

# Bahrain International Airport Standard Operating Procedures (SOP)




IVAO

GCC



Revision No	Changes	Editor	Effective Date
1.0	Initial Release	Hamad Ali	May 20th 2020
2.0	Layout Change Procedures revised	Mustafa Alsaif	Jan 23rd 2022

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# Document Information

## Purpose

This document prescribes the procedures to be utilized for providing air traffic control services at the Bahrain Air Traffic Control Tower (OBBI) and APC. The procedures described herein are supplemental to the Bahrain Facility Operating Guidelines and the Bahrain eAIP, as well as any published guidelines or procedures.

## Cancellation

This Document cancels any pre-existing SOP for OBBI This SOP shall become the procedures in use on the effective date.

## Disclaimer

Information contained in this document is designed specifically for use in a **virtual** air traffic control environment.

## Procedural Deviation

Deviation from this document may **not** occur unless otherwise announced by the FIR-CH and/or XG ATC Operations Department.



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# General Information

Bahrain International Airport									
ICAO-ID	OBBI	IATA-ID	BAH	Time Zone	UTC+3	Elevation	8 feet / 2 meters	Magnetic Variation	003° E
Location	Latitude: 26.270834 / 026° 16'25.00" N				Longitude: 50.633610 / 050° 38'01.00" E				
Airspace Information						Transition Level (TL)	Transition Altitude (TA)		
	CTR	TMA		FIR/UIR		FL150	13000ft		
Class	D	C		A	G				
Vertical Limit	SFC-2500ft	4500ft-FL150		FL150 FL460	FL460 UNL				

## Parking Stands

[Western Apron B](#): 50 to 58

[Western Apron A](#): 61 to 63

[Executive Apron](#): E1 to E4 (VDGS Equipped)

[Cargo Apron](#): C1 to C5 (VDGS Equipped)

[Middle Apron](#): 1 to 6 (VDGS Equipped)

[Main Apron A](#): (Under Construction)

[Main Apron B](#): 14A to 22B

[Eastern Apron](#): 20B to 28 (VDGS Equipped)

[Eastern Executive Apron](#): 81 to 88

[North Apron](#): 70 to 75

[Visual Docking Guidance System \(VDGS\)](#).

Note: The airport is stages of construction, gate numbers and location are subject to change.



## Runway Information

Runway	Length x width	Surface Type	TDZ- Eleve	ALS Displaced Threshold
<b>12L</b>	3964 x 60m	Asphalt	8 ft	1007
12R	2530 x 45m	Asphalt	8 ft	1007
30L	2530 x 45m	Asphalt	8 ft	394
<b>30R</b>	3964 x 60m	Asphalt	8 ft	1007

## Takeoff Run Available

Runway	Intersection	Takeoff Run Available
<b>12L</b>	A2	3414m
	A3	2801m
12R	S	2246m
	A5	1991m
	A6/A7	1576m
	A8	992m
30L	A9	2333m
	A8	1538
	A6/A7	954m
<b>30R</b>	A8	3150m
	A7	2606m
	A5	2152m

- CIRCLE-TO-LAND Not authorized South of airport between R-180 and R-260 clockwise.

Refer to the [circling authorization area chart](#) .



# ATC positions

## Primary Positions

Position	Radio Name	Callsign	Frequency
Clearance Delivery	Bahrain Delivery	OBBI_DEL	121.900
Ground	Bahrain Ground	OBBI_GND	121.850
Tower	Bahrain Tower	OBBI_TWR	118.500
Approach	Bahrain Approach	OBBI_APP	127.850
Radar	Bahrain Radar	OBBI_CTR	127.525

## Other Positions (XG-ATC Operations Department approval required)

Position	Radio Name	Callsign	Frequency
Departure Radar	Bahrain Departure	OBBI_DEP	119.100
Radar	Bahrain North Radar	OBBI_N_CTR	123.100
Radar	Bahrain Central Radar	OBBI_C_CTR	127.525
Radar	Bahrain East Radar	OBBI_E_CTR	132.125



# Chapter 1. Clearance Delivery

## 1.1 Responsibilities

- Issue ATC clearances to all departing VFR and IFR aircraft.
- All departing aircraft contact Bahrain Delivery on 121.900 MHZ for IFR enroute clearance or VFR departure instructions 10 minutes prior to start-up.

## 1.2 IFR Departure Instructions

### 1.2.1 IFR Routing

- All routes must be checked for compliance with [neighboring FIRs LOAs](#). Aircraft who do not file these routes should have them amended appropriately.
- Aircraft unable to accept preferred routes must **not** be cleared until coordination has occurred between affected/staffed facilities.
- Bahrain has no SIDs, all traffic departing Bahrain TMA should expect a full route clearance within the Bahrain FIR, see examples in [section 1.2.3](#).
- Bahrain has no SIDs, all traffic departing Bahrain TMA should expect a radar vectors departure with accordance of the table below:

### Turbojet Aircraft Headings

FIR Exit Airway	FIR Exit WP	Routing	
		12L	30R
B457	NARMI	075	300
A453	KUMBO	075	345
M444	DAVUS		
T444	ROTOX		
L319	OBTAR		
N697	TORBO		
	SODAK		
T872	DASUT		
P559	NALPO		
M677	OBNET		
N685	TULUB	120	
	TOSNA		





## Turboprop, piston, and helicopters Headings

FIR Exit Airway	FIR Exit WP	Routing	
		12L	30R
A453	KUMBO	030	
M444	DAVUS		
T444	ROTOX		
L319	OBTAR		
N697	TORBO		
	SODAK		
T872	DASUT		
P559	NALPO		
M677	OBNET		
N685	TULUB TOSNA	120	030
B457	NARMI	030	300

### 1.2.2 IFR Altitudes

- Instruct all pilots of turbojet aircraft to **“Climb 4000ft”**.
- Instruct all pilots of turboprop, piston aircraft and helicopters to **“Climb 3000ft”**.
- Substitute 4,000, or 3,000 for lower if an aircraft’s IFR cruise altitude is filed for lower.

### 1.2.3 IFR Clearance Example

- GFA508, cleared to Dubai via N697 SODAK P559 NALPO, after departure turn right Heading 345 climb 4000ft, Squawk 4410.
- GFA2181, Cleared to Jeddah via B457 NARMI, after departure fly Heading 300 climb 4000ft, Squawk 4420.
- GFA219, cleared to Kuwait via RAMSI M600 ORNAK A453 SOLEM M600 KUMBO, after departure turn Left Heading 075 climb 4000ft, Squawk 4430.

## 1.3 VFR Departure instructions

### 1.3.1 VFR Altitudes

- VFR Aircrafts (both remaining and not remaining in the pattern) shall be issued the instruction: "not above 1500ft"

## 1.4 Facility Beacon Codes

- All Types of flight rules aircraft must be assigned a unique beacon (squawk) code in accordance with the provided SSR codes by the IVAO server.

## 1.5 Scratchpads

- To assist the Departure controller, Clearance Delivery shall input appropriate scratchpads (WP and ALT) entries into the flight plan, as outlined below, after the clearance has been issued.
- WP shall include the Heading assigned as per [section 1.2.1](#).
- ALT shall include the Initial Climb clearance issued as per [section 1.2.2](#) for IFR aircrafts and [section 1.3.1](#) for VFR departures.

### Examples

WP H300 30R ▾ ALT 040 ▾

WP VFR 12L ▾ ALT 015 ▾

- Note that Altitude entries should be in level and not altitude such as: 030 and not 3000.



# Chapter 2. Ground Control

## 2.1 Responsibilities

- Ground controls all airport movement areas except the Active Runway.

## 2.2 Startup and Pushback

- Ground controller shall authorize pushback upon checking the selected transponder code assigned by Bahrain Delivery, with phraseology:  
" Push and start approved facing (direction)".

## 2.3 Intersection Departures


- Ground must notify the Tower Controller of all intersection departure verbally or via the combox.

## 2.4 Current ATIS

- Ground controller shall ensure pilots have the current ATIS and/or the Local QNH prior handoff to the tower controller.

## 2.5 Runway Crossing

- All active runway crossings must be approved verbally or through the combox by the tower controller.
- Note that Runway 12R/30L does not require a crossing clearance and is used as taxiway **A** in normal operations.

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# Chapter 3. Tower Control

## 3.1 Responsibilities

- Tower controller has responsibility for a 20nm radius from the Bahrain Airport from surface up to and including 2,500 MSL.

## 3.2 Runway Selection

- Bahrain has **only one** operational runway which can be used at all times (12L/30R).
- Runway **30R** is preferred up to 10Kts tailwind component.

## 3.3 Runway Change Checklist

- When changing runways, the Tower controller must coordinate with the appropriate Dep/App position(s).
  - a. Tower shall be responsible for coordinating the last departure off the previously used runway and the first departure off the newly selected active runway.
  - b. APC controller shall be responsible for coordinating the last arrival on the previously used runway and the first arrival on the newly selected active runway.
- Notify APC of the new runway configuration and last departure and arrivals.
- When notified by APC, stop all departures on the present configuration.
- Notify the Ground controller of the new runway configurations and divert all departures to the new runways.
- When APC is ready for the new configuration, APC will notify Tower. Upon completion of notification, departures may resume with the new configuration.
- Ensure ATIS has been updated to reflect the new configuration.



### 3.4 Departure Headings


- Assign a standard departure heading, as outlined below.

#### 3.4.1 Turbojet Aircraft Headings

FIR Exit Airway	FIR Exit WP	Routing	
		12L	30R
B457	NARMI	075	300
A453	KUMBO	075	345
M444	DAVUS		
T444	ROTOX		
L319	OBTAR		
N697	TORBO		
	SODAK		
T872	DASUT		
P559	NALPO		
M677	OBNET		
N685	TULUB	120	
	TOSNA		

#### 3.4.2 Turboprop, piston, and helicopters Headings

FIR Exit Airway	FIR Exit WP	Routing	
		12L	30R
A453	KUMBO	030	
M444	DAVUS		
T444	ROTOX		
L319	OBTAR		
N697	TORBO		
	SODAK		
T872	DASUT		
P559	NALPO		
M677	OBNET		
N685	TULUB	120	030
	TOSNA		
B457	NARMI	030	300

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### 3.5 Arrival Procedures

- Communication transfer must be completed prior to five nautical miles from the runway.
- Tower controller shall not change the approach sequence without coordination with APC.

### 3.6 Go Around/Missed Approach procedure

- Missed approach procedure depends on the runway configuration.
- When RWY 30R is active: Bahrain tower shall assign heading 300° and 2,500 feet.
- When RWY 12L is active: Bahrain tower shall assign heading 120° and 2,500 feet.
- TWR must coordinate with APC prior to a frequency change.

### 3.7 VFR Patterns

- VFR patterns are conducted at or below 1,500 feet.
- Runway 30R utilizes **right** traffic
- Runway 12L utilizes **left** traffic



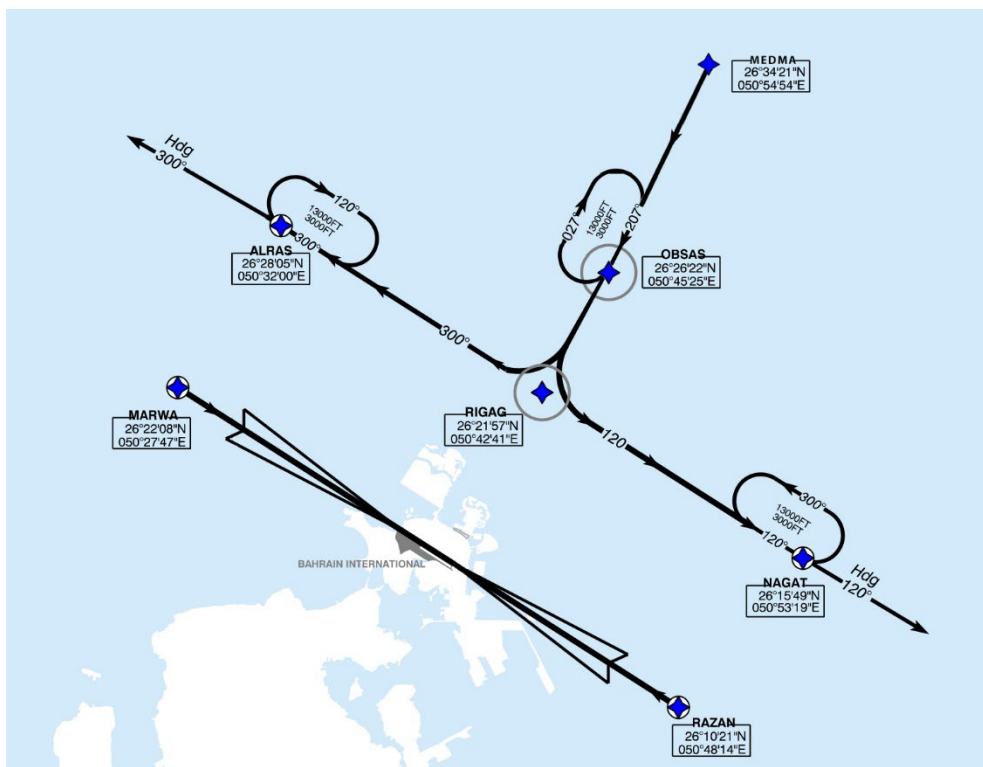
# Chapter 4. Departure & Approach Radar


## 4.1 Departure Procedures

- IFR departures will be automatically released if the aircraft departs with procedures outlined in [Chapter 3 section 3.4](#) and [Chapter 1 sections 1.2](#).
- Bahrain operates Radar Vektored Departures according to [Chapter 3 section 3.4](#)
- After the completion of transfer between Bahrain tower and Bahrain Departure, climb clearance shall be issued as well as a heading or a direct on the aircrafts course, more Information is included in the OBBS FIR SOP.

## 4.2 Arrival Procedures

- Bahrain operates 2 RNAV STARs for aircrafts West due East (arriving from the north and west):
  1. [KOBOK 1](#)
  2. [LADNA 1](#)
- Bahrain has 2 approach procedures for aircrafts East due West (arriving from the east):
  1. Runway 30R operations: Aircrafts arriving from the east shall have an arrival via MEDMA → OBSAS → RIGAG → NAGAT then vectors to final.
  2. Runway 12L operations: Aircrafts arriving from the east shall have an arrival via MEDMA → OBSAS → RIGAG → ALRAS then vectors to final.



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## 4.2.2 Handover Points Between CTR & APP

- Arrivals from the **east** shall receive a handoff by Bahrain Radar by Waypoint **ALREP**
- Arrivals from the **west** shall receive a handoff by Bahrain Radar by Waypoint **LADNA**
- Arrivals from the **north** shall receive a handoff by Bahrain Radar by Waypoint **KOBOK**

## 4.2.3 Handover Altitudes Between CTR & APP

- Bahrain CTR should clear all arrivals to FL160 and handover to Bahrain APC when passing TMA upper limit altitude.
- More information can be found in the OBBS FIR SOP

## 4.2.4 Bahrain Tower and TMA controller handover agreement

- Arrival Procedures tower shall be responsible for separation of all arrival aircraft that have been handed off by APC from all departing aircraft still under tower jurisdiction.
- Communication transfer must be completed prior to five nautical miles from the runway.
- Tower control shall not change the approach sequence without coordination with APC.

## 4.3 Automatic Releases

- Bahrain Tower is authorized for automatic releases from the APC controller so long as the aircraft departs on the pre-coordinated active departing runway(s) on approved procedures and headings in [Chapter 3 section 3.4](#).

## 4.4 Go-Around Procedures

- Tower controller shall assign runway heading and climb to 2,500, prior handoff to APC.
- Provide radar vectors for go around aircrafts according to the published [radar minimum altitude chart](#).






## 4.5 Arrival Holdings

### 4.5.1 Arrival Holdings - ACC

	<b>AFNAN</b>	<b>ALMOK</b>	<b>ALTOM</b>	<b>ITNAS</b>	<b>SOLOB</b>
<b>TRK</b>	268°	288°	294°	320°	294°
<b>Turn</b>	Right	Right	Right	Right	Right
<b>Vmax</b>	230kts	N/A	N/A	N/A	N/A
<b>Upper limit</b>	FL460	FL460	FL460	FL460	FL460
<b>Lower limit</b>	FL250	6000ft	6000ft	6000ft	6000ft

### 4.5.2 Arrival Holdings - APC

	<b>ALRAS</b>	<b>MARWA</b>	<b>NAGAT</b>	<b>OBSAS</b>	<b>RAZAN</b>	<b>SOGAT</b>	<b>VELOG</b>
<b>TRK</b>	300°	302°	120°	207°	122°	292°	142°
<b>Turn</b>	Right	Left	Left	Right	Right	Right	Left
<b>Vmax</b>	210kts	240kts	210kts	240kts	240kts	240kts	240kts
<b>Upper Limit</b>	13000ft	FL150	13000ft	1300ft	FL150	FL220	FL210
<b>Lower limit</b>	3000ft	5000ft	3000ft	3000ft	5000ft	5000ft	5000ft

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# Chapter 5. Non-Normal Operations

## 5.1 General view

- Low Visibility Procedures (LVP) shall be declared at Bahrain International Airport whenever the RVR reading is 1000M or less, or whenever conditions are such that all of the maneuvering area is not visible from the control tower.
- The procedures will ensure protection of the ILS sensitive and critical areas to ILS CATII limits, provide an effective surface movement guidance, and control system, and ensure a safe CAT II operations environment.
- LVP procedures will not normally be introduced for aircraft carrying out practice CAT II approaches.

## 5.2 LVP Departure procedure


### 5.2.1 Runway 30R

- RWY holding position H shall be used for departure. Intersection departures are not authorized during LVP.
- On receipt of take-off clearance, pilots should ensure that they are able to commence take-off without delay.
- Strict adherence to ATC taxi instructions is required, refer to the Bahrain eAIP [\(LVP chart DEP RWY 12L/30R\)](#).

### 5.2.2 Runway 12L

- RWY holding position A1 shall be used for departure traffic. Intersection departures are not authorized during LVP.
- On receipt of take-off clearance, pilots should ensure that they are able to commence take-off without delay.
- Strict adherence to ATC taxi instructions is required, refer to the Bahrain eAIP [\(LVP chart DEP RWY 12L/30R\)](#).

Notify ATC immediately of any noncompliance to the above requirements.

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## 5.3 LVP Arrival Procedures


### 5.3.1 Runway 30R

- Arriving aircraft may exit the RWY to the south at TWY A4 or beyond
- Arriving aircraft may exit the RWY to the north at TWY B1 or TWY B2.
- Strict adherence to ATC taxi instruction is required, refer to the Bahrain eAIP ([LVP chart ARR 12L/30R](#)).
- Report RWY vacated and taxi speed to ATC.

### 5.3.2 Runway 12L

- Arriving aircraft may exit the RWY to the south at TWY A5 or beyond or,
- Arriving aircraft may exit the RWY to the north at TWY B1 or TWY B2.
- Strict adherence to ATC taxi instruction is required, refer to the Bahrain eAIP ([LVP chart ARR 12L/30R](#)).
- Report RWY vacated and/or taxi speed to ATC.

Pilots are expected to comply with these operational procedures unless otherwise coordinated.

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# References

- [Bahrain FIR eAIP publication 12/AUG/2021](#)
- Jeppesen charts
- [Bahrain eAIP charts](#)