

#### GOVERNMENT OF INDIA OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION TECHNICAL CENTRE, OPP SAFDURJUNG AIRPORT, NEW DELHI

CIVIL AVIATION REQUIREMENTS SECTION 5 – AIR SAFETY SERIES F PART IV ISSUE I, \_\_\_ AUGUST 2019

EFFECTIVE: Three months after the final publication

F. No. DGCA.15032(02)/1/2019-DAS

- SUBJECT: Procedure for breath-analyser examination of the personnel engaged in Aircraft maintenance, Air Traffic control services, Aerodrome Operations, Ground handling Services for detecting consumption of Alcohol.
- 1. INTRODUCTION
- 1.1 It is a well-known fact that alcohol is a sedative, hypnotic, and addicting drug. It impairs judgment and leads to behavior that can easily contribute to or cause accidents. Even when the blood alcohol levels are zero in the body, there could be some effect of hangover, which is mainly due to congeners. A hangover effect produced by alcoholic beverages after the acute intoxication has worn off, may be just as dangerous as the intoxication itself. Symptoms commonly associated with a hangover are headache, dizziness, dry mouth, stuffy nose, fatigue, upset stomach, irritability, impaired judgment, and increased sensitivity to bright light.
- 1.2 The majority of adverse effects produced by alcohol relate to the brain, eyes, and inner ear which are three crucial organs of any person associated with safety-related activities.
  - Brain effects include impaired reaction time, reasoning, judgment, and memory. Alcohol decreases the ability of the brain to make use of oxygen.
  - Visual symptoms include eye muscle imbalance, which leads to double vision and difficulty in focusing.
  - Inner ear effects include dizziness and decreased hearing perception.
  - If such other variables are added as sleep deprivation, fatigue, medication use, the negative effects are significantly magnified.

1.3 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".

Federal Aviation Agency, USA and Civil Aviation Authority, UK have developed and published their policy for detection of consumption of psychoactive substance including alcohol by personnel engaged in safety sensitive functions.

- 1.4 This Civil Aviation Requirement lays down the procedure to be followed for the breath-analyzer examination for consumption of alcohol, of the personnel engaged in safety related functions pertaining to airside operations. It also lays down the provision for enforcement action for violation.
- 1.5 This CAR is issued under the provisions of Section 5 (A) of Aircraft Act 1934, Rule 21 A and Rule 24 (3) read with Rule 133A of the Aircraft Rules, 1937.

2. DEFINITIONS							
Breath-analyser	Test conducted on personnel to measure alcohol in						
Examination	his/her exhaled air so as to Determine the concentration						
	of alcohol in the blood.						
Maintenance	The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair or test.						
Maintenance Personnel	Aircraft Maintenance Engineer or any other technically trained person authorized to carry out maintenance of aircraft.						
Psychoactive substances	Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded						
Ground Handling Agency	An entity established for the purpose of providing ground handling service at an airport and security cleared by the Bureau of Civil Aviation Security and duly appointed by the airport operator						
Ground Handling	Vehicle Drivers, equipment operators, aerobridge						
Personnel	operator,						
Aerodrome Operation	Personnel manning Apron control, Personnel involved in						
Personnel	operational duty on air side. Aerodrome Rescue and Fire Personnel(ARFF)						

2. DEFINITIONS

## CIVIL AVIATION REQUIREMENTS SERIES F PART IV

## 3. APPLICABILITY

Provisions of this Civil Aviation Requirements are applicable to the following:

3.1 Organisations engaged in the provision of Air Traffic Control Services, Aerodrome Management, Aircraft Maintenance and Repair, Ground Handling Agency, Aircraft Operation.

- 3.2 Personnel employed in organizations as in para 3.1 whether holding licence/ approval/authorisation or non-licensed personnel i.e.
  - a. Air Traffic Controllers, Flight Despatchers.
  - b. Aircraft Maintenance personnel, Aerodrome operation personnel, Fire and rescue personnel, Vehicle drivers, ground equipment operators and ground handling staff.

# 4. SAFETY REGULATIONS

4.1. The organisations engaged in the provision of Air Navigation Services, Aerodrome Management, Aircraft Maintenance and Repair, shall ensure that at least 10% individuals employed in their respective organisations as engaged in such functions as in para 3, are randomly subjected to breath-analyzer examination on

daily basis. Aerodrome management shall also be responsible for conduct of BA test on the personnel of the ground handling agency and aerodrome operational personnel.

Organisations must use a scientifically valid method such as a random-number table or a computer-based random-number generator to select covered employees for testing. Each covered employee in the pool must have a unique identifier Employee Number, or other comparable identifying number. The employer must ensure that all employees have an equal chance of being tested each time the selections are made. Specific individuals or groups must not be targeted, including certain occupational groups or locations.

- 4.2 As specified in Paras1.4 and 3 of this CAR, no person shall consume any drug/formulation or use any substance mouthwash/tooth gel etc., which may have alcoholic content, prior to reporting for duty, as such alcohol content may lead to positive result in BA test. Any person, who is taking such medication shall consult the company doctor before they undertake the assigned duty.
- 4.3 Save as otherwise provided, officer of Air Safety Directorate/Directorate of Medical Services (Civil Aviation)/Concerned Directorate of DGCA may require random breath-analyzer examination of any personnel as covered in para 3.

## CIVIL AVIATION REQUIREMENTS SERIES F PART IV

## 5. EQUIPMENT USAGE

- 5.1 Organization shall make available at least two serviceable breath-analyzer equipment capable of giving accurate digital value up to three decimal places with a memory to store and recall at least last 1000 records.
- 5.2 The breath-analyser equipment shall be used only in auto mode.
- 5.3 The breath-analyzer equipment shall be attachable to a printer. At least one serviceable printer for the breath-analyzer equipment shall be available at all times.
- 5.4 The breath-analyzer equipment shall be calibrated after 10,000 blows/six months/at a frequency as recommended by the equipment manufacturer from an agency having ISO certification. The date of the last calibration shall be appended on the instrument. Record of such calibrations shall be maintained by the employer. It shall be the responsibility of the employer to ensure continued serviceability of the breath-analyzer equipment and maintain such records.
- 6. PROCEDURE FOR PRE-DUTY BREATH-ANALYZER EXAMINATION
- holding 6.1 Organisation shall have Doctor MBBS degree/trained Technician (EMT)/Personnel holding Paramedics/Emergency Medical BSC (Nursing) to conduct breath-analyser examination at a designated place within the airport premises. Alternatively organisations may pool their resources including personnel used for conducting BA test or avail the breath-analyzer examination services of Govt. /Govt. licensed private hospitals located in the premises of the aerodrome/Medical facilities established by Aerodrome operator. Such facilities shall be subjected to periodic checks by the DGCA.
- 6.2 Before each test, the Doctor/Paramedics/EMT/Personnel holding BSC (Nursing) shall run an 'air blank' on the instrument and obtain a reading of 0.000. The Doctor/Paramedics/EMT/Personnel holding BSC (Nursing) shall also carry out a control test on daily basis and keep a record of printout to ensure serviceability of both the breath-analyzer equipment and the printer. Any BA reading during examination of a personnel above 0.000 shall be considered as positive result.
- 6.3 Breath-analyzer examination record shall be maintained as per the format given in Appendix I and Appendix II.
- 6.4 If the breath-analyzer examination result is positive, a repeat test shall be carried out after an interval of maximum 15-20 minutes. During this time, the subject personnel may be permitted to wash his face and rinse his mouth, if desired. Before the second test is carried out, a control test must be taken with the same equipment to verify the serviceability and correctness of the breath-analyzer. Both the readings so obtained shall be recorded and print out taken. The second test shall be carried out in the presence of a witness as designated by the organisation, who shall countersign the test report.

- 6.5 The make, serial number and calibration status of the breath-analyzer shall be recorded in the event a personnel is detected positive for alcohol consumption. Under no circumstances, third test shall be conducted.
- 6.6 If the second test is satisfactory, the concerned personnel may be cleared for duty.
- 6.7 All the breath-analyzer examination positive /refusal cases shall be promptly reported but not later than 24 hours of occurrence to the concerned Regional Offices of the DGCA and at DGCA (HQ) as per table below:

S. No.	Personnel	Concerned Directorate of DGCA			
1.	Maintenance personnel	Airworthiness Directorate			
2.	Air Traffic Control Officer	AS & ANSS Directorate			
3.	Aerodrome Operation personnel	Aerodrome Directorate			
4.	Ground Handling Personnel	Aerodrome Directorate			
5.	Flight Despatcher	Flight Standards Directorate			

#### 7. ACTION ON POSITIVE TEST

- 7.1 Any personnel who tests breath-analyzer examination positive for the first time/refuses to undergo the breath-analyser examination/refuses to undergo the breath-analyser examination the second time upon being tested positive during the first test/ attempt to evade the pre-flight breath-analyzer examination by leaving the airport premises shall be kept off duty and their license/approval suspended for a period of three months. For non-licenced/non approval holder, administrative action shall be taken by the concerned organisation.
- 7.2 In case of second such violation of the provisions contained in Para 7.1 of this CAR, the license/approval issued by DGCA, of the concerned personnel shall be suspended for a period of one year. In case of non-licenced personnel, they shall be removed from the performance of safety related function.
- 7.3 In case of third such violation of the provisions contained in Para 7.1 of this CAR, the license/approval issued by DGCA of the personnel shall be suspended for a period of three years.
- 7.4 In case of fourth such violation of the provisions contained in Para 7.1 of this CAR, the license/approval issued by DGCA of the personnel shall be cancelled.
- 7.5 For the ground handling personnel and aerodrome operational personnel, who do not hold any licence/approval, the concerned aerodrome operator shall formulate a procedure for temporary removal from the duty and/or permanent removal from the duty of a personnel involved in violation of para 7.1 to 7.4.

## 8. PRESERVATION OF RECORDS

8.1 The Employer shall maintain records of breath-analyser examination for the personnel. All the relevant records must be preserved for a period of one year.

- 9. GENERAL
- 9.1 It shall be the responsibility of organisations to document the process for the Breath Analyser examination in their respective manuals and ensure wide publicity of the procedure.
- 9.2 Each Organisation shall submit monthly data in respect of Para 7 of this CAR to the concerned Directorate as per the table in para 6.7 at DGCA (HQ) latest by 10<sup>th</sup> of every month for the immediate preceding month.

(Arun Kumar) Director General of Civil Aviation

## Appendix I

# (NAME OF THE ORGANISATION) MEDICAL EXAMINATION FOR ALCOHOL

SI. No						
To be Filled by Personnel (in Capital Letters)						
NameJob Function						
Personnel (License No./Approval No. if Applicable)						
Emp. No Place D Time Hrs	)ate					
	Signature					
To be filled up by the Medical Officer						
1. Breath-analyzer Result Negative/Positive (Reading to be indicated in writing)						
2. If found positive%BAC						
3. Result of second test at hrs	%BAC					
Remarks: He/she is not under/under the	e influence of alcohol at present.					
Signature of Witness Name and Designation	Signature/Name of Medical Officer Trained Paramedics/ Emergency Medical Technician/BSC(Nursing)					

Date/Time .....

Date/Time .....

#### CIVIL AVIATION REQUIREMENTS SERIES F PART IV

## SECTION 5 \_\_\_ AUGUST 2019

CIVIL AVIATION REQUIREMENTS SERIES F PART IV

#### SECTION 5 - AIR SAFETY ---AUGUST 2019

Appendix II

#### PRE-FLIGHT MEDICAL EXAMINATION FOR ALCOHOL

Place: ..... Date: .....

Name of the Doctor/Trained Paramedics/Emergency Medical Technician/Personnel holding BSc (Nursing): .....

<u>NOTE</u>: In case a Personnel is tested 'Positive' in screening test, a separate Form is required to be filled up as in "Appendix I" by the Doctor and countersigned by the witness.

No.	Name (in capital Letters) of Personnel undergoing BA Test	Emp. No/Uniqu e I.D.	Job Function	Time of	Signature of personnel undergoing BA Test	BA Reading (in %)	Time	Signature of Medical Officer	Remarks