



# ATAR course examination, 2022

**Preparation booklet** 



# **AVIATION**

# **Practical (performance) examination**

### Time allowed for this examination

Preparation time: 15 minutes Performance: 20 minutes

# Materials required/recommended for this examination

**To be provided by the supervisor** A Preparation booklet Computer preloaded with *Microsoft Flight Simulator X (FSX)* Logitech Extreme 3D Pro joystick Flight data setting out the flying sequence to be completed

To be provided by the candidate Nil

### Important note to candidates

No other items may be taken into the examination room. It is **your** responsibility to ensure that you do not have any unauthorised material. If you have any unauthorised material with you, hand it to the supervisor **before** reading any further.

## Structure of the examination

The Aviation ATAR course examination consists of a written component and a practical (performance) component.

## Criteria for marking the practical (performance) examination

Criteria	Marks available	Percentage of practical examination
Take-off and climb	15	20
In-flight manoeuvres (turns, stall)	20	25
Use and interpretation of instruments (including navigation aids)	10	25
Descent and landing	13	30
	Total	100

#### Instructions to candidates

- 1. The rules for the conduct of Western Australian external examinations are detailed in the Year 12 Information Handbook 2022: Part II Examinations. Sitting this examination implies that you agree to abide by these rules.
- 2. You are required to simulate a flying sequence in a Cessna 172 aircraft using *Microsoft Flight Simulator X (FSX)*. The sequence will comprise a series of non-aerobatic manoeuvres that can be legally accomplished in an actual Cessna 172 in the time allocated.
- 3. You will be assessed on your ability to complete the manoeuvres by complying with the examiner's instructions. These will be given in a manner similar to that expected from a flight instructor who is instructing in a real aircraft.
- 4. If you are unable to comply with any particular instruction, the marker will guide you through the required action, but you will not receive any marks for that part of the sequence.
- 5. If, due to inaccurate manipulation, you lose control of the aircraft or the aircraft moves outside the limits of the 'exercise area', the marker will assume control and return the aircraft to its correct attitude within the intended pattern. You will not receive any additional penalty specific to the marker's intervention.
- 6. You must follow the requirements for this examination published in the *Aviation ATAR course Practical (performance) examination requirements 2022* document.

#### PRACTICAL (PERFORMANCE) EXAMINATION

#### Preparation (student briefing)

Below are the details of the sequences to be performed. You have 15 minutes preparation time prior to the examination.

#### Aerodrome and Navaids

At the commencement of the exercise the aircraft will be lined up on RWY 08 at Essendon. The engine will be idling.

The navigation aids have been tuned to the correct frequencies for the flight. The ADF is tuned to 230 kHz; Nav 1 tuned to 109.3MHz and Nav 2 tuned to 114.1MHz.

#### Flying sequence

You will be undertaking a flight which will depart from the aerodrome and return to Essendon. During the flight you will conduct sequences as outlined below.

- Take-off and climb on runway heading
- Trim for the climb
- Conduct climbing turn to the right onto heading 210°
- Reaching 1500 ft, establish cruise settings including trim
- Climb to maintain 2000 ft, re-establish cruise settings including trim
- Turn left at 45 degree angle of bank onto a heading of 330°, maintaining 2000 ft
- Conduct slow speed flight as instructed
- Close throttle and demonstrate stall with 20° flap and recovery

# Note: Stall recovery is NOT to be carried out until instructed to do so. When requested immediately apply the correct stall recovery procedure.

- Turn right at 60 degree angle of bank onto a heading of 280°, maintaining 2000 ft
- Turn and track directly to the NDB
- Establish glide descent and level out at 1200 ft

#### Note: do not go below 1200 ft

- Identify DME distance
- Identify position relative to ILS selected
- Identify station passage
- Conduct 30 degree angle of bank turn to the right heading 190°
- Track and intercept final runway 17
- Identify position relative to glide-slope
- Commence descent, use power as required
- Apply full flaps and reduce speed to 60 kt
- Descend to maintain correct glide path
- Make safe landing on centreline

If after given any instructions, you subsequently forget them of become unsure, you may ask to have any part of them repeated. This will be done without penalty.

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