



Aviation ATAR course Practical (performance) examination requirements

2021

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

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Aviation ATAR course Practical (performance) examination

This document provides general advice to teachers, candidates and parents about the Aviation ATAR course Practical (performance) examination.

Where the Year 12 ATAR course has both written and practical examinations, students are required to sit for both of these examinations. Students who do not sit an ATAR course examination and do not have an approved sickness/misadventure application for that course will not have the grades for the pair of units completed in that year contribute to the calculation of the Western Australian Certificate of Education (WACE).

The practical (performance) examination for the Aviation ATAR course will be held during the period from **Saturday**, **25 September** to **Sunday**, **3 October 2021** (Saturdays, Sundays and the public holiday included) at a metropolitan location. Candidates must be available to complete their practical (performance) examination during this time. A *Personalised practical performance examination timetable* (Appendix 1) for each candidate will be made available from **Thursday**, **9 September 2021** for schools/providers to download via SIRS and for students to download via the School Curriculum and Standards Authority's (the Authority's) <u>student portal (https://studentportal.scsa.wa.edu.au/)</u>. Country students must sit their practical (performance) examination at the Authority's designated examination centre.

For the Aviation ATAR course examination, the weightings are:

Written examination 80%Practical (performance) examination 20%

1. Reporting achievement

Teachers are responsible for ensuring the practical (performance) examination requirements are met and making sure candidates are adequately prepared. Teachers must ensure they are using the current syllabus. Any further advice on matters related to the syllabus or assessment will be published in the <u>11to12 Circular (https://www.scsa.wa.edu.au/publications/circular-ecircular/11to12-circulars)</u> on the Authority website.

Teachers should also refer to the ATAR course examination information published in Section 6 of the <u>WACE Manual (http://www.scsa.wa.edu.au/publications/wace-manual)</u> on the Authority website.

For all ATAR courses with a practical examination, for the pair of units, schools are required to submit to the Authority a:

- course mark out of 100 (weighted for each component)
- mark out of 100 for the written component
- mark out of 100 for the practical component
- grade for the completed pair of units.

2. Candidates with an injury, illness or disability

Candidates who have a permanent disability that could prevent them demonstrating their knowledge, understanding or skills in a standard practical examination may apply to be assessed under special examination arrangements. Candidates with a long-term injury or illness, which existed prior to the beginning of Term 3, can apply for special arrangements to be examined in an alternative format if the injury or illness will affect their participation in the standard practical examination. Application is made on the form available at all schools and must be received at the Authority by **Wednesday**, **28 July 2021**. These candidates will not be granted sickness/misadventure approval.

Additional application forms may be obtained on request or from the <u>Applications and Order Forms</u> page (<u>https://www.scsa.wa.edu.au/forms/forms</u>) on the Authority website.

3. Provisions for sickness/misadventure

Consideration may be given to candidates (except non-school candidates) who believe their performance in a practical examination may have been affected by an unexpected sickness, or unforeseen event beyond their control, close to or during the examination. Such candidates may apply for sickness/misadventure consideration. Candidates may make an application for sickness/misadventure by **4.00 pm Tuesday**, **23 November 2021** using the form available in schools or from the <u>Applications and Order Forms (https://www.scsa.wa.edu.au/forms/forms)</u> on the Authority website. A candidate with an injury or illness existing at the start of Term 3 is not entitled to apply for sickness/misadventure consideration on the basis of the existing injury or illness.

4. Principles of external assessment

The marking process preserves the anonymity of candidates and their school. This requires that candidates are identified only by their Western Australian student number (WASN).

Markers apply a consistent standard to assess the candidate's performance. This requires:

- a marking key for the practical (performance) examination
- attendance at a marker training meeting prior to the commencement of marking
- trial marking to ensure a common understanding of the marking key
- the practical (performance) examination to be marked independently by two markers who then reconcile any differences between them
- the Chief Marker to ensure consistency throughout the marking by monitoring the marking process and reconciling significant differences where necessary.

5. Criteria for marking

The practical examination is based on a simulated flight of approximately 20 minutes duration. During the flight, candidates will be assessed on their ability to carry out a selection of flight manoeuvres listed in the practical section of the syllabus within the tolerances set out in the *Standard operating procedures* (Appendix 2). At the start of the 15 minutes preparation time prior to the examination, candidates will be given details of the sequences to be performed. Detailed instructions will be provided by one of the markers during the examination and the candidates will be expected to comply with these instructions.

Each flight manoeuvre comprises one or more elements from the *Standard operating procedures*. For example, a 30° angle of bank turn at constant altitude and levelling out onto an assigned heading has three elements: the angle of bank, altitude maintenance and levelling out. One mark is assigned to each element that the candidate is able to demonstrate within the set tolerance. Where the element must be demonstrated for a period of time (e.g. angle of bank), the assessment is based on the candidate's performance being within the tolerance for the majority of the time period.

The Chief Marker sets the standards based strictly on the criteria set down in the Practical (performance) examination marking key.

The weighting of practical examination marks is as follows:

•	Take-off and climb	20%
•	In-flight manoeuvres (turns, stall)	25%
•	Use and interpretation of instruments (including navigation aids)	25%
•	Descent and landing	30%

6. Practical examination information

The candidate is required to simulate a flying sequence in a Cessna 172 aircraft using Microsoft Flight Simulator X[®] (FSX), and a Logitech[®] Extreme 3D Pro joystick. The sequence will comprise a series of non-aerobatic manoeuvres that can be legally accomplished in an actual Cessna 172 in the time allocated.

The candidate will be provided with a document setting out the required flight sequence 15 minutes before the examination is conducted.

The candidate will be assessed on their ability to complete the manoeuvres by complying with the marker's instructions. These will be given in a manner similar to that expected from a flight instructor who is instructing in a real aircraft.

If the candidate is unable to comply with any particular instruction, the marker will guide the candidate through the required action, but the candidate will not receive any marks for that part of the sequence.

If, due to inaccurate manipulation, the candidate loses 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 altitude within the intended pattern. The candidate will not receive any additional penalty specific to the marker's intervention.

7. Examination procedure

On the day of the practical (performance) examination, the candidate **must** bring a signed hard copy of their *Personalised practical examination timetable* to their examination as proof of enrolment, along with a photographic ID for proof of identity. An image of their *Personalised practical examination timetable* on their mobile phone will not be accepted as proof of enrolment.

Candidates **must not** wear or carry anything that identifies them, their school, club or achievements. Failure to do so will result in a breach of examination rules. The candidate is responsible for their personal belongings at all times.

If a candidate is found with any unauthorised materials during the examination, they will be referred to the Breach of Examination Rules Committee.

The candidate must report to a supervisor at the examination centre at the scheduled reporting time. This reporting time is 20 minutes before the scheduled examination time. The scheduled examination time is the time at which the candidate begins their preparation. A candidate who has not reported to a supervisor once their scheduled examination time has commenced will not be admitted to the practical (performance) examination and the examination cannot be rescheduled.

The candidate must leave the examination area once they have completed their examination and must not have contact with other candidates waiting to be examined, or teachers, or other parties who are seeking feedback about the examination until all the examinations have concluded. Failure to do so may result in a breach of examination rules.

8. Breach of examination rules

An alleged breach of examination rules will be referred to the Breach of Examination Rules Committee. Further information related to examination breaches can be found on the <u>Rules of</u> <u>conduct for Year 12 ATAR course examinations page (https://senior-</u> <u>secondary.scsa.wa.edu.au/assessment/examinations/rules-of-conduct-for-atar-course-</u> <u>examinations</u>) on the Authority website and in Part II of the *Year 12 Information Handbook,* published in July.

A breach of one of these rules can result in cancellation of part or all of the practical raw examination mark.

9. Practical examination support materials

To support candidates in preparing for the examination, the *Standard operating procedures* indicates the practical skills and knowledge that can be examined and the allowable tolerances for each flight manoeuvre.

10. Key dates

Thursday, 22 July 2021	Last date for withdrawal of enrolment from ATAR courses with a practical examination component	
Wednesday, 28 July 2021	Last date for completed application forms for alternative format ATAR course practical examinations	
Thursday, 9 September 2021	 Personalised examination timetables can be downloaded by schools/providers via SIRS Students can access their personalised examination timetables via the student portal 	
Saturday, 25 September to Sunday, 3 October 2021	Aviation ATAR Practical (performance) examination	

Appendix 1: Personalised practical examination timetable



Government of Western Australia School Curriculum and Standards Authority



Personalised practical (performance) examination timetable 2021 Aviation						
WA student number:		x x x x x x x x x				
Candidate:	Sample candidate					
School name:	Sample school	School code: XXXX				
Examination details						
Course:	Aviation					
Date:	Day, Date Month Year					
Reporting time:	9:00 am					
Examination time:	9:20 am					
Venue:	Sample venue (Re-check on the day prior to the examination)				
Reporting location:	Sample location Refer to the map on the following page					

These examination details are final and no changes can be made.

The examination will be administered observing COVID-19 safe practices.

Candidates must not present at the venue with COVID-19 symptoms.

Students who are unwell must complete and submit a Sickness/Misadventure Application Form, with supporting evidence, to the School Curriculum and Standards Authority (the Authority).

Candidates who have not reported to a supervisor once their scheduled examination time has commenced will not be admitted to the practical (performance) examination. The examination cannot be rescheduled.

Candidates must not wear or carry anything that identifies either them, their school, club or achievements. Failure to do so will result in a breach of examination rules.

Candidates are required to sign this timetable prior to the examination. This signed timetable must be shown to the supervisor, with photographic ID, when registering at the examination venue for the practical (performance) examination. Digital copies of your timetable e.g. on a mobile telephone, are not permitted.

Candidates must not contact the venue about the examination arrangements. Any queries must be directed to the Authority on 9273 6377.

SignatureDate

Emergency contact for candidates: Phone 0434 734 248

Appendix 2: Standard operating procedures





Standard Operating Procedures (SOP)

Microsoft Flight Simulator 2004—Cessna 172

1. Flight simulator parameters

- Cessna 172
- Day
- Nil wind
- Auto rudder 'on'.

2. Circuit procedures

Take-off (normal)

- Smoothly apply full power
- Maintain directional control (mains either side of centre line)
- Rotate at 55 kt (\pm 5 kt)
- Climb out 75 kt (\pm 5 kt)
- Maintain runway heading (\pm 5°)
- Trim for the attitude.

Crosswind

- Turn onto a heading 90° (\pm 5°) of runway heading
- Turn should commence not below 500 AGL (\pm 50 ft)
- Maintain 75 kt (\pm 5 kt).

Downwind

- Power 2200 RPM
- Heading reciprocal (\pm 10°) of runway designator
- Height 1000 ft (± 100 ft) AGL.

Base

- Reduce power—nominally 1500 RPM
- Maintain level attitude
- Flaps 20° (in the white arc)
- Adopt 65 kt (\pm 5 kt)
- Trim for the attitude.

Final

- The aircraft will be positioned on the runway centre line not below 500 ft AGL in the prefinal configuration
- Full flap
- Reduce speed to 60 kt (\pm 5 kt)
- Power as required
- Maintain tracking on runway extended centre line

- Trim for the attitude
- Power off on round-out
- Land after the runway threshold
- Touch down with mains either side of centre line
- Maintain centre line whilst decelerating to a stop.

3. Flight manoeuvres

Cruise

- Adopt straight and level attitude (heading \pm 5°, altitude \pm 100 ft)
- Allow airspeed to increase to 100 kt
- Reduce power to 2400 RPM
- Trim as required.

Transition—cruise to climb

- Apply full power
- Raise the nose to anticipated climb attitude
- Climb at 75 kt (± 5 kt)
- Maintain heading $(\pm 5^\circ)$
- Trim for the attitude.

Climbing turn

- Apply full power
- Roll to 20° angle of bank
- Maintain 75 kt
- Trim for the attitude.

Cruise descent

- Reduce power to 2000 RPM
- Lower the nose
- Recommended rate of descent not less than 500 ft/min
- Maintain heading $(\pm 5^\circ)$
- Trim for the attitude.

Glide descent

- Power off
- Maintain altitude
- Reduce speed to 70 kt.
- Lower the nose to maintain an airspeed of 70 kt (\pm 5 kt)
- Maintain required heading (\pm 5 kt).

Medium turns

- Power 2400 RPM
- Roll to 30° (±5°)
- Maintain 30° (\pm 5°)
- Maintain altitude (± 100 ft)
- Roll out of turn 15° before nominated/reference heading
- New heading (\pm 5° of nominated heading).

Steep turns (45°/60°)

• Power as required

- Roll to 45°/60° (±5°)
- Maintain 45°/60° (±10°)
- Maintain altitude (\pm 200 ft)
- Roll out of turn 20°/30° before nominated/reference heading
- New heading (\pm 5° of nominated heading).

4. Additional flight manoeuvres

Stall—Entry

- Select and maintain reference altitude
- Power off
- Maintain altitude (increase angle of attack) with full up elevator until stalled
- Maintain heading (\pm 10°).

Stall—Recovery

Note: Only when the aircraft is stalled will you no longer be able to maintain your height. The airspeed will be approximately 44 kt.

When you are no longer able to maintain height:

- Ease forward on the control (reduce the critical angle)—nose attitude should approximate that of the horizon
- Apply full power
- When airspeed has increased to 60 kt, regain lost height
- Maximum height loss 200 ft.

5. Navigation

- Interpret whether the aircraft is to the left, right or on a given VOR radial or LLZ
- Interpret whether the aircraft is above, below or on a glide path, PAPI or T-VASIS
- Using an ADF, determine the direction to turn to track to a station
- Using an ADF, home/track to an NDB/Locator
- Using an ADF, interpret when the aircraft is passing over the top of an NDB/Locator
- Using the DME indicator, determine the distance to a DME station.