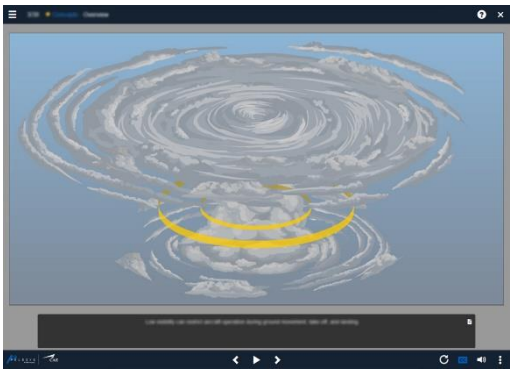
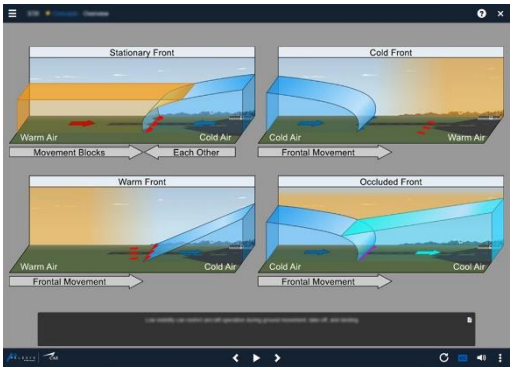
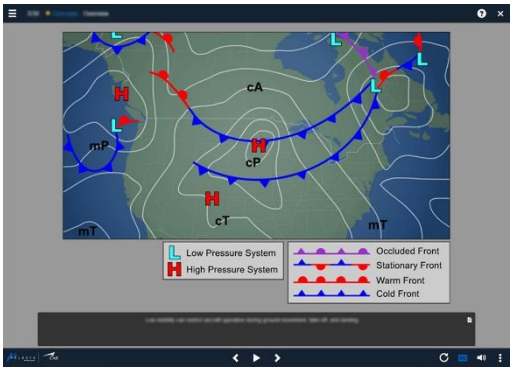
WEATHER AND METEOROLOGY

2019-2020







SUMMARY

This course covers aviation-related weather concepts, focussing on practical issues associated with airline flight operations. Included is a review of frontal systems, fog types and formation and high altitude weather phenomena (including the jet stream and clear air turbulence).

Particular attention is focussed on geographical areas of interest, including the Middle East and Asia and the Intertropical Convergence Zone (ITCZ), and associated tropical cyclones (hurricanes or typhoons).

A final section reviews decoding of Weather Reports and Forecasts.

TARGET POPULATION

The Pelesys Weather and Meteorology course is designed for Professional Pilots requiring initial or recurrent training.

REGULATORY COMPLIANCE

- ICAO / EASA / FAA / Transport Canada
- Maintain compliance with IOSA standards

Versions Available:
Standard

Course Length:
1 hr 25 min

LESSON 01: Frontal System

In this lesson we cover aviation-related concepts about:

- Climate and Weather
- Frontal Systems
- Stationary Fronts
- Warm Fronts
- Cold Fronts
- Occluded Fronts

LESSON 02: Fog

In this lesson we cover different types of fog that are important for aviation operations, including:

- Radiation Fog
- Advection Fog
- Up-slope Fog
- Frontal Fog
- Steam Fog

LESSON 03: High Altitude Weather

In this lesson we cover weather phenomena associated with high altitude flying, including:

- Tropopause
- High Level Clouds
- Jet Stream
- Clear Air Turbulence

LESSON 04: Weather Conditions – Middle East and Asia

In this lesson we cover specific weather conditions associated with:

- Middle East and Asia

LESSON 05: The Intertropical Convergence Zone

In this lesson we cover specific weather conditions associated with:

- Intertropical Convergence Zone (ITCZ)

LESSON 06: Tropical Cyclones

In this lesson we cover:

- The characteristics of a tropical cyclone (hurricane or typhoon)
- How tropical cyclones are formed
- How these storms are categorized

LESSON 07: Weather Reports and Forecasts

In this lesson we cover decoding Weather Reports and Forecasts, including:

- METAR – Routine Aviation Weather Report
- SPECI – Non-Routine Aviation Weather Report
- TALPA-ARC
- TAF - Terminal Aerodrome Forecast
- AIRMET and SIGMET formats

LEARNING TIME AND RUN TIME

This course has a learning time of: (run time plus additional time per page to account for understanding learning points)

- 1 hr 25 min

This course has a run time of: (the base time for each page to be completed)

- 39 min

Exam Generation System (EGS) Banked Questions

The total amount of banked questions for this course is:

Lesson Title	Standard Questions
Air Masses and Fronts	14
Fog	3
High Altitude Weather	5
Weather Conditions - Middle East and Asia	2
The Intertropical Convergence Zone (ITCZ)	3
Tropical Cyclones	4
Weather Reports and Forecasts	11
	42

REFERENCE MATERIAL

The Pelesys Weather and Meteorology Course provides pilots and operators with information about weather and meteorology as it relates to airline operations. It is not intended to provide basic knowledge of meteorology. The course also provides strategies to mitigate the risks associated with airline operations in various meteorological conditions. It is based on information outlined in:

ICAO / EASA

- Doc 9385 Manual of All Weather Operations The All-Weather Operations Guide

FAA

- AC00-6B

The operator remains responsible for obtaining approval from the regulatory authority.

Click to request more information