

## 11 ROUTE AND AERODROME INFORMATION

### 11.1 ROUTE INFORMATION

Flight crew and aircraft dispatchers have access to route and airport information through the Route Manual and related charts, which are available on company issued portable Electronic Flight Bag (EFB) devices or via web briefing for each flight. The Route Manual and charts, provides detailed flight information on rules of the air, air traffic control and emergency procedures, and enroute procedures. The Route Manual in combination with OM C and OM A, details the rules and special information for departure, enroute alternate, destination, and designated alternate airfields, essential for flight planning.

All route planning must be conducted with reference to the enroute chart information contained in the Route Manual.

The Pilot-in-command (PIC) bears the ultimate responsibility of ensuring a comprehensive understanding of various route aspects before initiating a flight. The PIC must ensure that the crew has access to, and is aware of, departure, enroute, destination and alternate aerodrome NOTAMs, FIR NOTAMS, meteorological information, communication facilities, navigation aids, air traffic services, and aerodromes along the planned route.

Before each flight, the flight crew must ensure the currency of Jeppesen FliteDeck ProX data, which provides enroute charts, aerodrome charts, and details on minimum safe enroute/sector altitudes, restricted areas, and danger zones, covering the entire route including destination and alternate airports. The PIC must utilize the Route Manual, NOTAMs, and other company-provided information to ensure that the operating crew is informed about:

1. The route to be flown, including destination and alternate paths.
2. Take-off and landing data for each usable runway at each destination and alternate aerodrome.
3. Meteorological information relevant to the time of operation, expected conditions during the operational season, and the status of facilities along the route.
4. Detailed briefings utilizing the Route Manual, which includes the Enroute Chart Legend.
5. Information on Standard Instrument Departures (SID), Standard Terminal Arrival Routes (STAR), and profile Descent Legends.

## 11.2 AERODROME CLASSIFICATION

The classification of authorized destination, alternate, enroute, ETOPS, and emergency aerodromes in this manual is based on the following criteria:

	Destination	Destination Alternate	Enroute Alternate	ETOPS Alternate	Emergency
<b>Hours of Operation</b> Available during planned time of operation	Yes	Yes	Yes	Yes	No
<b>Aerodrome Category</b> Category A, B or C / Special Airport	A, B or C	A or B	A or B	A or B	A, B or C
<b>Navigation Aids / Lighting</b> <b>minimum of one available IAP</b> sufficient lighting for the planned operation	Yes	Yes	Yes	Yes	Yes
<b>Rescue Fire Fighting</b> Available and compatible with aircraft category	Yes	Yes	Yes	Yes	Firefighting capability, but not aircraft category
<b>Air Traffic Service</b> *Note 1 Tower	Yes	Yes*	Yes*	Yes*	Yes
<b>Aerodrome Meteorological Service</b> Available at the planned time of use	Yes	Yes	Yes	Yes	No
<b>Runway and Taxiway Characteristics (length, width, PCN)</b> Meeting aircraft and OPT performance requirements	Yes	Yes	Yes	Yes	No
<b>Parking</b>	Yes	Yes	Yes	Yes	No



# OPERATIONS MANUAL PART C

## 11 ROUTE AND AERODROME INFORMATION

### 11.2 AERODROME CLASSIFICATION

**Issue:** 00

**Revision:** 00

**Date:** 18-FEB-2024

adequate parking for the aircraft type					
<b>Fuel*</b> Note 2					
suitable for the aircraft type	Yes	Yes	Yes*	Yes*	No
<b>Customs and Immigration</b>					
Available at the planned time of operation	Yes	Yes	No	No	No
<b>Ground Handling</b>					
Contracted Ground Handler available at planned time of operation	Yes	Yes	No	No	No
<b>Medical Facilities</b>					
Located near the aerodrome	Yes	Yes	Yes	Yes	No

Table 8 - Aerodrome Classification

**Note 1:** Aerodromes equipped with a Flight Information Service (FIS), Flight Service Station (FSS), Advisory Service, or Common Traffic Advisory Frequency (CTAF) are eligible to be nominated as alternate aerodromes.

**Note 2:** Enroute and ETOPS Aerodromes that have limited fuel supply hours can still be designated as ETOPS alternates, even if fuel would be unavailable at the time of diversion.

#### 11.2.1 Destination Aerodromes

A destination aerodrome is an aerodrome served by a Riyadh Air scheduled flight. It must be designated as being available for such use in Riyadh Air's Operations Specifications.

#### 11.2.2 Alternate Aerodromes

An alternate aerodrome is defined as an aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing.

Listed alternate aerodromes, included as part of the OFP briefing, provides a selection of destination alternates suitable for use under normal conditions. These alternates comply with the minimum criteria such as Rescue and Fire Fighting (RFF) services, runway strength, and other standards specified in the 'Aerodrome Classification' guidelines.

The decision to select an alternate airport, different from those listed in the OFP, falls under the discretion of the PIC. In such cases, consultation with the OCC is required.

### 11.2.2.1 Alternate Listing Order and Considerations

Alternate aerodromes are typically ordered based on fuel efficiency or proximity to the destination. The Operational Flight Plan (OFP) specifies the alternates in the order of most fuel-efficient option for the particular flight.

In determining alternates, the OFP accounts for weather conditions, NOTAMs, and other relevant parameters specific to the flight.

### 11.2.3 Emergency Aerodromes

Emergency Aerodromes shall only be considered where continued flight is impossible. These aerodromes are not suitable for medical emergencies due to the absence of both critical medical infrastructure and aircraft support facilities. These aerodromes are intended for use only in extreme circumstances where continued flight is rendered impossible.

#### **CAUTION:**

**DO NOT CONSIDER DIVERTING TO EMERGENCY AERODROME DURING A MEDICAL EMERGENCY.**

## 11.3 AERODROME AUTHORIZATION

### 11.3.1 Category C (Special Aerodrome) Authorization

The below airports are classified as Category C Aerodrome (Special Aerodrome). No PIC may operate to a Category C Aerodrome unless they have completed the requisite training outlined in OM D.

Aerodrome	Conditions
Reserved	Reserved

Table 9 - Special Aerodrome Authorization

### 11.3.2 Isolated Aerodrome Authorization

The below airports are classified as Isolated Aerodromes. No PIC may operate to an Isolated Aerodrome unless it is authorized in accordance with the below table.

Aerodrome
Reserved

Table 10 - Isolated Aerodrome Authorization

### 11.3.3 Required Navigation Performance - (RNP-AR) - Authorized Aerodromes

The below airports are classified as RNP-AR aerodromes. No PIC may perform an RNP-AR approach at an aerodrome unless it is authorized in accordance with the below table.

Aerodrome	Authorized Approach
Reserved	Reserved

Table 11 - RNP AR Authorization

### 11.3.4 Aerodrome Data and Authorization Table

Table 12 provides guidance about the aerodrome authorization criteria for different aircraft types of each aerodrome listed in OM C. The codes used in the Aerodrome Authorization Tables are as follows:



RIYADH AIR  
طيران الرياض

# OPERATIONS MANUAL PART C

## 11 ROUTE AND AERODROME INFORMATION

### 11.3 AERODROME AUTHORIZATION

Issue: 00

Revision: 00

Date: 18-FEB-2024

Aerodrome Data					Aircraft Authorization	
Aerodrome Name	ICAO code	Category	RFF	Terrain	B787	Reserved
Aerodrome ICAO and IATA Codes		Aerodrome categorization	Available RFF at the aerodrome	<b>Yes</b> , means there is significant terrain within 25nm of the aerodrome.	Aerodrome Authorization , by aircraft type: 1. Destination 2. Alternate 3. Enroute 4. ETOPS 4. Emergency	Reserved for future aircraft type

Table 12 - Aerodrome Data and Authorization Table

## 11.4 AREA BRIEFINGS

The Area Briefings provide flight crew with details and insights not typically included in the Route Manual. These briefings are designed to highlight additional, explanatory material that is not readily available in other publications. The briefing structure for each region includes the following content:

1. **Terrain:** This section provides information on the topographical features of the region, focusing on aspects such as significant mountain ranges, areas of high terrain, and other geographical elements that may impact flight operations.
2. **Navigation:** This section covers navigation-related information, including special procedures required for the region (e.g., strategic lateral offset procedures).
3. **Communication:** This section focuses on region-specific communication procedures, and any unique communication challenges or requirements (e.g., in-flight broadcast procedures).
4. **Meteorology:** The meteorology section provides insights into the regional climate, weather patterns, and any meteorological phenomena specific to the area that could affect flight operations.

### 11.4.1 Africa

#### 11.4.1.1 Aerodrome Authorization and Data

Aerodrome Name	Aerodrome Data				Aircraft Authorization	
	ICAO code	Category	RFF	Terrain	B787	Reserved

Table 13 - Airport Authorizations Africa

#### 11.4.1.2 Area Briefing

##### 11.4.1.2.1 Terrain

Africa is a continent with diverse topography, featuring areas of high terrain, particularly in East Africa. Flight operations in this region need to account for the significant elevation changes due to numerous mountain ranges and elevated grounds.

**Note:** Enroute, flight crew shall operate all flights above the Grid MORA when not flying on published airways.

## 11.4.1.2.2 Navigation

The use of Strategic Lateral Offset Procedure (SLOP) throughout the African Flight Information (AFI) In-flight Broadcast Procedure (IFBP) region is recommended to avoid potential TCAS conflicts.

SLOP allows flight crew to fly an offset 1 or 2nm to the right of the airway centerline, greatly reducing the risk of an airprox event. Flight crew should note that ATC approval to fly SLOP is not required when operating in the AFI IFBP region.

For further information on SLOP, refer to Route Manual / Air Traffic Control / International Civil Aviation Organization – Air Traffic Management / Miscellaneous Procedures / Strategic Lateral Offset Procedure (SLOP).

## 11.4.1.2.3 Communication

Due to a high number of TCAS events in the AFI region, flight crew must exercise extra vigilance when overflying or operating to destinations in Africa. Flight crew are reminded to strictly adhere to In-flight Broadcast Procedures (IFBP) when in AFI IFBP airspace.

For further information on AFI IFBP airspace, including area of applicability and designated VHF frequencies, flight crew shall refer to the Route Manual / Enroute / Enroute Data – Africa / IATA In-Flight Broadcast Procedure – Africa

## 11.4.1.2.4 Meteorology

Africa's climate is diverse, ranging from tropical in the equatorial regions to subarctic temperatures on its highest peaks. The continent's northern half is predominantly desert or arid, notably the Sahara. In contrast, central and southern Africa feature a mix of plains and dense rainforest regions. The Sahel and steppe dominate the transition zones. Coastal regions in North Africa, like Morocco and Algeria, and the Cape Province in South Africa experience Mediterranean climates.

## 11.4.1.2.5 Inter-Tropical Convergence Zone (ITCZ)

The climate of Africa (excluding the extreme north and south) is determined by the movement of the Inter-Tropical Convergence Zone (ITCZ). This movement brings a distinct rainy season to the areas south of the Sahara. Southern Africa typically receives summer rains from convective clouds and winter rains from frontal systems originating in the west.

Flight crew should note that cloud formations in the ITCZ are characterized by dense lines of cumulonimbus clouds that can extend to significant altitudes, often necessitating substantial diversions off the planned route. Flight crew should be prepared for sudden enroute weather changes and avoid areas of convective weather, where possible.



### 11.4.1.2.6 Cyclones

The east coast of Africa, particularly around Madagascar, is susceptible to tropical storms originating in the Indian Ocean. These cyclones can bring severe weather conditions, including heavy rainfall, strong winds, and turbulent flying conditions. Flight planning in these regions should take into account the seasonal prevalence of cyclones and the potential need for route adjustments.

### 11.4.1.2.7 Sandstorms

Sandstorms are common in arid and semi-arid regions of Africa, especially in the Sahara Desert. These sandstorms can significantly reduce visibility. Flight crew operating in or near these regions should be aware of the potential for sandstorms and be prepared for low visibility operations.

### 11.4.1.3 Algeria

#### 11.4.1.3.1.1 Introduction

Flight crew operating to or within Algeria should exercise increased vigilance. ATC communicates in French with local carriers, and, as a result, situational awareness of traffic in the vicinity can be affected.

### 11.4.1.4 Egypt

#### 11.4.1.4.1 Introduction

Security concerns persist in certain regions of Egypt, especially in the Sinai Peninsula. There is a heightened security awareness for aircraft traversing the airspace over the Sinai Peninsula and the Red Sea, largely due to regional tensions. Incidents in the broader area, including missile and drone activities originating from Yemen, have been recorded, with drone interceptions occurring over the Red Sea and others impacting near the HECC/ LLLL FIR border.

Flight crew are advised to refer to Chapter 9, Restricted and Prohibited Airspace for further information.

### 11.4.1.5 Morocco

#### 11.4.1.5.1 Introduction

Flight crew operating to or within Morocco should exercise increased vigilance. ATC communicates in French with local carriers, and, as a result, situational awareness of traffic in the vicinity can be affected.

## 11.4.2 Asia

### 11.4.2.1 Aerodrome Authorization and Data

Aerodrome Data					Aircraft Authorization	
Aerodrome Name	ICAO code	Category	RFF	Terrain	B787	Reserved

Table 14 - Airport Authorizations Asia

### 11.4.2.2 Area Briefing

#### 11.4.2.2.1 Terrain

Asia is characterized by extensive high terrain, which is particularly pronounced in the Far East, leading to high Minimum Enroute Altitudes (MEAs) and Minimum Sector Altitudes (MSAs).

##### 11.4.2.2.1.1 Afghanistan, Kyrgyzstan, and Tajikistan

These countries are home to the mountain ranges of the Pamirs, Tian Shan, and Hindu Kush. The Pamir mountains, primarily in Tajikistan, feature numerous peaks surpassing 20,000 feet. The Tian Shan range extends across Kyrgyzstan and into north-eastern China. The Hindu Kush marks the southwestern border between Pakistan and Afghanistan, with many peaks over 20,000 feet, tapering down towards the central regions of Afghanistan.

##### 11.4.2.2.1.2 Northern Pakistan and Northern India

This region is dominated by the Karakoram mountain range, which includes some of the world's highest peaks, such as K2 at 28,250 feet.

##### 11.4.2.2.1.3 China and the Himalayas

Beyond the Tian Shan range in the north and the Himalayas in the south, the Kunlun Shan range spans central China. These mountain ranges boast an array of peaks well above 20,000 feet, with the Himalayas alone hosting over 30 peaks above 25,000 feet. This includes nine of the world's fourteen 8,000-meter peaks, with Mount Everest standing at 29,035 feet.

Enroute, flight crew shall operate all flights above the Grid MORA when not flying on published airways.

Refer to Chapter x, Decompression and One Engine Inoperative Procedures for further information on non-normal operations in these regions.

## 11.4.2.2.2 Navigation

The use of Strategic Lateral Offset Procedure (SLOP) throughout Asia, in accordance with local procedures, is recommended to avoid potential TCAS events.

For further information on SLOP, refer to Route Manual / Air Traffic Control / International Civil Aviation Organization – Air Traffic Management / Miscellaneous Procedures / Strategic Lateral Offset Procedure (SLOP).

## 11.4.2.2.3 Communication

Flight operations in certain regions may encounter communication difficulties with ATC due to various factors, including local accents and limitations in ATC equipment. These challenges can impact the clarity and reliability of voice communications.

To mitigate these issues, flight crews are encouraged to utilize all available resources to maintain continuous two-way communication with ATC, including Controller Pilot Data Link Communications (CPDLC), HF, In-flight Relay (i.e., using other aircraft as intermediaries to relay communications) and SATCOM.

In scenarios where communication becomes difficult, flight crews should not hesitate to seek clarification or confirmatory read-backs to ensure mutual understanding of all clearances and instructions.

## 11.4.2.2.4 Meteorology

The southwestern part of Asia experiences the Southwest Monsoon, a significant seasonal wind system that brings heavy rainfall. This monsoon typically occurs from June to September and affects the Indian subcontinent and parts of Southeast Asia. It is characterized by moist, warm air that brings heavy rains, which can lead to reduced visibility, turbulence, and challenging flying conditions.

During the monsoon season, flight crews should be prepared for abrupt weather changes, including severe thunderstorms and heavy precipitation. Communication with ATC regarding weather deviations is essential, and flight crews should preempt request route changes or altitude adjustments as necessary.

**Note:** Flight planning during the monsoon season should consider the increased likelihood of delays and diversions.

## 11.4.2.2.5 Inter-Tropical Convergence Zone (ITCZ)

The ITCZ is a significant meteorological feature over Asia, characterized by dense lines of Cumulonimbus clouds. These cloud formations can extend to significant altitudes, often necessitating substantial diversions off the planned route. Flight crew should be prepared for sudden enroute weather changes and avoid areas of convective weather, where possible.

## 11.4.2.2.6 Cyclones

Flight crew operating in Asia should be aware of significant weather (SIGWX) phenomena that can affect the region, particularly tropical cyclones, and low-pressure systems. These weather systems are prevalent during the monsoon season, which typically extends from June to September, with a peak period between July and August. Cyclones, originating primarily in the Bay of Bengal and the Indian Ocean, can bring strong winds, heavy rainfall, and severe turbulence.

## 11.4.2.2.7 Fog

Flight crew operating in Asia should note that prevalent fog conditions can significantly impact flight schedules, particularly during the winter months. Dense fog, during winter, is common in several regions, notably in northern India and eastern China. Flight crew should be prepared for potential delays, diversions, and the implementation of Low Visibility Procedures (LVP).

## 11.4.2.3 Afghanistan

### 11.4.2.3.1 Introduction

Kabul FIR (OAKX) is prohibited for all operations, unless specifically authorized by the Vice President Flight Operations.

**Note:** In an emergency requiring immediate decision and action for the safety of the flight, the PIC may deviate from this directive to the extent required by that emergency.

## 11.4.2.4 Bangladesh

### 11.4.2.4.1 Introduction

All flights operating to or overflying the Bangladesh Air Defense Identification Zone (ADIZ) must obtain prior permission and an Air Defense Clearance (ADC) number. This number shall be incorporated on the OFP for flight crew awareness.

## 11.4.2.5 China

### 11.4.2.5.1 Introduction

The airways and route system in China use fixed entry and exit points. Routes are based on a published structure and cannot be changed by the company or PIC on the day of operations without prior approval. Flight crew shall ensure that entry into China airspace is according to the OFP. Any deviation from the airway or track requires prior ATC approval.

**Note:** The military control the majority of airspace in China with domestic ATC having no authority outside of the airway dimension width (20km). Extensive use of airway offset is common in China. Flight crew should expect to be assigned by ATC, and maintain, an offset to right of the airway (e.g., 3nm or 6nm right of track).

#### 11.4.2.5.2 Communication

In China, communication between Chinese carriers and air traffic controllers is conducted in the Chinese language. Flight crews operating in this region should be aware that there may be instances of poor ATC radio reception, potentially leading to challenges in understanding radio transmissions.

Pilots should exercise increased vigilance when flying in these areas and consider alternative communication strategies (e.g., in-flight relay, HF etc.) if necessary to maintain clear and effective communication with ATC.

#### 11.4.2.5.3 Flight Level Allocation Scheme (FLAS)

China and Mongolia RVSM flight level allocation scheme (FLAS) are based on metric flight levels. Flight crew shall use the below Table when clearances are provided in meters.

**Note:** When instructed by ATC to change levels, both flight crew should independently cross check the new altitude / level setting before commencing a climb or descent.



RIYADH AIR  
طيران الرياض

# OPERATIONS MANUAL PART C

11 ROUTE AND AERODROME INFORMATION

11.4 AREA BRIEFINGS

Issue: 00

Revision: 00

Date: 18-FEB-2024

## 11.4.2.5.3.1 Metric Flight Level Conversation Table Above Transition Level

TRUE TRACK			
WEST		EAST	
Meter	Feet	Meter	Feet
13100	4300	12500	41100
12200	40100	11900	39100
11600	38100	11300	37100
11000	36100	10700	35100
10400	34100	10100	33100
9800	32100	9500	31100
9200	30100	8900	29100
8400	27600	8100	26600
7800	25600	7500	24600
7200	23600	6900	22600
6600	21700	6300	20700
6000	19700	5700	18700
5400	17700	5100	16700
4800	15700	4500	14800
4200	13800	3900	12800
3600	11800	3300	10800
3000	9800	2700	8900

**Note:** Feet values are rounded to the nearest 100 for the purpose of MCP altitude setting

Table 15 - China Metric FL above Transition Level



RIYADH AIR  
طيران الرياض

# OPERATIONS MANUAL PART C

## 11 ROUTE AND AERODROME INFORMATION

### 11.4 AREA BRIEFINGS

**Issue:** 00

**Revision:** 00

**Date:** 18-FEB-2024

#### 11.4.2.5.3.2 Metric Altitude Conversation Table Below Transition Level

QHN	
Meter	Feet
3300	10800
3000	9800
2700	8900
2400	7900
2100	6900
1800	5900
1500	4900
1200	3900
900	3000
600	2000
550	1800

Table 16 - Metric FL below Transition Level

For further information refer to Route Manual / Air Traffic Control / Air Traffic Control Data – China / Reduced Vertical Separation Minima (RVSM).

#### 11.4.2.6 India

##### 11.4.2.6.1 Introduction

A notable challenge when operating in India is the frequency congestion when contacting Mumbai Radio on HF channels. Flight crew should anticipate possible delays in HF communication and should use other methods if contact cannot be established (e.g., CPDLC, in-flight relay, SATCOM).

**Note:** Flight crew are advised to carry out a SELCAL check on first contact with Mumbai, Chennai or Kolkata when using HF.

Awareness of temporary airspace restrictions, due to factors like VVIP movements or military exercises, is crucial. Flight crew should note that the submission of a new flight plan is required for departures delayed by more than 30 minutes.

### 11.4.2.7 Turkey

#### 11.4.2.7.1 Introduction

Flight operations the Turkey experience frequent instances of GPS jamming. This interference can affect navigation accuracy. Flight crew must remain vigilant for any anomalies in GPS navigation readings when flying in or near Turkey's airspace.

Flight crew should utilize alternate and/or navigation methods as per aircraft capabilities if GPS interference is suspected. Refer to the respective aircraft's FCOM for detailed guidance on navigating in GPS-compromised environments and the use of alternative navigation systems.

**Note:** Flight crew shall report any instances of GPS interference to ATC and record them in the aircraft's logbook.

### 11.4.3 Europe

#### 11.4.3.1 Aerodrome Authorization and Data

Aerodrome Data					Aircraft Authorization	
Aerodrome Name	ICAO code	Category	RFF	Terrain	B787	Reserved

Table 17 - Airport Authorizations Europe

#### 11.4.3.2 Area Briefing

##### 11.4.3.2.1 Terrain

Europe's topography includes significant elevation changes due to its diverse range of mountainous regions. This leads to varying Minimum Enroute Altitudes (MEAs) and Minimum Sector Altitudes (MSAs) across the continent. The Alps, Pyrenees, and the Scandinavian Mountains are some of the notable ranges that can influence flight paths and altitudes. Flight crews operating in these areas must ensure they are aware of the MEAs and MSAs, especially during winter months when cold weather temperature corrections may be required.

##### 11.4.3.2.2 Navigation

Traffic routes to/from Europe, Middle East and Asia are constrained by the airspace unavailability in Ukraine. Further capacity reductions in European central/eastern airspace may occur because of military activities at short notice.



### 11.4.3.2.2.1 Nicosia FIR

Flight crew should note that contrary to ICAO requirements, there is no contract between Ankara and Nicosia Area Control Centers (ACC). Operations in the northern part of the Nicosia FIR may be subject to conflicting ATC instructions in the same piece of airspace.

Flight crew shall note that authority for air traffic control within Nicosia FIR (LCCC), rests solely with Nicosia. ATC instructions within LCCC must only be accepted from Nicosia ACC.

When operating Southbound or Northbound between Nicosia and Ankara FIRs, flight crew must refer to Route Manual / Briefing Bulletins / Nicosia FIR IATA Communication Procedures

### 11.4.3.2.3 Communication

Flight operations in certain regions may encounter communication difficulties with ATC due to various factors, including local accents and limitations in ATC equipment. These challenges can impact the clarity and reliability of voice communications.

To mitigate these issues, flight crews are encouraged to utilize all available resources to maintain continuous two-way communication with ATC, including Controller Pilot Data Link Communications (CPDLC), In-flight Relay (i.e., using other aircraft as intermediaries to relay communications) and SATCOM.

In scenarios where communication becomes difficult, flight crews should not hesitate to seek clarification or confirmatory read-backs to ensure mutual understanding of all clearances and instructions.

### 11.4.3.2.4 Meteorology

The weather in Europe is diverse and can have significant implications for flight operations. One of the key meteorological phenomena affecting the region is Atlantic Depressions, which are common, especially during the winter months. These low-pressure systems move eastwards across the continent, often bringing widespread cloud cover, precipitation, and can lead to turbulent conditions. Western and Northern Europe are particularly affected, with the potential for strong winds, snow, and heavy rainfall, which necessitate cold weather operating considerations during flight planning.

Europe can also experience wide-spread foggy conditions during the colder months. Italy and the Netherlands are known for dense fog occurrences. Pilots should be prepared for reduced visibility, which could lead to operational delays and the need for Low Visibility Procedures (LVP). Flight crews should familiarize themselves with airport-specific procedures for operating in low visibility conditions.