



SYMBIOTICS



Mandatory Psychological Evaluation

A smart guide to preparing for EASA mandatory
assessment of pilots.

Are you ready?



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Throughlife support

There must be ongoing assessment throughout the pilot's career

When should the assessments be run?

Tests should be completed prior to training and again prior to entering service. Regular checks should be implemented at all stages of the pilot's career, when transitioning from First Officer to Captain, or from airline to airline.

Whose responsibility is it?

It is the airlines responsibility to verify that pilots employed have successfully undergone psychological evaluation by a psychological expert. The safety management system of the airline should include provisions to ensure this.

What happens to the results?

The results of the psychological testing should be available to the training organisation, recruitment/employment agency and the airline. There is some discussion that pilots will be unsure about signing over confidentiality of their personal health reports, however, there must be a balance between medical secrecy and flight security.

Where and by whom can the tests be carried out?

There are many psychological testing organisations who will perform various individual tests for candidates.

EASA accepts that pilot training organisations have their own customised tests. The tests, however, must be carried out by trained aviation psychologists who can analyse the report and provide detailed recommendations as to the candidate's strengths and weaknesses.

“ Our expert Karen Moore says:

We are delighted that EASA have recognised the importance of ongoing assessment, as we believe that regular testing, of the right things, should be the norm. Psychological profiling of personality is appropriate at the start of a pilot's career and at key stages of change, such as command upgrade. However personality traits are stable over time, what changes is mental state, which a personality questionnaire does not measure. A new component of our ADAPT system is a mental wellbeing indicator, which should be administered three or four times a year to track an individual's mental state, with the aim of identifying people who are stressed before they need clinical help. This helps you to keep your flight crew at peak performance.

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Global context

Assessment should be international and take into account specific operational and organisational environments

Culture

Different cultural environments will have impacts on both operational environments and organisational environments. Within each culture, the status of flying is very different and the behaviour of the pilot may change in response to: changes in context, expectations of how to work with colleagues, or they may experience deference to age, seat position, uniform, gender, language or nationality.

Environment Overview

There is a need to agree on international standards for the airlines pilot aptitude testing while adapting them to the different socio-cultural environments across Europe and beyond.

Operators know best the conditions their future crew members will be exposed to. Inadequate psychological profiles must be detected.

Safety management processes should ensure safe conduct of air operations by identifying risks.

Operational environments

Pilots will behave in various ways depending on factors such as multi-pilot operations, single pilot operations, long-haul or short-haul routes, the type of airplane or helicopter. This needs to be taken into consideration with regard to the different profiles in terms of decisiveness or socially desirable behaviour. For example cooperation, tolerance towards others, averting harm, norm-abiding behaviour.

Organisational environments

Factors to consider that may have an influence on the organisational environment are the company culture, size and structure of the organisation or its expansion plans, leadership and management styles.

Tests should be configured to meet the ongoing psychological vulnerabilities of aircrew throughout their career path.



Our expert Karen Moore says:

Following extensive research, we have worked with clients to understand the impact of different dimensions on the assessment of flight crew, including cultural, operational and organisational factors. The ADAPT system has been developed around the work of Hofstede on organisational culture, and Helmreich on crew resource management, to ensure that it is able to assess these important elements without adverse impact. ADAPT not only assesses candidates for essential traits and skills but also measures them against the culture for their role, employer and level from ab-initio to instructors anywhere in the world.





Aptitude and skills

Pilots must be assessed for cognitive capacity, multi-tasking, psycho-motor coordination and memory reaction times

It is important for a battery of tests to be used in a blended approach and these types of tests are vitally important to discover the candidate's ability to learn and reflect on their mistakes, take on board change and adapt to different situations. This is important, particularly over time where additional training may cost more than anticipated or candidates may take longer to pick up skills.

Tests should assess the following:

- Multi-tasking.
- Auditory and visual processing.
- Situation awareness and learning potential.
- Hand-eye coordination.
- Motor skills.
- Physical dexterity.
- Spatial reasoning.
- Working memory.
- Perceptual speed.
- Accuracy abilities.
- Measures of reaction time.

The result of the tests is a balanced insight into the individual as a whole that fulfils the duty of care as an employer to identify resilient individuals who are competent aviators with a good fit to the role and company.

The Adapt Suite consists of

- Full ADAPT - our five-stage process that provides information on personality, skills and situation.
- Online ADAPT - our blended solution that takes some components of the full ADAPT assessment and merges them with our online screening FAST tool.
- FAST - our pre-screening tool.

“ Our expert Karen Moore says:

Just as aptitude and skills can be improved through training and experience, they can also fade due to lack of practise or reliance on automated systems such as navigational aids. The EASA recommendations for using a battery of tests in these areas is already supported by ADAPT. Candidates selected through our assessment process demonstrate higher levels of success in ground school and are predicted to have greater SOP adherence in role. The psycho-motor assessment process has had similar success in predicting aircraft handling and the likelihood of experiencing skill-fade.

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Importance of personality

Ensure pilots are not prone to risk taking behaviour or limited personal resilience to stressful situations

Mental and behavioural impairments may result from psychological and personality conditions in a similar way that impairment results from alcohol or drug abuse.

Some behaviours are difficult to detect because no early symptoms exist, and difficulties arise when an individual is not open about their symptoms, thoughts or behaviour.

Personality questionnaires have no right or wrong answers but can establish typical behaviour patterns. This means we can predict if someone will revert to a particular behaviour (negative or positive) in a certain situation.

Mental Wellbeing

Personality is just one part of the picture with a focus also needed on mental wellbeing, something which fluctuates throughout life. In addition to our ADAPT suite of selection tools we work alongside MHS Assessments in our use of MindQ, the clinically validated mental wellbeing risk assessment tool. By identifying who is at risk of potential mental health conditions this allows them to be directed to the appropriate resources and support to improve their mental wellbeing.

“ Our expert Karen Moore says:

A personality questionnaire is an important element in the assessment of pilot suitability and resilience. The EASA recommendations stress the importance of using specific constructs underpinned by proven psychological research. Our system includes a personality questionnaire based on the Big Five factors of personality which is combined with FAA's approved Hazardous Attitudes scale, to produce profiles that indicate the individual's capacity for learning and predicted reactions under pressure. A number of other constructs in our assessment process that support this insight include measures of resilience, stress management and anxiety.*

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* The Big Five factors of personality are

- Extraversion
- Agreeableness
- Openness
- Conscientiousness
- Neuroticism



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