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GOVERNMENT OF INDIA

OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION

TECHNICAL CENTER, OPP SAFDURJUNG AIRRPORT, NEW DELHI

**CIVIL AVIATION REQRUMENTS
SECTION 7 – FLIGHT CREW STANDARDS
SERIES J PART II**

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File No. DGCA 22024/03/2017-FSD

**SUBJECT: DUTY PERIOD, FLIGHT DUTY PERIOD, FLIGHT TIME LIMITATIONS
AND PRESCRIBED REST PERIODS FOR FLIGHT AND CABIN CREW
ENGAGED IN HELICOPTER OPERATIONS**

1. INTRODUCTION

1.1. The ICAO Annex 6, Part III, requires that the State of the operator shall establish regulations for the purpose of managing fatigue. Accordingly, the State shall establish prescriptive regulations for Flight Time, Flight Duty Period, Duty Period and Rest Period Limitations and, if authorizing the operator to use a Fatigue Risk Management System (FRMS) to manage fatigue, establish FRMS Regulations. This CAR lays down prescriptive fatigue management regulations. The Operator, for the purpose of managing its fatigue related safety risks, is required to establish flight time, flight duty periods, duty period and rest period limitations that are within the prescriptive fatigue management regulations established by this CAR.

1.2. In order to enhance safety of helicopter operations and in exercise of powers conferred under Rule 42A of the Aircraft Rules, 1937, read with Rule 133A of Aircraft Rules, 1937, the following Flight Time, Flight Duty Period, Duty Period and Rest Period Limitations for Flight / Cabin Crew are issued for information, guidance, and compliance by all concerned.

1.3. This CAR supersedes all previous communications, letters and instructions issued by the DGCA regarding Flight crew FDTL.

2. APPLICABILITY

2.1. This CAR is applicable to all operators, flight and cabin crew engaged in helicopter operations.

2.2. No operator / flight and or cabin crew engaged in such operations shall operate beyond 01 Aug 2019 unless the requirements of this CAR are complied with.

3. **DEFINITIONS**

3.1. **Accommodation:** means, for the purpose of split duty, a quiet and comfortable place not open to the public, with the ability to control light and temperature, equipped with adequate furniture that provides a crew member with the possibility to sleep, with enough capacity to accommodate all crew members present at the same time and with access to food and drink.

3.2. **Break:** means a period of time within a flight duty period, shorter than a rest period, counting as duty and during which a crew member is free of all tasks.

3.3. **Cabin Crew.** Cabin crew are crew who perform duties on board the helicopter in the interest of safety of passengers. They shall perform duties as assigned by the operator and pilot in command.

3.4. **Days Off.** Periods available for leisure and relaxation free from all duties. A single day off shall be a period of minimum 36 hours including at least 02 local nights. Consecutive days off shall include a further local night for each additional consecutive day off. A rest period may be included as part of a day off.

3.5. **Duty.** Any task that flight crew members are required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue.

3.6. **Duty Period.** A period which starts when a flight crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties.

3.7. **Fatigue.** A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to adequately perform safety-related operational duties.

3.8. **Flight Crew Member.** A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

3.9. **Flight Duty Period.** A period which commences when a flight crew member is required to report for duty that includes a flight or a series of flights and which finishes when the helicopter finally comes to rest and the engines are shut down at the end of the last flight on which he/she is a crew member.

3.10. **Flight Time (Helicopters).** The total time from the moment a helicopter's rotor

blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped.

- 3.11. **Home base.** The geographical location decided between the operator and the helicopter flight/ cabin crew at the time of the employment and duly notified.
- 3.12. **Local night.** A period of eight hours falling between 2200 and 0800 local time.
- 3.13. **Positioning.** The practice of transferring crew from place to place as passengers in surface or air transport at the behest of the company.

Note: "Positioning" as here defined is synonymous with the term "Deadheading".

- 3.14. **Reporting Time.** The time at which the flight / cabin crew members are required by an operator to report for duty.
- 3.15. **Rest Period.** A continuous, uninterrupted and defined period of time, subsequent to and/or prior to a duty, during which the flight / cabin crew members are free of all duties.
- 3.16. **Roster.** A list provided by an operator of the times when a crew member is required to undertake duties.

Note- "Roster" as here defined is synonymous with "Schedule", "Line of Time", "Pattern" and "Rotation".

- 3.17. **Split Duty Break.** A period free of all duties, which counts as duty, being less than a rest period.
- 3.18. **Standby.** A defined period during which a crew member may be called for duty with minimum notice.
- 3.19. **Suitable Accommodation:** means, for the purpose of standby, split duty and rest, a separate room for each crew member located in a quiet environment and equipped with a bed, which is sufficiently ventilated, has a device for regulating temperature and light intensity, and access to food and drink.
- 3.20. **Unforeseen Operational Circumstance.** An unplanned event, such as unforeseen weather, natural calamity, medical emergency, national requirement for relief and rescue operations, equipment malfunction, runway / heliport closure, passenger distress / disruption, helicopter security etc., that is beyond the control of the operator.

- 3.21. **Window of Circadian Low (WOCL).** WOCL means a period between 0200h and 0600h in the time zone to which a crew member is acclimatized. This

estimate of the window is calculated from scientific data on the circadian low of performance, alertness, subject report (i.e. peak fatigue) and body temperature.

4 OPERATOR'S RESPONSIBILITY

4.1 Every operator shall establish a scheme for complying with the limitations for flight time, flight duty periods, duty periods and rest periods specified in this CAR in respect of flight / cabin crew members.

Note 1: Each operator must take into account the available airport / heliport facilities to ensure that the operating crew gets sufficient time to complete pre-flight activities and have adequate cockpit preparation time. The operator shall define in the FDTL scheme, the optimum time of pre-flight dispatch activities

4.2 The operator shall define eight hours of local night in the FDTL scheme to cater for seasonal schedules and type of operations.

4.3 The FDTL scheme shall be submitted to DGCA for approval. The approved scheme shall form part of the operator's operations manual.

4.4 The operator shall not require a flight / cabin crew member to perform flight / cabin crew duties on a flight if it is known or suspected that the flight / cabin crew member is fatigued to the extent that the safety of flight may be adversely affected.

4.5 No operator may schedule any flight / cabin crew member which shall exceed the prescribed limitation.

4.6 **Scheduling Practices.** Every operator should endeavour to strike a balance between commercial imperatives and crew members' ability to work effectively. FDTL limits given in this document are the 'outer limits' and should be treated as such. Operators should follow the following principles while developing the working schedules.

4.6.1 Provide adequate opportunity for rest and 'night time' sleep to each flight / cabin crew.

4.6.2 Avoid combination of long duty periods with min rest period in planning patterns and plan sufficient rest periods after long flight duty periods.

4.6.3 Avoid alternating day / night or late night / early morning duties.

4.6.4 Distribute the amount of work, especially fatigue inducing duties, equally amongst available flight / cabin crew as applicable.

- 4.7 Operators shall ensure that personnel concerned with operations of aircraft are trained and educated regarding dangers and management of fatigue.
- 4.8 **Fatigue Report Management.** Fatigue reports shall be used as effective tool in identifying and mitigating crew fatigue. Each operator shall establish a clear policy with respect to fatigue reports. The policy should state not only 'how to raise' a report but also 'what to do' in response to a fatigue report. Executive responsibility for addressing fatigue management shall be defined by the operator.
- 4.9 All the fatigue reports and the action taken reports shall be preserved by the operator for a period of minimum 18 months and be made available to the DGCA as and when required.
- 4.10 Fatigue reports should follow a non-punitive and confidentiality policy.
- 4.11 Every operator shall require their flight and cabin crew to define a home base to be recorded in their contract of employment.

5. **FLIGHT AND CABIN CREW MEMBER'S RESPONSIBILITY**

- 5.1. No flight / cabin crew member may accept an assignment, which shall exceed the prescribed limitation.
- 5.2. Flight / Cabin crew members shall make best use of facilities and opportunities that are available or provided for rest and for the consumption of meals, and shall plan and use rest periods to ensure that they are fully rested.
- 5.3. A flight / cabin crew member shall not perform flight / cabin crew duties on a flight if it is known or suspected that the flight / cabin crew member is fatigued to the extent that the safety of flight may be adversely affected.

6. **FLIGHT AND DUTY PERIOD LIMITATIONS**

- 6.1. The following limitations regarding maximum flight duty time and flight time shall be observed:

6.1.1. **Maximum Flight Duty Period.**

- a) In 24 consecutive hours*¹ - 10 hrs.

¹ * *In case of onshore flying once a 12 hour period of rest has been given the maximum allowed flight duty period and flight time in the next duty period will be as annotated in para 6.1.1 a) and 6.1.2 a).*

- b) In any seven consecutive days - 60 hrs.
- c) Duty hours in any 28 consecutive days (Spread as evenly as possible) - 200 hrs

Note 1. The flight duty period shall commence a minimum of 45 minutes before the first planned departure. For record purposes, the pre-flight report time shall count both as duty and as flight duty.

Note-2. Standard allowance, which will count as duty period only, shall be added at the end of flight time to allow for completion of checks, records and post flight duties, including, post flight breath analyser requirements, when applicable. The same shall be specified in the FDTL Scheme of the operator, based on the nature of the operations.

Note 3. The limit given in 6.1.1 a) above may be extended to 12 hrs, but not more than 03 times in any period of 28 consecutive days due unforeseen operational circumstances.

6.1.2. Maximum Flight Time.

- a) In 24 consecutive hours*¹. - 07 hrs.
- b) In any seven consecutive days - 30 hrs.
- c) In any 28 consecutive days - 100 hrs.
- d) In one year (i.e. any consecutive 365 days) - 1000 hrs.

Note 1. Maximum Flight time in one duty period in case of single pilot operations/ aerial work shall not exceed 06 hours.

Note 2. The maximum flight time in a duty period in case of twin pilot operations may be exceeded by 01 hours up to a maximum of 03 times in any period of 28 consecutive days. These limits shall not be exceeded on consecutive days.

Note 3. In case of unforeseen operational circumstance, the Flight Duty Period Limitations may be exceeded. However, the crew shall be provided additional rest of 1 hour for every 30 minutes of Flight Duty Period in excess of 12 hours. All such cases shall be subsequently reported by the operator to the DGCA (Flight Standards Directorate) with necessary justification;

Note 4. In case of offshore pilots doing night halt on rig / offshore platform the duty period next day shall terminate so as not to exceed 24 hours from the start of the previous duty period. This will be followed by a standard rest period onshore.

6.2. Maximum Landings. Flight / Cabin crew flying repetitive short sectors, for example offshore sector shuttles and hill operations at an average rate of 10 or

more landings per hour, shall have a break of at least 30 minutes away from the helicopter within any continuous period of 02 hours. Maximum number of landings in one duty period shall not exceed 50. The record of all landings made by the crew shall be maintained.

7. **DAYS OFF.** The following days off shall be provided to prevent cumulative fatigue:-

7.1. **In Station (Home Base).**

7.1.1. Minimum one day off shall be provided in a period of any 07 consecutive days.

7.1.2. Minimum 03 Days off shall be provided in a period of any 14 consecutive days, in case the duty period is extended beyond 07 days without a break.

7.2. **Out Station (Away From Home Base).**

7.2.1. Where the duty schedule from home base operations as in para 7.1 above is not applicable then "Off Duty" as per details below is to be provided:-

- a) At least 50% of days on outstation duty shall be provided as 'Off Duty' at home base. This provision is applicable only after more than 06 days of continuous outstation duty.
- b) The maximum time on outstation duty shall not exceed 42 days at a stretch.

8. **REST PERIOD**

8.1 The minimum rest, which is to be provided before undertaking a flight duty period, shall be at least as long as the preceding duty period, or 12 hours whichever is greater.

8.2 **Split Duty.**

Consecutive hours of break	Maximum extension of the FDP
Less than 03 H	NIL
Between 03 H and 10 H	A period equal to half the consecutive hours break taken
>10H	No extension permitted.

- a) Post – flight and pre –flight duties shall not be counted as part of rest.

- b) If the break is 03 or more consecutive hours, then operator shall provide suitable accommodation.
- c) Parts of the flight duty period before / after the break shall not exceed 08 hours.

9. MIXED DUTIES

- 9.1. Whenever a flight / cabin crew is required to carry out additional tasks at the behest of operator, before a flight, then the time spent on the task shall be part of the flight duty period.
- 9.2. If flying is carried out in two or more different types of helicopter or operations having different flight / duty timings, the more restrictive flight and duty time limitations shall apply.

10. ADDITIONAL LIMITS ON 'FLIGHT BY NIGHT'

- 10.1. Night flights shall be permitted during period embracing 0000 to 0500 hours for only two consecutive nights provided:-
 - a) The minimum rest period before the start of such a series of duties is 24 hours including a local night.
 - b) At the finish of such a series of duties crew members shall have a minimum of one day off.
- 10.2. When the flight duty period (FDP) starts in the WOCL, the maximum FDP stated in para 6.1.1 (a) shall be reduced by 100 % of its encroachment up to a maximum of two hours. When the FDP ends in or fully encompasses the WOCL, the maximum FDP stated in para 6.1.1 (a) shall be reduced by 50% of its encroachment.
- 10.3. Flight / Cabin crew on offshore night medical evacuation standby shall fly back direct to shore base on completion of duty and not be utilized for production task. They will report back for duty only after a full rest period.

11. POSITIONING

- 11.1. All the time spent on positioning immediately preceding a flight without any intervening rest period on the behest of the operator shall be counted as duty and be a part of the flight duty period. Period of local transportation to and from an airport shall neither be counted towards duty time nor rest period.

12. RECORDS

- 12.1. To enable the operator to ascertain that the fatigue management system is functioning as intended and as approved, backup records shall be kept for 18 months of the duties performed and rest periods provided so as to facilitate inspection by the operator's authorized personnel and surveillance / audit by DGCA officers.
- 12.2. The operator shall ensure that these records include for each flight / cabin crew, at least:-
- a) The start, duration and end of each flight duty period.
 - b) The start, duration and end of each duty period.
 - c) Rest periods.
 - d) Flight time.
 - e) Cumulative flight time / duty period as per Para 6 of this CAR.
- 12.3. The operator shall ensure that flight / cabin crew are well within the flight time, flight duty period and rest period requirements before permitting them to operate the flight. The Operator shall keep a record of occasions when flight time, flight duty period and number of landings are extended / exceeded as per para 6 of this CAR.
- 12.4. Above may be achieved through a transparent, computerized system for which there will be an online system with a link for DGCA to monitor. Further, the system shall have provision of audit trail so that any change made in the data may be tracked down to its source.



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