

# Senior Airman



Complete the following:

- (A) Hold the Airman Badge.
- (B) Flight Safety and Aviation Concept
1. Know how to obtain a pilot license and the relevant aviation laws.
  2. Understand the precautions and inspection procedures by the flight crew and tourists before takeoff.
  3. Know the parts and functions of a life jacket.
- (C) Aviation Knowledge
1. Demonstrate the marshalling signals for fixed wing and rotary wing aircrafts during day and night times.
  2. Understand airport signals, including signal square, lamps and pyrotechnic, and the lamps of the runway at night.
  3. Know not less than 10 ICAO registrations, IATA codes and airline markings of common civil aircrafts in Hong Kong.
  4. Understand the letter designations and markings of military aircrafts of mainland China and one other country.
- (D) Parachute Knowledge
1. Understand parachuting.
  2. Understand the equipment for parachuting, including the emergency parachute.
  3. Understand the principles of parachuting.
  4. Understand the safety rules and the correct landing method.
- (E) Rotary Aircraft
1. Understand the principle of an aerofoil.
  2. Understand the basic principles of flight of a rotary aircraft, including:
    - 2.1 Understand the function of the control surfaces.
    - 2.2 Know how a rotary aircraft flies.
    - 2.3 Explain the relation between weight and lift, and thrust and drag.

2.4 Explain the reasons why lift is created, factors affecting lift and explain the reason for a stall.

2.5 Explain the operation of the main rotor, tail rotor, and swash plate.

3. Explain the meaning of 'trim' and the importance of weight and balance.

(F) Aircraft Manoeuvres

1. Have a basic understanding of aircraft instruments, and be able to interpret the information as provided by the gauges.

2. Understand the importance of 'true air speed'(TAS), 'indicated air speed'(IAS), 'rectified air speed'(RAS) and 'ground speed'(GS) in navigation.

3. Understand and demonstrate basic manoeuvres in a flight simulator.

(G) Aircraft Recognition

1. Recognise at least 20 common aircrafts found in Hong Kong, including civil aircraft, military aircraft, helicopter and light aircraft, from the photos provided by the examiner.

(H) Practical

1. Make a plastic model of civil or military aircraft with fuselage length no less than 20 cm. The model should be complete and painted correctly. Explain the details of the aircraft.

2. Make a wooden glider with wingspan not less than 40 cm and be able to fly for not less than 5 seconds.