



# EASA.CAT.GEN.MPA.175(b)

WHAT IS THE NEW EASA PSYCHOLOGICAL ASSESSMENT REGULATION?

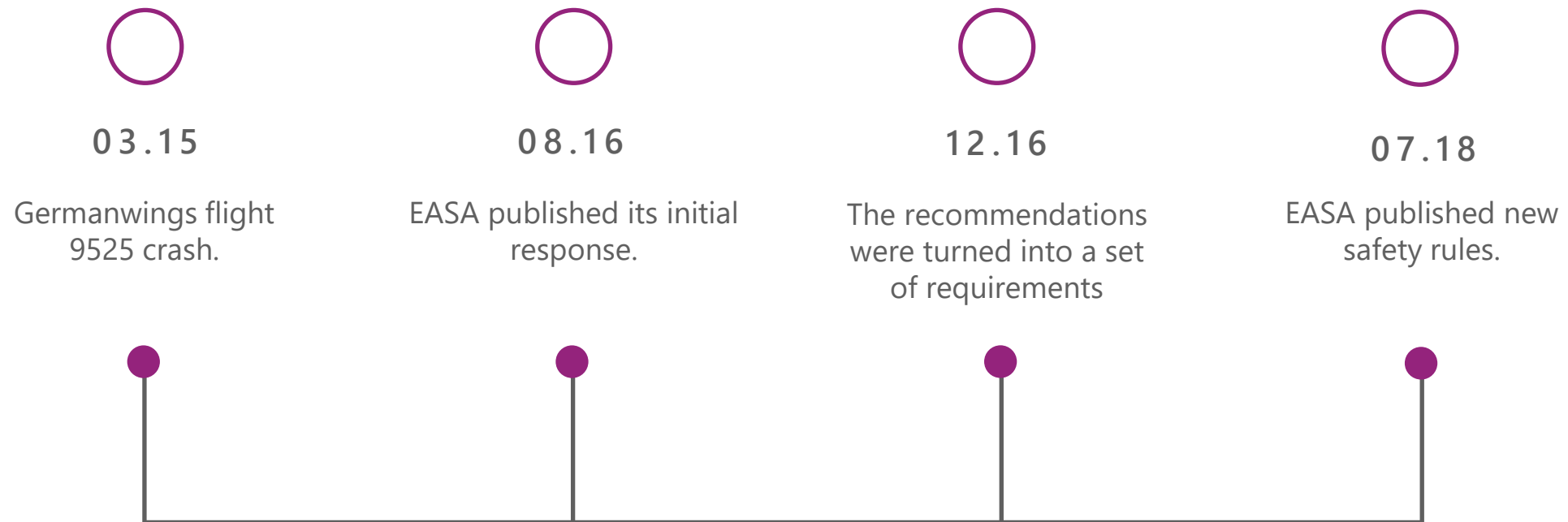
# INTRODUCING EASA.CAT.GEN.MPA.175(b)

EASA CAT.GEN.MPA.175(b) is a new regulation that was introduced by EASA in July 2018. The regulation has stemmed from recommendations made in the BEA report following Germanwings 9525 and focusses on the requirement for psychological assessments of pilots. Airlines have been given two years to put plans in place for the new regulation and it is due to be implemented in early 2021.

The purpose of this presentation is to outline the requirements of the regulation and what it means for airlines.



# THE HISTORY OF THE NEW REGULATION





MARCH 2015

## GERMANWINGS FLIGHT 9525 CRASH.



In March 2015 Germanwings flight 9525 crashed in the French Alps killing all 150 people on board.

The investigation deemed that the crash was deliberately caused by the co-pilot Andreas Lubitz. Lubitz had previously been treated for suicidal tendencies and had been declared "unfit for work" by his doctor, however Lubitz kept this information from Germanwings and reported for duty as normal.

Three days after the incident EASA issued a temporary recommendation that airlines ensure there are at least two crew members (including at least one pilot) in the cockpit for the duration of the flight, with a number of airlines announcing that they had already implemented similar policies.

EASA went on to convene a number of meetings with medical staff and psychological experts to look at possible ways to address the root cause of the problem: the mental fitness of the pilot.



AUGUST 2016

## EASA PUBLISHED ITS INITIAL RESPONSE.

In August 2016 EASA published its initial response which included a number of measures to be taken by airlines.

These measures covered the following:

- Strengthening the initial and recurrent medical examination of pilots by including drugs and alcohol screening, comprehensive mental health assessment, as well as improved follow-up in case of medical history of psychiatric conditions;
- Increasing the quality of aero-medical examinations by improving the training, oversight and assessment of aero-medical examiners;
- Preventing fraud attempts by requiring aero-medical centres and AMEs to report all incomplete medical assessments to the competent authority.



## DECEMBER 2016

### THE RECOMMENDATIONS WERE TURNED INTO A SET OF REQUIREMENTS.

In December 2016 EASA's recommendations were presented to the EU commission and they were turned into a clear set of requirements.

The proposals included the following new requirements:

- Ensuring that all pilots have access to a support programme;
- Mandating airlines to perform a psychological assessment of pilots before the start of employment;
- Introducing systematic Drug & Alcohol (D&A) testing of flight and cabin crew upon employment, after a serious incident or accident, with due cause (i.e. following reasonable suspicion), as well as
- Unannounced D&A testing after rehabilitation and return to work;
- As an additional safety barrier for airlines which are not already subject to a national programme for psychoactive substance testing: mandatory random alcohol screening of flight and cabin crew within the EU RAMP inspection programme.



JULY 2018

## EASA PUBLISHED NEW SAFETY RULES.

In July 2018 EASA published the new safety rules, giving airlines a two and a half year transitional period to ready themselves for the implementation of the new safety rules in early 2021.

The new safety rules cover the following:

- Support programme: all pilots working for European airlines will have access to a support programme that will assist and support pilots in recognising, coping with, and overcoming problems which might negatively affect their ability to safely exercise the privileges of their licence.
- Alcohol testing: as an additional safety barrier, alcohol testing of pilots and cabin crew for all European and foreign airlines who fly into the territories of the European Union has been added. Alcohol testing is already a well-established practice in some Member States and with this Regulation alcohol testing will now be extended to all EU Member States.
- Psychological assessment: European airlines will perform a psychological assessment of their pilots before the start of employment.

# WHAT IS EASA.CAT.GEN.MPA.175(b)?



Fundamentally EASA.CAT.GEN.MPA.175(b) refers to the Psychological assessment of all pilots. The regulation calls for all Pilots to receive a Psychometric evaluation within 24 months of employment and in advance of commencing line flying that is overseen by a psychologist with at least 3 years' aviation experience.

The EASA Acceptable Means of Compliance (AMC) and Guidance Material (GM) that were published in March 2019 give the following guidance:

#### AMC: PSYCHOLOGICAL ASSESSMENT

(a) The psychological assessment should be:

(1) appropriate to the particularity, the complexity and the challenges of the operational environment that the flight crew is likely to be exposed to, as defined by a job analysis identifying the safety-critical dimensions related to the flight crew's function and role within the operator and should include at least the following assessment criteria:

- (i) cognitive abilities;
- (ii) personality traits;
- (iii) operational and professional competencies; and
- (iv) social competences in accordance with crew resource management principles;

(2) validated and either directly performed or overseen by a psychologist with acquired knowledge in aviation relevant to the flight crew's operating environment and with expertise in psychological assessment, and where possible, the psychological selection of aviation personnel; and

(3) undertaken at least within the past 24 months before commencing line flying, unless the operator can demonstrate that the psychological assessment undertaken more than 24 months ago is still adequate for the risk mitigation as required by ORO.GEN.200(a)(3). Such a demonstration should be based on the tests previously performed, an updated risk assessment based on data gathered from previous operational experience and continuous human performance monitoring since the last psychological assessment.

(b) As regards the psychological assessment, the following should be documented:

- (1) the procedures followed;
- (2) the personnel involved;
- (3) the assessment criteria and instruments used in the assessment;
- (4) the validity period.



The full document can be viewed here (Page 34) - [https://www.easa.europa.eu/sites/default/files/dfu/Consolidated%20AMC-GM Annex%20IV%20Part-CAT\\_March%202019.pdf](https://www.easa.europa.eu/sites/default/files/dfu/Consolidated%20AMC-GM%20IV%20Part-CAT_March%202019.pdf)

# BUT WHAT DOES THIS MEAN FOR YOU?

Airlines will need to conduct a psychological assessment of pilots covering at least the four key assessment criteria identified by EASA that pilots must be assessed against in order to be compliant with the new regulation. These are i) Cognitive Abilities, ii) Personality Traits, iii) Operational & Professional Competencies and iv) Social Competencies in accordance with Crew Management Principles.

IATA's Guidance Material and Best Practices in Pilot Aptitude Testing details five measuring dimensions which can be used to assess the key criteria set by EASA in the regulation. The measuring dimensions are:



The full document can be viewed here - <https://www.iata.org/en/publications/pilot-testing/>

# THE FIVE MEASURING DIMENSIONS



## **BASIC MENTAL ABILITIES**

### **COMPONENTS:**

- Memory capacity
- Speed and accuracy of information processing (perception, classification, transformation)
- Spatial abilities (static)
- Technical comprehension
- Reasoning (information processing with basic figures)
- Logic abilities
- Long-term concentration



## **COMPOSITE MENTAL ABILITIES**

### **COMPONENTS:**

- Allocation of attention
- Multi-tasking (different tasks combined), psycho motor abilities (pursuit tracking; compensatory tracking), spatial abilities (dynamic)

Note: These dimensions are related to aeroplane flight path management, manual control and automation.



## **OPERATIONAL ABILITIES**

### **COMPONENTS:**

- Problem solving
- Decision-making
- Workload management
- Situation awareness
- Management of information



## **SOCIAL-INTERPERSONAL ABILITIES**

### **COMPONENTS:**

- Communication
- Leadership
- Teamwork



## **PERSONALITY TRAITS**

### **COMPONENTS:**

- Professionalism (professional motivation, self-discipline, self-criticism, self-organization, safety motivation, stress-coping with social confrontation, information load, time pressure)
- Application of procedures
- Compliance with regulations

# WHO SHOULD CONDUCT THE ASSESSMENT?

The regulation requires the assessment to be validated and either directly performed by, or overseen by, a psychologist.

## WHAT ARE THE KEY THINGS TO LOOK FOR IN A PARTNER?

This may be different depending on what country you are based in, but the following can give a starting point in terms of what to look for:

- ✓ Chartered Member of their national Psychological Society (or local equivalent), preferably with EuroPsy accreditation for cross-border recognition.
- ✓ In the UK Registered with HCPC – as shown by the use of Clinical or Occupational title
- ✓ Experienced in assessment - the person conducting or overseeing the assessment should hold BPS TUO-A and TUO-P certification (Test User Occupational, Ability or Personality respectively)
- ✓ Have acquired aviation knowledge, generally recognised as a minimum three years' experience and/or Member of the European Association of Aviation Psychologists –Ideally this should include the psychological assessment of aviation personnel.

# HOW CAN SYMBIOTICS HELP?

Symbiotics are a human performance organisation with expertise in high-risk, high-consequence industries and have provided assessment, selection and consultancy services to 80 countries across 5 continents, working with airlines, air forces, business jet operators and flight training organisations.

Symbiotics' psychologists have a minimum of three years' experience within the aviation sector and hold the TUO-A and TUO-P certificates.

The team is led by our Principal Occupational Psychologist, [Karen Moore](#) CPsychol CSci AFBPS MRAS who is a Chartered Occupational Psychologist, registered with HCPC, an Associate Fellow of the British Psychological Society, an Associate Member of the European Association of Aviation Psychologists, a Member of the Royal Aeronautical Society, and holds the highest level of assessment accreditation in the UK, the BPS Specialist in Test Use, Occupational certificate.

ADAPT provides an easy to use software interface for pilot aptitude testing, with comprehensive reporting across all our assessments.

# HOW DOES ADAPT MEET EASA.CAT.GEN.MPA.175(b)?

Symbiotics support airlines by providing an online test battery for the recruitment of direct entry pilot candidates that complies with the new regulation for Pilot Psychological Assessment.

We recommend the following test battery aligned to IATA 'Guidance Material and Best Practices for Pilot Aptitude Testing'.



## **PERSONALITY QUESTIONNAIRE**

Our Personality Questionnaire (PQ) is widely used within the aviation sector, and includes traits that are specific to this sector, such as Hazardous Attitudes, in addition to the general traits of the Big Five Factor personality measures.



## **CREW RESOURCE MANAGEMENT**

This questionnaire is designed to identify a candidate's decision-making and communication skills in response to various situations.



## **FAST**

This test assesses a candidate's multitasking, learning, cognitive, situational awareness and physical skills.



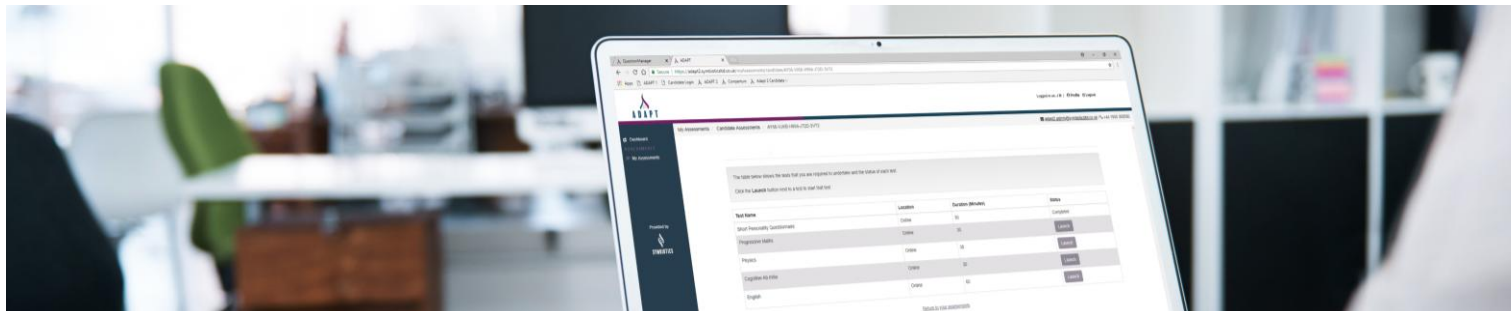
## **COGNITIVE REASONING**

A range of aptitude tests that are designed to measure an individual's cognitive abilities in numerical reasoning, perception speed and accuracy, verbal reasoning, spatial reasoning, working memory and abstract reasoning.

# WHAT IS ADAPT?

ADAPT is our online assessment and reporting platform that delivers our psychometric and aptitude tests to candidates and provides oversight, reports and management to clients.

Candidates undertake each test of the assessment one at a time and if required this can be over several sessions. Once the candidate has completed the assessment, ADAPT provides a comprehensive consolidated output report in English. Results are also available to download as a spreadsheet from ADAPT, to provide data summaries for all candidates.



# CONTACT US

If you would like any further information or to talk to us about how Symbiotics can help to support you with the new EASA psychological assessment regulations then please get in touch using the details below.



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