



FEDERATION OF INDIAN PILOTS

FIP/DGCA/26 - 06

14 Apr 26

The Director General
Directorate General of Civil Aviation (DGCA)
Opposite Safdarjung Airport
New Delhi - 110003

Formal Representation for Urgent Review and Amendment of Flight Duty Time Limitations (FDTL) CAR Section 7 Series J Part II-Helicopter Operations : Systemic Safety Concerns and Regulatory Gaps

Respected Sir,

1. This is with reference to DGCA CAR Section 7 Series J Part II Issue II dated 24 April 2019 regarding Duty Period, Flight Duty Period, Flight Time Limitations and Prescribed Rest Periods for Flight and Cabin Crew engaged in Helicopter Operations.
2. Federation of Indian Pilots (FIP) is a nationwide body of pilots from both fixed-wing and helicopter community which has from time to time, addressed academic, scientific, technical and issues of relating to aviation. This representation is on behalf of the helicopter pilot's community, regarding certain helicopter FDTL related issues which seemed to have escaped audit and regulatory scrutiny. These aspects have direct impact on the crew fatigue with associated grave flight safety implications. The highlighted issues are based on extensive inputs and feedback consolidated from operational pilots across numerous sectors such as those engaged in offshore, onshore, pilgrimage and VIP/election-related flying.
3. The received inputs reveal systemic and premeditated regulatory circumvention in the implementation of current CAR Section 7, Series J, Part II (Helicopter FDTL), which are being routinely exploited by the helicopter operators, resulting in significant fatigue accumulation and a sharp escalation in flight safety risk.
4. The intent of this submission is to bring to your attention critical deficiencies in both the regulatory provisions and their enforcement by the helicopter operators and to recommend specific remedial measures. These are based on operational ground realities and aligned with ICAO Fatigue Risk Management System (FRMS) principles. Some of these critical issues are enumerated in the succeeding paragraphs.



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5. Ambiguity in Mandatory Weekly Requirement at Outstations (Para 7.1 & 7.2)

Issue - The CAR ibid does not explicitly mandate a weekly rest period during Outstation deployment (whilst permitting it In-station/Home base) which allows the operators to deny the mandatory 7th day off during outstation positioning. This results in pilots being routinely on-duty continuously at times, for 10-25 days without rest.

Safety Impact – Violation of fatigue recovery cycles and cumulative fatigue build up.

Recommendation - Explicitly mandate a compulsory weekly off every 7 days, irrespective of location (Home Base or Outstation), without exception.

6. Continuous Duty Periods Exceeding 7 Days

Issue - Pilots are frequently rostered for consecutive duty periods exceeding 7 days including transitions between home base and outstations without a break.

Safety Impact - This undermines fatigue mitigation intent of the CAR and is contrary to ICAO FRMS principles, which identify cumulative fatigue as a critical hazard.

Recommendation - Mandate a clear and unambiguous regulatory cap of 6 consecutive duty days, beyond which a mandatory rest day must be enforced.

7. Misapplication and Merging of Compensatory Off Days (Para 7.2.1 a)

Issue - Operators routinely merge compensatory off which is **50% of Outstation Duty** (mandated for outstation duty exceeding 6 days) with standard rostered leave.

Safety Impact - Effectively nullifies the fatigue recovery intent and just caters for 'paper compliance'.

Recommendation - Compensatory Rest must be granted as **additional** and **distinct** rest and should not be merged with rostered Off period. This Rest must be **pre-declared** in the pilot's roster and is to be **time bound**.



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8. Inadequate Definition & Accounting of Standby Duty

Para 3.18 'Standby - A defined period during which a crew member may be called for duty with minimum notice'

Issue - Unlike fixed-wing regulations, helicopter FDTL does not account for Standby (even when at home) as duty time, despite pilots being operationally constrained to be available at short notice. In actual practice, standby duty is neither clearly defined nor appropriately counted. Standby duty is only accounted for as Duty (**Para 3.5**), which has no daily limits.

Safety Impact – Being on Standby as per definition, means that one can 'be called for duty with minimum notice.' Thus, the crew is not on 'Rest' (**Para 3.15**) but the psychological factor of being on short notice, adds to the cumulative fatigue

Recommendation – Standby duty should be a rostered period and standby time should be counted as duty time, aligned with airline FDTL provisions wherein Airport/Heliport and Home/Hotel Standby are counted as part of Duty but based at different scales.

9. **Absence of Daily Duty Time Limitation**

Issue - While the CAR ibid defines cumulative duty limits as 200 hours in 28 days, there is no explicit daily duty cap, resulting in pilots working for 12-13 hour duty days including ground tasks.

Safety Impact – Extended wakefulness results in impaired cognitive performance even for ground tasks such as ground run of helicopter.

Recommendation - Introduce a daily duty time limit (e.g., 10-12 hours) inclusive of all operational and ancillary tasks.

10. **Misclassification of Ground Runs as Non-Flight Duty**

Issue - Critical non-flight operations such as helicopter ground runs (with engine(s) started up and rotors engaged) are being incorrectly logged as 'duty' time instead of 'flight time', violating CAR definitions. In helicopters, unlike in the fixed-wing aircraft where the Grounds Runs are carried out by engineering staff, the pilot is always required to conduct a Ground Run since a condition peculiar (and dangerous) to the helicopters, known as 'Ground



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Resonance', may develop once the rotors start turning. This necessitates an immediate take-off from the Ground Run spot to break the helicopter-ground contact which is the chief cause of developing ground resonance.

Conflict Issue – This contradicts CAR definition of Flight time as the chief intent of tasking a pilot to conduct the Ground Run in helicopters, is the possibility of requirement of immediate take-off. It is pertinent to mention that pilots tasked for a Ground Run, must mandatorily carry out a pre-flight breath analyser (BA) test (in case the previous BA test is not valid) just as prior to day's first flight.

Recommendation - Enforce strict compliance within the definition of Flight time and all rotor running operations must be logged as Flight Time (FTL) within the overall Flight Duty Period limitation.

11. Non-Recording of Technical Ground Runs in Tech Logs

Issue - There are instances where ground runs are neither recorded in tech logs nor counted towards component life thus posing serious airworthiness and safety risks.

Safety Impact – This a serious regulatory breach and an airworthiness compromise as the helicopter's major critical components, all which have a certain life, are life-degraded without this being recorded anywhere.

Recommendation – A regulatory mandate for strict audit of this aspect and enforcement of technical logbook integrity to be emphasised to the operators.

12. Inadequate Crew Manning Norms

Issue - Many operators function with insufficient/minimum pilot strength (sometimes one pilot per single-pilot helicopter), making FDTL compliance practically impossible.

Operational Consequence – FDTL compliance becomes structurally impossible.

Recommendation – Regulator may strictly mandate a manning scale of pilots-per-helicopter as -

- Minimum **2 pilots** per helicopter (**single-pilot ops**)
- Minimum **3 pilots** per helicopter (**dual-pilot ops**)



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13. No Differentiation Between Single-Pilot and Multi-Pilot Operations

Issue – Unlike the fixed-wing aircraft wherein almost all flights are conducted with two or more pilots, in helicopters, a number of operations are conducted by single-pilot only and other flight operations are conducted by two/multi-crew. However, the current FDTL limits are identical for both categories (except for daily limit of 6-hour FTL for single-pilot versus 7-hour FTL for multi-crew pilots), ignoring significantly higher workload in single-pilot operations.

Safety Impact – Identical limits ignore the workload disparity since the weekly, monthly and annual FTL as well as daily Flight Duty Period (FDP) limits are the same for both the categories of operations.

Recommendation - Introduce stricter and differentiated FDTL limits for single-pilot operations and high-workload environments such as pilgrimage and mountain flying.

14. Environmental and Operational Fatigue Factors Ignored

Issue - Helicopter pilots operate in uniquely demanding conditions such as low altitude obstacle-rich environment, high vibration, high ambient noise, heat stress (many helicopters have non-AC cockpits), offshore humidity and multiple landings & take off within one flight (offshore/ pilgrimage flying).

Safety Impact – All the above aspects of helicopter flying are more stress inducing than a comparable flight of a fixed-wing aircraft. To illustrate an example, unlike fixed-wing aircrafts pilots, the helicopter pilots often need to take off and land on different platforms in one offshore mission. The take-off and landing conditions vary for each operation in terms of the hovering in/out of ground effect (HI/OGE), obstacles in close proximity, the minimum size of the deck, marginal visibility, turbulent winds, etc. Due to those variables, the repeated take-off and landing operations in an offshore flight are significantly more stressful and exhausting for the pilots than on a comparable fixed-wing flight.

Recommendation - Develop helicopter-specific fatigue risk models and incorporate environmental stressors into FDTL calculations. Instead of following the Prescriptive Approach of fatigue management, a far more effective ICAO prescribed FRMS approach to fatigue management in helicopters may be adopted.



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15. Lack of Published Rosters and Unpredictability

Issue - Pilots are often kept on 'informal standby' without published rosters, leading to mental stress and inability to plan any activity including proper rest.

Safety Impact - Stress of being 'on-call' constantly coupled with unpredictability of events, leads to a mental fatigue and a sense of helplessness resulting in a degraded performance if tasked for flying or any other duty.

Recommendation - Mandate publication of monthly roster in advance, with defined duty/rest cycles with justified deviations if any.

16. Regulatory Oversight and Enforcement

Issue - With digital FDTL data being available, there is a need for introducing a regulatory real-time FDTL monitoring system apart from the periodic systematic audits with tough enforcement action against violators.

Recommendation:

- Conduct more rigorous FDTL compliance audits
- Introduce penal provisions for violations
- Ensure centralised DGCA directives with minimum deviations if any.

17. Deficient Safety Culture and Reporting Concerns

Issue - Pilots hesitate to report violations due to fear of retaliation and reprisal especially in a small company set-up, indicating a weak safety culture.

Safety Impact - Despite the repeated emphasis by ICAO and DGCA upon promotion of 'Just Culture' within the aviation industry, the fear of the crew/pilots is deeply embedded, based on ground realities. Thus, reporting of serious or pressing safety occurrences are given a miss by the pilots.

Recommendation: Establish confidential reporting mechanisms and strengthen safety culture through regulatory backing.



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Recommendation: Establish confidential reporting mechanisms and strengthen safety culture through regulatory backing.

18. Conclusion

19. The helicopter sector in India is a demanding high-risk, high-workload segment of aviation requiring a specific regulatory oversight. Yet it remains inadequately structured in terms of fatigue management system which while well-intentioned, suffers from ambiguity, vague and inadequate specificity and weak enforcement by the helicopter operators. The issues highlighted above are not isolated but systemic and if left unaddressed, will continue to erode safety margins and increase the likelihood of fatigue-related incidents.

20. A comprehensive revision of the Helicopter FDTL CAR, coupled with strict and continuous enforcement, is urgently required. In alignment with ICAO Doc 9966, DGCA may consider urgent transition from Prescriptive FDTL to a FRMS-based framework for the helicopter sector for effective mitigation of the above enumerated issues. This will not only align India with global best practices but also uphold DGCA's commitment in ensuring the highest standards of Aviation Safety.

21. We, at FIP, remain available for further technical inputs and participation in consultative forums as and when necessary.

Yours Sincerely

Warm Regards,
Capt CS Randhawa,
President, FIP

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