reports/findings must be sent to the Head of Airfield Services for review.

58.4 Safety

It is the responsibility of all organisations handling, dispensing, and receiving or in any other way involved in aviation fuel usage to ensure that rigorous safety precautions are applied at all times. The minimum requirements are outlined below.

59 SECTION 59 - Fuelling

59.1 Definition

For the purpose of both CAP 748 and this Instruction, the term “fuelling” is to Include fuelling, de-fuelling and the draining of aircraft tanks.(de-fuelling and draining of aircraft tanks is only to take place in exceptional circumstances and not routine operations)

59.2 Supervision of Fueling

Airline operating companies shall appoint an authorised person to be responsible for the technical aspects of aircraft fuelling for each fuelling operation. The authorised person is termed “Fuelling Supervisor” by CAP 748 and is nominated as per airline procedures (which may delegate the task to their Ground Handling agent).

If the airline company or handling agent decides that the responsibilities of the fuelling supervisor shall be limited to the technical aspects of fuelling only, the turnaround supervisor (as detailed in the LBA Generic Aircraft Turnaround Plan) shall be made responsible for the overall safety requirements during the fuelling operation. This supervisor(s) should be readily identifiable and remain in the area during fuelling operations.

Authorised members of a flight crew may also undertake the responsibilities of supervising fuelling operations.

59.3 Fueling Zone and Vent Points

Industry best practice requires the establishment of FUELLING ZONES before fuelling commences. These zones should be regarded as extending not less than 6 metres (20 feet) radially from the filling and venting points on the aircraft and fuelling equipment.

During fuelling, air and fuel vapour are displaced from the aircraft tanks. This potentially explosive vapour is expelled from the aircraft via vent points that are usually situated at the wing tips.

Within the fuelling zones, all personnel must avoid any activity involving the risk of fuel vapour ignition. Smoking (including e-cigarettes) is prohibited everywhere airside at LBA (with the exception of the dedicated smoking area) but danger could result from the use of naked lights, the operation of electrical systems or the sparks from exposed iron or steel studs on footwear or from tools.

In addition, engines must not be left running in the fuelling zones, particularly in the vicinity of fuel vents.

When de-fuelling takes place, the cargo tank of the refueller will be venting. Consequently, a fuelling zone, as detailed above, must be established around the vehicle vent points.

59.4 Fire Extinguishers

Fuelling companies are responsible for ensuring that fire extinguishers, for the protection of the fuelling equipment are readily available before the transfer of fuel begins. These extinguishers should be maintained to the standards recommended by the manufacturers and fuelling company personnel should be trained in their use.

59.5 Precautions Prior to Fueling

The aircraft is to be firmly restrained on the stand with brakes applied and / or chocks in position in line with established airline procedures. It is preferable that both methods of restraint are used when aircraft brake systems requirements do not make this impracticable.

All personnel working in the vicinity of any aircraft while it is being refuelled are to ensure that they do not obstruct escape routes by which fuelling vehicles may leave the aircraft rapidly without having to manoeuvre in the event of an emergency. Should the escape route be obstructed, the fuel company operator has no alternative but to cease fuelling, with the inevitable risk of delay to the aircraft turnaround.

All personnel involved in the fuelling of aircraft are to be instructed by their employer in the procedure of summoning the Airport Fire Service. This should include the use of the Emergency Stand telephones (Dial 2299 and ask for Fire Service) and/or the use of radio links as an alternative where the radio is intrinsically safe.

59.6 General Precautions

Aircraft borne auxiliary power units (APU) that have an exhaust efflux discharging into the fuelling zone must, if required to be running during the fuelling operation, be started before filler caps are removed or fuelling connections made. If the APU is stopped for any reason during the fuelling operation, it should not be restarted until the flow of fuel has ceased and there is no risk of igniting fuel vapours.

The replenishment of oxygen systems is not to take place when fuelling is in progress.

Only those aircraft switches essential to the fuelling operation are to be switched when fuelling is in progress, except that switches essential to the servicing of the aircraft may be operated subject to the authorisation of the Fuelling Supervisor.

Aircraft external lighting and strobe systems are not to be operated during fuelling. AOU must be notified of any observed breach of this rule.

In the event of an emergency such as a bomb alert or fire, either on the aircraft being fuelled or on an adjacent aircraft, fuelling is to cease. The Fuelling Supervisor is to establish from the emergency services or AOU staff in attendance the extent of the emergency. Fuelling can re-commence when the Fuelling Supervisor has established that it is safe to do so.

If the presence of fuel vapour is detected by Cabin Staff in the aircraft interior, or any hazard or potential hazard is observed during the fuelling operation, the Fuelling and Safety Supervisors are to be informed immediately.

Under these conditions fuelling operations, as well as any maintenance work being carried out, shall cease immediately. No additional electrical equipment shall be switched on and unless electrical equipment

already running is likely to cause a special hazard, it should not be switched off until the hazard has been declared safe.

59.7 Fueling of Aircraft with Passengers Onboard and During Embarkation and Disembarkation

In general, passengers should be disembarked prior to the commencement of fuelling. However the operator may deem this to be inappropriate. The aircraft operator should have assessed the risks associated in order to formulate and establish procedures for fuelling with passengers on board.

It is the responsibility of each airline to determine whether fuelling of its aircraft should take place with passengers on board and the method by which this is to be carried out. However, when wide-cut fuels (JP4 / JETB) are involved, airlines are advised that:

Passengers should be disembarked before fuelling if wide-cut fuel is involved and the fuel does not contain an anti-static additive. Wide-cut fuel is considered to be involved when it is being supplied or is present in the aircraft tanks, or the tanks contain a mixture of more than 5% wide-cut kerosene.

Passengers may remain on board the aircraft only if the operator is satisfied that all fuel being boarded contains an approved anti-static additive, that the guidance given in CAP 748 is being followed and that the appropriate instructions have been given to their operating staff.

The following safety measures are to be taken when fuelling with Aviation Kerosene (Jet A1), with passengers on board or when airline or other staff are on board for maintenance or other purposes:

Passengers / staff are to be warned that fuelling is taking place and they must neither smoke, use mobile phones or produce sources of ignition.

The aircraft cabin "No Smoking" signs are to be illuminated together with sufficient interior lighting to enable the aircraft emergency exits to be identified.

Ground servicing activities outside and within the aircraft are to be conducted in such a manner that they do not create a hazard. Exits are not to be obstructed by vehicles or equipment. Should an incident occur, the crew should be able to disembark the passengers via the aircraft steps or escape chutes without obstruction.

Inside the aircraft cabin, the aisles between seats and the areas where the aircraft escape chutes may be deployed are to be kept clear of obstructions.

When passengers are embarking or disembarking, their route is to avoid areas where fuel vapours are likely to be present, e.g. beneath fuel vent points, and they are to be under the direct supervision of airline staff at all times. The "No Smoking" rule is to be strictly enforced.

When it is necessary to carry out passenger / baggage reconciliations on the ramp, this must be done away from all the fuelling zones.

59.7.1 Aircraft Equipped WITH Automatic Inflatable Chutes

The following measures should be adhered to when refuelling aircraft equipped WITH automatic inflatable chutes.

- During fuelling, one set of aircraft passenger steps is to be positioned at the main passenger door normally used for the embarkation / disembarkation of passengers.
- As a precautionary measure, the left or right rear door is to be manned constantly by a member of the Cabin Staff and is to be available immediately for use as an emergency escape route using the automatic inflatable chute.

- The Fuelling Supervisor is to ensure that the area of ground beneath the door selected as an emergency escape route is kept unobstructed.

59.7.2 Aircraft NOT Equipped with Automatic Inflatable Chutes

The following measures should be adhered to when refuelling aircraft NOT equipped with automatic inflatable chutes.

- During fuelling, aircraft passenger steps are to be positioned at two of the main passenger doors normally used for the embarkation / disembarkation of passengers.
- Where aircraft are fitted with integral stairways and these are deployed, each may count as one means of egress.
- The Fuelling Supervisor is to ensure that two means to egress are available throughout the fuelling operation.

59.8 Cabin Safety

For the purpose of this Instruction, Cabin Staff may include airline staff trained in the use of emergency escape equipment.

Cabin Staff are required to supervise passengers and to ensure aisles and emergency doors are unobstructed.

Helicopters and Fixed Wing aircraft are not permitted to refuel with passengers on board.

In the event of the aircraft Captain or airline official requiring fire cover during the operation of fuelling with passengers on board, the Fire Service are to be requested via the operators handling agent or directly to the Fire Station Watch Manager (Extension 3241). The Fire Station staff will be made aware of the request.

59.9 Helicopters

Passenger(s) should not remain on the helicopter whilst fuelling is in progress except in exceptional circumstances, in which case all exits should be available for immediate use and the external area clear of obstructions if the only normal exit is on the same side as the fuelling points

The fuelling of helicopters with engines or rotors running is prohibited.

59.10 Fuel Spillages

In support of the Airport's environmental policy, all airside companies should be committed to minimising the occurrence and effects of fuel spillages at all times.

The Airport Emergency Orders detail the actions required in the event of aviation fuel spillages in the airside environment.

Every case of fuel spillage, irrespective of the amount must be reported immediately via Extension 2299. AOU will liaise with ATC as appropriate who may alert the Airport Fire Service. AOU will ensure that the incident has been satisfactorily concluded. When a major or extensive spillage is involved, the Fire Service may require the aircraft to be removed from the stand.

All staff that work airside have a responsibility to report any fuel spillage they may discover, in accordance with Section 12 of the Emergency Orders by calling ext. 2299 / 0113 391 3399 with details.

When LBA manpower and or materials are employed in dealing with a spillage, a charge may be levied for the service against the operator or handling agent of the aircraft concerned. Payment will be the responsibility of the operator or agent, as appropriate. Any negotiation with the fuel company involved will also be a matter for the aircraft operator or handling agent.

59.11 Fuel Samples and Waste Fuel – Disposal

Routine fuel samples are a fire hazard and their disposal must be conducted in a safe manner. Sample cans must be placed in an appropriate bunded container as soon as possible. Fuel samples are not to be stored in open containers or placed in grit bins, dustbins or sawdust bins. Under no circumstances must fuel be allowed to enter the storm water or foul-drainage systems. Waste fuel must be in a suitable container stored in a bunded location.

Bulk fuel samples must be retained in a Proprietary safety vessel which has the following characteristics:

- The vessel is to be clearly marked with the grade of fuel it contains and the words, “FLAMMABLE” or “HIGHLY FLAMMABLE”,
- The vessel must state the type of fuel contained and marked “ NOT FOR FLIGHT USE”
- The vessel is to be free from leakage and sealed.
- The vessel is to be of such a size and weight that it can be easily manhandled in the event of an emergency.
- Fire extinguishers should be available in close proximity to retained fuel samples.
- Bulk fuel sample containers are not to be positioned near to a recognised means of escape or other building or near any electrical sources or similar area of high risk.

59.12 Defueling

Airlines/Handling agents that require defueling or the transfer of fuel, must provide detailed procedures and risk assessment to the Head of Airfield Services for approval.

59.13 Maintenance of Vehicles and Ground Servicing Equipment

All vehicles and ground equipment operating airside are to be properly inspected and maintained to ensure that they do not create a fire risk. They should meet the requirements as detailed in CAP 642 which dictates MOT standards or similar.

All general maintenance on vehicles or equipment is strictly forbidden on the apron/ramp area. Only essential repairs due to breakdown or vehicle incident will be authorised but **MUST** have prior approval from the Airside Operations Unit. In these circumstances a remote area airside will be identified.

Vehicles/equipment that requires maintenance or servicing must be relocated landside if not contracted to LBA Vehicle Maintenance Department.

As stated in the Aerodrome, all drivers must ensure that their vehicle is parked in such a manner as to not prevent or restrict the access/exit of other vehicles or equipment. The keys must be left in the ignition in case the vehicle requires moving in an emergency.

Any operator that carries tools for their work (regardless of ownership of the tools) should keep these in a secure strong box /tool box in the rear of the vehicle and locked. With the key kept separate from the ignition key.

The Airside Operations Unit will undertake frequent audits of airside/apron operations and operators will be notified of any practices observed that do not comply with the above procedures.

59.14 Enforcement

In the event of any breach of this Instruction, the airline / handling agent or fuelling company is to report the incident to LBA. If the incident is sufficiently serious, an investigation may be carried out jointly in conjunction with the airline and fuelling company concerned. If, in the opinion of the investigation team, there has been negligence, advice will be sought with a view to legal action.

59.15 Implementation

If individual airlines or handling agents have difficulty in reconciling their current company fuelling regulations with this Instruction, they should inform LBA in writing of the differences and forward a copy of the relevant regulations and their risk assessment of the proposed operation. Each case will be examined by LBA and expert advice may be sought to see if the individual airline or handling agent's regulation can be considered a safe working practice in the light of the standards already established.

AOP 23 – *Detention of Aircraft*



60 SECTION 60 - Detention of Aircraft

60.1 Aims and Objectives

Under section 88 of the Civil Aviation Act 1982, LBA has the right to detain an aircraft for non-payment of airport charges payable to LBA for the use of, or for services provided at, Leeds Bradford Airport ('the Airport') until such time as the charges due in respect of it (or incurred by its operator in respect of another aircraft) are satisfied.

The power to detain for non-payment of airport charges is not given to specific named individuals. It is instead given to LBA as the owner/manager of the Airport.

The procedures set out below determine who is authorised internally to detain an aircraft pursuant to this document.

60.2 Aircraft to be detained

Aircraft that may be detained until such time as any relevant charges are discharged are:

- The aircraft in respect of which the charges were incurred (whether or not the charges were incurred by the person who is the operator of the aircraft at the time the detention begins); or
- Any other aircraft of which the person in default is the operator at the time the detention begins.

Before any detention for unpaid fees is implemented, Section 88 of the Civil Aviation Act must be reviewed to ensure all actions are legal and defensible.

The power to detain is to recover "airport charges". This includes landing, navigational and parking charges. It may also include charges for other "services" provided by LBA to the aircraft at the Airport. LBA's Legal Counsel should be consulted prior to exercising a right to detain in respect of other "services" to ensure the relevant right exists.

The power to detain only arises where "default" is made in payment of airport charges. If credit terms are in place e.g. payment within 14 days of invoice, "default" will not arise in respect of such sums until the expiry of the credit period.

If the aircraft charges are not paid within 56 days of the date when detention begins, LBA may take steps to sell the aircraft in order to satisfy the charges. No steps of this nature should be taken without first having consulted LBA's Legal Counsel as court approval is required.

60.3 Internal Authorisation

When unpaid airport charges that may be recovered by exercising the right to detain an aircraft are identified by the Finance Department or otherwise, the Chief Financial Officer should in the first instance consult with the:

- Chief Executive and
- Operations Director

to ascertain the commercial viability and implications of detention.

Where possible LBA's Legal Counsel should be consulted prior to detention. Following this internal consultation, Part A of the form APPENDIX 35 - Notification of Intention to Detain an Aircraft should be completed and the Chief Executive (or Operations Director in his absence) should then authorise the detention by signing Part A of the form.

Once authorisation of detention is granted, copies of the completed form are to be circulated to:

60.3.1 Notification of Intent circulation list

- Chief Executive
- Chief Financial Officer
- LBA's Legal Counsel
- Operations Director
- Head of Airfield Services
- Head of Air Traffic Services

If the aircraft is foreign registered, the Department for Transport (DfT) must be informed before the detention is implemented. As at the date of issue of this document, the DfT contact is the Head of Bilateral Division (0207 944 5803 or, out of hours, 0207 944 5999).

60.4 Implementation

On receipt of the Notification of Intention to Detain an Aircraft, a person designated to detain aircraft shall complete and sign APPENDIX 36 - Notice of Detention of Aircraft.

It is important that a contact name and number are specified on the Notice of Detention of Aircraft so that payment can be made and the detention ended without delay. Out of hours contact details should be provided where possible.

The persons designated to detain aircraft are:

- Operations Director
- Head of Airside Services
- Head of Air Traffic Services

The person designated to detain aircraft shall attend the aircraft and serve the Notice of Detention of Aircraft, in the presence of witnesses, either by presenting it to the aircraft captain or affixing it to the exterior of the aircraft door. It is recommended that a copy of the notice be affixed to the exterior of the aircraft door in all cases (whether or not handed to the aircraft captain as well) so that any person entering is aware of detention. (A copy should be sent immediately to the owners' and operators' head office and the handling agent).

The aircraft should be blocked in to prevent unauthorised attempts to remove it.

60.5 Exceptions

LBA shall not detain or continue to detain an aircraft for unpaid charges if the operator of the aircraft or any other person claiming an interest in the aircraft:

- disputes that the charges, or any part of them, are due; and
- gives LBA, pending the determination of the dispute, sufficient security for the payment of the charges which are alleged to be due.

60.6 Removal of Lien

On final settlement of the charges that resulted in the detention, the Chief Executive and/or Operations Director (whoever authorised the implementation of the lien) should then end the detention by signing Part B of the form APPENDIX 35 - Notification of Intention to Detain an Aircraft. Once authorisation for the end

of the detention is granted copies of the completed form are to be circulated to the recipients provided for in Para. 60.3.1.

60.7 Legal Liability

LBA's legal liability arising from the detention of aircraft is covered under LBA's aviation insurance policy to the extent that LBA becomes legally liable to pay damages arising out of detention of aircraft in breach of the Civil Aviation Act 1982 and / or the Air Navigation Order 2009 and / or existing or future legislation including, without limitation, instruments, regulations, directives, orders and byelaws pursuant to which LBA detains an aircraft.

60.8 CAA and Eurocontrol Detentions

As of the date of issue of this document, the following persons are authorised pursuant to the Civil Aviation (Chargeable Air Services) (Detention and Sale of Aircraft) Regulations 2001 (as amended) and the Civil Aviation (Chargeable Air Services) (Detention and Sale of Aircraft for Eurocontrol) Regulations 2001 (as amended) to detain aircraft on behalf of the Civil Aviation Authority (CAA) and the European Organisation for the Safety of Air Navigation (Eurocontrol) in respect of air navigation charges due.

- Chief Executive
- Operations Director

All required paperwork will be prepared and provided by the CAA.

60.9 Implementation of CAA and Eurocontrol detentions

- LBA will receive a request to detain an aircraft from the CAA on behalf of either Eurocontrol or the National Air Traffic Services (NATS).
- This request must be actioned by one of the persons holding the roles identified in Para. 60.4
- Once the aircraft has been detained the CAA should be contacted and the CAA will, in turn inform the operator of the event and the procedures for payment of costs.
- Once a satisfactory conclusion has been reached between the operator and the CAA, LBA will be informed and the aircraft can be released. This should be confirmed to the CAA, who will in turn advise the operator.

60.10 Air Navigation Order Detentions

A further right to detain aircraft may be given to specific individuals by CAA authorisation issued under the Air Navigation Order 2009 made pursuant to Section 60 of the Civil Aviation Act 1982. If it appears to an Authorised Person that any aircraft is intended or likely to be flown while in a condition unfit for the flight, that Authorised Person may direct the operator or the commander of the aircraft that he is not to permit the aircraft to fly until the direction has been revoked by the CAA or by an Authorised Person and the CAA or that Authorised Person may take such steps as are necessary to detain the aircraft.

The power within the Authorisation could be invoked in 3 circumstances:

- On your own volition, when you suspect reasonable grounds exist
- After obtaining advice from the CAA; or
- The CAA requests you to detain the aircraft on its behalf.

LBA must not exercise these powers of an Authorised Person to detain an aircraft for non-payment of landing or other fees. An Authorised Person acting under Article 257 is not carrying out a function of the CAA or acting on its behalf. Their authority to perform the function derives from their appointment by the CAA under the ANO as an Authorised Person and they are responsible for their own actions. Liability for the use of

Authorisations under Article 257 by non-CAA personnel lies solely with them and their employer, and not with the CAA.

60.10.1 Aircraft determined unfit for flight

Should an authorised person resolve that an aircraft is unfit for flight, in the first instance they should try to contact the CAA to request that they attend and detain the aircraft.

A Direction is to be issued to the Operator or the Commander of the aircraft. It should always be in writing. If it cannot be given to the addressee in person the Direction should be fixed to the aircraft concerned and a copy of it sent to the Commander and/or Operator. In such a case it may be appropriate to try and inform the Operator and/or Commander orally that the Direction has been issued. The power to detain under Article 257(3) allows the authorised person to direct the operator/commander not to permit the aircraft to make 'the particular flight or any other flight of such description as may be specified in the direction'.

It is important to remember that if a Direction has been given it must subsequently be revoked. This Direction should only be revoked if required by a court order or if the Authorised Person is satisfied that the aircraft is now airworthy.

If a decision is made to detain an aircraft under in accordance with Para. 60.10.1, then only a CAA approved person is authorised to detain such aircraft & shall complete and sign APPENDIX 37 – Air Navigation Order Detention Forms.

The Authorised Person will be responsible for ensuring this power to prevent an aircraft flying is used properly in accordance with the ANO and may be liable for any claims of improper use.

As well as issuing the Direction, an Authorised Person is also entitled to take such steps as are necessary to detain the aircraft. This may for example involve parking an airport vehicle so as to prevent the aircraft from moving. Any such steps should however be apparent to any person trying to move the aircraft and should avoid damaging the aircraft. In accordance with Article 257 (5), the CAA or any authorised person may enter and inspect any aircraft. The persons approved by the CAA to detail aircraft under Article 257 are: LBA Airfield Safety & Compliance Manager.

60.10.2 CAA Contact details

Once an aircraft has been detained the CAA should be informed on the following numbers:

- Between the hours of 0900 hours and 1700 hours the CAA Investigation and enforcement Manager should be contacted on 0207 453 6193;
- Should the above be unavailable, or if it is out of hours, then contact 01293 567171.

Should an aircraft be detained by LBA and a CAA surveyor subsequently reviews the position and considers that there are no grounds for detention, and then the detention notice will be revoked.

60.10.3 Seeking advice from the CAA

The authorised person may believe that an aircraft is unfit for flight but needs further advice from the CAA before the aircraft is detained. In this case the a surveyor will be requested. The surveyor will review the position and will either issue a detention notice or will advise LBA that no further action is to be taken.

Once it has been agreed that an aircraft is safe to operate, the CAA will revoke the direction to prevent aircraft flying. The CAA will inform both LBA and the operator that this has happened and normal operations may commence.

60.11 APPENDIX 35 - NOTIFICATION OF INTENTION TO DETAIN AN AIRCRAFT

for internal use only - this is not a detention notice

Part A - To be completed and distributed to the relevant persons before exercising a right to detain any aircraft at Leeds Bradford Airport

Part B - To be completed and re-distributed as above, as soon as practicable once a right to detain has been rescinded.

PART A

LBA intends to exercise a right to detain the following aircraft.

Aircraft detail	
Registration	
Type	
Operating Company	
Owner	
Details Of Debt To Be Recovered	

ATC please suspend departure slots for this aircraft.

Airfield Operations please ensure that the aircraft is parked in an area that will cause the minimum amount of disruption to operations.

Authorising person:.....

Signature:.....

Print Name:.....

Position:.....

Date: Time:.....

PART B

The detention relating to the above aircraft has now been rescinded.

Authorising person:

Signature:.....

Print Name:.....

Position:.....

Date:..... Time:.....

60.12 APPENDIX 36 – NOTICE OF DETENTION OF AIRCRAFT

To be prepared on LBA headed notepaper

LEEDS BRADFORD AIRPORT LIMITED**NOTICE OF DETENTION OF AIRCRAFT**

Section 88, Civil Aviation Act 1982

AIRCRAFT REGISTRATION / CHASSIS NUMBER

insert aircraft registration / chassis number

NOTICE IS HEREBY GIVEN

for and on behalf of Leeds Bradford Airport Limited that this aircraft has been detained by Leeds Bradford International Airport Limited in accordance with the provisions of Section 88 of the Civil Aviation Act 1982 pending settlement of all airport charges now accrued and due to Leeds Bradford Airport Limited by

insert name of debtor

and shall subject to the provisions of Section 88 of the said Act be detained by Leeds Bradford Airport Limited until all claims and accounts in respect of the same are satisfied **AND** that this aircraft may not be moved, boarded or its state or condition altered in any way or any items removed from it without the express authority of Leeds Bradford International Airport Limited, until further notice.

Furthermore, if the charges are not paid within 56 days of the date of detention, Leeds Bradford International Airport Limited may take steps to sell the aircraft in order to satisfy the charges.

Signed.....

Name.....

Job title.....

Contact no.....

Date.....

Time.....

To discuss the requirements for the removal of this lien contact [*insert name and position*] or [*insert contact number*]

60.13 APPENDIX 37 – Air Navigation Order Detention Forms**Air Navigation Order 2009****DIRECTION TO PREVENT AIRCRAFT FLYING WHILE IN A CONDITION UNFIT FOR THE FLIGHT**

To: **NAME OF OPERATOR**, the Operator of **AIRCRAFT REGISTRATION**
Or
NAME OF COMMANDER, the Commander of **AIRCRAFT REGISTRATION**

It appears to me **NAME OF AUTHORISED PERSON**

being an authorised person for the purposes of Article 232 of the Air Navigation Order 2009, that the aircraft bearing the registration **AIRCRAFT REGISTRATION** is likely to be flown while in a condition unfit for the flight.

NOW I, as an authorised person, direct that the said aircraft shall not be flown until this direction has been revoked by the CAA or by an authorised person.

Dated this..... day of.....20...

Signature.....

Air Navigation Order 2009**REVOCATION OF DIRECTION TO PREVENT AIRCRAFT FLYING WHILE IN A CONDITION UNFIT FOR THE FLIGHT**

I, **NAME OF AUTHORISED PERSON**, being an authorised person for the purposes of Article 232 of the Air Navigation Order 2009, revoke the Direction dated **DATE** issued to **NAME OF OPERATOR** or **NAME OF COMMANDER** in respect of **AIRCRAFT REGISTRATION**.


Dated this..... day

of..... [year]

Signature.....

AOP 24 -

Movement Area, Drainage Inspection and Runway Friction Assessment



61 SECTION 61 - Movement Area, Drainage Inspection and Runway Friction

Assessment

61.1 Aims and Objectives

ADR.OPS.C.010 Pavements, other ground surfaces and drainage states

The aerodrome operator shall inspect the surfaces of all movement areas including pavements (runways, taxiways and aprons), adjacent areas and drainage to regularly assess their condition as part of an aerodrome preventive and corrective maintenance programme.

The aerodrome operator shall:

- maintain the surfaces of all movement areas with the objective of avoiding and eliminating any loose object/debris that might cause damage to aircraft or impair the operation of aircraft systems;
- maintain the surface of runways, taxiways and aprons in order to prevent the formation of harmful irregularities;
- take corrective maintenance action when the friction characteristics for either the entire runway or a portion thereof, when uncontaminated, are below a minimum friction level. The frequency of these measurements shall be sufficient to determine the trend of the surface friction characteristics of the runway.

61.2 Movement Area Inspections

Details of movement area inspections can be found in AOP 06

61.3 Drainage Inspections

In the event a build-up of water is found during inspections around drainage gulleys the projects department will be informed to action remedial work.

61.4 Runway Friction Assessment

In accordance with CAA CAP 683, Tels 13 will tow a water bowser and Mu-Meter along the Runway at set distances from the centreline. The bowser will self-wet the runway to 0.5mm water depth in order to determine Runway Friction levels. It is anticipated that 12 full-length runs will be required and approximately 2 hours runway time will be required. It is anticipated that the full assessment will take approx. 4 hours in total (subject to aircraft movements) to allow for bowser refilling and calibration. When the friction of a significant portion of a runway is found to be below the minimum friction level value, a NOTAM should be filed specifying which portion of the runway is below the minimum friction level and its location on the runway, and take immediate corrective action.

61.4.1 Assessment Conditions

- Works will take place during daylight hours subject to scheduled movements.
- The work will be continuous except in LVPs when work will only proceed subject to approval by ATC. The runway and apron will be vacated prior to commencement of any aircraft movements.
- It is possible to vacate the Runway at the end of one complete run, or abort a run should it be operationally necessary. N.B. 32 Emergency Access Road cannot be used due to the gradient of the road.
- The runway surface should be free from precipitation during the assessment, with no wet patches.

- The assessment should be conducted at an ambient air temperature above 2°C.
- Dampness, fog and mist conditions, along with cross-winds might affect the outcome of the assessment, therefore ATE should consider these, prior to and during the assessment.
- A full process plan is detailed in the LBA Runway Friction Assessment document (held by SATE)

AOP 25 – *Runway Incursion Prevention*



62 SECTION 62 - Runway Incursion Prevention.

62.1 Aims and Objectives

LBA regularly reviews the effectiveness and adequacy of the prevention measures in place at their aerodrome. Much of this activity takes place as part of the Local Runway Safety Team (LRST) agenda. In doing so, LBA ensures that suitable measures are in place, particularly in areas of vulnerability, to minimise the risk of runway incursion. In this review, LBA considers:

- to what extent aerodrome visual aids, i.e. aeronautical ground lighting, signs and markings, contribute towards reinforcing situational awareness;
- whether the aerodrome's visual aids, in conjunction with ATC clearances and instructions, in the vicinity of a runway could mislead pilots and vehicle drivers;
- whether the layout of any movement areas on the aerodrome could cause confusion 'hot-spots', and how such confusion could be eliminated;
- whether airside driver training is sufficiently robust, reassessing vital topics such as aerodrome operations; radio communication procedures and phraseology;
- the use and meaning of visual aids;
- and familiarisation of aerodrome layout;
- and how runway safety is maintained during periods of 'work-in-progress', particularly when contractors who are not familiar with the aerodrome or with aerodrome operations are involved.
- identification and monitoring of known "hot spots", with a view to minimizing risk in these areas.

LBA conducts regular 'table-top' exercises attended by representatives of all relevant aerodrome functional areas, whereby runway incursion scenarios can be developed and the effectiveness of potential prevention measures may be assessed. A review of these assessments and other SMS actions may be included in the aerodrome audit process.

62.2 Procedures

All runway holding point red stop bar lights will be selected H24 and deselected for aircraft and vehicles entering the runway.

Illuminated red stop-bars used at runway holding positions will only be de-selected when clearance has been given for an aircraft or vehicle to enter the runway. If a conditional clearance has been issued in respect of a landing aircraft the stop-bar will not be deselected until the landing aircraft has passed the position at which the vehicle or aircraft will enter the runway. This requirement will be satisfied visually by the controller.

For aircraft departing from the same runway holding position, when a conditional line up clearance has been issued to a succeeding departing aircraft the illuminated red stop-bar may remain de-selected provided that it will be the next movement on that runway. This procedure is not available during Safeguarding or LVP conditions.

Runway guard lights will continue to be illuminated even when the stop bars have been disabled.

AOP 26 –

Drugs &

Alcohol Policy



63 SECTION 63 – Drugs & Alcohol Policy

Leeds Bradford Airport's (LBA) Drugs & Alcohol policy, in accordance with ADR.OR.C.045, applies to all personnel involved in the operation, rescue and firefighting, maintenance of the aerodrome and unescorted persons operating on the movement area or other operational areas of the aerodrome. These aforementioned persons shall not consume alcohol during their duty period or perform any duties under the influence of alcohol, or any psychoactive substance or any medicine that may have an effect on his/her abilities in a manner contrary to safety.

For the purposes of this procedure, the alcohol consumption level has been set at 35 micrograms per 100 millilitres breath alcohol concentration, equivalent to the current England and Wales drink drive level.

Anyone who is suspected to have breached this policy will be removed from site. Their employer will be informed and WYP advised.

For any aforementioned persons who have additional regulations regarding the consumption of alcohol, for example, ATC, Pilots, Engineers and Cabin Crew, their respective regulatory limit will apply.

The LBA full Drugs and Alcohol Policy which is applicable to all LBA employees can be found on the Company Intranet and is available on request from the Human Resources Department.

AOP 27 -

Integration of Miscellaneous Aviation Activities



64 SECTION 64 - Integration of Miscellaneous Aviation Activities

64.1 Policy

The Head of Air Traffic Services (HoATS) is responsible for ensuring that all aircraft activity categorised as 'miscellaneous' which occurs within LBA controlled airspace is managed effectively to ensure the safe operation of aircraft.

64.2 General

Any user of the LBA controlled airspace (the dimensions of which are promulgated in the UK AIP), is subject to the following regulations:

- Air Navigation Order
- UK AIP
- MATS Part I
- MATS Part II (Local instructions)
- Special restrictions by NOTAM
- Special procedures by NOTAM
- Airport Bylaws

The following activities are examples of categories of flight or events that require prior approval:

- Gliding
- Banner Towing Operations
- Parachute Dropping
- Balloons
- Request for Free Flights
- Laser Displays
- Air Display Activities
- Microlight Operations (not normally permitted).
- Calibration Flights
- Sky Lanterns

The obtaining of any permissions or exemptions (from Civil Aviation legislation) that may be required for any activity rests with the person(s) intending to carry out the activity.

AOP 28 – *Safeguarding Procedures*



65 SECTION 65 - Safeguarding Procedure

65.1 Aims and Objectives

The aerodrome shall be safeguarded in accordance with advice issued by the CAA and Local Planning authority procedures and the requirements of CAP 764 and CAP 738. LBA will endeavour to ensure that the aerodrome obstacle limitation surfaces remain clear of all permanent and semi-permanent obstructions.

Safeguarding is the process used in order to ensure that the operation and development of Leeds Bradford Airport is not inhibited by buildings, structures, erections or works that infringe protected surfaces, obscure runway approach lights or have the potential to impair the performance of aerodrome navigation aids, radio aids or telecommunication systems; by lighting that has the potential to distract pilots; or by developments that have the potential to increase the number of birds or the bird hazard risk.

LBA shall establish and maintain contact on safeguarding issues with the local planning authorities. These authorities will consult with LBA before granting permission for developments that may potentially have an impact on the safe operation of the aerodrome.

65.2 LBA Safeguarding Considerations

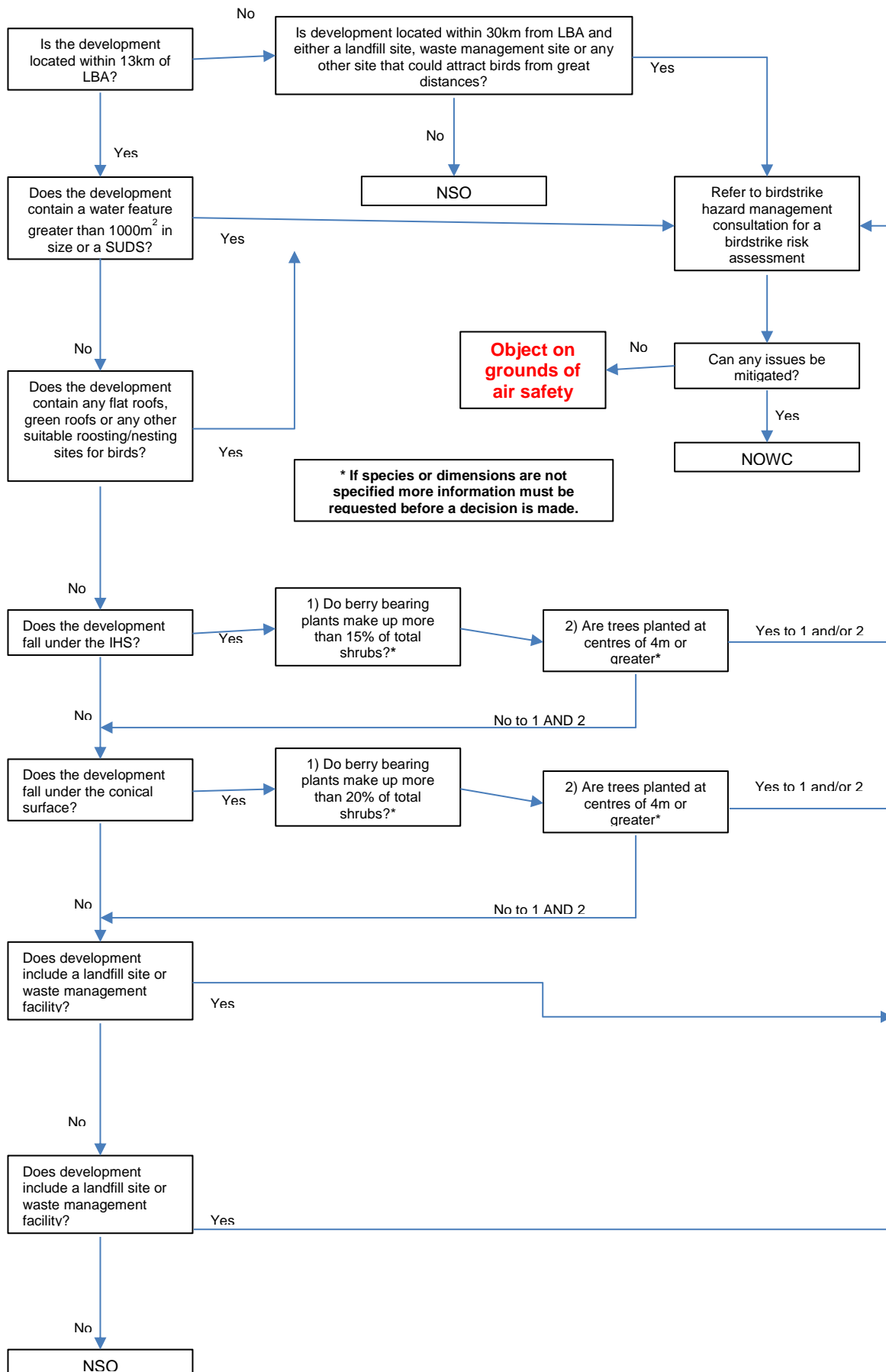
The risks caused by human activities and land use which are assessed and mitigated should include:

- obstacles and the possibility of induced turbulence;
- the use of hazardous, confusing, and misleading lights;
- the dazzling caused by large and highly reflective surfaces;
- sources of non-visible radiation, or the presence of moving, or fixed objects which may interfere with, or adversely affect, the performance of aeronautical communications, navigation and surveillance systems; and
- non-aeronautical ground light near an aerodrome which may endanger the safety of aircraft and which should be extinguished, screened, or otherwise modified so as to eliminate the source of danger

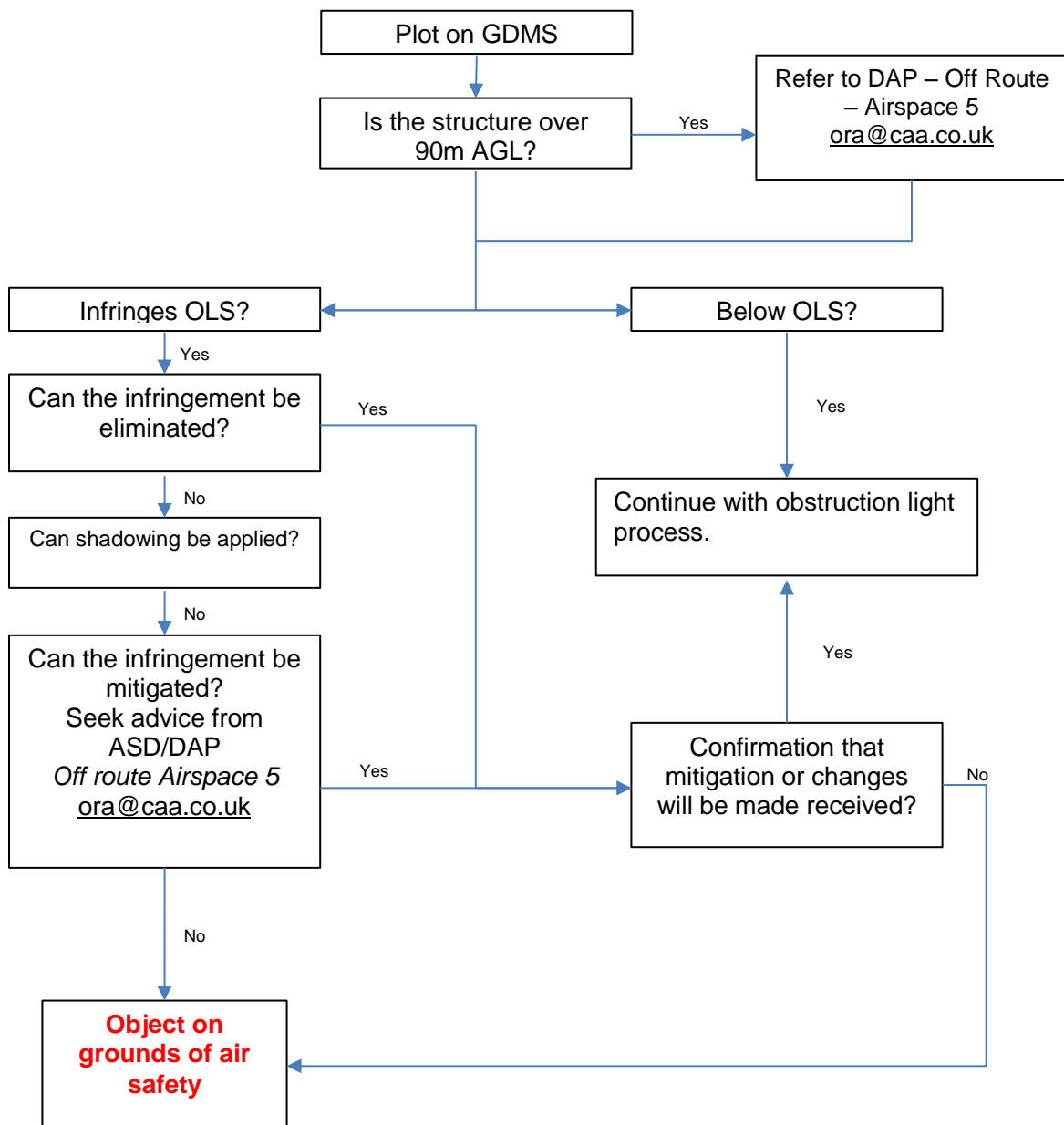
NB: Consideration should be given to obstacles or developments that may require prior approval from the CAA on accordance with ADR.OR.B.040

The following flow charts provide considerations for LBA when conducting reviews for planning applications against safeguarding criteria.

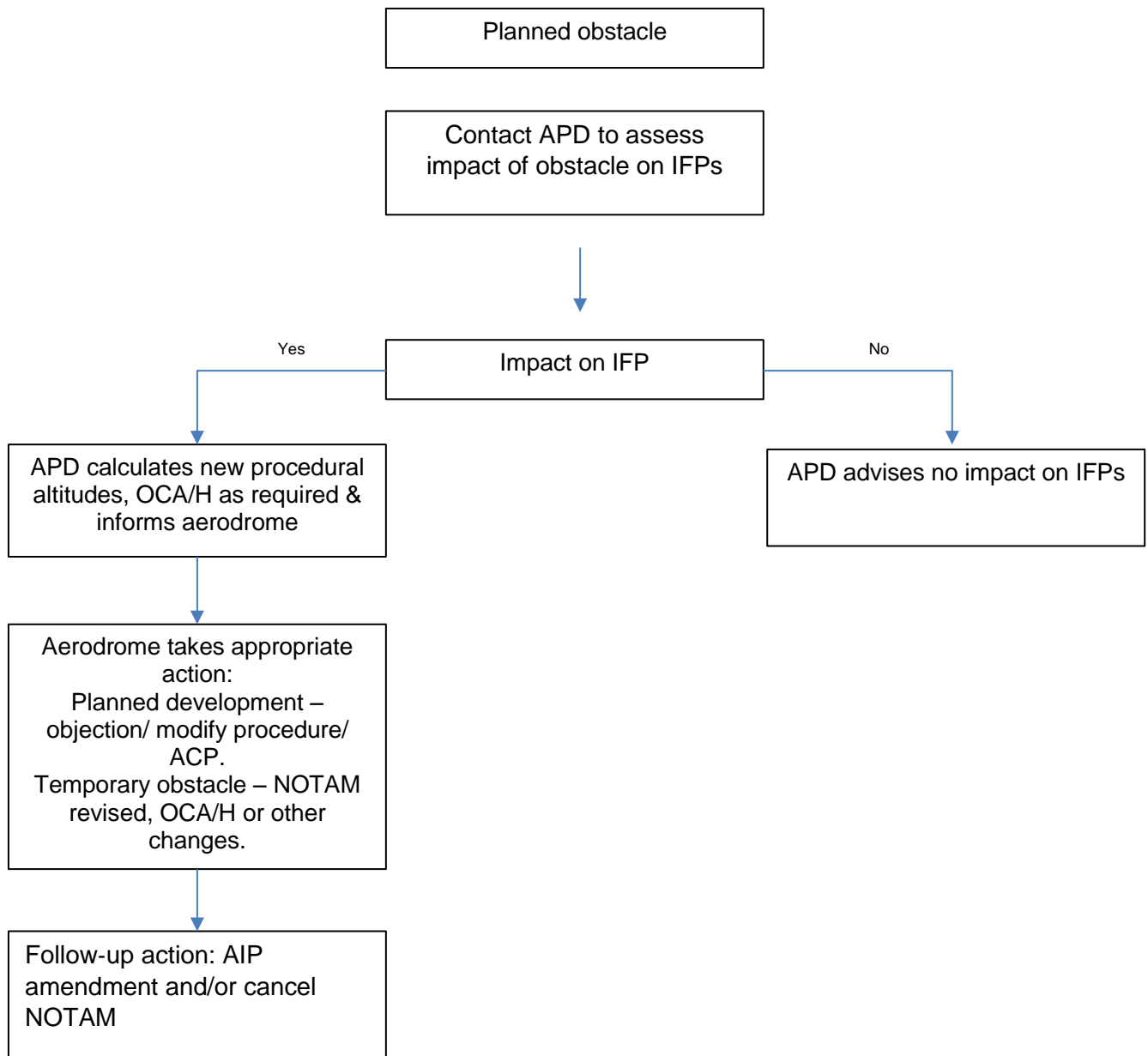
65.2.1 Birdstrike Hazard



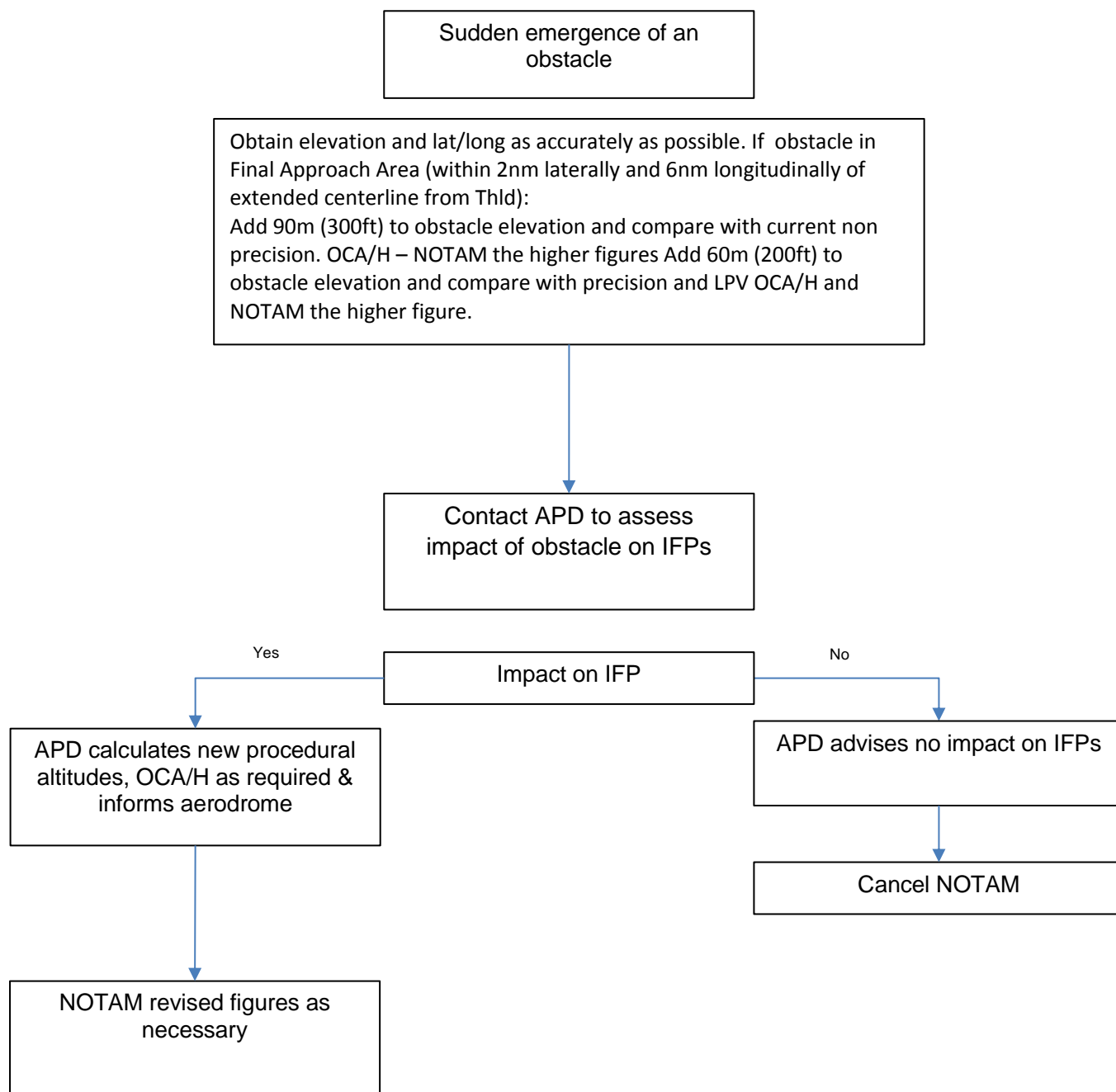
65.2.2 Height Assessments



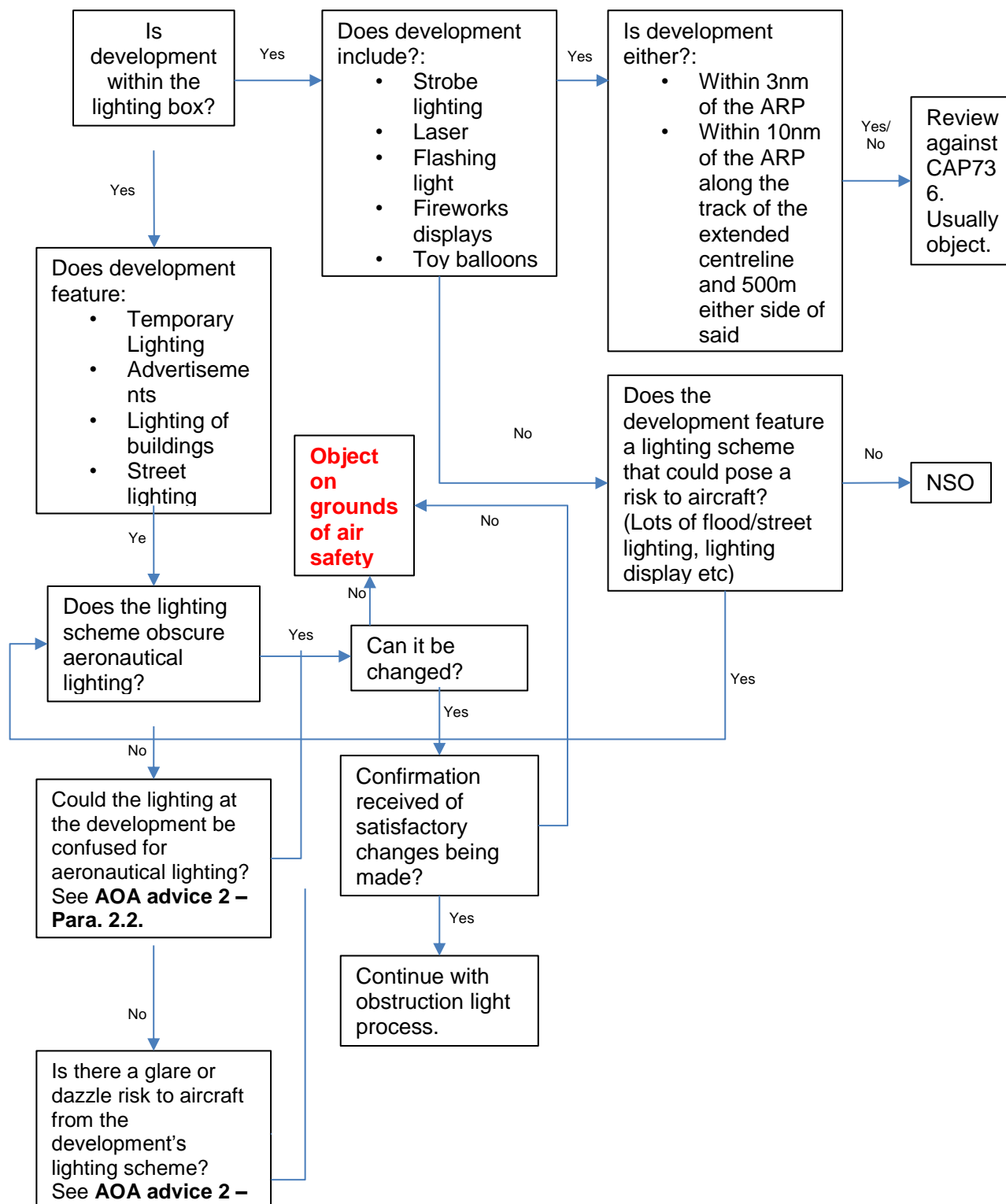
65.2.3 Instrument Flight Procedures (IFPS) – Planned Obstacle



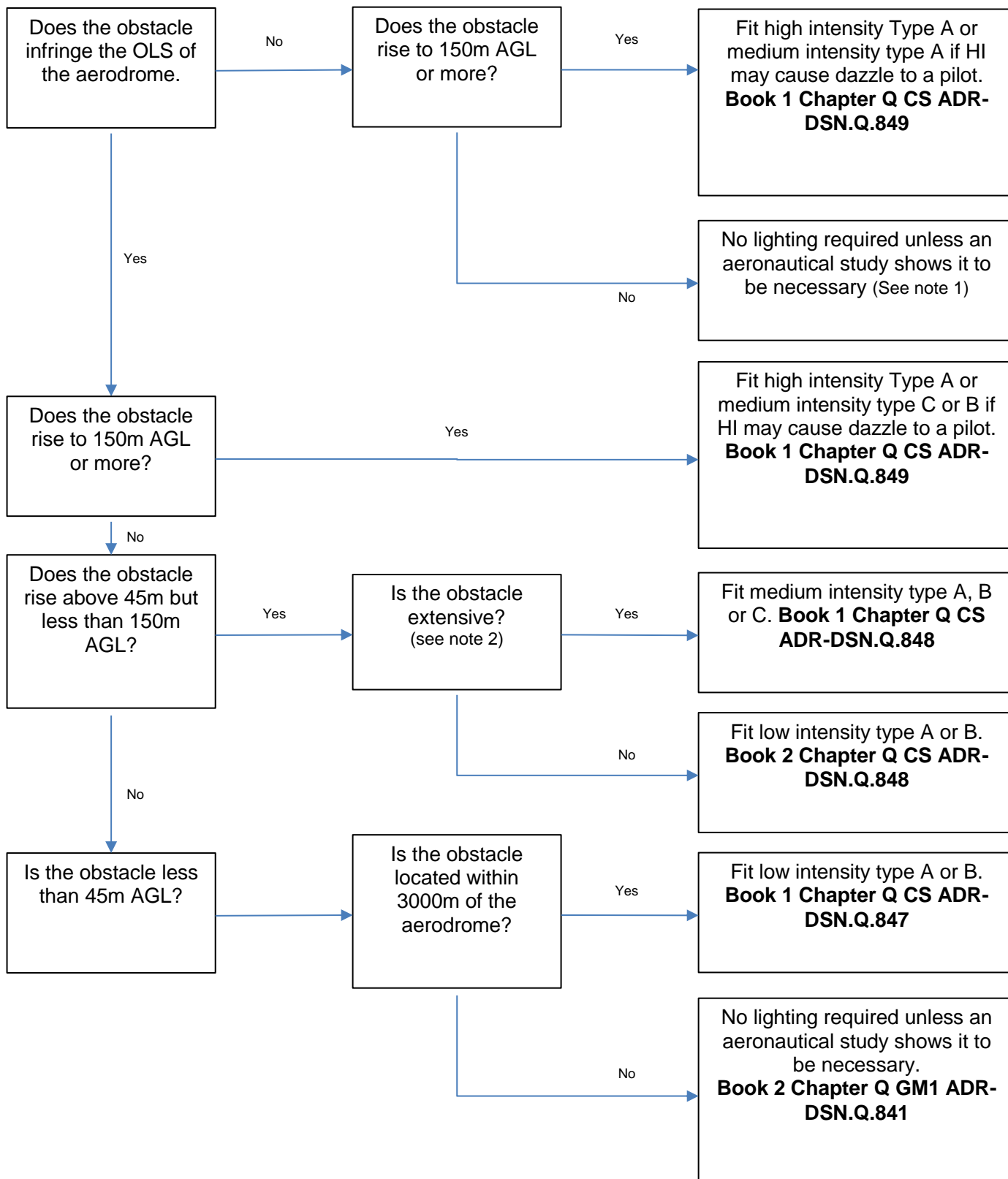
65.2.4 Instrument Flight Procedures (IFPS) – Sudden Emergence of Obstacle



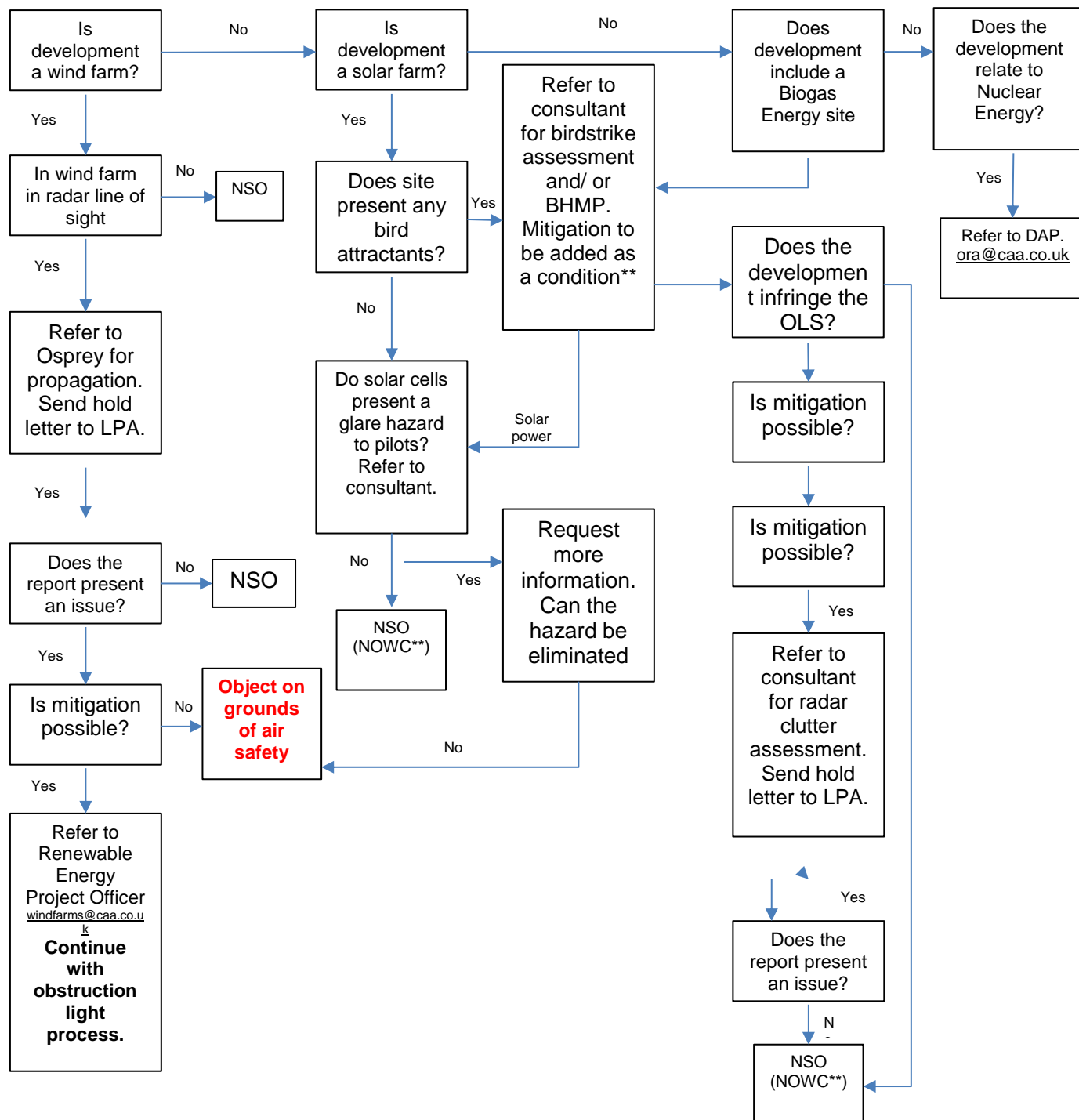
65.2.5 Lighting Schemes



65.2.6 Obstacle Lighting



65.2.7 Renewable Energy



65.3 APPENDIX 38 – Safeguarding Procedure

No	Process Activity	Responsibility
A1	Planning Application document received by Safeguarding Team	Safeguarding Team
A2	Case number allocated to application from chronological list in SharePoint database. Details of application entered onto database against the unique reference number. Case processed using any of the tools available (GDMS, LoS, Google Maps, Grid Ref Finder).	Safeguarding Team
A3	Any applicable or relevant documents to be saved using the unique reference followed by the document name. These can include drawings, maps, and also the GDMS test and LoS.	Safeguarding Team
A4	If the application is a wind farm case, Safeguarding Team will advise whether to pass to a consultant for further assessment. Letter advising developer/planning authority to speak to consultant advised by LBA. Safeguarding Case parked pending further information	Safeguarding Team
A5	Decision taken on referral if insufficient information available to make a decision. If further information is required, the relevant specialist will be consulted. <ul style="list-style-type: none"> – ATC issues refer to HoATS – Bird attractant refer to HAS – Potential to impair the performance of aerodrome navigation aids, radio aids or telecommunication refer to SATE. The SATE will then assess the application against the requirements of ICAO Annex 10. – Lighting considerations, refer to SAGLE 	HAS/HoATS/ Safeguarding Team
A6	Decision on application reached on either Objection/No Objection / Objection + Conditions.	HAS/ Safeguarding Team
A7	If the case is a referral, the Safeguarding Team is to request additional information.	Safeguarding Team
A8	Safeguarding Team raise a No Objection/ Objection + Conditions/Objection letter raised Letter signed by HATS.	Safeguarding Team /HAS
A9	Database updated with decision information Copy of letter added to SharePoint All documents and analysis stored on SharePoint, not hardcopy files.	Safeguarding Team
A10	There is a system in place for crane permits which are issued on a form, an illustration of which can be seen in APPENDIX 39.	Safeguarding Team /AOU

65.4 APPENDIX 39 – Crane Permit



Leeds Bradford®
Airport

AERODROME SAFEGUARDING DEPARTMENT

MOBILE CRANE NOTIFICATION WITHIN 5KM OF THE AIRFIELD

CRANE OPERATOR PERMIT

NOTAM	NOTAM request form to be issued to ATC by AOU.
Other considerations	Any changes in equipment and/or hours/period of operation must be made known to LBA at earliest opportunity. An amended crane operator permit will then be issued.

Time / Date	
Issued by	
Position / Contact Details	

Safeguarding Department, AOU
Leeds Bradford Airport
LS19 7TL
Safeguard@yvgbna.co.uk



Leeds Bradford®
Airport

AERODROME SAFEGUARDING DEPARTMENT

MOBILE CRANE NOTIFICATION WITHIN 5KM OF THE AIRFIELD

CRANE OPERATOR PERMIT

LBA Reference	
Operations Reference	
Supervisor / Contact name	
Contact details	

Period of Activity (DATE/TIME)	Crane Type:
Crane details & Location	Crane Address: LBA ARP Range metres Bearing
	Grid Reference:
	Ground Elevation:
	Crane Height:
	JIB Length:
	Total elevation AMSL:
Safeguarding considerations	
Obstruction lighting	
ATC considerations	
Operator conditions	Inform ATC before works commence and subsequently once complete 0113 391 3282

Safeguarding Department, AOU
Leeds Bradford Airport
LS19 7TL
Safeguard@yvgbna.co.uk

AOP 29 –

Safety


Directives

issued by

the

competent

authority



66 SECTION 66 - Safety Directive Procedure

66.1 Aims and Objectives

To assess what impact a directive issued by the competent authority may have on LBA operations, personnel or aerodrome.

66.2 Procedures

No	Process Activity	Responsibility
A1	Safety Critical Directive received by e-mail from EASA or CAA	ASCM
A2	E-mail saved in SharePoint under SMS/CAA_EASA Information Updates.	ASCM
A5	Should any of the publications be new, the whole document has a workflow created in SharePoint for distribution to certain nominated parties with a target date for feedback, which can be extended due to annual leave, shifts etc.	ASCM
A6	The nominated parties are: - <ul style="list-style-type: none"> Any publications with ATC content – delegated ATC WM Any publications with ATE content – SATE Any publications with RFFS content – FSM Any publication with OPS content - HAS Where any larger more detail publications are issued, all parties will be included on the distribution workflow.	ASCM
A7	If no impacts are applicable, the workflow is completed by sending feedback with no comments.	All nominated parties
A10	If the changes or notifications outlined in the publications affect LBA, comments should be added to the workflow and relevant documentation/manuals/procedures be updated.	All nominated parties/ ASCM

ALL respective managers are required to subscribe to the CAA Skywise notification service for all non-safety critical directives