

Hyperventilation

lack of carbon dioxide. This can be overcome by breathing into a bag, slowing the breathing, and calming down the person

Alcohol legal limit

8 hours between the last sip of alcohol and touching the controls of an aircraft, and a blood alcohol level of less than 0.04%

Fitness for Flight

- Illness
- Medication
- Stress
- Alcohol
- Fatigue
- Emotions/Eating

Aircraft Components

Fuselage-- The fuselage is the central body of an airplane and is designed to accommodate the crew, passengers, and cargo

Empennage-- The empennage includes the entire tail group and consists of fixed surfaces, such as the vertical stabilizer and the horizontal stabilizer.

Aircraft Components

Wings-- The wings are air foils attached to each side of the fuselage and are the main lifting surfaces that support the airplane in flight.

Landing Gear-- The landing gear is the principal support of the airplane when parked, taxiing, taking off, or landing

Powerplant-- The powerplant usually includes both the engine and the propeller

V_{S0} ---- **Bottom of the White Arc**
V_{S1} ---- **Bottom of the Green Arc**
V_{FE} ---- **Top of the White Arc**
V_{NO} ---- **Top of the Green Arc/Bottom of the Yellow Arc**
V_{NE} ---- **Top of the Yellow Arc/ Red Line**
V_A ---- **Maneuvering Speed (NOT DEPICTED)-**

Compass errors

Variation

Isogonic lines on the Map to correct the Compass to True North

Deviation

Airplane Errors of the compass

Types of Aircraft Construction

Truss Structure
Monocoque
Semi monocoque
Composite Construction

Perceive, Process, Perform (3P) Model

Perceive the given set of circumstances for a flight
Process by evaluating their impact on flight safety
Perform by implementing the best course of action