



GOVERNMENT OF INDIA

DIRECTORATE GENERAL OF CIVIL AVIATION
TECHNICAL CENTRE, OPP SAFDURJUNG AIRPORT, NEW DELHI

CIVIL AVIATION REQUIREMENTS
SECTION 5 – AIR SAFETY
SERIES F PART V
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Subject: Procedure for examination of the aviation personnel for consumption of Psychoactive Substances.

1. Introduction:

- 1.1 The worldwide spread of use of psychoactive substances, their general availability and the ever-increasing number of addicted users is a serious concern to aviation safety. Their use causes behavioural, cognitive and physiological changes. This manifests in dependence, major health related issues and negative effect on performance.
- 1.2 Ministry of Social Justice and Empowerment, Government of India has carried out a study on the extent of the prevalence of this disorder amongst general Indian population and published a report in Feb 2019. The report reveals the following facts:
 - After Alcohol, Cannabis and Opioids are the next commonly used psychoactive substances in India. About 2.8% of the population had used any cannabis product within the previous year. About 0.25% (one in eleven Cannabis users) suffer from Cannabis dependence.
 - About 2.1% of the country's population use opioids which includes Opium and its various variants, Heroin (or its impure form – smack or brown sugar) and a variety of pharmaceutical opioids.
 - Nationally, the most common opioid used is Heroin (1.14%) followed by pharmaceutical opioids (0.96%) and Opium (0.52%). About 0.70% of Indians are estimated to need help for their opioid use problems.
- 1.3 In view of the facts stated above, there remains a possibility of the use of psychoactive substance by those involved with Civil Aviation and therefore there is a need for setting up a preventive mechanism. This Civil Aviation Requirement lays down the procedure for the identification of the aviation personnel indulging in use of the psychoactive substance and deterrent action on such aviation personnel.

- 1.4 Para 1.2.7.1 of ICAO Annex 1 states that “Holders of licences 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 these privileges”.

The Federal Aviation Administration, USA and European Union Aviation Safety Agency (EASA) have also developed and published their policy for detection of consumption of psychoactive substance by personnel engaged in safety sensitive functions.

- 1.5 This CAR is issued under the provisions of Sub Rule (1), (3) & (4) of Rule 24 of the Aircraft Rules, 1937 read with Rule 133A of the Aircraft Rules, 1937.

2. Definitions:

- 2.1 **Appropriate Laboratory:** Appropriate Laboratory: NABL/ NABH approved pathological laboratory having technical capability and skilled manpower for collection of the samples, confirming validity of samples, maintaining its integrity, testing the requisite panel of drugs as prescribed in this CAR, ensuring Chain of Custody within the lab and for further confirmatory testing in the appointed confirmatory lab and preserving the samples.
- 2.2 **Chain of custody (CoC):** refers to the procedure used to document and handle specimen (required for conducting of tests) from the time the aviation personnel donates the specimen to the collector until the specimen is destroyed or stored, hence assuring its integrity and traceability back to the aviation personnel.
- 2.3 **Confirmatory Test:** Confirmatory test utilizes high complexity instrumentation that yields a definite and specific result. Best practice for Confirmatory test involves using either a Gas Chromatography/Mass Spectrometry (GC/MS) or Liquid Chromatography-Mass Spectrometry (LC-MS). The results of a confirmation test provide an absolute and definite result that indicates the specific drug/compound present in the urine sample.
- 2.4 **Drug Use:** It is the use of prescription or non-prescription substance (drug) for recreational or other purposes in a non-therapeutic setting.
- 2.5 **Drug Dependence:** Arises out of maladaptive pattern of substance use, leading to a cluster of behavioural, cognitive and psychological phenomena that develops after repeated use.

- 2.6 **Drug Addiction:** it is a chronic, relapsing disorder characterized by compulsion to take a drug (craving), resulting in physical, psychological and social harm and continued use despite evidence of that harm.
- 2.7 **Drug Habituation:** It is a condition resulting from repeated consumption of a drug, in which there is a psychological or emotional dependency on the drug.
- 2.8 **Sample Collector:** An employee of an appropriate laboratory, who is trained for collection of samples, maintaining its integrity, preservation and chain of custody as per Urine specimen collection procedure guidelines for detection of consumption of psychoactive substances.
- 2.9 **Medical Review Officer:** Is a doctor registered with a Medical Council in India, who has successfully completed a recognized MRO certification course, has knowledge and experience in psychoactive substance abuse disorders and is responsible for reviewing & evaluating laboratory results of psychoactive substance testing program.
- 2.10 **Negative Report:** A 'negative' report is when the sample is 'valid' and the test result does not show presence of detectable quantity of any of the psychoactive substances tested.
- 2.11 **Non-negative report:** A 'non-negative' report is when the sample is 'valid' but shows one or more of the psychoactive substances tested detected.
- 2.12 **Problematic use of substances:** The use of one or more psychoactive substances by aviation personnel in a way that:
- a) constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or
 - b) causes or worsens an occupational, social, mental or physical problem or disorder.

3. Applicability:

Provisions of this Civil Aviation Requirements are applicable to aircraft operators engaged in commercial operations, Maintenance & Repair Organizations, Flying Training Organizations and Air Navigation Service Providers.

4. Safety Regulations:

- 4.1 All scheduled commercial aircraft operators and Air navigation service provider shall carryout, random drug testing for the consumption of psychoactive substance by flight crew members and Air traffic controllers

employed by them respectively at the facilities established by them using the services of an appropriate laboratory. The medical personnel of the concerned Organization shall associate during this process. This programme shall ensure that at least 10% of the employees of an organization, as mentioned in para 4.1 of the Civil Aviation Requirements, are covered in a year.

The Organizations shall use a scientifically valid method such as a random-number table or a computer-based random-number generator to select the employees for testing using the unique identifying number. The Organization must ensure that all employees have an equal chance of being tested each time the selection is made. Specific individuals or groups must not be targeted including certain locations.

- 4.2 All organizations as in para 3 are encouraged to carry out random drug testing of their employees not covered in para 4.1 and trainee pilots in case of FTOs.
- 4.3 In addition, the Organizations as mentioned in para 3, shall ensure that Flight Crew Member, Air Traffic Control Officers, Aircraft Maintenance Engineers/ certifying staff, trainee pilots and Instructors/examiners in their employment are tested for consumption of psychoactive substances on the following occasions:
 - a) Before employing a person
 - b) Before admitting a trainee pilot in a FTO
 - c) Follow-Up testing of confirmed cases.
 - d) At first available opportunity, in case an aviation personnel has refused drug test to a foreign regulator during flight operation to that country/duty in that country.
- 4.4 All the positive cases shall be reported by the organization to DAS, DGCA (HQ) within 24 hours. In addition the information shall also be submitted to DDG/JDG Air Safety and DMS (CA).
- 4.5 Organizations as in para 3, should encourage their employees for self-declaration regarding use of psychoactive substance. Such employees shall be subjected to rehabilitation process by the organization before return to the active duty. Number of such cases shall be reported to DGCA on six months basis.
- 4.6 Organizations as in para 3, shall educate their employees about the prescription drugs that contain substances listed in para 5 of this CAR. The education programme should also include basic information on the physical, emotional, and social causes and consequences of psychoactive

substance use, raise awareness of the factors that encourage psychoactive substance use in general, equip them with skills to identify and resist pressure to use psychoactive substances. It should also offer information on types of treatments and rehabilitation.

- 4.7 Based on information generated by this psychoactive substance testing program, organizations should identify hazards and mitigate the risks within its operation.

5. Drug Testing Requirements:

The presence of the following psychoactive substances shall be tested:

- a) Amphetamine and Amphetamine type stimulants
- b) Opiates and metabolites
- c) Cannabis (Marijuana) as THC
- d) Cocaine
- e) Barbiturates
- f) Benzodiazepine

6. Procedure for Testing of psychoactive substances(Drugs):

- 6.1 Testing will be done on urine samples collected from the randomly selected employees. The urine samples shall be collected at the collection site at the designated secure facility established by the organization in the proforma provided as Appendix 'A' to this CAR.
- 6.2 The collection site must be well lit, clean, free of any areas where adulteration or substitute can be hidden, eliminate or secure all sources of water, detergent, soap dispensers or any potential adulterants in the area. The facility shall be examined by the organization's medical personnel and sample collector, before commencement of the sample collection.
- 6.3 The test shall be carried out post flight/post shift or anytime during the duty period as the case may be. It shall not be carried out, while an employee is on leave or on rest period.
- 6.4 The pre-flight testing requirement will be introduced in due course, all the applicable organization are required to build capacity/ infrastructure for the same.
- 6.5 Prior to collection, the sample collector shall ensure the identity of the employee and the personal particulars form is filled up as in Appendix A.

- 6.6 The sample is to be collected in a sterile container. At least 45 ml of urine sample needs to be collected. This sample shall be split into two labeled specimen containers A and B in front of the employee (donor). Labels of specimen bottles shall be signed by the employee (donor), sample collector and medical personnel of the concerned Organization before the samples are collected.
- 6.7 The employee (donor) shall be provided privacy for sample collection.
- 6.8 Screening and confirmatory test will be done on urine samples. The screening test shall be carried out immediately after the sample is collected at the designated facility of the organization and report shall be generated. Screening test including splitting of urine sample as in para 6.5 shall be video recorded. The readings of the test will be observed and noted in front of the employee.
- 6.9 In case sample A is non-negative, then sample B with signatures of the sample collector, employee (donor) and medical personnel of the concerned Organization shall be forwarded to the appropriate laboratory for Confirmatory Test.

7. Confirmatory Test:

The confirmatory test shall be carried out at the appropriate laboratory. During transportation of the sample, the integrity of the sample shall be ensured at every step including temperature control. The laboratory shall maintain integrity of the samples and also maintain the chain of custody of the samples. In the laboratory sample shall be tested for all the drugs as listed in para 5 and the report from the laboratory shall be sent directly to the Medical In Charge of the concerned organization and Director Air Safety, DGCA (HQ). In case the confirmatory test is found positive, the Medical In Charge of the concerned organization shall consult a Medical Review Officer (MRO) to determine if the result was due to a legitimate therapeutic treatment or some other innocuous source (for example pain relief medication containing codeine may trigger a positive result for opiates).

8. Action on Positive Cases:

- 8.1 In case the screening test is non-negative, the employee shall be immediately removed from the safety sensitive duty till a confirmatory report is received.
- 8.2 In case of positive confirmatory test for the first time, the concerned employee shall be referred by the organization to a Specialist Doctor/ Counsellor/de-addiction center for de-addiction/rehabilitation programme as applicable, in consultation with MRO. Such an employee shall return to

active duties after again having undergone the tests for the consumption of the psychoactive substance with a negative test report. In addition fitness certificate by the Medical In Charge of the concerned organization shall be required.

- 8.3 In case a person who has returned to safety sensitive duties after having been tested positive as in para 8.2 and is again found positive in the confirmatory test i.e. the second occasion, license of such person shall be suspended for period of three years and for third positive occasion, the license shall be cancelled.
- 8.4 In the event, if a person refuses to undergo the examination, such a person shall be removed from the safety sensitive duties until such a person clears drug testing profile as listed in para 5 within a period of 48 hours at the organization facility. Failing which, the license of the involved person shall be suspended for a period of one year and the involved person shall undergo rehabilitation process before return to the active duties.
- 8.5 In case a person refuses for the test on second occasion or is tested positive after first occasion of refusal for testing, the license shall be suspended for a period of three years and any subsequent violation shall lead to the cancellation of license.

9. Preservation of records:

The organization shall preserve test records of psychoactive substances for a period of one year.



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Appendix A

(NAME OF THE ORGANISATION)
PSYCHOACTIVE SUBSTANCE TESTING PERFORMA

Sl. No.

SCREENING TEST

To be filled by Employee undergoing test (in Capital Letters)

NameJob Function:.....

Personnel (License No. /Approval No.)

Emp. No.

Are you on any medication? If yes, please specify.....

Place Date Time.....

Signature of Employee.....

To be filled up by the Sample Collector

1. Urine test Outcome Negative/Non-Negative

(Signature)

(Name)

2. If the Screening Test is Non-Negative:

Ensure sample B is sealed and the label is signed

Signature
Medical Personnel of
Organization
Name and designation
Date/Time

Signature
Name of Sample
Collector
Date/Time

Signature and
Name of Person
undergoing test
Date/Time