

AVIY5050Y Provide aerodrome control services

Modification History

Release 3. This is the third release of this unit of competency in the AVI Aviation Training Package Release 10.

Release 2. ISC upgrade - a statement relevant to Defence Aviation has been added to the Application of the unit.

Release 1. This is the first release of this unit of competency in the AVI Aviation Training Package.

Application

This unit involves the skills and knowledge required to provide aerodrome control services during air traffic control operations, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority and national operating standards.

It includes managing aerodrome traffic zones, aerodrome manoeuvring areas, and assuring separation.

This unit is applied to provide aerodrome control services in control towers equipped with surveillance capability and/or using procedural control practices.

This unit addresses:

- aviation technical skill requirements (physical, mental and task-management abilities) related to managing aerodrome traffic zones and aerodrome manoeuvring areas in which distance between aircraft as well as their relative positions and speed might compromise the safety of the aircraft operations
- air traffic control duties that complement the non-technical skills of air traffic controllers, and contribute to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of commercial and military air traffic services across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under supervision as a single operator or within a team environment.

Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Use for Defence Aviation is to be in accordance with relevant Defence Orders, Instructions, Publications and Regulations.

Pre-requisite Unit

Not applicable.

Competency Field

Y – Aircraft Operation and Traffic Management

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Manage aerodrome traffic zone and aerodrome manoeuvring area

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Traffic priorities are applied in accordance with standard operating procedure
- 1.2** Service priorities are applied in accordance with that which is most safety critical
- 1.3** Hazards are identified, risks are assessed and risk controls are implemented
- 1.4** Control practices and procedures are adjusted in accordance with changing aerodrome traffic zone and aerodrome environment factors
- 1.5** Systematic scan technique of aerodrome traffic zone and aerodrome is maintained
- 1.6** General and sector weather observations are conducted
- 1.7** Documented instructions and agreements applicable to jurisdictional area are applied
- 1.8** Non-compliance with control instructions and procedures is recognised and addressed
- 1.9** Taxiways are used to facilitate maximum use of runways

- 1.10** Runway mode selected is suitable and efficient for traffic flow
- 1.11** Runways are operated dependently
- 1.12** Runways are operated independently
- 1.13** Control services are provided in accordance with airspace classification and status
- 1.14** Airspaces are administered in accordance with user activity
- 1.15** Aircraft are authorised to use aerodrome traffic zone and aerodrome
- 1.16** Vehicles and pedestrians are authorised to use aerodrome manoeuvring areas

2 Assure separation

- 2.1** Conflicts are recognised and resolved
- 2.2** Separation is provided
- 2.3** Jurisdiction for maintaining aircraft separation is agreed and assigned
- 2.4** Alternative separation is provided as required
- 2.5** Separation is adjusted when systems are degraded or airways facilities are reduced
- 2.6** Most appropriate applied separation is provided taking into account safety, expedition and the method of control and surveillance
- 2.7** Compromised separation is recognised and addressed

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to AVIY5050A Provide aerodrome control services.

Links

AVI - Aviation Training Package Companion Volume Implementation Guide at: [sector webpage link here]

DRAFT

Assessment Requirements for AVIY5050Y Provide aerodrome control services

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- adhering to procedures
- adjusting route and track of aircraft
- allocating attention according to priorities
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying reasoning and decision making to airspace and flight path scenarios
- communicating effectively with others
- completing relevant documentation
- conducting general and sector meteorological observation
- coordinating air traffic services effectively
- determining runway mode
- executing control actions
- facilitating unusual flight operations
- formulating airways clearance and control instructions
- implementing contingency plans
- maintaining a strategic traffic management plan
- maintaining surveillance of aerodrome traffic zone and aerodrome
- managing aerodrome traffic zone operating equipment in accordance with standard operating procedures
- managing operations on taxiways
- perceiving and comprehending incoming information
- processing military aircraft
- projecting and developing future airspace and flight path scenarios
- recording and annotating flight information and messages
- reporting and rectifying identified conflicts promptly
- reporting and rectifying identified problems promptly

- responding to stressful situations with a considered and measured approach
- separating aircraft using aerodrome control techniques and standards
- working collaboratively with others
- working systematically with attention to detail.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- aerodrome and runway markings
- aerodrome control separation standards and techniques
- aerodrome lighting
- air navigation systems and visual aids
- air traffic priorities
- air traffic services
- airborne collision and avoidance systems
- aircraft type, associated wake turbulence and performance categories
- airspace service priorities and the safety imperative
- characteristics of aerodrome traffic zone patterns and traffic flows including critical positions
- charts and operational documentation
- communications phraseologies and procedures
- compromised separation and non-compliant use of aerodromes and airspaces
- conditional air traffic clearance
- coordination requirements
- division of responsibilities for air traffic services
- formation flight configurations, separation, procedures and practices
- handover/takeover procedures and practices
- human machine interface (HMI) states and associated interactions
- meteorological documentation, terms and definitions
- military flight operations
- national airspace system and standard route structure
- navigation principles and terminology
- organisational and licensing administration
- physical characteristics of aerodrome and runways
- principles and procedures of altimetry
- principles of threat and error management
- principles of flight
- procedures for recording operational information
- provision of air traffic services and air traffic flow management during system degradation including facility failures and restoration of system components
- relevant sections of regulatory and operational documentation
- route, track, heading and aircraft performance characteristics

- rules of the air governing visual and instrument flight
- runway visibility measurement
- safety occurrence reporting
- terrain and prominent landmarks affecting flight operations within aerodrome traffic zone
- terrain protection
- transfer of control points
- transition from instrument flight to visual flight conditions
- weather phenomena affecting flight operations.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- acceptable means of simulation assessment.

Links

AVI - Aviation Training Package Companion Volume Implementation Guide at: [sector webpage link here]