AVIF5013A Provide SAR alerting and emergency service

Revision Number: 1

AVIF5013A Provide SAR alerting and emergency service

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor	This unit provides the knowledge and an inventory of skills required to alert appropriate authorities to the need for search and rescue (SAR) action, and to provide the necessary assistance to aircraft in abnormal or emergency situations that helps to resolve such situations. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit	Work must be carried out in compliance with relevant air traffic services regulatory requirements of the Civil Aviation Safety Authority.
	Use for ADF Aviation is to be in accordance with relevant Defence Orders and Instructions and applicable CASA compliance.
	Work is performed under various levels of supervision, dependent on workplace context, and might be in a team environment.
	By providing SAR alerting and emergency service to aircraft. The goal of which is to assist in the resolution of the emergency situation. The possible outcomes of the emergency situation are that the aircraft will land safely or an aircraft accident occurs. If an accident occurs, the emergency situation is transferred to the relevant search and rescue organisation for rescue.
	This unit of competency is packaged at Diploma level.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability Skills   This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Provide search and rescue alerting	1.1 Search and rescue information is coordinated and/or relayed
	1.2 Critical event times for search and rescue alerting are monitored and actioned
	1.3 Appropriate emergency phase is declared when required
	1.4 Search and rescue information and/or actions are appropriately recorded
2 Provide emergency service	2.1 Critical initial actions are carried out in accordance with emergency plans and checklists
	2.2 Appropriate emergency phase is declared in accordance with standard operating procedure
	2.3 Overt or covert response to emergencies or unusual situations is provided using standard operating procedure
	2.4 Emergency or abnormal situations are coordinated and transferred to other responsible units when necessary
	2.5 Emergency situations are recorded and/or logged and events reported in accordance with emergency plans and/or standard operating procedure
	2.6 Priority service is provided to emergency situations
	2.7 Aircraft separation is maintained during emergency and/or abnormal situations
	2.8 Critical information is relayed to emergency aircraft and updated
	2.9 Standard emergency phraseologies are used

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Relevant sections of Civil Aviation Safety Regulations
- Relevant OH&S and environmental procedures and regulations
- Principles of effective air traffic control
- Search and rescue organisations and infrastructures
- Jurisdictions related to the search and rescue of different aircraft operations
- SARTIME and SARWATCH criteria
- Emergency aviation phases and criteria and declaration
- Emergency services, IFER management process, IFER roles and responsibilities, IFER techniques, IFER resource management and intercept and escort
- Emergency communications
- Emergency checklists and documentation
- Emergency and abnormal HMI indications including alarms and alerts
- Emergency separation standards
- Aerodrome emergency plan (AEP)
- Types of in-flight emergencies including unlawful interference, general aircraft failures and problems, landing, pilot incapacitation, military emergencies, uncertain of position, VFR emergencies, emergencies declared by data link
- Fuel jettison during emergency and practice including ATS response for practice jettison

Required skills:

- Communicate effectively with others when providing SAR alerting and emergency service
- Actively listen
- Declare emergency phases
- Communicate clearly and concisely using standard and non-standard phrases to emergency aircraft
- Use overt and covert emergency messages, phrases and signals
- Use management communication with emergency traffic and other aircraft
- Perceive incoming information associated with strategic, tactical, geographic, spatial, system and environment components of a complex system
- Comprehend incoming information and develop the current airspace and flight path model
- Read and interpret instructions, regulations, procedures and other information relevant to the provision of SAR alerting and emergency service

REQUIRED KNOWLEDGE AND SKILLS

- Interpret and follow operational instructions and prioritise work

- Coordinate emergency and/or abnormal related information

- Use checklists and other documentation

- Provide navigational and traffic information to the pilot during emergencies and unusual situations

- Complete documentation related to the provision of SAR alerting and emergency service including the recording of emergency and/or abnormal flight related information

- Operate electronic communication equipment to required protocol

- Provide leadership and work collaboratively with others when providing SAR alerting and emergency service

- Communicate in a team by exchanging information through assigning responsibility, acknowledgment, inquiring, and by recognising and noting facts that create team rapport and enhance team outputs

- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others

- Promptly report and/or rectify any identified problems that may occur when providing SAR alerting and emergency service in accordance with regulatory requirements and workplace procedures

- Judge and form an opinion or evaluate situations by discerning and comparing information

- Make decisions relevant to the provision of SAR alerting and emergency service

- Conduct aeronautical decision making

- Implement decisions using knowledge-based, rule-based and skill-based activities

- Demonstrate temperament reflecting a calm, composed and cooperative characteristic and emotional response under challenging situations

- React to some form of treatment or stressful situation by a considered and measured response in a timely fashion

- Implement contingency plans for unexpected events that may arise when providing SAR alerting and emergency service

- Maintain air traffic services to other traffic during emergencies and unusual flights

- Anticipate and prepare for work tasks

- Project and develop future airspace and flight path scenarios

- Maintain a strategic traffic management goal for the jurisdiction airspace

- Initiate emergency actions

- Monitor critical search and rescue event times

- Provide priority service to emergency aircraft

- Apply emergency separation and restore normal separation

- Apply precautions and required action to minimise, control or eliminate hazards that may exist when providing SAR alerting and emergency service

- Demonstrate an attitude to error management that limits unintentional deviation from work

REQUIRED KNOWLEDGE AND SKILLS

practices and maintains accuracy through application of disciplined procedures and practices and a methodical work ethic

- Monitor and anticipate operational problems and hazards and take appropriate action

- Regulate workload in emergency situations

- Adhere to procedures through a series of steps followed in a regular definite order or a traditional or established way of doing things when this is required

- Modify activities dependent on differing workplace contingencies, situations and environments

- Work systematically with required attention to detail without injury to self or others, or damage to aircraft or equipment

- Adapt to differences in aircraft, equipment and operating environment in accordance with standard operating procedures

- Be receptive to training for the skills, knowledge, or experiences acquired or gained over a career

- Implement OH&S procedures and relevant regulations

- Identify and correctly use equipment required when providing SAR alerting and emergency service

- Apply human reasoning to airspace and flight path scenarios

- Allocate attention according to demand and to constantly switch between: managing the Human-machine Interface (HMI) or equipment use; managing communications; and managing traffic

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	• The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying: • the underpinning knowledge and skills • relevant legislation and workplace procedures • other relevant aspects of the range statement
Context of and specific resources for assessment	• Performance is demonstrated consistently over a period of time and in a suitable range of contexts • Resources for assessment include: • a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or • access to an appropriate range of relevant operational situations in the workplace • In both real and simulated environments, access is required to: • relevant and appropriate materials and equipment, and • applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
Method of assessment	• Assessment of this unit must be undertaken by a registered training organisation • As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests • Practical assessment must occur: • through activities in an appropriately simulated environment at the registered training organisation, and/or • in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Emergency situations can occur:	• in flight and on the ground. The assistance provided by air traffic services aims to resolve the emergency situation to achieve a favourable outcome. Generally, this will involve in-flight emergency responses and/or the activation of aerodrome emergency plans
Performance may be demonstrated in:	• simulated situations, and/or • an operational air traffic control workplace
Air traffic control workplace may be a workstation in :	• Area Control • Approach Control • Aerodrome Control
The requirements of the management of the emergency are that :	• during an emergency the ATS officer actively controlling the airspace should not manage the emergency response • ATS officers should be familiar and understand the work pressures involved in piloting an aircraft during an emergency • air traffic services provided to aircraft under normal operations while dealing with an emergency should be appropriately managed by transferring jurisdiction to other ATS units if appropriate • initial actions and response during an emergency should attempt to stabilise the situation. Reference to workplace checklists is recommended • types of emergency will include unlawful interference, general aircraft failures and problems, landing, pilot incapacitation, military emergencies, uncertain of position, VFR emergencies, emergencies declared by data link. Fuel jettison might be required during emergencies, creating possible environmental damage. At times, aircraft might also include a request to ATS for practising fuel jettison. Regulations and organisational advice should be followed in the case of such a request • if the aircraft in the emergency situation will leave the area of jurisdiction, every attempt should be made to retain the aircraft on the original communication frequency for as long as possible to provide consistency of service and to relieve pilot workload
Dependent on the type of organisation concerned and the local terminology used, workplace	• company procedures • enterprise procedures • organisational procedures

RANGE STATEMENT

procedures may include:	• established procedures • standard operating procedures • regulatory standards and recommended practices
Information/documents may include:	• relevant Civil Aviation Safety Authority (CASA) regulations and Manuals of Standards (MOS) • Local Instructions (LI) and Temporary Local Instructions (TLI) • training curricula and syllabi • equipment manufacturers specifications and instructions • Manual of Air Traffic Services (MATS) • Aeronautical Information Publication (AIP) • workplace procedures, instructions • Training Standards Manual (TSM) • ICAO Document 4444, ATM/501, Procedures for Air Navigation Services, Air Traffic Management • occupational specification for air traffic controllers • industrial certified agreements and awards • training and assessment records • emergency reference manuals, guides and checklists • documented learning and assessment strategies
Applicable regulations and legislation may include:	• International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARP) • Civil Aviation Safety Regulations (CASR) and Manuals of Standards (MOS) • relevant Defence Orders and Instructions • Airservices Act (Commonwealth) 1995 • OH&S Legislation (state and federal) • Civil Aviation Act (Commonwealth) 1988 and the Civil Aviation Amendment Act 1995

Unit Sector(s)

Not applicable.

Transport & Logistics Industry Skills Council

Competency field

Competency Field   F - Safety Management

Transport & Logistics Industry Skills Council