



CAVEAT

The information in these presentations represents the CAA's interpretation of the legislation. It may be found in the future that EASA has a different interpretation and so the CAA's position may change following discussion and agreement with the Agency and the other National Aviation Authorities.





- Background for the Management of Fatigue risk
- Requirements under ORO.FTL.110
- Demonstrable Actions to meet Requirements

ICAO Regulations



Flight Time, Flight Duty Time and Rest Periods

NOW

Fatigue Management

Safety Management System



- Fatigue is a hazard
- EASA has stated "Safety Management Systems (SMS) should manage all risks, including the risk of Flight and Cabin Crew being fatigued."





The Responsibility for Management of Fatigue Risk

Regulations place responsibilities for avoidance of fatigue on both operators and crew members. The operator is responsible for operating safely, which entails the appropriate management of all safety risks affecting their flights; crew fatigue is one of these risks. Appropriate mitigations for the risk include an approved FTL Scheme with provision for good rostering practice, and other best practice recommendations ... The approved FTL Scheme needs to be properly owned, implemented and monitored by the operator.



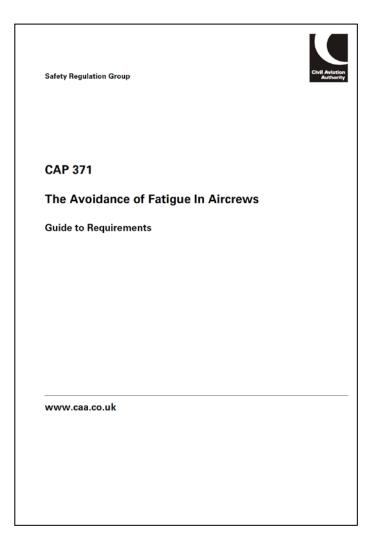


Roster Planning and Staff Training

Operators are strongly urged to consider crew rostering in the early planning of commercial schedules to minimise such problems [associated with creative scheduling] and to ensure that all staff required for rostering and crewing duties receive appropriate initial and recurrent training as recommended in CAP 371. The training should include education on the effects of sleep deprivation and circadian rhythm disturbance.

Guidance for the Management of Fatigue Risk





SAFETY REGULATION GROUP
FLIGHT OPERATIONS
DIVISION COMMUNICATION



10/2009

Applicability: All AOC Holders

FLIGHT TIME LIMITATIONS (FTL) SCHEMES - CURRENT ISSUES AND CONCERNS

- 1 Introduction
- 1.1 The Air Navigation Order (ANO) and EU-OPS both require Air Operator Certificate holders to establish Schemes for the regulation of flight times of crews which must be approved by the CAA. The CAA's guidance material is contained in CAP 371 The Avoidance of Fatigue in Aircrews. Current experience indicates that although operators use the exemplars given in CAP 371 to create their Schemes, they sometimes find it necessary to "interpret" this guidance. This "interpretation" has resulted in situations that were not envisaged when the guidance material was drawn up.
- 1.2 This FODCOM highlights some of the CAA's current concerns over FTL practices, provides clarify over certain aspects of the guidance in CAP 371, and includes details of some additional allowable variations to Schemes (originally published in FODCOM 16/2005).
- 2 General Points
- 2.1 The Status of CAP 371

European legislation provides for a Member State to continue to maintain national provisions regarding flight and duty time limitations, provided that commonly established procedures are compiled with, and until Community rules based on scientific knowledge and best practices are established. CAP 371 contains the UK national provisions.

2.2 The Responsibility for Management of Fatigue Risk

Regulations place responsibilities for avoidance of fatigue on both operators and crew members. The operator is responsible for operating safely, which entails the appropriate management of all safety risks affecting their flights; crew fatigue is one of these risks. Appropriate mitigations for the risk include an approved FTL Scheme with provision for good rostering practice, and other best practice recommendations of CAP 371. The approved FTL Scheme needs to be properly owned, implemented and monitored by the operator. The operator has the responsibility for ensuring that all staff know their duties, how their duties are to be carried out, and what limitations apply; this will involve training as well as written guidance.

2.3 CAA Oversight

The operator's Quality System should ensure compliance with the approved FTL Scheme. Operators can expect audits to confirm that their Quality System makes adequate provision for this monitoring and that it can be shown to be effective in dealing reactively with reported FTL non-compliances and issues. In addition, sample inspections of records to verify the effectiveness of the operator's Scheme and process audits of specific aspects of FTL management may be conducted. For operators with Safety Management Systems (SMS) and/or Fatigue Risk Management Systems (FRMS), appropriate internal audits of fatigue risk management should be carried out. All oversight will have the aim of confirming that the operator continues to comply with requirements and adequately manages their fatigue risk.

2.4 Interpretations

Since a Scheme is owned by the operator and submitted to the CAA for approval, the operator should prior to submission, confirm that the guidance is clear, appropriate to their operation and unambiguous, If a condition within an approved Scheme becomes unclear to crews, rostering teams or the management of a company, 'interpretations' are sometimes used. On occasions these interpretations' respectively.

European Regulation Subpart FTL



- Operator Responsibilities ORO.FTL.110
 - 10 Specific areas that require the operator to demonstrate the fatigue management performance of crew members' rosters
- There are also a number of specific procedures and processes that are required to be part of the OM and will require approval with the prescriptive FTL requirements
- EASA's explanatory material states "The use of FRM is encouraged and FRM might also be a useful tool to demonstrate compliance with the responsibilities established in ORO.FTL.110,"

Operator Responsibilities ORO.FTL.110



An Operator shall:

- ORO.FTL.110 (b) ensure that flight duty periods are planned in a way that enables crew members to remain sufficiently free from fatigue so that they can operate to a satisfactory level of safety under all circumstances;
- ORO.FTL.110 (d) take into account the relationship between the frequency and the pattern of flight duty periods and rest periods and give consideration to the cumulative effects of working long duty hours combined with minimum rest periods;





An Operator shall:

- ORO.FTL.110 (e) allocate duty patterns which avoid practices that cause a serious disruption of an established sleep/work pattern, such as alternating day/night duties;
- ORO.FTL.110 (g) provide rest periods of sufficient time to enable crew members to overcome the effects of the previous duties and to be rested by the start of the following flight duty period;

Additional Requirements



- Plus specific procedures and processes that are required to be part of the Operations Manual (OM):-
 - Procedures specifying how the Commander may reduce an FDP or increase a rest period
 - Non-punitive reporting for Discretion (increase FDP/decrease FDP/decrease rest period/increase rest period)
 - Delayed reporting
 - Nutrition
 - Fatigue Management Training
 - Reserve
 - Standby other than airport standby
 - Rotations crossing time zones
 - Fatigue management training

Managing Night Duties



- Additional requirements for the management of night duties where they exceed 10 hours Flight Duty Period
- CS FTL.1.205 Flight Duty Period (a) (2) states "appropriate fatigue risk management in relation to the surrounding duties and rest periods"
- GM1 CS FTL.1.205(a)(2) provides further detailed guidance of what is required over and above ORO.FTL.110 responsibilities
- Full compliance with ORO.FTL.120 requirements is NOT required
- Demonstration of these additional requirements does NOT provide the operator with FRM privileges

Meeting the Requirements of ORO.FTL.110





Demonstrate understanding of your fatigue risks (Safety Case / SMS Hazard log / Risk Register, etc)



Demonstrate what you do to manage combinations or patterns of work that could be impact on the crew's ability to rest (roster rules / planning rules / etc)



Show an understanding of the differences between bases, fleets and flight / cabin crew



Develop a method of tracking performance





- FRM in accordance with the full provisions of ORO.FTL.120 and AMC 1 and AMC 2 to ORO.FTL.120(b) is required for:-
 - ORO.FTL.205(3) Crew members in an unknown state of acclimatisation under FRM
 - CS FTL.1.235 Rest Periods (c) Reduced Rest

Crew Members Responsibilities ORO.FTL.115



Crew Members shall:

- (a) comply with point CAT.GEN.MPA.100(b) of Annex IV (Part-CAT); and
- (b) make optimum use of the opportunities and facilities for rest provided and plan and use their rest periods properly

Summary – Demonstrable Responsibility



Specific Operator Responsibilities for demonstrating fatigue management through SMS/Management System

Additional processes and procedures must be contained in the OM

FRM – additional requirements and mandated for specific areas