747 NOTICES

This book contains all notices which apply to **747 Flight Crew**.

Specifically:

Operations Manual Notices (OMN)
Issued to legally amend all areas of the Operations Manual.

Part B
- FCOM
- QRH
- FCTM
- MEL
- CDL
- Performance Manual
- Load and Balance Manual
- SEP Manual
- Cabin Technical Manual

Part D
- Part D - Appendix

Fleet Admin Notices (FAN)
Issued to provide guidance or admin type information

Notices specific to all Flight Crew can be found under the All Fleet book.

For each Notice you will receive two updates in DocuNet:

1. The notice file will be updated when it is issued
2. The manual that the notice applies to will also be updated on the effective date to incorporate the change.

For completeness you will also receive notices via crewlink and ESS mail.

If you have any questions or comments regarding notices please contact janice.barr@ba.com

B747 DDG

BRITISH AIRWAYS

Issue Date	: 24/05/2018	Origin	: Christine Perkins
Effective	: 24/05/2018	Position	: Assistant Flight Manager Technical - 747
Number	: 2/18	Authority	: Captain Simon Scholey
Incorporated	: Revision 30	Position	: Head of Flight Technical
Cabin Crew	: ☐		

Correction to MEL item 21-51-01-01 'Packs'

Introduction

Due to an error in the last DDG revision this OMN corrects the particular pack referenced in OPERATIONS NOTE, Item 2, NOTE 1.

Effective 00:00 24th May 2018 MEL item 21-51-01-01 Packs - Passenger/Combi or Freighter without Draw-Through Smoke Detection System item is amended as follows:

[Previous unchanged]

OPERATIONS NOTE

1. Position HI FLOW switch ON. HI FLOW must be maintained on operative packs.

2. ~~2.~~ For passenger/combi with lower lobe airconditioning installed, temperature sensitive cargo may be affected.

   NOTE 1: For Pack ~~3~~ 2 not used and aft lower lobe airconditioning installed, the aft lower lobe cargo compartment may still be heated by the aft cargo heating system.

   NOTE 2: For Pack 3 not used and forward lower lobe airconditioning installed, the forward lower lobe cargo compartment may still be heated to a limited extent by equipment cooling exhaust air.

B747 DDG

BRITISH AIRWAYS

Issue Date	: 29/03/2018	Origin	: Christine Perkins
Effective	: 12/04/2018	Position	: Assistant Flight Manager Technical - 747
Number	: 1/18	Authority	: Captain Simon Scholey
Incorporated	: Revision 30	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

B747 Dispatch Deviation Guide Revision 29

B747 Dispatch Deviation Guide – DDG, Revision 29 (MEL revision 14)

This is the initial issue of the British Airways EASA compliant B747 DDG. This manual is based on the Boeing FAA 747 DDG including MMEL Revision 30 and CDL Revision 12 (Boeing do not publish an EASA DDG for the 747-400). This replaces MEL revision 13, so is also referred to as Revision 14.

In general, the technical content is the same as the previous MEL, however the layout is a more intuitive format that complies with the EASA requirements. As this is a completely new format there are no change bars or revision highlights. Crews should familiarise themselves with the content and structure prior to operating after the effective date of 12th April, 2018.

A preview copy of B747 DDG Revision 29 is now available to view on eManuals/DocuNet. This manual is effective from 12th April 2018.

The following OMNs are incorporated at this revision and are therefore withdrawn from 12th April:

B747 MEL 03/16	Revision 13 Published
B747 MEL 04/16	GoGo Connectivity System
B747 MEL 05/16	Navigation Database
B747 MEL 01/17	78-31-01 Revision to (M) Procedures
B747 MEL 02/17	Handling of STATUS Messages

B747 QRH

BRITISH AIRWAYS

Issue Date	: 29/03/2018	Origin	: Christine Perkins
Effective	: 29/03/2018	Position	: Assistant Flight Manager Technical - 747
Number	: 1/18	Authority	: Captain Simon Scholey
Incorporated	: Revision 65	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

RNAV/PBN Equipment Spec

Introduction

Currently, Boeing do not provide a list of Communications, Navigation and Surveillance (CNS) equipment required to support the various levels of RNAV and RNP standards for en-route, terminal and approach procedures.

The following information is added below the existing text in B747 QRH > Operational Information > Flight management, Navigation > MNPS Aide Memoire > Systems Failures in Flight section with effect from 29th March 2018:

Operational Information
Flight Management, Navigation
MNPS Aide Memoire
Systems Failures in Flight

[Previous unchanged]

RNAV/PBN Equipment required to guarantee navigation performance

The Performance Based Navigation (PBN) concept defines a level of navigation performance, rather than specific equipment requirements. Inbuilt redundancy in the aircraft's navigation equipment will often allow continued operations at the required RNP level with partial failures. The following tables are drawn directly from Boeing source information and are provided to allow crews to identify the impact on PBN performance when faced with equipment failures.

> NB: Once airborne, ATC may allow aircraft to transit airspace despite reductions in Communications, Navigation and Surveillance (CNS) capability. Crews should advise ATC of such failures at the earliest opportunity to allow for clearance or re-routing as appropriate.

RNAV/RNP CAPABILITY

Before the aircraft enters RNAV/RNP airspace, RNAV/RNP capability is based on:

- The required RNAV/RNP equipment that is described below.
- Actual Navigation Performance displayed on the POS REF page 2/4
- Any specific local requirements published in the Aeronautical Information Publication (AIP).

When the aircraft flies in RNAV/RNP airspace, RNAV/RNP capability is based on:

- Actual Navigation Performance displayed on the POS REF page 2/4
- Any specific local requirements published in the Aeronautical Information Publication (AIP).

For all specifications below the following equipment is required as well as equipment listed in the applicable section:

- Autopilot or Flight Director Computer
- Air Data Computer (ADC) System x 1

- Control Display Unit (CDUs) x 2
- Navigation Displays (NDs) x 2
- Primary Flight Displays (PFDs) x 2
- EICAS System
- Current Navigation Database

RNAV 10 / RNP 10

GENERAL

RNAV 10 operations correspond to RNP 10 operations.

In RNAV 10 airspace, the aircraft is expected to fly for a long period of time outside radio navaid coverage.

Required Equipment

The minimum navigation equipment required to enter RNAV 10 airspace is:

- FMC 2
- GPS 2
- IRU 2

Note - if GPS inop aircraft may operate in RNP 10 airspace for a maximum of 6.2 hrs using the following equipment

- FMC 1
- IRU 2

P-RNAV / B-RNAV / RNAV 5 / RNAV 2 / RNAV 1 (en-route and terminal area procedures)

GENERAL

RNAV 5 operations correspond to European BRNAV operations.

RNAV 1(2) operations correspond to P-RNAV TERMINAL RNAV operations.

The AIP may specify that GPS equipment is required.

Required Equipment

The minimum navigation equipment required to enter P-RNAV / B-RNAV / RNAV 5 / RNAV 2 / RNAV 1 airspace is:

- FMC 1(Check charts for dual FMC req)
- GPS 1 (Or DME x 1)
- IRU 2

RNP 4

GENERAL

In this airspace, the aircraft is expected to fly for a long period of time outside radio navaid coverage.

Required Equipment

The minimum navigation equipment required to enter RNP 4 airspace is:

- FMC 2
- GPS 2
- IRU 2
- SATCOM (VHF can be used where it is available)
- CPDLC
- ADS-C
- HF (Unless VHF available)

RNP 2 (remote areas)

GENERAL

In this airspace, the aircraft is expected to fly for a long period of time outside radio navaid coverage.

Required Equipment

The minimum navigation equipment required to enter RNP 2 airspace is:

- FMC 2
- GPS 2
- IRU 2
- CPDLC
- ADS-C
- HF (Unless VHF available)

RNP 1 / Terminal RNP 1 - Basic RNP 1

GENERAL

RNP 1 operations correspond to RNP 1 Terminal operations.

Required Equipment

The minimum navigation equipment required to enter RNP 1 airspace is:

- FMC 1
- GPS 1 (Or DME x 1)
- IRU 2

RNP APCH / RNAV (GNSS)

GENERAL

RNP APCH operations correspond to RNAV (GNSS) or RNAV (GPS) operations.

Required Equipment

The minimum equipment required to start RNP APCH operations is:

- FMC 2
- GPS 2
- IRU 2

B747 PERF

BRITISH AIRWAYS

Issue Date	: 29/03/2018	Origin	: Sam Kennett
Effective	: 29/03/2018	Position	: Flight Operations Engineer
Number	: 1/18	Authority	: Christine Perkins
Incorporated	: Revision 2	Position	: Assistant Flight Manager Technical 747
Cabin Crew	: ☐		

Drift Down and Decompression Procedure UP975/UG8/UM688 – Decision Point Change

Introduction

Following crew feedback and a reassessment of the route, the driftdown and decompression procedure for UP975/UG8/UM668 through to Northern Iraq has been adjusted.

The B747 Performance Manual for all variants is amended with immediate effect as follows:

5.2.7 Decompression Procedure for Operation on Airway UP975/UG8/UM688 Eastbound

B747-400	**UP975/UG8/UM688 Eastbound**
Critical Points **SIVAS** (N39 47'22.90 E036 53'36.20) for driftdown and decompression **SORAR** (N38 37'27.00 E039 30'45.00) for driftdown and decompression. **OTKEP** (N37 51'33.00 E042 39'36.00) for driftdown and decompression.	
Actions Following Decompression/Engine Failure 1. **Before SIVAS/SIV –** divert as appropriate ***OR*** continue to SIVAS/SIV, turn right onto UL615 and divert to Ankara (LTAC/ESB). 2. **Between SIVAS/SIV and SORAR:** turn right and backtrack, offsetting the airway to SIVAS/SIV, turn left onto UL615 and divert to Ankara (LTAC/ESB). 3. **Between SORAR ~~SIVAS/SIV~~ and OTKEP –** continue to OTKEP, continue onto UG8 to ALRAM, G208 to UMH, A422 to TBZ and divert to Tabriz (OITT/TBZ). If Tabriz is not available, turn North from TBZ on R661 to DULAV, L125 to NEGAN and divert to Yerevan (UDYZ/EVN). 4. **After OTKEP –** continue on planned route and divert as appropriate.	
MSAs and Turns Turn direction is unrestricted.	
Notes – see figure 1 (new figure).	

B747 PERF

BRITISH AIRWAYS

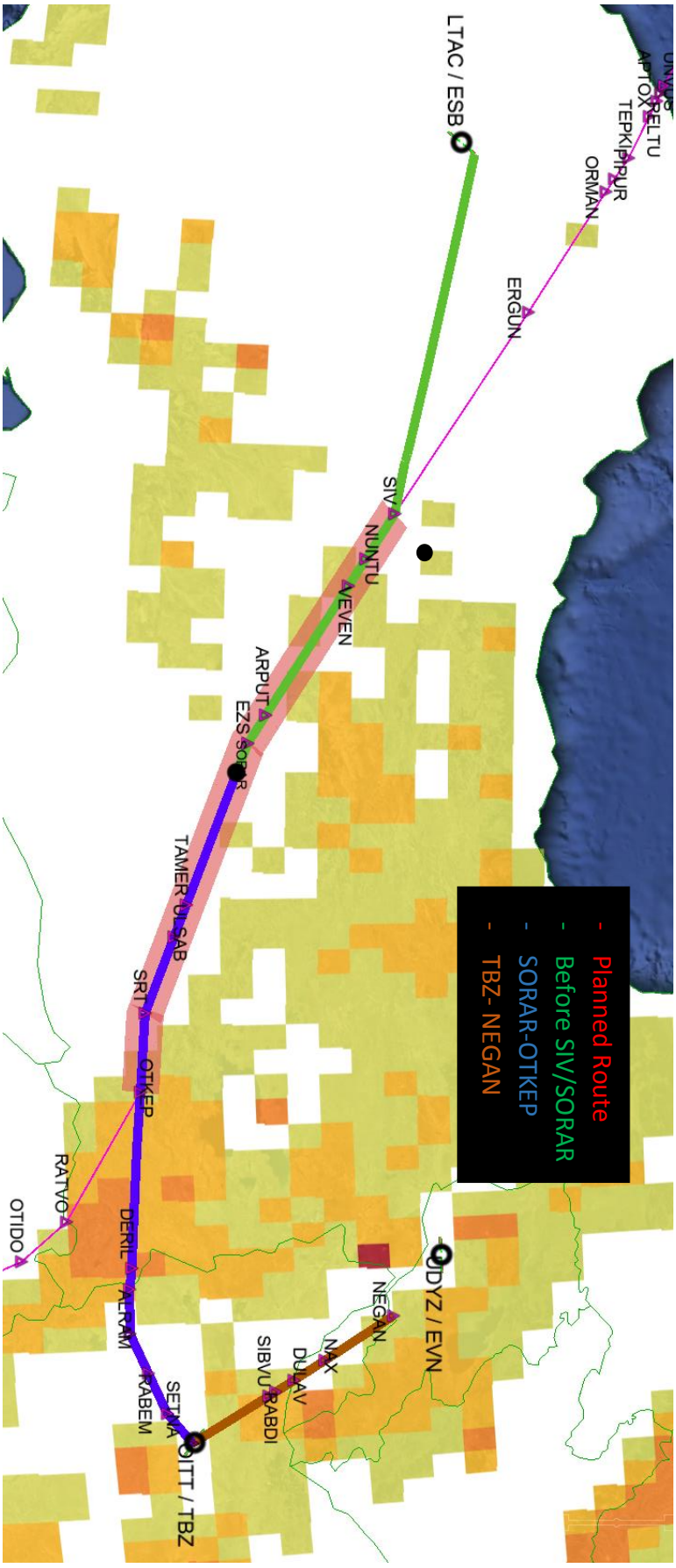

Figure 1 - Decompression procedure UP975/UG8/UM688 Eastbound

B747 LBAL

BRITISH AIRWAYS

Issue Date	: 15/02/2018	Origin	: Iain Hudspith
Effective	: 15/02/2018	Position	: Flight Ops Engineer - Weights
Number	: 1/18	Authority	: Captain Simon Scholey
Incorporated	: Revision 3	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

B747 Load & Balance Manual Revision 2

Introduction

With effect from 15th February 2018 the B747 Load and Balance Manual is amended to Revision 2.

The manual will be available to download and view on eManuals and DocuNet from 15th February 2018.

Summary of changes

- Amendment to carriage of Perishable Goods details for clarification
- Amended Ground Ops Manual references
- Clarification of conditions for carriage of A-Base size 88in x 125in ULDs in Excess of 4626kg
- Correction to allowance for Passengers Exceeding Standard Passenger Weights
- The following OMNs will be incorporated into the LBM and therefore withdrawn:
    - 02/16 - Malfunction of the Lateral Guide Rail
    - 04/16 - Change of MAG NOTOC Requirement
    - 05/16 - Removal of Potable Water from the Aircraft Basic Weight
    - 06/16 – B747 Super Hi-J (275 Seater) – Reduced MTOW
    - 07/16 - USA Maximum Take-Off Weights
    - 01/17 - Standard Passenger Weights – Flights to and from Japan
    - 02/17 - Constant Climate Cargo Code and NOTOC Sign-off
    - 03/17 - B747 Mid-J (337 Seater) – Reduced MTOW & MLW
    - 04/17 - Change to NOTOC Temperature Setting Requirement

B747 FCOM

BRITISH AIRWAYS

Issue Date	: 04/01/2018	Origin	: Christine Perkins
Effective	: 04/01/2018	Position	: Assistant Flight Manager Technical - 747
Number	: 1/18	Authority	: Captain Simon Scholey
Incorporated	: Revision 64	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

Flight Crew Seat Adjustment OMB

Introduction

Effective 4th January 2018 the attached Operations Manual Bulletin will be added to the FCOM 'Preface' section.

Flight Crew Operations Manual Bulletin
for
British Airways

The Boeing Company
Seattle, Washington 98124-2207

747-400

Number: BAB-169

IssueDate: December 15, 2017

Subject: Flight crew seat adjustment

Reason: To inform flight crews of the potential for uncommanded seat movement resulting from damage incurred during manual fore and aft adjustment.

Information in this bulletin is recommended by The Boeing Company, but may not be FAA approved at the time of writing. In the event of conflict with the FAA approved Airplane Flight Manual (AFM), the AFM shall supersede. The Boeing Company regards the information or procedures described herein as having a direct or indirect bearing on the safe operation of this model airplane.

THE FOLLOWING PROCEDURE AND/OR INFORMATION IS EFFECTIVE UPON RECEIPT

Background Information

Aircraft operators have reported instances of uncommanded seat movement as a result of damage incurred during manual fore and aft adjustments. To mitigate the potential for this to occur, Boeing is including a WARNING in Chapter One of the FCOM which clarifies use of the seat adjustment lever.

Flight Crew Operations Manual Information

The following WARNING will be incorporated into the FCOM at the next scheduled revision. Until then, please reference this OMB for use of the seat adjustment lever.

WARNING: When using the manual release lever to move the seat, ensure the seat motion has stopped before releasing the fore/aft lever. Releasing the fore/aft seat lever while the seat is still moving can damage the seat actuator. Manually moving the seat to the forward or aft stop is permissible as it does not impact the seat actuator.

Administrative Information

Insert this bulletin behind the Operations Manual Bulletin Record page in Volume 1 of your Operations Manual. Amend the Operations Manual Bulletin Record to show BAB-169"Incorporated" (INC).

This Flight Crew Operations Manual Bulletin will be cancelled when the WARNING is incorporated in the FCOM Chapter One.

Please send all correspondence regarding this Flight Crew Operations Manual Bulletin to the 747 Manager, Flight Technical Data, through the Service Requests Application (SR App) on the MyBoeingFleet home page.

B747 QRH

BRITISH AIRWAYS

Issue Date	: 07/12/2017	Origin	: Captain Jonny Lutton
Effective	: 21/12/2017	Position	: Flight Manager Technical B747/B767
Number	: 2/17	Authority	: Captain Simon Scholey
Incorporated	: Revision 64	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

Handling of STATUS Messages

Introduction

The guidance on handling status (STS) messages is being revised to align with Boeing guidance that STS messages must be considered for the current sector, and resolved in accordance with the DDG, until the first engine start.

The exception is when departing to 'AOG Sensitive' stations which will be identified on LORETO and in the OM C brief. In these circumstances, crew must consider STS messages for the current sector until take-off and ensure that any which are either 'None' (No Dispatch) or require Maintenance (M) actions are resolved in accordance with the DDG prior to departure.

Training guidance - Handling of B747 Status Messages After Engine Start - has been added to the MLA.

In accordance with this change, the following FCTM text has been revised despite not directly referencing STS messages.

QRH, Checklist Instructions, Non-Normal Checklists, Non-Normal Checklist Operation

[Previous unchanged]

Non-normal checklists also assume:

- During engine start and before ~~brakes-release~~ dispatch, the associated non–normal checklist is done if an EICAS alert message is shown or a non-normal situation is identified. After completion of the checklist, the MEL must be consulted to determine if dispatch relief is available.
- After ~~brakes-release~~ dispatch and before takeoff, the associated non-normal checklist must be done if an EICAS alert message is shown or a non-normal situation is identified. ~~The MEL may be useful in determining whether it is appropriate to depart taking into account the facilities at the destination airport and other factors.~~ Although compliance with the MEL is not mandatory at this stage, this may be useful in determining whether it is appropriate to depart, taking into account factors such as facilities at the destination.

  ~~Compliance with the MEL is not mandatory at this stage.~~
- System controls are in the normal configuration for the phase of flight before the start of the non-normal checklist.

[Remainder unchanged]

B747 FCOM

BRITISH AIRWAYS

Issue Date	: 07/12/2017	Origin	: Captain Jonny Lutton
Effective	: 21/12/2017	Position	: Flight Manager Technical B747/B767
Number	: 10/17	Authority	: Captain Simon Scholey
Incorporated	: Revision 64	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

Handling of STATUS Messages

Introduction

The guidance on handling status (STS) messages is being revised to align with Boeing guidance that STS messages must be considered for the current sector, and resolved in accordance with the MEL, until the first engine start.

The exception is when departing to 'AOG Sensitive' stations which will be identified on LORETO and in the OM C brief. In these circumstances, crew must consider STS messages for the current sector until take-off and ensure that any which are either 'None' (No Dispatch) or require Maintenance (M) actions are resolved in accordance with the MEL prior to departure.

Training guidance - Handling of B747 Status Messages After Engine Start - has been added to the MLA.

In accordance with this change, the following FCOM text reverts to 'engine start' which is the standard Boeing text.

FCOM, Normal Procedures, NP.11 Introduction, Configuration Check

It is the crew member's responsibility to verify correct system response. Before engine start, use lights or indications to verify each system's condition or configuration.

If there is an incorrect configuration or response:

- verify that the system controls are set correctly
- check the respective circuit breaker as needed. Engineering must first determine that it is safe to reset a tripped circuit breaker on the ground
- test the respective system light as needed

Before engine start, review the EICAS alert messages and status display. If there are unexpected messages:

- check the Minimum Equipment List (MEL) to decide if the condition has a dispatch effect
- decide if maintenance is needed

If, during or after engine start, there is an alert message:

- do the respective non-normal checklist (NNC)
- on the ground, check the MEL

After ~~dispatch~~ engine start, EICAS alert messages are the primary means of alerting the flight crew to non-normal conditions or incorrect configurations.

After ~~dispatch~~ engine start, there is no need to check status messages. Any message that has an adverse effect on safe continuation of the flight appears as an EICAS alert message.

B747 PERF

BRITISH AIRWAYS

Issue Date	: 07/12/2017	Origin	: Sunny Sobti
Effective	: 07/12/2017	Position	: Assistant Flight Operations Engineer
Number	: 4/17	Authority	: Captain Jonny Lutton
Incorporated	: Revision 2	Position	: Flight Manager Technical – B747/B767
Cabin Crew	: ☐		

B747 Performance Manual Revision 1 Published

Introduction

With effect from 7th December 2017, B747 Performance Manual is published at Revision 1.

Refer below for a summary of changes.

Revision Highlights:

- Section 1.1 – Introduction: EU OPS reference replaced with EASA OPS reference.
- Section 2.2 – Take-off Weights: Reference to OM A 8.28.A for take-off and landing performance basics has been added.
- Section 2.5.3 – CARD ACARS Performance Request Page and Decode: Clarification of how Wind data should be entered.
- Section 3.1 – Introduction: Reference to OM A 8.28.B for landing performance and influencing factors has been added.
- Section 3.4 – Landing on a Wet Runway/Section 4.4 – Take-off from Contaminated Runways: Clarification that exactly 3mm of water is considered to be wet.
- Section 3.6 – Generalised Landing Data: Quality of Landing Field and Climb Limit charts has been improved.
- Section 5.1 – Introduction: References for En-route Terrain – Drift Down and Oxygen analysis have been updated to correct locations in FCTM.

The following OMNs have been incorporated and are withdrawn:

B747 PERF 01/16 B747 Performance Manual Changes

B747 PERF 03/16 747 CARD Performance Correction Codes

B747 PERF 04/16 Emergency Turn Procedures

B747 PERF 05/16 Installation of GoGo WiFi Antenna

B747 PERF 01/17 Emergency Turn Procedures

B747 PERF 02/17 B747 Mid J (337 Seater) – Reduced MTOW & MLW

B747 PERF 03/17 Drift Down and Decompression Procedure UP975/UG8/UM688

For questions and/or feedback please contact the Aerodromes and Performance Team on aerodromes.performance@ba.com

B747 FCOM

BRITISH AIRWAYS

Issue Date	: 23/11/2017	Origin	: Captain Jonny Lutton
Effective	: 07/12/2017	Position	: FMT B747 & B767
Number	: 9/17	Authority	: Captain Simon Scholey
Incorporated	: Revision 64	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

Revision 63 Published (FCOM & QRH)

Introduction

B747 FCOM and QRH Rev 63 will be effective from 00:01 7th December, 2017. Preview copies, which are not approved for operational use are now available for review on DocuNet and eManuals.

Crew are authorised to use whichever copy of the QRH is on the aircraft until the Flight Technical Library completes the replacement.

A full list of amendments can be found as follows:

FCOM – Preface > Revision Highlights

QRH – Checklist Instructions > Revision Highlights

Revision Highlights

This is a routine update from Boeing for the B747 FCOM, however all pilots are to familiarise themselves with all changes. The main revisions include a comprehensive review and rewrite of the '*Tow in with APU U/S*' and '*Shutting Engines Down with APU U/S*' supplementary procedures in *FCOM SP.7 Engines, APU*. These edits remove procedural elements that were required by the B747-100/200 Pratt & Whitney JT9 engines and replace them with a procedure more relevant to the B747-400.

Other edits include the reintroduction of single engine start restrictions at airports with a pressure altitude in excess of 6,000 ft amsl, with autostart inoperative or if air supply for engine start is insufficient (*FCOM NP.21 Amplified Procedures, Engine Start Procedure*).

Further edits are for general clarity and ease of use as well as updated procedural information to compliment recent OM A changes for PBN approaches.

Revision 7 of the B747 FCTM will also be published at the same time and notified by separate OMN.

Revision 63 incorporates the following OMNs which will be cancelled on 7th December, 2017.

B747 – FCOM 1/17	Revision 62 Published (FCOM & QRH)
B747 - FCOM 2/17	Ground Operations in Freezing Fog
B747 – QRH 1/17	CABIN ALTITUDE or Rapid Depressurisation NNC
B747 – FCOM 5/17	B747 Mid J (337 Seater) – Reduced
B747 – FCOM 6/17	Rejected landing Procedure
B747 – FCOM 7/17	CONTINUE call at DA/MDA
B747 – FCOM 8/17	Position Check at Radio Altimeter Activation

B747 FCTM

BRITISH AIRWAYS

Issue Date	: 23/11/2017	Origin	: Captain Jonny Lutton
Effective	: 07/12/2017	Position	: FMT B747 & B767
Number	: 2/17	Authority	: Captain Simon Scholey
Incorporated	: Revision 8	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

Revision 7 Published

Introduction

With effect from 00:01 on 7th December, 2017 the B747 FCTM is published at Revision 7.

A preview copy, which is not approved for operational use is now available for review on DocuNet and eManuals

Revision Highlights

All changes are minor in nature and listed in the manual revision highlights pages.

The following notices are incorporated at this revision and therefore withdrawn with effect from 7th December 2017:

B747 FCTM 1/17	Removal of TSN 01/2013 – Rejected (Baulked) Landing
B747 FCTM 4/16	Transition to an Instrument Approach Using VNAV
B747 FCTM 3/16	Revision 6 Published

B747 FAM

BRITISH AIRWAYS

Issue Date	: 03/08/2017	Origin	: Amber Wilson
Effective	: 17/08/2017	Position	: Cabin Safety Partner
Number	: 1/17	Authority	: Captain Jonny Lutton
Incorporated	: Revision 8	Position	: Flight Manager Technical – B747/B767
Cabin Crew	: ☒		

B747 Toilet Smoke Detector Familiarisation

Introduction

With effect from 17th August 2017, there is no longer a requirement for crew to perform a toilet smoke detector familiarisation prior to departure.

The B747 FAM, 5.10.9, Toilet Smoke Alarm Familiarisation and 10.10.1, Crew Complement, B747 SOPs have been amended to remove this requirement. Crew members must continue to check the toilet smoke detectors for evidence of tampering or blockage and that the toilet bin lid closes automatically as part of their pre-flight checks and complete the required security checks.

5.10.09 Lavatory Fire Protection System

[Previous unchanged]

~~**Toilet Smoke Alarm Familiarisation**~~

~~To perform a Toilet Smoke Alarm familiarisation test:~~

- ~~The "Test" switch on the smoke detector control panel in the galley must be pressed to activate the aural and visual alarms.~~
- ~~After a short delay, the toilet location indicator lights flash and the horn sounds.~~
- ~~There are no indications above each toilet during the 'test'. There is no need to cancel the 'test'.~~

10.10.1 Crew Complement

(Continued on next page)

B747 FAM

BRITISH AIRWAYS

Crew Complement

B747 SOP

	SCCM No.1	No.2	No.3	No.4	No.5
Crew Seat	Door 1L rear facing inboard **Required crew seat**	Door 2L rear facing inboard **Required crew seat**	Door 3L rear facing **Required crew seat**	Door 4L rear facing inboard **Required crew seat**	Door 5L forward facing **Required crew seat**
Pre-flight Procedures	OM B General Procedures 0 B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram
	• Crew seats at Door 1L x 2 • PA and Handset	• Crew seat at Door 2L x 2 • PA and Handset	• Crew seat at Door 3L. • PA and Handset	• Crew seat at Door 4L. x 2 • PA and Handset	• Crew seats at D5L • PA and handset
	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram
	• AML. • PA/Interphone system • Potable Water • Evac Alarm Test * • ~~Toilet Smoke Alarm famil *~~ • Cabin crew security check & receive check from crew OM B General Procedures 2.1.9	• Cabin dividers secured & open • Evac Alarm Test* • Pass checks to SCCM • Cabin crew security check & pass check to SCCM	• Evac Alarm Test* • Pass checks to SCCM • Cabin crew security check & pass check to No 4	• Evac Alarm Test* • ~~Toilet Smoke Alarm famil *~~ • Pass checks to SCCM • Cabin crew security check & pass check to SCCM	• Evac Alarm Test* • Pass checks to No 4 • Cabin crew SEP security check & pass check to No 4
	• Pass checks to Commander				
Boarding	• Remain in the vicinity of the primary boarding door, • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #
Normal Door Operation	• Close Door 1L. • Door mode PA	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check
	• Interphone 54 call • Receive checks from 2L, 3L, 4L, 5L, 1R & UDR	• Report door mode	• Report door mode	• Report door mode	• Report door mode
Before Takeoff	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions
Cabin and Galley Secure Reporting	• Receive cabin and galley secure • OM B General Procedures 1.6 • 6P to flight crew	Zone B & C Left and centre left, Galley at Door 2 area Left, Lavs F, H. Receive check from No. 7 Pass check SCCM via interphone	Zone D Right and centre seats – left and middle Zone D, Lav K Pass on check to No.4 Pass check to SCCM via interphone	Galley at Door 4 area Receive check from No.3, 5, 8, 9 & 10 Pass check to SCCM via interphone	Zone E Left and centre seats left and middle Pass check to No 4 via interphone
Climb and Cruise	• OM B General Procedures 1.6.3 Regular Updates	B747 FAM Ch.10 zonal diagram • Handover area #			
Descent and Approach	• 6P to flight crew	Pass checks to SCCM	Pass checks to SCCM	Pass checks to SCCM	Pass checks to SCCM
Normal Door Operation	• Door mode PA • Interphone 54 call • Receive checks from 2L, 3L, 4L, 5L, 1R & UDR	• Door mode selection • Door mode cross-check • Report door mode	• Door mode selection • Door mode cross-check • Report door mode	• Door mode selection • Door mode cross-check • Report door mode	• Door mode selection • Door mode cross-check • Report door mode
	B747 FAM 7.20.15 Normal Door Opening	B747 FAM 7.20.15 Normal Door Opening			
Disembarkation	• Disembark passengers • Confirm that all cabin crew have completed disembarkation checks	• Disembark passengers • Overhead lockers empty • Lavatories clear • Seat rows • Galley secure	• Disembark passengers • Overhead lockers empty • Lavatories clear • Seat rows	• Disembark passengers • Galley secure	• Disembark passengers • Overhead lockers empty • Sear rows empty • Lavatories secure • Galley secure

* - if required and time available # - IF REQUIRED

B747 FAM

BRITISH AIRWAYS

B747 SOP

	No.6	No.7	No.8	No.9	No.10
Crew Seat	Door 1R rear facing inboard **Required crew seat**	Door 2R rear facing inboard **Required crew seat**	Door 3R rear facing **Required crew seat**	Door 4R rear facing inboard	Door 5R forward facing
Pre-flight Procedures	B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram	B747 FAM 8.10 location diagram
	• Crew seat at Door 1R x 2 • PA and handset	• Crew seat at Door 2R x 2 • PA and Handset	• Crew seat at Door 3R • PA and Handset	• Crew seat at Door 4L x 2 • PA and Handset	• Crew seat at Door 5R • PA and Handset
	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram	B747 FAM Ch.10 zonal diagram
	• Evac Alarm Test* • Pass checks to SCCM • Cabin crew SEP security check & pass check to SCCM	• Evac Alarm Test* • Pass checks to No.6 • Cabin crew SEP security check & pass check to No 6	• Evac Alarm Test* • Pass checks to No.4 • Cabin crew SEP security check & pass check to No 4	• Evac Alarm Test* • Pass checks to No.4 • Cabin crew SEP security check & pass check to No 4	• Evac Alarm Test* • Pass checks to No.5 • Cabin crew SEP security check & pass check to No 4
Boarding	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #
Normal Door Operation	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check
Before Take Off	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions	B747 FAM 10.10 Demo Positions
Cabin and Galley Secure Reporting	Zone A, Galley at Door 2 area Right Lav D and E Pass check to SCCM	Zone B & C Right and centre seats right to middle, Lav J. Pass checks to SCCM	Zone D Right and centre seats right to middle, Lav L Pass checks to No.4	Zone E Right and centre seats Right and middle, Pass checks to No.4	Lavs M, N , P & Q Crew Rest Pass checks to No.4 As directed by the SCCM
Climb and Cruise					
Descent and Approach	Pass checks to No.SCCM	Pass checks to No.6	Pass checks to No.4	Pass checks to No.4	Pass checks to No.4
Normal Door Operation	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check	• Door mode selection • Door mode cross-check
Disembarkation	• Disembark passengers • Overhead lockers empty • Lavatories clear • Seat rows • Galley secure	• Disembark passengers • Overhead lockers empty • Lavatories clear • Seat rows	• Disembark passengers • Overhead lockers empty • Lavatories clear • Seat rows	• Disembark passengers • Overhead lockers empty • Lavatories clear • Seat rows	• Disembark passengers • Overhead lockers empty • Lavatories clear

* - if required and time available # - if required

B747 FAM

BRITISH AIRWAYS

B747 SOP

	No.11	No.12	No.13	No.14	No.15
Crew Station	Crew seat at Upper Deck Door R	Crew seat at Upper Deck Door R	Crew seat at Door 1L outboard	Crew seat at Door 1R outboard	Crew seat at Door 1R outboard
Pre-flight Procedures	As directed by the SCCM	B747 FAM 8.10 location diagram	As directed by the SCCM	As directed by the SCCM	As directed by the SCCM
	Crew seat at Door UDR	• Crew seat at Door UDR • PA and Handset	Crew seat at Door 1L outboard	Crew seat at Door 1R outboard	Crew seat at Door 2L outboard
	As directed by the SCCM	B747 FAM Ch.10 zonal diagram	As directed by the SCCM	As directed by the SCCM	As directed by the SCCM
	As directed by the SCCM	• Evac Alarm Test* ~~• Toilet Smoke Alarm famil *~~ • Pass checks to SCCM • Cabin crew SEP security check & pass check to SCCM	As directed by the SCCM	As directed by the SCCM	As directed by the SCCM
	As directed by the SCCM		As directed by the SCCM	As directed by the SCCM	As directed by the SCCM
Boarding	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #	• One crew member in the vicinity of each pair of doors. • Refuelling procedures #
Normal Door Operation		• Door mode selection • Door mode cross-check			
Before Take Off	As directed by the SCCM	B747 FAM 10.10 Demo Positions	As directed by the SCCM	As directed by the SCCM	As directed by the SCCM
Cabin & Galley Secure Reporting	As directed by the SCCM	Zone G Left and Right seats, Galley area, Lavs A, B & C Pass checks to SCCM	As directed by the SCCM	As directed by the SCCM	As directed by the SCCM
Climb and Cruise					
Descent and Approach	As directed by the SCCM	Pass checks to SCCM	As directed by the SCCM	As directed by the SCCM	As directed by the SCCM
Normal Door Operation		• Door mode selection • Door mode cross-check			
Disembarkation	• Disembark passengers	• Disembark passengers • Overhead lockers empty • Lavatories clear • Seat rows	• Disembark passengers	• Disembark passengers	• Disembark passengers

* - if required and time available # - IF REQUIRED

(remainder unchanged)

B747 FAM

BRITISH AIRWAYS

Issue Date	: 08/12/2016	Origin	: Sarbjit Mann
Effective	: 08/12/2016	Position	: Aircraft Team Leader - Cabin Safety
Number	: 2/16	Authority	: Captain Garth Miller
Incorporated	: Revision 8	Position	: Flight Manager Technical - B747
Cabin Crew	: ☒		

On-Board Connectivity System

The Super Hi J B747 aircraft are being modified to add WiFi capability via a GoGo Connectivity system. Information has been added to FAM to detail the switch in the Cabin.

The system will enable and disable automatically at 10,000ft so there are no actions for the Cabin Crew.

The first aircraft is due to operate on 11th December with the system installed however the system will not be turned on until January 2017.

4.40.6 On-board Connectivity System

Crew operating on retrofitted aircraft should not have to carry out any additional tasks, as the connectivity system will already be running.

Should the system not be switched on, inform the flight crew, then press the power switch (as shown below) the power switch is located in the SCCM office.

Connectivity power switch

B747 FAM

BRITISH AIRWAYS

Issue Date	: 29/09/2016	Origin	: Sarbjit Mann
Effective	: 29/09/2016	Position	: Aircraft Team Leader
Number	: 1/16	Authority	: Captain Garth Miller
Incorporated	: Revision 8	Position	: Flight Manager Technical – B747
Cabin Crew	: ☒		

Revision 7 Now Available

Introduction

The B747 FAM, revision 7 will be available on eManuals and DocuNet from 29th September 2016. The B747 FAM has been amended to reflect the revised Emergency Door Operation procedure in OM B 3.5.2. The following OMNs have been incorporated, In addition to the OMNs listed below several editorial changes have been included in this revision.

OMNs Incorporated

B747 FAM 02/14	Overwing Emergency Exit Normal Operation
B747 FAM 03/14	Seat/PC & IFE Power Isolation
B747 FAM 02/15	Lavatory Smoke Detector
B747 FAM 03/15	Super Hi J Seating & Preflight Briefing Positions
B747 FAM 04/15	Aerolux Bun Warmers
B747 FAM 05/15	First (Prime) Seat
B747 FAM 06/15	Panasonic IFE System Smoke or Fire

B747 FAM September 2016 – Summary of Changes		
Section	**Item**	**Change**
1.10.37	Passenger & Attendant Seating Layout	Information added
7.20.18	Passenger Entry Door Normal Operation - Exterior	Replaced Flight Crew Only to All Crew
7.30.12	Overwing Emergency Exit Normal Operation	Change to the requirement of pulling the manual inflation handle
7.40.12	Upper Deck Door Emergency Operation	Change to the requirement of pulling the manual inflation handle
7.50.1	Main Deck Door Slide/Raft	Change to the requirement of pulling the manual inflation handle
9.20.9	Summary of Duties after Planned Ditching	Change to the requirement of pulling the manual inflation handle
10.10.2	Areas of Responsibilities & Zonal Diagrams	Information added to bring in line with Areas of Responsibility

B747 OM C

BRITISH AIRWAYS

Issue Date	: 26/04/2018	Origin	: Sunny Sobti
Effective	: 26/04/2018	Position	: Assistant Flight Operations Engineer
Number	: 12/18	Authority	: Captain Jonny Lutton
Incorporated	: Revision 3	Position	: Flight Manager Technical - B747/B767
Cabin Crew	: ☐		

B747 Ground Manoeuvrability at Austin (Updated)

This OMN updates the information previously provided B747 OM C 11/18.
A diagram has been added for visual representation of the apron taxiway restrictions.

Introduction

As part of new B747 operations to Austin, ground analysis has been carried out to determine if there are any issues with ground manoeuvrability at Austin airport. The analysis has found that all taxiways meet the minimum taxiway width required for B747 aircraft however, extra caution should be exercised when taxying and carrying out 90 degree turns, for example turning in to taxiway G2 from taxiway H.

Temporary stands are in place at Austin airport until March 2019. When BA begins B747 operations to Austin it is expected that stand T3 will be used for parking. On occasions when stand T3 is not available, stand T2 will be used. Both of these stands are able to accommodate B747 aircraft.

With effect from 26h April 2018, OM C RIM, Section 7 Aerodrome Briefings, Austin (AUS/KAUS) is amended as follows:

AUSTIN (AUS/KAUS)

[Previous unchanged]

GROUND

- ~~BA normally park on Stand 2. The turn onto this stand is about 110° (slightly back on yourself).~~
- Usual parking stands are T3 or T2.
- Exercise caution in the ramp area as ramp space is constrained in contrast to the airfield and uncontrolled.
- Exercise extra caution when taxying and carrying out 90 degree turns due to narrow taxiways.
- Do not accept dashed taxi lines near stands T2-T4. Only use solid taxi lines when taxying. See Figure 1.

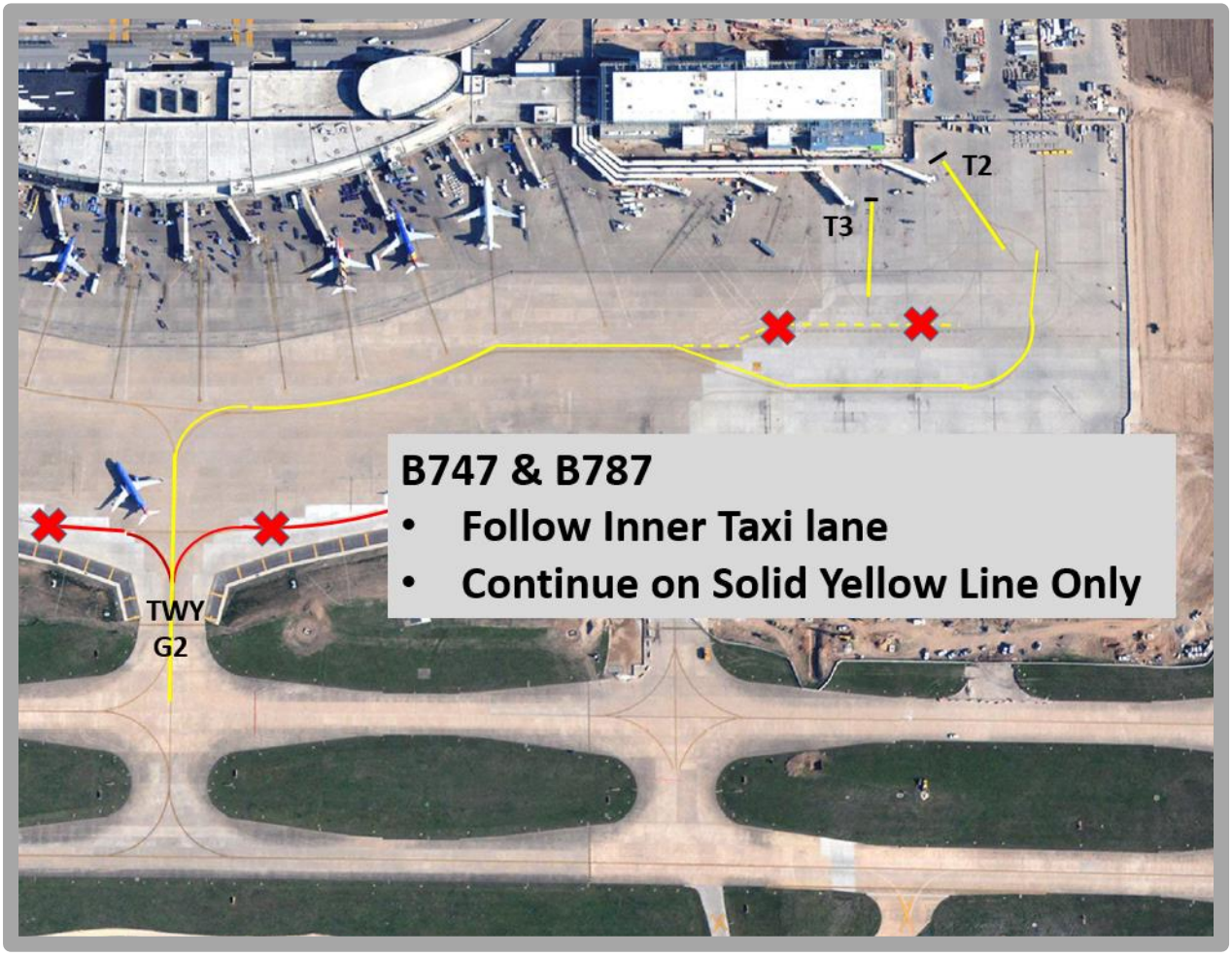

Figure 1 - KAUS Apron Taxiways

B747 OM C

BRITISH AIRWAYS

Issue Date	: 29/03/2018	Origin	: Sunny Sobti
Effective	: 29/03/2018	Position	: Assistant Flight Operations Engineer
Number	: 11/18	Authority	: Captain Jonny Lutton
Incorporated	: Revision 3	Position	: Flight Manager Technical - B747/B767
Cabin Crew	: ☐		

B747 Ground Manoeuvrability at Austin

Introduction

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With effect from 29th March 2018, OM C RIM, Section 7 Aerodrome Briefings, Austin (AUS/KAUS) is amended as follows:

AUSTIN (AUS/KAUS)

[Previous unchanged]

GROUND

- ~~BA normally park on Stand 2. The turn onto this stand is about 110° (slightly back on yourself).~~
- Usual parking stands are T3 or T2.
- Exercise caution in the ramp area as ramp space is constrained in contrast to the airfield and uncontrolled.
- Exercise extra caution when taxying and carrying out 90 degree turns due to narrow taxiways.
- Do not accept dashed taxi lines near stands T2-T4. Only use solid taxi lines when taxying.

B747 OM C

BRITISH AIRWAYS

Issue Date	: 15/02/2018	Origin	: Ben King
Effective	: 15/02/2018	Position	: Flight Operations Engineer
Number	: 2/18	Authority	: Captain Jonny Lutton
Incorporated	: Revision 3	Position	: Flight Manager Technical – B747/767
Cabin Crew	: ☐		

Tucson (TUS/KTUS) OM C entry

Introduction

OM C RIM, Section 7 Aerodrome Briefings, Tucson (TUS/KTUS) is amended as follows:

[previous unchanged]

ALL

ARRIVAL

• Instrument ~~letdowns~~ let-downs to Rwy 11L/11R are aligned with a NW/SE ridge in CFIT section.

ALL

Approach

- Request direct routing to DINGO/EGETE for RNAV (GPS) Z Rwy 29R.
- Preferred landing Rwy 29R (even in light tailwinds).
- Expect DME indications when tuned to I-TUS for approaches to Rwy 11L/29R.
- Expect radar vectors to ILS Rwy 11L.

ALL

GROUND

- B747 aircraft can taxi with all engines but care must be taken with jet blast when manoeuvring.
- B747 aircraft should request a follow me and care must be taken to ensure that the centreline is followed whilst on taxiway A as wingtip separation is limited.
- A diverted BA B747 aircraft was parked on the General Aviation Apron (North East of taxiway A5) in summer 2017. Entry onto the apron required a marshalled right 235 degree turn from NW to S. After refuel and engine start the aircraft taxied from parked position to departure Rwy (no pushback is required). Care must be taken with jet blast when exiting the apron.

[remainder unchanged]

B747 OM C

BRITISH AIRWAYS

Issue Date	: 17/08/2017	Origin	: Captain Jonny Lutton
Effective	: 24/08/2017	Position	: FMT B747 & B767
Number	: 25/17	Authority	: Captain Simon Scholey
Incorporated	: Revision 2	Position	: Chief Pilot Technical
Cabin Crew	: ☐		

B747 LHR Noise Abatement

Addition of B747 to speed restrictions on westerly departures to MID/MAY/DET

The B747 fleet has demonstrated a deviation from the ideal noise preferential route on westerly departures following MID/DET/MAY departures. This effect is particularly pronounced on heavyweight departures to CPT and JNB. This is due to the FMC drawing the LNAV track at a higher speed than flown with the current FCOM noise abatement procedure.

As a result, the 747 fleet will now construct an LNAV track using a 210kt/6000' speed restriction on the FMC VNAV CLB page as already followed by other LHR wide-body fleets. The departure will continue to be flown following FCOM SP.NAP – F10, full CLB thrust to 4000', but with the LNAV track drawn at a maximum of 210kts, the noise preferential route will be achieved.

This OMN covers the OM C entry. There will be a parallel note in AIS for 3 months from the OMN effective date (24th August, 2017) and a performance note on CARD for all LHR wide-body aircraft until further notice.

OM C Aerodrome Briefings
London Heathrow (LHR/EGLL)

[Previous sections unchanged]

1. DEPARTURE

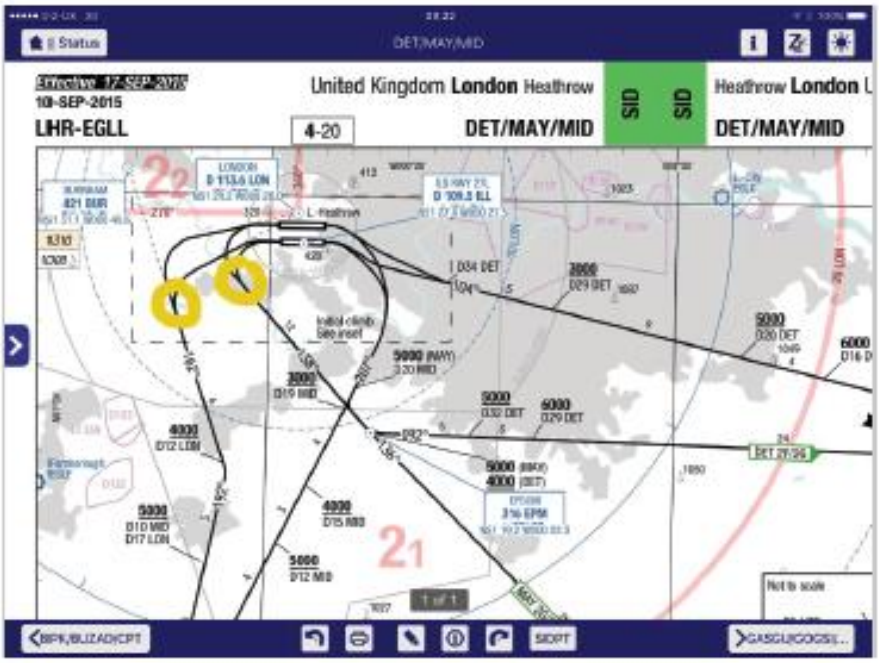
[*Previous unchanged]*

~~ALL~~
B747 B767 B777 B787 A380

210 kt SID Restriction On DET/MAY/MID SIDs at LHR (B747, B767, B777, B787, A380)

In order to achieve accurate tracking keeping after the LON 2D point and stay within the Noise Preferential Routes, a 210 kts speed restriction is introduced for all BA wide-body aircraft. The B747 will continue to utilise the FCOM SP.NAP procedure in addition to the 210kt speed restriction. ~~with the exception of the B747-400 (separate procedures apply).~~
This restriction applies until the aircraft is established on course 138° towards EPM (DET/MAY SIDs) or course 162° (MID SID). Additionally, once on a radar vector the speed restriction no longer applies.
The screen shot below shows the point at which it is OK to accelerate i.e. once the initial, large southerly turns on the SIDs are complete.

BRITISH AIRWAYS



B777 B787

Fleet Specific Advice to Improve Track-keeping on Westerly MID/DET/MAY SIDs at LHR

[Section unchanged]

B747

Fleet Specific Advice to Improve Track-keeping on Westerly MID/DET/MAY SIDs at LHR

To ensure that the FMS calculates an accurate LNAV turn, the following fleet specific advice is offered:

- **B747** – Enter a 210/6000 restriction on the VNAV Climb page (LSK 4L). Cancel the restriction, if needed, once established on course after the initial turn. Speed intervention will not replot the FMC LNAV profile, so the aircraft will merely reduce the commanded bank angle and not comply with the noise preferential routing. Do not introduce speed constraints on the LEGS page, because there is a risk that altitude constraints could be compromised. Continue to use the FCOM noise abatement procedure for LHR departures as detailed in FCOM SP.NAP. This is critical as B747 LHR noise performance relies on BOTH correct FMC LNAV plotting and utilisation of FCOM noise abatement procedures.

[Rest of section unchanged]

B747 OM D

BRITISH AIRWAYS

Issue Date	: 07/12/2017	Origin	: Captain Richard Allen-Williams
Effective	: 07/12/2017	Position	: Flight Training Manager 747 & 767
Number	: 18/17	Authority	: Captain Dave Thomas
Incorporated	: Revision 8	Position	: Head of Flight Technical and Training
Cabin Crew	: ☐		

OM D - Appendix T (B747) Revision 8

Introduction

Revision 8 of OM D Appendix T (B747) has been published today and is effective immediately.

Background

The Revision Highlights detail all the changes which include:

- Full Conversion and Command Conversion simulator courses - raw data ILS added to detail one
- Full Conversion, Command Conversion and Command on Type courses – PBN knowledge check and approach to 2D minima during LST / LPC included
- Full Conversion and Command Conversion courses – extended LIFUS guidance for Trainers
- Command on Type Course – details 2 & 3 order reversed to include LPC during detail 3
- Command on Type Course – Command Assessment requirement for a TSC or Nominated TAH included
- Section 11.1 – Line Continuation Course added
- Section 11.3 – Three Engine Ferry Course added
- Section 11.4 – Command Development Course added
- Section 12.2 – Line Continuation Training discussion items added
- Section 12.3 – Simulator differences updated to include NGFMC and TCAS 7.1 installation

B747 OSN

BRITISH AIRWAYS

Issue Date	: 29/09/2016	Origin	: Christine Perkins
Effective	: 29/09/2016	Position	: Assistant Flight Manager Technical - 747
Number	: 2/17	Authority	: Captain Dave Thomas
Expiry Date	: 29/09/2018	Position	: Head of Technical & Training

B747 CPDLC & DCL Clearances Display (Reissue)

This notice has been reissued to extend the expiry date.

Introduction

Since the introduction of the B747 NGFMC issues have been identified that cause incomplete clearances to be seen on both the CDU screens and associated print outs.

Initially the advice was to print all clearances to ensure route amendments could be seen but we now understand that the 747 printer is not certified to the same level as the NGFMC and will, in many cases, print incomplete messages.

Several of the printer issues are documented by Boeing in FCOM, Preface, OMB BAB-167 R1 FMC Anomalies.

Further print out issues have also been seen since the introduction of DCL clearances in the USA. Many of these clearances, when printed out, are missing the end of sentences on the right hand side of the page along with parts of the clearance missed completely.

The CPDLC and DCL system design is such that the printout will always be required to allow sight of the list of amended waypoints but the rest of the message is subject to error.

Boeing are aware of the issues and they will be included on the list of problems to be fixed in the next NGFMC software upgrade. This will not be released by Boeing until Q4 2017 at the earliest, so crews must be rigorous in their reading & understanding of CPDLC & DCL clearances for a long period of time until the fixes are implemented.

Crew Procedure

When a CPDLC or DCL clearance is received it must still be printed as soon as possible using the master FMC (the FMC that is selected by the FMC selector).

Crew must use the CDU screen as the master source of information for reading clearances but the list of amended waypoints must also be read from the printout – see example on page 2.

If there is any uncertainty as to the clearance contact ATC to resolve the ambiguity.

This procedure is included in FCOM, SP5 Pre-Departure Clearance & Oceanic Clearance sections and ensures that crews will always see the full clearance including revised waypoints.

B747 OSN

BRITISH AIRWAYS

Use the screen to read clearance details as associated print out may not contain full message.

Amended waypoints listed on printout.

Do not rely on the rest of the information on the printout as it could be incomplete.

B747 FAN

BRITISH AIRWAYS

Issue Date	: 30/05/2018	Origin	: Ben Rees
Effective	: 01/06/2018	Position	: Operations Manager
Number	: 70/18	Authority	: James Basnett
Expiry Date	: 31/08/2018	Position	: Head of Flying

Terminal 3 Long-haul Punctuality: Cabin Crew Report Time Trial

We know that one of the most important drivers of customer satisfaction is our punctuality performance. Despite the continued focus across Operations on our RTG performance, we still have flights that are consistently failing to meet target. Long-haul flights from Terminal 3 are currently underperforming with an average RTG performance so far this year of 22% against a target of 50%.

Terminal 3 has some specific challenges due to it being a multi-airline terminal with no dedicated BA infrastructure as we have in Terminal 5. From a crew perspective, we have the added complexity of reporting in Terminal 5 and then having to make our way to Terminal 3.

Trial on extended cabin crew report times

Along with many other departments, IFCE have been reviewing what they can do to improve the current Terminal 3 long-haul performance. There are two specific areas where they propose to allocate additional time at report:

1. An additional 5 minutes added for journey time from CRC to Terminal 3 to give additional time both to clear security and pick up transport between terminals.
2. Commence boarding 5 minutes earlier at -43 to give our ground colleagues more time to complete boarding and final checks. Catering and cleaning will also be adjusting their timings to ensure they have completed their activity by -50 to allow them to start welcoming customers at -43.

IFCE therefore plan to run a three-month trial from Friday, June 1 to Tuesday, August 31 during which they will bring forward report times by 10 minutes to -115 minutes for the A380 and to -100 for all other aircraft types.

Revised critical path for cabin crew during the trial period

	Long-haul flights (excl A380)	A380 only
Briefing starts	-100	-115
Bus departs coaching bay	-70	-70
Cabin crew engage at aircraft	-55	-55
Ready to board	-43	-43
Ready to go	-5	-5

The adjustment to the cabin crew critical path during the trial does not affect the current flight crew critical path with separate transport planned between T5 and T3 during the trial period. The current critical path for flight crew sees transport depart the T5 bus bay 5mins after the cabin crew at -65 to STD and arrive at the aircraft for -50.

B747 FAN

BRITISH AIRWAYS

Should flight crew operating long-haul services out of Terminal 3 on occasion find themselves in the bus bay in good time to share the same transport as their cabin crew, they are more than welcome to do so.

To assist with the trial, and to ensure flight crew operating T3 long-haul departures are given every opportunity to arrive at the T5 bus bay as early as possible, Flight Operations has agreed to supply flight crew with pre-printed copies of the relevant flight plans which will be available for collection from the on-shift DFCM.

B747 FAN

BRITISH AIRWAYS

Issue Date	: 22/05/2018	Origin	: Captain Jonny Lutton
Effective	: 25/05/2018	Position	: Flight Manager Technical 767
Number	: 66/18	Authority	: Captain Simon Scholey
Expiry Date	: 25/08/2018	Position	: Head of Flight Technical
Cabin Crew	: ☐		

B747 Magnetic Variation Update 2018

Introduction

At 00:01z on Friday 25th May, 2018, Boeing will publish a revision of the Airplane Flight Manual (AFM) which introduces limitations and operational restrictions for worldwide flight operations using magnetic north referenced parameters.

The Boeing 747 contains multiple Magnetic Variation (MagVar) tables. These are contained within the Inertial Reference Unit (IRU), and within the Flight Management System (FMS). There are also up-to-date MagVar tables in the FMC Nav database, which are the same as Lido/mPilot MagVar on navigation charts.

The Boeing restrictions apply only to IRU MagVar tables referenced to a 2005 standard. BA are currently updating these MagVar tables to the 2015 standard and the purpose of this brief is to explain what the restrictions are and how to manage them. There are some significant operational restrictions which are temporary until an upgrade programme is completed, so it is important for crew to be aware of the effects on the operation.

What are MagVar tables?

MagVar tables are used to convert true heading to magnetic heading within the IRU. Magnetic heading accuracy is also a basic requirement of multiple aircraft systems, including navigation displays and autoflight systems.

Why do the MagVar tables need updating?

As the Earth's magnetic field changes, certain geographical locations especially near the north and south magnetic poles, experience changes in magnetic variation. A MagVar table on an aircraft is a 'snapshot' of one specific set of magnetic variation values. For Boeing aircraft new MagVar tables are released every 10 years. This has happened in 1995, 2005, 2015 etc. By way of example, a 2005 MagVar table will contain a set of magnetic variation values which were valid on 1st January 2005. The aircraft has no reference for how the magnetic variation has changed since this date.

Why is this relevant to Flight Operations?

After investigation into aircraft incidents at Fairbanks and Anchorage in 2012, Boeing determined that a significantly out-of-date MagVar database had contributed to errors which affected the Autoland capability of the aircraft. In simple terms, if the magnetic variation of an airport in 2017 is 12°, but the MagVar table on an aircraft believes it is only 1°, the AFDS system receives conflicting information from external and internal sources which may result in an incident during Autoland and ILS approach procedures. Anchorage and Fairbanks airports now have NOTAM restrictions specifying which year of MagVar table which must be installed on an aircraft to perform LVOs. This has ensured safety at those two airports, but Boeing are now taking steps to ensure the safety of Boeing aircraft at all airports worldwide.

B747 FAN

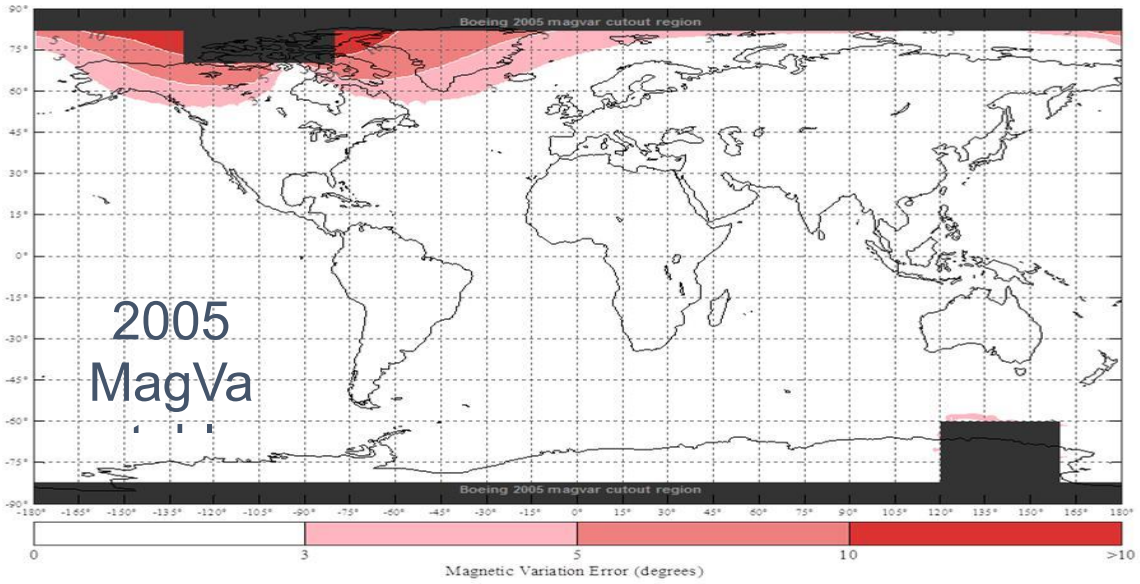
BRITISH AIRWAYS

To ensure ongoing operational integrity, Boeing have announced that on the 25th May 2018 at 00:01z, they will introduce a revision to the AFM for all Boeing aircraft fitted with a 2005 (or earlier) IRU MagVar database, which **restricts all ILS/LOC referenced operations if the MagVar differential between the IRU database and airfield exceeds 3°**. This will immediately restrict the operational capability for B747 aircraft with a 2005 MagVar database at two North Atlantic en-route alternate airports.

Boeing have also determined that **flight operations using magnetic reference in areas where MagVar exceeds 5° are no longer permitted**. This will remove all airspace at higher latitudes, as well as Kangerlussuaq as an en-route alternate. Without modification to a standard later than 2005, more and more airports would eventually become restricted as MagVar evolves, further limiting operational options for the B747 unless updated.

To minimise the effect on our operation, the 747 is undergoing an upgrade programme to fit MagVar tables at the 2015 standard. With the introduction of the restriction on Friday 25th May, ~50% of the 747 fleet will have been modified to the new 2015 standard. The entire B747 fleet is planned to be modified to the 2015 MagVar standard by the end of July 2018.

The map below is produced by Boeing and it indicates the position of the isogonic lines for 3° and 5° MagVar for the 2005 database compared to the 2017 magnetic values.



Which airfields and airspace are restricted and what are the nature of the restrictions?

<u>B747 with a 2005 MagVar database ONLY</u>

3° MagVar airfields

Keflavik (BIKF) – Any autopilot/flight director ILS approach (CAT I, CAT II, CAT III) that use Magnetic North referenced courses or bearings. All RNAV/PBN approaches are still available and useable.

Iqaluit (CYFB) – Any autopilot/flight director ILS approach (CAT I, CAT II, CAT III) that use Magnetic North referenced courses or bearings. All RNAV/PBN approaches are still available and useable.

5° MagVar airspace and airfields

Kangerlussuaq (BGSF) – No flight operations are permitted, including overflight in the cruise.

All BA 747 aircraft that have been upgraded to a 2015 MagVar database are unaffected by the operational restrictions detailed above. Refer to the AML and Temporary Attribute details for your aircraft modification state. The map below highlights the operational state of relevant airports in relation to B747 aircraft with a 2005 MagVar database.

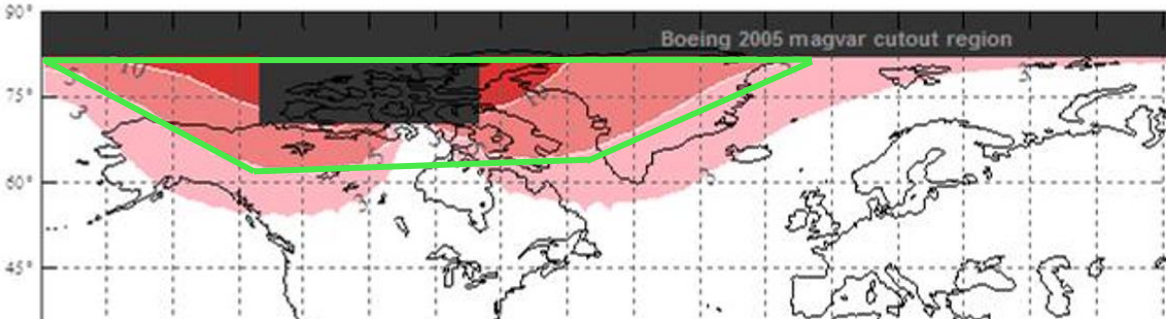
How do I know which MagVar database is fitted to my aircraft?

Aircraft which have a 2005 MagVar database will have an entry highlighted on the front page of LORETO - "*2005 MAGVAR database installed. Operational restrictions apply*". There is no reference to MagVar in the AML and restrictions as discussed elsewhere in this FAN will be in place for both flight planning and flight operations.

Aircraft which have been upgraded with a 2015 MagVar database will have an AML entry stating '*2015 MagVar embodied'* and a Loreto entry on the front page – "*2015 MagVar embodied"*. These aircraft are unrestricted by any MagVar operational or planning limitations.

What are the flight planning restrictions for aircraft with a 2005 database?

It is not possible to close airspace for the 5° region in the same curved format as the isogonic lines on the Boeing MagVar map. As a result, the fleet has conducted a risk assessment and a decision has been taken to close airspace roughly north of 65° N between 45° west and 130° west, plus some areas further north to the east and west of that region. Airspace and airports inside the green line on the map below are blocked within CIRRUS flight planning for B747 2005 MagVar aircraft. As the aircraft are upgraded, Engineering will remove the restriction notice.



B747 aircraft with a 2005 MagVar database should not be planned to operate inside the closed region. Crew should conduct a gross error check at the briefing stage to confirm that their flight has not been routed inside the 5° airspace if their aircraft holds a 2005 database. Refer to Loreto for the presence of the Temporary Attribute as detailed above.

Aircraft noted as '*2015 MagVar embodied*' in the AML and on Loreto are unrestricted in terms of flight plan routing or operational ability at all normal fleet en-route alternates.

What if the flight crosses into 5° MagVar airspace due to weather/ATC constraints?

Flight in 5° airspace has not suddenly become hazardous with the introduction of the Boeing AFM restriction, however Boeing needed to draw an operational line at some point. If a crew are required to deviate into 5° airspace in the cruise due to weather avoidance or ATC routing requirements, then when practical, the aircraft should be returned to the flight planned routing.

Crews should note that conducting approaches to airfields within the 5° region is prohibited. For the remaining period of the 2015 MagVar embodiment programme, it is calculated that Kangerlussuaq is the only current en-route alternate within 5° airspace, and therefore is closed for all flight operations to B747 aircraft with a 2005 MagVar database.

Why has the B747 fleet not already been modified in advance of the Boeing restriction?

The current modification plan has been underway since February 2018, however Boeing have varied the nature and scale of the operational restrictions continuously over the last 18 months. The final Boeing restrictions for May 2018 are significantly more limiting than the restrictions proposed by the manufacturer at the end of 2017 therefore the operational impact has only recently been determined.

The B777 fleet is also subject to this restriction, however a MagVar upgrade on the B777 is generally software only. The B747 requires an IRU hardware change and so is subject to a greater logistical constraints. Despite these challenges, Engineering are making good progress modifying the 747 fleet.

Why are PBN approaches not affected by the 2005 MagVar restriction?

RNAV/PBN approaches internally reference True North in the FMC, and so are unaffected by outdated IRU MagVar tables.

With the restriction on ILS approaches, are FMC generated overlay procedures of those ILS approaches permitted?

As these approaches still require the display of ILS data and use of an APFDS, they are not permitted.

Can VOR approaches be conducted at airfields where MagVar exceeds 3°?

VOR approaches can still be conducted, however crew should be aware that the indicated heading and track will differ on the procedure inbound track by the amount of IRU MagVar error. Therefore at KEF, a VOR approach would display in excess of 3° of error.

Can VOR/NDB approaches be flown using an LNAV/VNAV 'overlay' procedure at airfields where MagVar exceeds 3°?

Yes, however crew will be able to observe the error on the navigation display between aircraft track, heading and procedure track by the amount of IRU MagVar error. Therefore at KEF, a VOR overlay approach flown in LNAV/VNAV would display in excess of 3° of error.

Can an ILS approach be hand flown to airfields where MagVar exceeds 3°?

The restriction specifically prohibits ILS/LOC procedures using either autoflight or flight director. Therefore a hand flown approach using the flight director is prohibited. A raw data (no flight director), manually flown approach is permitted, as the sole reference is ground based ILS data and there is no negative influence from the IRU MagVar table to instrumentation, other than heading error by the amount of IRU MagVar error.

However, it is worth pointing out that fully automatic RNAV/PBN approaches are still available down to the published minima.

Does it cause a problem having the FMC MagVar database at 2005 but the IRU at 2015?

Boeing allow a 1 epoch (10yr) difference between the FMS and IRU MagVar tables. Therefore this solution is acceptable for the BA 747 fleet.

Once the IRU MagVar update to 2015 has been made, will there be any noticeable flight deck effects?

The flight deck instrumentation effects are minimal, but will vary depending on the latitude of operation and proximity to the magnetic North Pole. There are no SOP or procedural changes, however there are some points crew should be aware of:

- **Geographical Location**

  The flight deck effects mentioned below will only be visible if the aircraft is in a location where there was a large difference between the magnetic variation on 1st January 2005 and 1st January 2015. During this 10 year period, large changes will only have happened in certain areas of the world. The effect will be significantly more noticeable on the North Atlantic, than in the Middle East. Therefore if you are flying an approach into Keflavik (for example) you may notice the following flight deck effects:

- **Navigation Display Magnetic track vs FMC generated magenta route**

  The ND receives magnetic heading information from both the FMS & IRU MagVar tables, depending on the information displayed. The Captain's RMI receives IRU magnetic reference data. However the magenta route track from the NGFMC uses the FMC MagVar database (2005) on all waypoints except the existing active waypoint, which references IRU MagVar (2005, or 2015 depending on upgrade status). Therefore it is possible that a small difference may be seen between the white track line on the ND (IRU sourced) and

the magenta route line on large scale (>160nm) straight legs with 'same track' waypoints in between.

- **Variation in Hold Pattern**

  The B747 uses the FMS MagVar table for both Procedure Hold Patterns and Pilot Defined Hold Patterns. After the IRU MagVar table upgrade, the displayed inbound course will differ very slightly from the indicated track flown in the hold. This is because the 2005 FMS MagVar table will be used to define the orientation of the hold, however the indicated heading on the ND will use the new 2015 IRU MagVar table. There is no action required from the crew in this situation.

What about the FMS Nav Database and the LIDO Charts? Does the Boeing restriction affect the validity of their information?

No. The FMS Nav Database and LIDO charts are regularly updated as per the AIRAC cycle. They display the actual magnetic variation value at that point in time. Updating the IRU MagVar table simply provides more accurate data for various aircraft systems and displays to use.

Conclusion

For the first time there will be a MagVar table 'intermix' on the modified B747 aircraft, with the NGFMC containing 2005 information and the IRU 2015. This is specifically permitted by Boeing, however there are some very small flight deck effects which may be noticed as described above. However please note, these effects will only be noticeable in areas which has experienced a significant magnetic variation change between 1st January 2005 and 1st January 2015. These areas are located near the magnetic North Pole, so in general terms, Northern Canada and parts of the North Atlantic region. During the upgrade programme, the temporary operational restrictions at Keflavik, Iqaluit and Kangerlussuaq for unmodified aircraft will require effective crew briefing to ensure en-route contingency plans are carefully managed. Please ensure you are fully aware of the modification state of your aircraft and the constraints this may place on your operational capability in the north Atlantic region.

If you have any questions, please do not hesitate to get in touch.

Many thanks and safe flying,

Captain Jonny Lutton
Flight Manager Technical,
Boeing 767 and 747

B747 FAN

BRITISH AIRWAYS

Issue Date	: 17/04/2018	Origin	: Agata Luch
Effective	: 17/04/2018	Position	: Manpower Deliver Manager
Number	: 55/18	Authority	: Agata Luch
Expiry Date	: 28/10/2018	Position	: Manpower Delivery Manager

S18 DME scheduled to operate on B777 & B744

For S18 schedule BA233/232 is being planned under section 14.16.3 when operated by B777 or B744 aircraft.

Credit

For Trips departing from 01 April 2018, additional credit will be added to all DME trips operated on B777 and B744. The credit value for the trips will be displayed in the trip descriptions if flights are planned to operate on those aircraft types.

Hotel

Hotel rooms will be made available on request.

If you require hotel accommodation, either before or after the trip, please contact the Duty Flight Crew Executive (DFCE) at CRC T5 or call 020 8513 1515 option 2, option 3.

The approved hotel agreed between BA and BALPA is the Sheraton Heathrow. However, should individuals wish to use BA's main contracted hotel, the Premier Inn T5, then that option is available, and should be advised to the DFCE.

The Hoppa service is available to take crews to and from the Sheraton, and complimentary travel will be granted by showing your ID.

Should crew wish to use the car park at the requested hotel, then flight crew will need to claim via staff expenses.

B747 FAN

BRITISH AIRWAYS

Issue Date	: 15/03/2018	Origin	: Christopher Forbes
Effective	: 25/03/2018	Position	: Flight Ops Project Manager
Number	: 37/18	Authority	: Allister Bridger
Expiry Date	: 27/10/2018	Position	: Chief Pilot Boeing

Flight Crew Rest Seats Summer 18

On aircraft departing LHR from 25 March 2018 onwards, the flights and routes shown below require one Flight Crew rest seat. The designated rest seat is 60B.

Sector	Flight Number
LHR-JNB	BA0057
CPT-LHR	BA0058
LHR-CPT	BA0059
LHR-LAX	BA0283
LHR-SFO	BA0285

B747 FAN

BRITISH AIRWAYS

Issue Date	: 02/02/2018	Origin	: Ben Rees
Effective	: 02/02/2018	Position	: Operations Manager
Number	: 21/18	Authority	: Captain Al Bridger
Expiry Date	: 13/12/2018	Position	: Chief Pilot Boeing

Terminal 3 LH Punctuality Drive

Under Plan4 Operations, the airline aspires to achieve the highest punctuality of any major airline in London by the end of the current 5 year business plan. What that means in terms of performance is 82% of our network services departing within 15mins of STD by 2021. In 2017, in what turned out to be a very positive year for operations, we achieved 80%.

As previously communicated the company has this year taken the decision to set the RtG metric as the primary punctuality driver in terms of our corporate targets, acknowledging the positive impact that being closed up on time, also has on our 15min performance.

As ever, a large number of operational improvement initiates are already underway, none more so than at Heathrow where the LHR50-50 programme through its numerous work streams, aims to ensure that 50% of all LH and SH departures are ready to go on time throughout 2018. Whilst 50% may to some seem like a fairly uninspiring target, the fact we managed just 35% on all LH departures last year, puts a little more perspective on the challenges ahead.

In regards to LH operations at Heathrow, our Terminal 3 proposition has for some time been an area of concern and naturally has been identified as a focus for this year and beyond. With that in mind the 11 daily LH departures from Terminal 3 have for the first time been aligned to individuals within the Duty Flight Crew Managers team. The individuals in turn will be taking responsibility for ensuring the LHR50-50 programme board are kept abreast of the views of both the operating flight crew, as well as the Operations Team.

DFCMs and their accountable services

- Tracy Bell: MIA (BA207 & BA209) and YVR (BA085)
- Debbie Clements: ACC (BA081), CPT (BA043 & BA059) and NBO (BA065)
- Caroline Kennally: BA219 (DEN), BA271 & BA275 (LAS) and BA289 (PHX)

If operating a T3 LH service and you have feedback pertaining to the efficiency of your departure from Heathrow, please share this by emailing the accountable DFCM via their BA email which can be located on the Trip Notice for your respective service.

If for any reason Flight Operations incurs a delay on a T3 LH departure, please expect proactive contact from the on-shift DFCM via ACARS. They in turn will work with you to ensure any incorrectly assigned delay is rectified. We are only able do this with your information and co-operation.