

International Virtual Aviation Organisation

SO Online Day

Saudi Arabia

Sunday, 24th March of 2024



Special Operations Department

International Virtual Aviation Organisation

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Introduction

The IVAO Special Operations department is pleased to introduce the second SO Online Day of 2024.

The second division that will host this event is Saudi Arabia (SA). We invite you to fly to OERK (Riyadh King Khalid Intl. Airport) and OEDR (King Abdulaziz Air Base).

These airports will be open from 1700UTC to 2000UTC.

Date and Time

Date: Sunday, 24th March of 2024

Time: 1700UTC – 2000UTC

Definitions

The following are definitions of some acronyms used throughout this document:

TERM	EXPLANATION
GAT	General Air Traffic
OAT	Operational Air Traffic
S&R	Search and Rescue
POL	Police
MEDEVAC	Medical Evacuation

Aircrafts

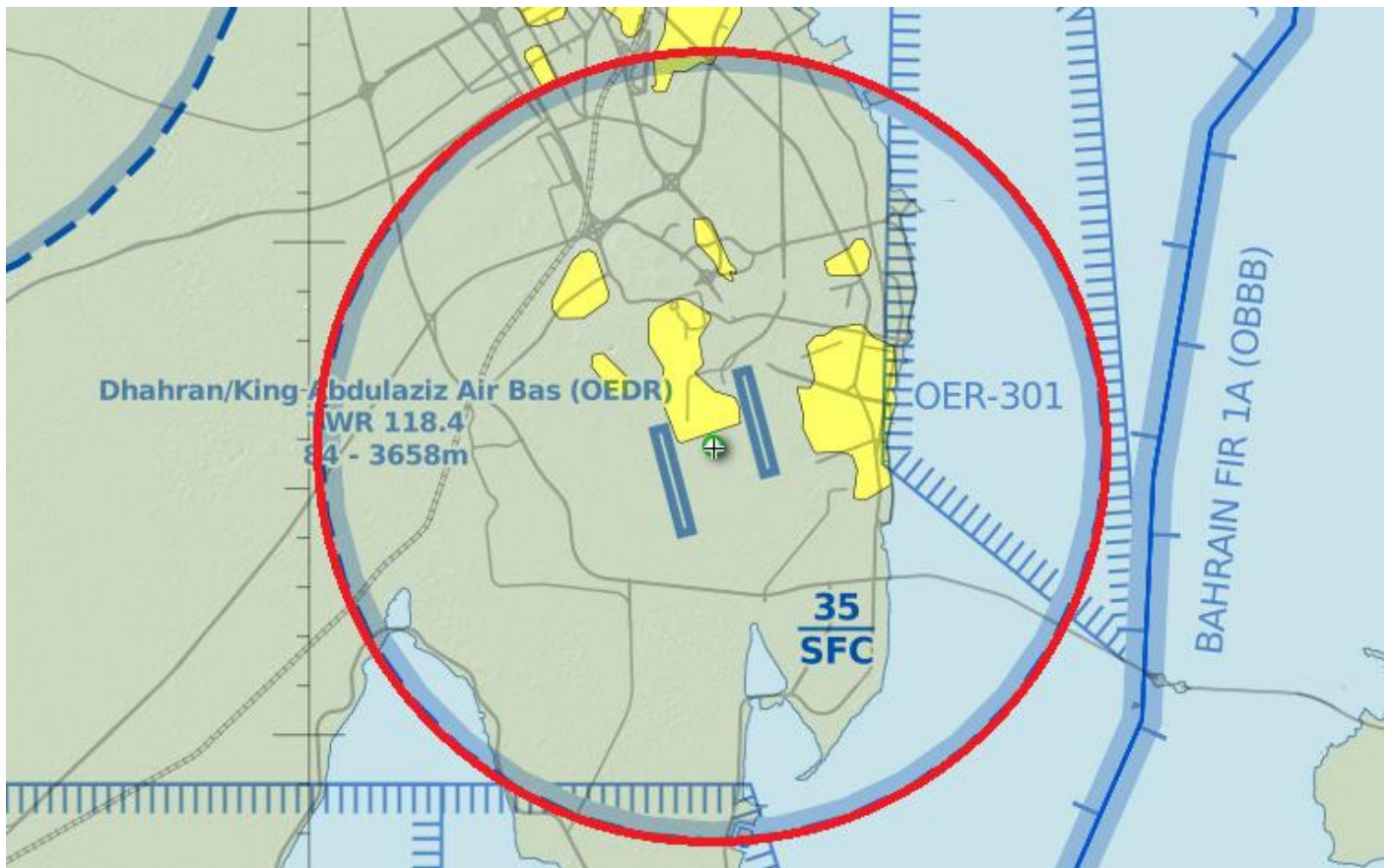
This event is not restricted to any type of aircraft and can be flown. Anyway, we propose transport (OAT), search and rescue, police, medical, and fighter.

Airports and Traffics

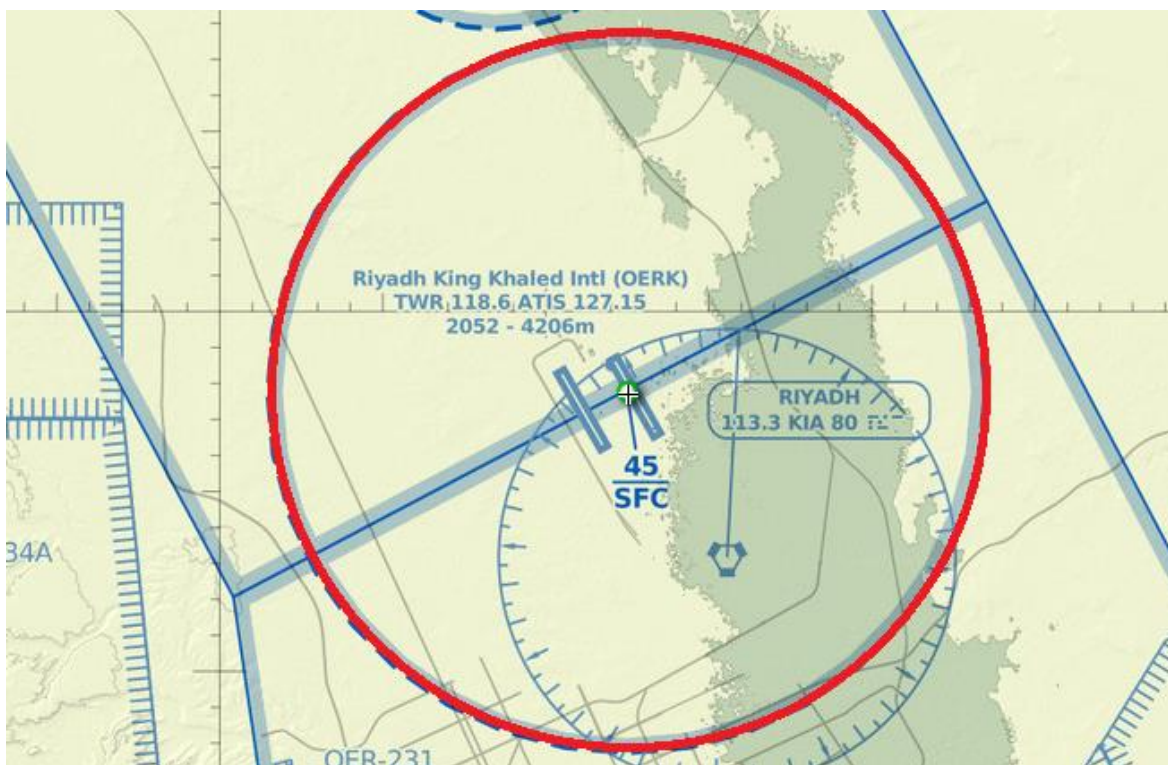
Airport ID	Name	Type of flights
OERK	Riyadh King Khalid Intl. Airport	ILS Calibration
OEDR	King Abdulaziz Air Base	S&R

Airspace

OEDR (King Abdulaziz Air Base): C from SFC to 3500ft AMSL.



OERK (Riyadh King Khalid Intl. Airport): C from GND to 4500ft AMSL.



Airports

Riyadh King Khalid Intl. Airport

ICAO: OERK

Charts: [OERK - King Khaled International Airport Diagram and Aeronautical Charts.](#)
([airwaymap.com](#))

Runway	Length	ILS	CIRCUIT	HEIGHT
33R	4325 m	109.500	Right	2040 ft
15L	4325 m	109.100	Left	2062 ft
33L	4205 m	110.500	Left	2061 ft
15R	4205 m	110.100	Right	2077 ft

Frequencies

Position	Callsign	Frequency
OERK_TWR	Riyadh Tower	118.600
OERK_GND	Riyadh Ground	121.600

Scenery

MSFS: [OERK - King Khaled Intl. Airport, Riyadh for Microsoft Flight Simulator | MSFS](#)

P3D/FSX: [AVSIM Library](#)

X-Plane: [King Khalid International Airport - Riyadh 2023 - X-PLANE 12 - OERK - Scenery Packages XP12 - X-Plane.Org Forum](#)

King Abdulaziz Air Base

ICAO: OEDR

Charts: [OEDR – King Abdulaziz Air Base Diagram and Aeronautical Charts.](#)

airwaymap.com

Runway	Length	ILS	CIRCUIT	HEIGHT
34R	3600 m	109.300	Right	48 ft
16L	3600 m	109.900	Left	68 ft
34L	3600 m	109.100	Left	64 ft
16R	3600 m	109.700	Right	68 ft

Frequencies

Position	Callsign	Frequency
OEDR_TWR	King Abdulaziz Tower	118.700
OEDR_SMC	King Abdulaziz Approach	121.700

Scenery

P3D/FSX: [Scenery OEDR Dhahran Airport – Saudi Arabia 1954 – Military AI Works](#)

X-Plane: [X-Plane Scenery Gateway](#)

Mission 1 Rescue

In this Mission, you will depart from OEDR to do some Rescue Flights in the OB (D)–8. Helicopters are available and rescue aircrafts also.

Mission 2 ILS Calibration

The ILS Calibration it's important in regular flights, so, because of that, ILS's must be operating normally. State aircrafts will be calibrating all ILS of OERK, requesting it to the ATC.

How is the ILS Calibration performed?

1. Modulation check of both transmitters. From 5 to 8 NM out, maintaining constant altitude, the aircraft proceeds to the outer marker where it breaks the maneuver. Estimated time: 5 to 8 min. Estimated pass speed: 200 kts.
2. Path width and nominal angle (B) check. From 5 to 8NM out, proceed to the path's vertical with a pass at constant altitude and speed. Estimated time: 5 to 7 min.
3. Maximum (A) and minimum (C) path angle check (angle alarms). From 5 to 8 NM out, perform a pass at constant altitude and speed. Critical and sensitive areas of the ILS must be protected. Estimated time: 5 to 8 min.
4. Maximum and minimum path width check (width alarms). From 5 to 8 NM out, perform a pass at constant altitude. Critical path area must be protected. Estimated time: 5 to 8 min.
5. Safety pass with maximum width to check for absence of false paths below the nominal angle. From 5 to 8 NM out, the aircraft flies following a 1.3° angle to the touchdown point on the runway. Critical path area must be protected. Estimated time: 8 min.
6. Final check. Two full approaches are made from the initial approach fix (IAF) to the runway touchdown point. Critical path area must be protected. Estimated time: 5 to 8 minutes per pass.
7. NOTES:

8. Estimated time does not include the time needed to reach the starting point of the next maneuver.
9. Movements in critical areas invalidate some checks that will need to be repeated.

Also:

Check of the Localizer beam range.

10. Approach from 20–25 NM.
11. Modulation check of LLZ and GP transmitters. From 7 to 12 NM outside the threshold, maintaining constant altitude, proceed to the Outer Marker where the maneuver is terminated.
12. Estimated time: 5 min.
13. Alignment check of both transmitters' courses. From 15 NM out, perform an ILS approach, fly over the runway at 50 feet, and terminate the maneuver after passing it. Critical and sensitive areas of the ILS must be protected. Estimated time: 10 min.
14. Check for absence of false courses and nominal width LLZ and GP. Describe an orbit around the LLZ evaluating its passage at $+35^\circ$ and -35° (C and C*). Estimated time: 10 min.
15. Check of maximum (COC'), minimum (AOA), and nominal (BOB*) width of the ELZ. Crosses perpendicular to the LLZ course at the Outer Marker height repeating in the opposite direction. Estimated time: 8 min per pass.
16. Check of LLZ axis alarms. The laboratory aircraft is positioned at the runway threshold and on its axis. Critical and sensitive areas of the ILS must be protected. Estimated time: 5 to 6 min.
17. NOTES:
18. Altitudes are requested for each manoeuvre by the crew.

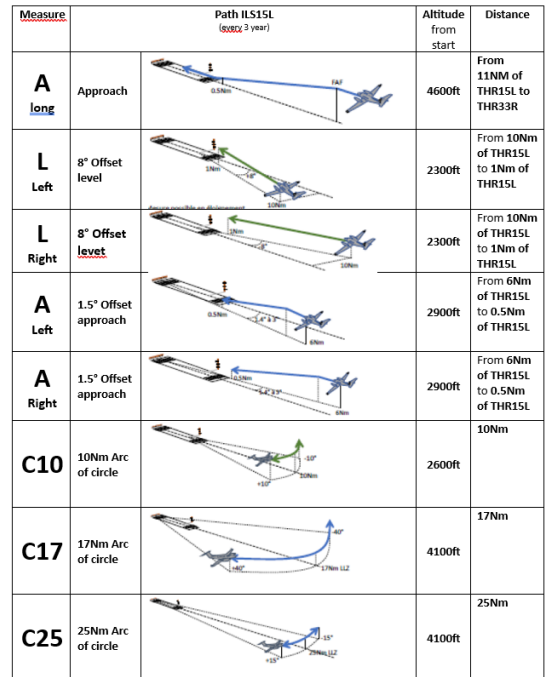
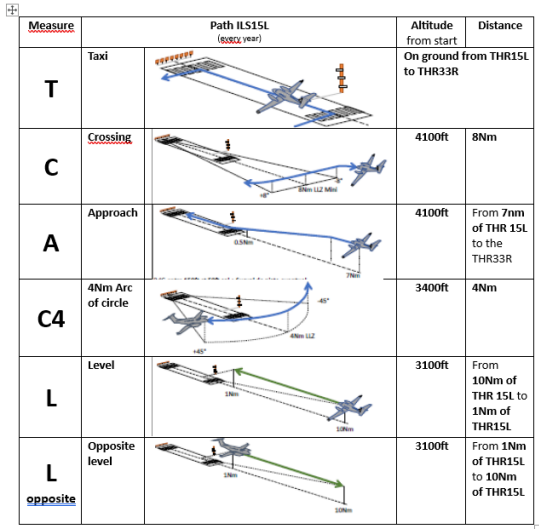
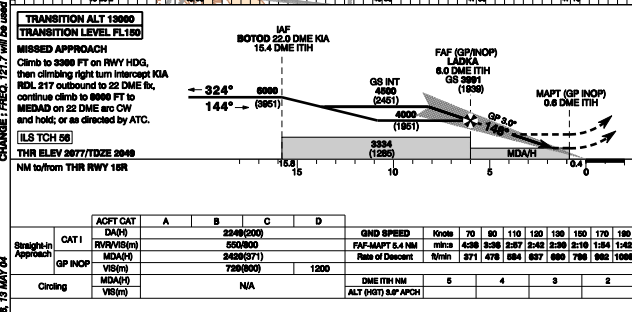
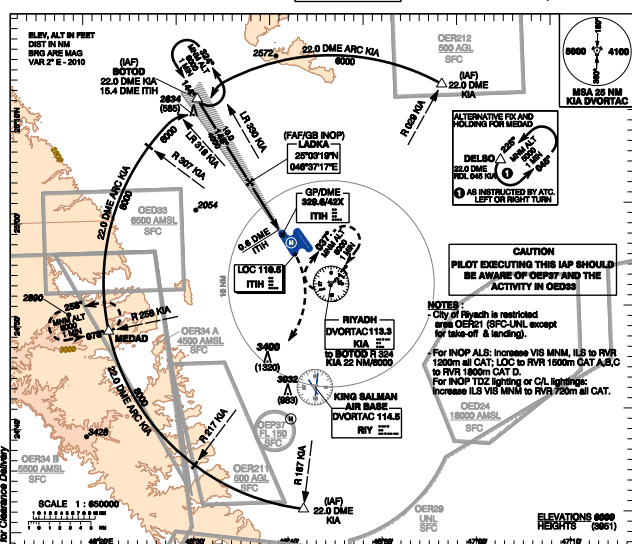
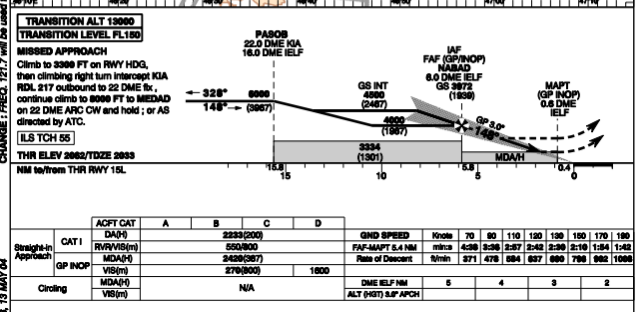
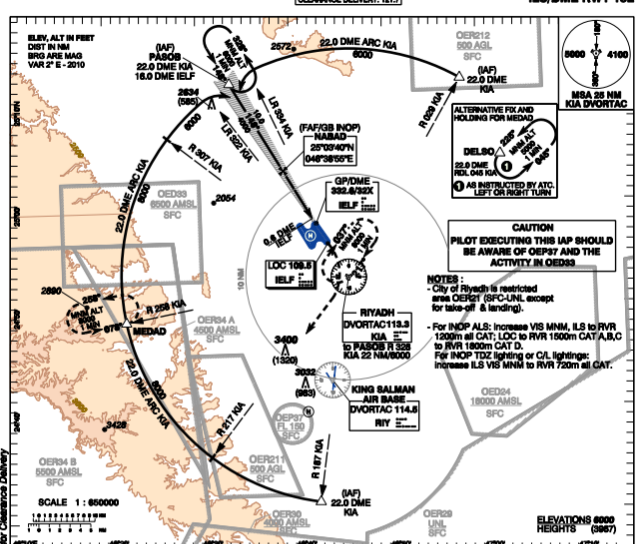


Photo by 157774 – Etienne.

INSTRUMENT APPROACH CHART - ICAO **AERODROME ELEV 2049 ft** **RIYADH/King Khaled Intl (OERK)**
 HEIGHTS RELATED TO TDZ RWY 15R - ELEV 2048FT
 ILS/DME RWY 15R



INSTRUMENT APPROACH CHART - ICAO **AERODROME ELEV 2049 ft** **RIYADH/King Khaled Intl (OERK)**
 HEIGHTS RELATED TO TDZ RWY 15L - ELEV 2048FT
 ILS/DME RWY 15L



Verbal briefing for the Missions

A verbal briefing will take place at:

Place: IVAO Special Operations Department Discord (HQ SOD)

Time: 24/3/2024 16:00z

Discord Room: #event-voice-1

Contact

You can contact to HQ-SOD via [discord](#), [forum](#) or email: specops@ivao.aero.