

Radox Testing Services & The Aviation Industry

Gary McCutcheon
RTS General Manager

**Information
Notice**

Civil Aviation Authority

INFORMATION NOTICE

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Alcohol, medication and drugs are the most common medical causes of worldwide fatal commercial air transport aircraft accidents.

Recent evidence from alcohol and drugs testing programmes of aviation safety critical workers in the UK and internationally has demonstrated positive rates at levels that have warranted an increase in testing.

International Civil Aviation Organisation (ICAO)

The ICAO Standards require that States ensure their safety critical personnel are not under the influence of alcohol or drugs. Annex 1 Personnel Licensing to the Convention on International Civil Aviation includes:

1.2.7.1: licence holders *'shall not exercise the privileges of their licences and related ratings while under the influence of any psychoactive substance* which might render them unable to safely and properly exercise those privileges.'* * The definition of psychoactive substance includes drugs and alcohol but excludes coffee and tobacco.

1.2.7.2: licence holders *'shall not engage in any problematic use of substances'*.

European Union – Air Operations

- **European Union – Air Operations**

Annex IV to Regulation (EC) No. 216/2008 sets out Essential Requirements for Air Operations. Paragraph 7.g. states: *‘A crew member must not perform allocated duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to injury, fatigue, medication, sickness or other similar causes’.*

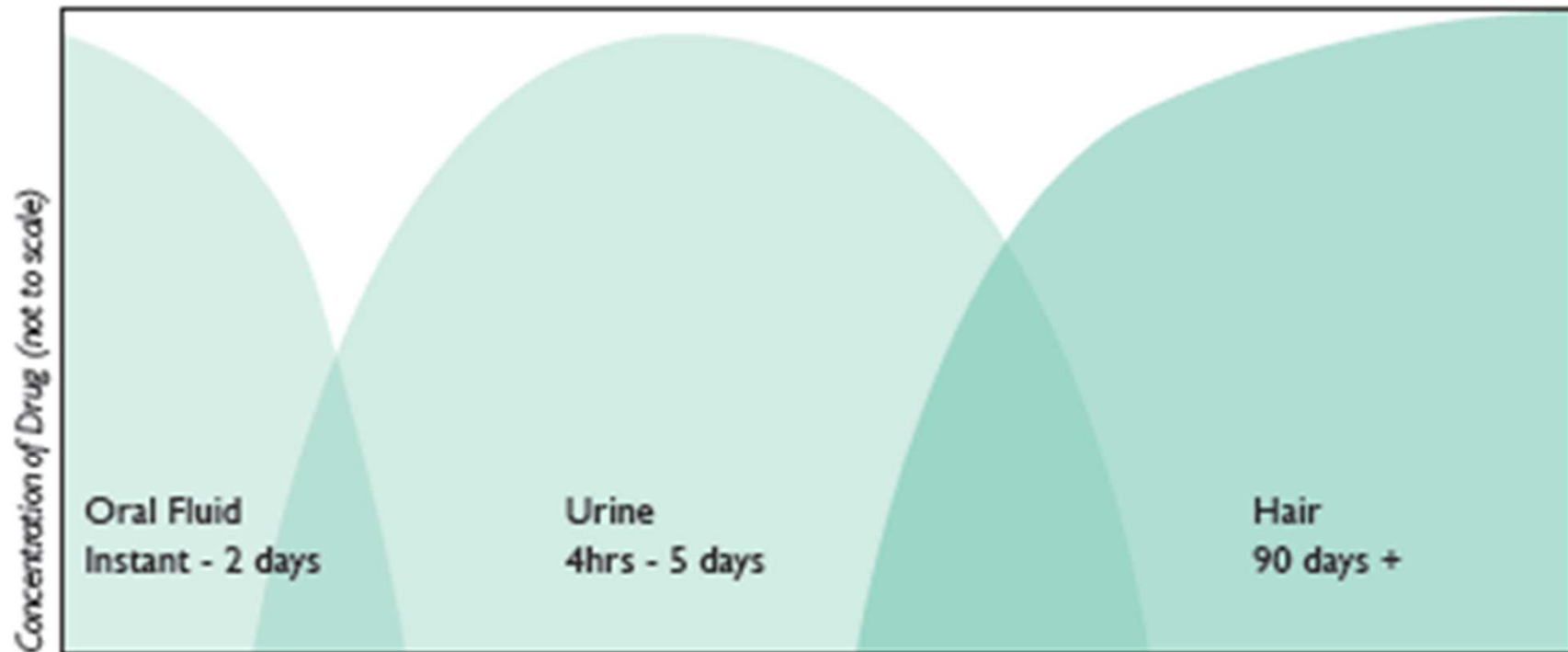
This requirement is reflected at CAT.GEN.MPA.100 (c)(1) of the EASA Air Operations Regulation.

In addition AMC3 ORO.MLR.100 provides that an AOC holder ought to include guidance to crew members concerning health, including material dealing with alcohol and other intoxicating liquids, narcotics and drugs.

UK Legislation

- The Railways and Transport Safety Act 2003 sets out a prescribed alcohol limit for people involved in aviation activities including flight crew, cabin crew and air traffic controllers (ATCOs). The limit is 20mg of alcohol/100ml blood except for licensed aircraft engineers for whom the limit is 80mg/100 (the same as the current drunk driving limit in England and Wales). The Act authorises the police to test flight crew, cabin crew and ground crew after accidents or incidents or with due cause.

Sample Types & Detection Windows



Hair Testing

- Hair testing can provide drug history spanning the most recent year, is difficult to adulterate and can be easily collected. This makes hair an ideal matrix to monitor the workforce and ensures any drug use is detected, unlike temporary abstinence for several days or a week, prior to a urine collection which may result in a negative urine result.

Who to test?

Pilots

Flight crew

Engineers

Mechanics

Ground Staff

All are responsible for the safety of all the passengers and cargo on board a flight.

Test Model 1

- Low cost airline
- Short haul flights
- Destinations – Europe and North Africa
- Collection Officer flies to testing destination
- Landing slot selected by customer
- All crew tested – Cabin Crew and Pilots
- Each site tested at least once a year
- Random and With Cause Testing

Test Model 2

- Luxurious Airline
- Long Haul flights
- Destinations – Global
- Airports on a international scale
- Collections normally at hub locations
- Cockpit and Cabin Crew
- With Cause Testing Only

Obstacles

- Getting Airside
- Carrying Scissors through security
- Carrying Oral Fluid collection device – buffer solution
- With Cause Call Out – International 2 Hours

Second UK pilot arrested over alcohol concerns

Jon Stone 31st October 2014 – Independent



<http://www.independent.co.uk/news/uk/home-news/second-uk-pilot-arrested-over-alcohol-concerns-9830211.html#>

Case Study: Hair – drug detection 1

Scenario

Airline pilot – Routine random drug screen

No prescription medications disclosed

No doctor / dentist visits in previous 3 months

Case Study: Hair – drug detection 1

Scenario

Airline pilot – Routine 3 month drug screen

No prescription medications disclosed

No doctor / dentist visits in previous 3 months

Positive for Bromazepam (benzodiazepine)

Case Study: Hair – drug detection 1

Scenario

Airline pilot – Routine 3 month drug screen

No prescription medications disclosed

No doctor / dentist visits in previous 3 months

Positive for Bromazepam (benzodiazepine)

Initial Explanation.

Given 115 mg of benzodiazepine to control anxiety for dental treatment 2 weeks prior to hair collection.

Case Study: Hair – drug detection 1

Scenario

Airline pilot – Routine random drug screen

No prescription medications disclosed

No doctor / dentist visits in previous 3 months

Positive for Bromazepam (benzodiazepine)

Initial Explanation.

Given 115 mg of benzodiazepine to control anxiety for dental treatment 2 weeks prior to hair collection.

NOTE 1: No disclosed doctor / dentist in previous 3 months.

NOTE 2: Very high single dose (typically 2 – 30 mg).

Case Study: Hair – drug detection 1

Scenario

Airline pilot – Routine random drug screen

No prescription medications disclosed

No doctor / dentist visits in previous 3 months

Positive for Bromazepam (benzodiazepine)

Initial Explanation: **Challenged.**

Case Study: Hair – drug detection 1

Scenario

Airline pilot – Routine random drug screen

No prescription medications disclosed

No doctor / dentist visits in previous 3 months

Positive for Bromazepam (benzodiazepine)

Authenticated Explanation.

Prescribed 3 mg Bromazepam to overcome fatigue due to poor sleeping routine.

Donor claims he was unaware of the contents of the prescribed medication or its consequences.