Competency Assessment Guidance Document

CAP 1715

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Introduction

This brief Guidance Document material has been developed with collaboration between industry and the UK Civil Aviation Authority.

The purpose of this document is to provide guidance to aviation organisations conducting competency assessments. It is suggested that this procedure be used by maintenance, continued airworthiness management and production organisations to assist in building their internal competency assessment processes. It is hoped that industry wide adoption of a harmonised procedure will help generate consistency of competency assessment within the aviation environment and thereby help to improve maintenance, airworthiness management and production standards.

Competency assessment procedure

Competency assessment should include analysis for the need of additional training or support to individuals according to the required task as detailed in organisational procedures. A competence assessment tests knowledge and understanding and should wherever possible include an 'on the job' assessment as a test of performance. The 'on the job' assessment would normally be carried out by appropriately qualified personnel, such as managers, team leaders and supervisors.

The Competency Assessment Template at Appendix A can be used to conduct and record the Competency Assessment and as a means to identify any additional training/actions required to attain the appropriate levels of competency. It is envisaged that the template can be used for 1 to 1 interviews and/or on the job assessments.

Paragraphs 1 to 3 provide a quick overview of the Competency Assessment process with greater detail being provided in the subparagraphs.

Competency definition

Competence can be defined as a measurable skill or standard of performance, knowledge and understanding which takes into account attitudes and behaviours.

NOTE: This guidance material has been developed with collaboration between industry and the UK Civil Aviation Authority. The purpose of this document is to provide assistance and guidance only.

Competency and assessment process

1.   Pre-interview checks

To be conducted by the assessor ahead of the interview/assessment.

Validation of candidate

1.1   How does the candidate meet the requirements of the Job Description for the role they are doing/applying for (i.e., shift work, location, base maintenance/line maintenance/workshop, lone working, leading a team of unlicensed engineers, or following instructions given by the Licenced Engineer or supervisor?)

1.2   Experience requirements against the relevant rule

1.3   Human factor training

1.4   Continuation training requirements against the relevant regulation

1.5   Basic training as applicable

1.6   Any recency requirements (refer to applicable regulation)

NOTE: Prior to the interview the candidate should be informed to provide original and valid documentation including current aircraft maintenance licence, if applicable.

2.   Technical requirements

2.1   It is important for the candidate to have sufficient knowledge according to the organisation's scope of approval and associated privileges.

2.2   Beyond the day-to-day task requirements, it is also important for the candidate to be trained in the organisational procedures and reporting systems.

2.3   The organisation should analyse all responses from the competence assessment. Should an individual's competence fall below an acceptable level, it is the organisation's responsibility to identify suitable support and measures which are necessary to attain satisfactory competency. For example, by training, mentoring or working under supervision).

2.4   An individual's competence should be re-assessed following the application of support measures.

2.5   Authorisations of the individual may be limited or suspended whilst support measures are progressed.

3. Behavioural & Attitude factors

The demonstration of the appropriate personnel attitudes & behaviours are crucial factors that go towards maintaining and continuously improving maintenance and continued airworthiness standards. The demonstration of positive attitude and behaviours also aids the promotion of safe working environment and contributes to a well-structured and effective Safety Management System. Positive attitudes and behaviours are critical to the delivery of a functional SMS the and the encouragement of a Just Culture in an organisation.

3.1   Decision Taking & Judgement Making

3.2   Professionalism

3.3   Integrity

3.4   Adaptability

3.5   Leadership

3.6   Team Working

Guidance and sample questions

Behavioural and Attitude factors are described in sections 3.1 to 3.5 with sample questions which can be used during the competency assessment.

3.1 Decision Taking & Judgement Making

(a)   Not jumping to conclusions, primarily using factual evidence

(b)   Proactive, anticipating potential issues and taking appropriate action dealing with them

(c)   Not allowing personal preconceptions to interfere with daily tasks

(d)   Remaining open minded for reappraisal

'Tell me about the last decision that you made which required thought and analysis?'.

'Tell me about a time you had to make a quick decision?'.

'What elements did you consider when making the decision & how did you assess the risks involved?'

'Tell me how you would go about making sure your decisions are realistic, workable and permissible?'

3.2 Professionalism

(a)   Recognising own limitations & strengths, taking accountability for actions

(b)   Ability to engage with colleagues and customers, to promote awareness of risks involved

(c)   Remaining calm and efficient under pressure

(d)   Proactively seeking training and advice, when unsure

'Discuss an experience where you explained a complicated technical task to a colleague without your experience'.

'How do you manage relationships with a difficult individual (colleague, customer, pilot, owner)?'

'How would you resist giving "popular" responses which could lower standards when under pressure?'

3.3 Integrity

(a)   Understand the implications of commercial imperatives

(b)   Never jeopardise the safety of others by cutting corners

(c)   Strive to maintain high standards of work consistently

'Consider individual or organisational conflict (stakeholders)'.

'How do you manage conflict? Provide an example of when you have done this'.

'Can you name three of your strengths and weaknesses?'

'Have you ever been asked to compromise your integrity by your supervisor or colleague?'

3.4 Adaptability

(a)   Accepting change in a positive way

(b)   Learning from mistakes and those of others

(c)   Considering a problem from different perspectives

'Describe a situation where you were responsible for getting others to make a change. What role did you play and what action did you take? What was the outcome? If you could do it again, would you do anything differently?'

'Describe a situation in which you embraced a new system or technology at work that was a major departure from the old way of doing thing's'.

3.5 Leadership

(a)   Encouraging others to achieve and exceed their objectives, assisting thorough challenging situations

(b)   Motivating others through adapting organisation's culture and creating a pleasant environment and recognising colleagues' efforts

(c)   Having confidence to complete a task with little or no supervision

(d)   Taking personal responsibility for ensuring that tasks are fully completed

'Describe a situation where you were required to improve the performance of your team.'

'How do you encourage creativity?'

'Discuss an experience where you explained a complicated maintenance task to a colleague with less experience than you.'

3.6 Teamworking (Collaborating positively with others for mutual benefit)

(a)   Shows respect to all team members at all levels by treating them with equal courtesy and consideration

(b)   Understands the effects of their actions and words on other people and modifies their behaviour to achieve results,

(c)   Minimises conflict and takes active steps to relieve tension and stress within the team, exhibiting rapport and compassion to build effective working relationships,

(d)   Coaches and trains less experienced colleagues and shares ideas, information, and solutions for the team's benefit,

Notes on Competency Ratings

Training required:	At the time of interview, the candidate cannot demonstrate adequate knowledge and understanding of the subject. It is therefore recommended that appropriate support, mentoring or training package be developed and delivered before reassessment.
Satisfactory:	The candidate demonstrates sufficient knowledge and understanding of the subject that allows the candidate to perform required tasks to an acceptable standard.
Exceeds:	The candidate demonstrates a high level of experience and knowledge of the subject, which allows the candidate to perform required tasks to a very high standard. The candidate should be considered for additional responsibilities as part of their personal development

Appendix A: Anybody's Competency Assessment Template

This template can be used to conduct and record the Competency Assessment and as a means to identify any additional training/actions required to attain the appropriate levels of competency.

It is envisaged that the template can be used during 1 to 1 interview's and/or on the job assessments.

To make it easier for organisations to use, the CAA has published form SRG1700, a downloadable version of this appendix, which can be completed electronically.

Anybody's Competency Assessment Template: Staff Competency Assessment

Organisation:	Staff Competency Assessment	Document Number/Issue:
		Date:

Name (Candidate):	Authorisation Number:
Licence Number:	Licence Expiry Date:

Pre-Interview Checks	Status			Sign off Approval
Copy of Valid Licence	YES	NO	N/A	
Part 147 Approved Type Training	YES	NO	N/A	
Continuation Training	Next Due:			
Human Factors Training	Next Due:			
Maintenance Experience Recency				

Regulatory Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
A	UK CAA	*What is your understanding of the UK CAA?*				
B	Part 145	*Describe the relationship between Part 145 & Part-CAMO approved organisation?*				
C	Part 147	*Describe the relationship between Part 147 & Part 66?*				
D	Part M	*Describe how the Part-CAMO organisation manages continuing airworthiness?*				
E	Part 66	*What are the responsibilities of a licensed engineer?*				
F	National regulation	*Where do you find information relating to national regulation?*				
G	Human Factors	*What is your knowledge of HF / Human Performance Limitations?*				

Manual & Procedure Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
A	**Organisation Exposition/ procedures**	*What manuals are available for the organisation?*				
		Where do you find the exposition and procedures?				
		How do you notify anomalies and to whom?				

Continuing Airworthiness Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
A	Data and its use	*What is the approved data? AMM, IPC, SB's, drawings etc.*				
		How do you access the data?				
		How do you know the data is at the correct revision or amendment status?				
B	Understanding mandatory requirements E.g., Airworthiness Directives / ALI / CMR / CDCCL	*How do you access the data?*				
		How do you verify incorporation and record compliance?				
		How does the organisation forecast mandatory requirements, such as AD's, CMR, ALI / CDCCL?				
C	Evaluation of technical data – Maintenance data	*Where do you find information relating to inspection tasks and life limited parts in the data?*				
D	Production of task cards and work instructions	*What needs to be considered in the production of task cards or work instructions? E.g., Critical tasks, staging of complex tasks, reporting of findings to TC Holder, updating log cards.*				

Continuing Airworthiness Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
E	Evaluation of technical data – repair schemes	*What kind of data is required to support the issue of certificate of release to service for a repair outside the Structural Repair Manual?*				
F	Knowledge of Aircraft Maintenance Programmes (AMP)	*Reliability – when and why do we need to a reliability system to support an aircraft maintenance programme?*				
		Effectiveness – how do we ensure the AMP remains current?				
G	Understanding of critical tasks	*What is your understanding of critical tasks, independent inspections and their application?*				
H	Understanding of component life / maintenance task Penalty Factors	*What is your understanding of 'Penalty Factors' that need to be applied to component lives or maintenance tasks as a result of aircraft operations?*				
I	Development of work packages	*Explain how the organisation develops and controls work packages.*				
J	Ability to utilise CAW Information Management Systems	*Explain how we use the organisation continuing airworthiness management system (IT system or otherwise) to manage continuing airworthiness?*				

Technical Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
A	Calibrated equipment & use of special tools	*What are the user responsibilities?*				
B	Critical Parts / Components	*Handling, storage, transport, fitment of?*				
C	Shelf-Life Control	*What has a shelf life? (more than oils, greases & sealants)*				
D	Shift Handover	*Requirements for a good shift handover?*				
E	Control & completion of work	*Task progression, break in task, distraction.*				
F	MOR's / Internal reporting	*What are they? Reporting Time limit? How would you raise an MOR or internal report?*				
G	Aircraft Maintenance planning	*Why is good maintenance planning important?*				
H	Deferred Defects	*What are DD's? Describe how to raise, manage & control?*				
I	Independent Inspection & Error Capture	*Describe error capture methods. Talk through Independent Inspections.*				

Technical Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
J	Daily Fuel Sampling	*What to look for. Reporting?*				
K	HUMS/VHM	*HUMS/VHS training? Understanding?*				
L	Role of the approved MEL/ MMEL	*Describe MMEL and MEL?*				
M	Acceptance of components from store	*Talk through lifted item to be fitted to an aircraft. What to check? Understanding of acceptable Authorised Release Certificates E.G. CAA form 1, EASA Form 1, FAA 8130-3 etc.*				
N	Control of tools	*Check understanding of tool control. What do you do if you lose a tool?*				
O	Function and use of the Tech Log/Logbooks	*Competence in use of Logbook / Tech Log. How do you know when the maintenance is due? How are deferred defects controlled?*				

Attitudes & Behaviours Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
A	Learning Culture	*Learning from safety events.* *What is your understanding of SMS?* *What is your role within SMS?*				
B	Decision & Judgment Making	*Anticipating problems & not jumping to conclusions.* *Not allowing personal preconceptions to affect task.*				
C	Integrity	*Never jeopardise aircraft safety or cut corners.*				
D	Communication	*Actively listening & structuring what you want to say. Do my records make sense and would someone else understand?*				
E	Professionalism	*Recognising own mistakes & accepting responsibility. 'Am I following procedures? Working under pressure.*				
F	Internal Reporting	*Reporting awareness & how to report effectively.*				
G	Adaptability	*Positive and constructive attitude. Learns from mistakes and those from others.*				
H	Responsibilities of the QM	*Compliance Improvement & why?*				

Attitudes & Behaviours Questions			1 Training Required	2 Satisfactory	3 Exceeds	Feedback Rationale
I	**Team working**	*Offering support, respect & assist others.*				
		Examples of negative behaviour.				
J	**Leadership**	*Motivates others by setting an example, asks for help when needed.*				
K	**Flexibility**	*Altering approach & attitude to deal with new situations and change.*				

On the Job Assessment						Feedback Rationale
Name and Role of Assessor						
			1 Training Required	**2 Satisfactory**	**3 Exceeds**	
A	**Description of activity**					

Consolidated Competency Assessment
Statement by Assessor I consider the candidate to be competent/requires additional actions* for the position held/intended. (* as appropriate) **Signed (Assessor)**   **Dated** **Position**
*The following additional actions are recommended: (i.e., formal training, OJT, allocation of Mentor)
Feedback on Personal Performance. I have read the competency assessment above and discussed it with my Line Manager. I have the following comments: **Signed (Candidate)**   **Dated**