Australian Government

Assessment Requirements for AVIB0003 Inspect and report on serviceability of aerodrome lighting systems

Release: 1

Assessment Requirements for AVIB0003 Inspect and report on serviceability of aerodrome lighting systems

Modification History

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

Performance Evidence

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

- adapting to differences in equipment and operating environment in accordance with workplace procedures
- applying relevant legislation and workplace procedures
- applying relevant systems (such as safety management systems [SMS]) and procedures to assess and/or mitigate risk that might arise during inspecting and reporting on serviceability of aerodrome lighting systems
- communicating effectively with others when inspecting and reporting on serviceability of aerodrome lighting systems
- completing documentation related to inspecting and reporting on serviceability of aerodrome lighting systems
- identifying and correctly using equipment required to inspect and report on serviceability of aerodrome lighting systems
- implementing work health and safety (WHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritising work
- modifying activities in accordance with workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring work activities in terms of planned schedule
- operating electronic communications equipment to required protocols
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting faults in aerodrome lighting
- initiating procedural repairs or hazard removal, including:
  - notifying appropriate aerodrome lighting personnel or electrical contractors
  - notifying relevant aerodrome personnel
  - removing hazard/s
  - serviceability inspection (following repairs)
  - undertaking repairs
- working collaboratively with others

- working systematically with required 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, performance criteria and range of conditions and include knowledge of:

- aerodrome layout, including access routes
- aircraft schedules and their use in inspecting and reporting on serviceability of aerodrome lighting systems
- aerodrome movement area facilities, including:
  - apron
  - clearway
  - markers, markings and aerodrome lighting
  - runway and runway strip
  - runway end safety area (RESA)
  - taxiway and taxiway strip
- workplace procedures for making a lighting problem safe, including:
  - closing movement area (aerodrome closure)
  - contacting aerodrome user
  - partial closure of movement area
- allowable minor repairs under electrical codes and workplace procedures, and arrangements for engaging a qualified electrician to carry out repairs
- basic features and characteristics of aerodrome lighting systems
- different operating conditions:
  - all weather conditions
  - day and night
  - variety of terrain conditions
- various forms of transport, such as vehicle and other motorised/towed equipment
- effects on serviceability of aerodrome caused by lighting faults
- equipment used in inspecting and reporting on serviceability of aerodrome lighting systems
- faults in aerodrome lighting including:
- changes to temporary or permanent published aerodrome information
- electrical circuit failure
- failure of:
  - aerodrome beacon
  - wind indicator lighting
  - obstruction lights
  - pilot activated lighting (PAL)
- hazardous situations resulting in some or all of the aerodrome lighting becoming unserviceable

- partial lighting failures
- power supply failure
- restoration of aerodrome serviceability
- operation of airband radio equipment as used to communicate with air traffic control (ATC) and/or pilots
- orange or yellow painting or distinctive marking of vehicles regularly used on movement area
- permanent aerodrome lighting facilities
- temporary lighting, including:
  - battery-powered lights
  - hard-wired portable lights
  - kerosene flares
  - solar-powered lights
  - vehicle lighting.
- aerodrome beacon
- approach lighting
- apron:
  - edge lights
  - flooding lights
  - illuminated wind indicators
  - obstacle lighting
  - pilot activated lighting (PAL)
  - precision approach path indicator (PAPI)/visual approach slope indicator system (VASIS)
- runway:
  - end identification lights
  - end lights
  - edge lights
  - threshold lights
  - centre line lighting
  - touch down zone lighting
  - high intensity and approach lighting
  - stop bar lighting
  - runway guard lighting
  - movement area guidance sign lighting
  - threshold identification lights
- standby power
- taxiway:
  - centreline lights
  - edge lights
  - movement area guidance sign lighting

- obstacle lighting
- problems, safety hazards and risks that exist when inspecting serviceability of aerodrome lighting systems and related assessment/management measures that may need to be taken into account
- procedures for servicing and minor maintenance of equipment used in inspecting and reporting serviceability of aerodrome lighting systems
- purpose and application of aerodrome markers, markings and temporary lighting
- radio frequencies applicable to the aerodrome
- relevant information/documents:
  - aerodrome emergency plan (AEP) and procedures to be followed for each aerodrome emergency
  - aerodrome manual
  - aerodrome SMS and safety/security policies and principles of risk assessment and risk management
  - aeronautical information publication (AIP)
  - AIP – En Route Supplement Australia (ERSA)
  - equipment manufacturer specifications for inspecting and reporting on aerodrome lighting systems
- documentation related to inspecting and reporting on serviceability of aerodrome lighting systems
- Manual of Standards (MOS) Part 139 – Aerodromes
- Civil Aviation Safety Regulations 1998 – Volume 4
- operational checklists
- plans and maps
- relevant legislative and regulatory requirements relating to inspecting and reporting on aerodrome lighting systems
- reporting procedures
- requirements for completing relevant documentation and/or incident reporting
- weather information and implications for workplace operations
- workplace procedures for inspecting and reporting on serviceability of aerodrome lighting systems
- acceptable outages to lighting
- awareness of hazardous lighting to aviation operations.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

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 materials, tools, equipment and personal protective equipment (PPE) currently used in industry.
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- acceptable means of simulation assessment.

Links

AVI Training Package Companion Volume Implementation Guide available on VET Net: - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816