AIRCRAFT CATEGORIES

- Category I (‘CAT I’) 
- Category II (‘CAT II’) 
- Category III (‘CAT III’)
CATEGORY I (CAT I) AIRCRAFT

• Weight: 12,500 lbs. or less
• Single-engine
• Propeller-driven

All helicopters
CAT I GENERAL PERFORMANCE CHARACTERISTICS

- **Speed**: 100 - 160 knots
- **Altitude**: 10,000 feet and below
- **Climb Rate**: 1,000 feet per minute or less
- **Weight Class**: Small (S)
HELICOPTER’S GENERAL PERFORMANCE CHARACTERISTICS

- **Speed**: 90 - 160 knots
- **Altitude**: FL200 and below
- **Climb Rate**: 500 - 2,150 feet per minute
CATEGORII (CAT II) AIRCRAFT

- Weight: 12,500 lbs. or less
- Twin-engine
- Propeller-driven
CAT II GENERAL PERFORMANCE CHARACTERISTICS

- **Speed**: 160 - 250 knots
- **Altitude**: FL240 and below
- **Climb Rate**: 1,000 - 2,000 feet per minute
- **Weight Class**: Small (S)
CATEGORY III (CAT III) AIRCRAFT

Any other aircraft NOT described in either CAT I or CAT II

This includes all turbojet engine aircraft
CAT III GENERAL PERFORMANCE CHARACTERISTICS

- **Speed:** 300 - 550 knots
- **Altitude:** FL450 and below
- **Climb Rate:** 2,000 - 4,000 feet per minute
9 AIRCRAFT IDENTIFICATION FEATURES

1. **Size**
   2. Engine location and number
   3. Engine type
   4. Wing placement

5. Wing configuration
6. Tail configuration
7. Windows
8. Fuselage shape
9. Landing gear
Boeing B767
Boeing B737
WEIGHT CLASS DEFINITIONS

Small: Aircraft of 41,000 pounds or less maximum certified takeoff weight.

Large: Aircraft of more than 41,000 pounds, maximum certified takeoff weight, up to 255,000 pounds.

Heavy: Aircraft capable of takeoff weights of more than 255,000 pounds whether or not they are operating at this weight during a particular phase of flight.
AIRCRAFT IDENTIFICATION
FEATURES

1. Size

2. **Engine location & number**

3. Engine type

4. Wing placement

5. Wing configuration

6. Tail configuration

7. Windows

8. Fuselage shape

9. Landing gear
ENGINE LOCATIONS AND NUMBERS

GLF2
on fuselage (2)

B737
under wing (2)

DC10
under wing and
through tail (3)

B747
under wing (4)
AIRCRAFT IDENTIFICATION
FEATURES

1. Size
2. Engine location and number
3. **Engine Type**
4. Wing placement
5. Wing configuration
6. Tail configuration
7. Windows
8. Fuselage shape
9. Landing gear
THREE BASIC AIRCRAFT ENGINE TYPES

- Reciprocating
  - C421 Golden Eagle

- Turboprop
  - BE20 Super King Air

- Turbojet
  - C550 Citation II
AIRCRAFT IDENTIFICATION

FEATURES

1. Size

2. Engine location and number

3. Engine type

4. **Wing Placement**

5. Wing configuration

6. Tail configuration

7. Windows

8. Fuselage shape

9. Landing gear
WING PLACEMENT

High-wing

Mid-wing

Low-wing
AIRCRAFT IDENTIFICATION FEATURES

1. Size
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4. Wing placement

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9. Landing gear
STRAIGHT-WING CONFIGURATION

Piper Saratoga
PA32
SWEPT-WING CONFIGURATION

DC-10
DELTA-WING CONFIGURATION

Fighting Falcon
F16
AIRCRAFT IDENTIFICATION FEATURES

5. Wing configuration

1. Size

2. Engine location and number

3. Engine type

4. Wing placement

6. Tail Configuration

7. Windows

8. Fuselage shape

9. Landing gear
CONVENTIONAL TAIL
Piper Saratoga - PA32
FORWARD SLANT VERTICAL STABILIZER

Mooney Mark 21 - M20P
HORIZONTAL STABILIZER ABOVE FUSELAGE (MID-TAIL)
Dassault-Breguet Mystere/Falcon 20 - FA20
“T” TAIL
Beech Super King Air 200 - BE20
“V” TAIL
Stealth Fighter - F117
TWIN BOOM TAIL
Cessna Super Skymaster 337 - C337
AIRCRAFT IDENTIFICATION FEATURES

1. Size
2. Engine location and number
3. Engine type
4. Wing placement
5. Wing configuration
6. Tail configuration
7. Windows
8. Fuselage shape
9. Landing gear
BUBBLE CANOPY
ROUND
OVAL
TEARDROP
SQUARE
AIRCRAFT IDENTIFICATION FEATURES

1. Size
2. Engine location and number
3. Engine type
4. Wing placement
5. Wing configuration
6. Tail configuration
7. Windows
8. Fuselage shape
9. Landing Gear
TRICYCLE LANDING GEAR

Cessna 150
CONVENTIONAL LANDING GEAR

Cessna 170
TANDEM LANDING GEAR
B52 “Stratofortress”
FIXED GEAR
RETRACTABLE GEAR
THE END