



Quick Reference Guide

– European Flight Time Limitations –

As of 16 July 2008, EU Member States will have to implement new harmonised minimum Flight Time Limitations (FTL)¹ for pilots, as set out in Subpart Q of the "EU-OPS" Regulation 1899/2006.

As these new FTL are minimum standards, national Authorities can choose to keep existing higher standards and to introduce new – but higher – ones. They are also encouraged to refrain from downgrading their existing higher standards to the lower European minimum ("non-regression" principle). Higher standards set within the context of Collective Labour Agreements (CLAs) are not affected by the new FTL rules (unless they provide for protection, in which case they would have to be adapted to the level of Subpart Q).

While setting a welcome pan-European minimum level, the provisions of Subpart Q have never been subject to a scientific and medical evaluation. Hence, they are not based on sound scientific evidence as to their ability to prevent pilot fatigue. The Cologne-based European Agency for Aviation Safety is mandated to carry out such an evaluation by the end of 2008, the results of which could result in future changes to the FTL rules.

Summarising the provisions of Subpart Q, this guide aims at facilitating the understanding of Europe's new FTL rules.

1. Objectives & Scope

The operator, the pilot and the Authority each have well defined responsibilities.

The **operator** must, amongst others:

- produce rosters sufficiently in advance,
- nominate a home base for each crew member,
- appreciate the relationship of how the work is rostered and the rest periods,
- give consideration to the cumulative effects of long duty hours and minimum rest,
- provide rest periods that enable crew to overcome previous duties and be well rested for their next duty.

¹ The purpose of FTL is to ensure that pilot fatigue does not endanger flight safety: "The State of the Operator shall establish regulations specifying the limitations applicable to the flight time and flight duty periods for flight crew members. These regulations shall also make provision for adequate rest periods and shall be such as to ensure that fatigue occurring either in a flight or successive flights or accumulated over a period of time due to these and other tasks, does not endanger the safety of a flight." 1944, Chicago Convention, Annex 6, chapter. 9.6.

The **pilot** must:

- not operate if they know that they are suffering from or likely to suffer from fatigue or feels unfit, to the extent that they would endanger the flight,
- must make optimum use of the opportunities and facilities for rest and plan their rest periods properly.

The **Authority** may:

- grant variations in accordance with applicable laws and procedures and in consultation with the interested parties,
- such variations must achieve an equivalent level of safety and accompanied by suitable mitigation measures where appropriate.

2. Duty / Flight Duty Period

Duty - Any task that a crew member is required to carry out associated with the business of an AOC holder. (However, the extent that standby is to be accounted for as duty is defined by the Authority – see below.)

Flight Duty Period (FDP) - Any time during which a person operates in an aircraft as a member of its crew. It starts when the crew member reports and finishes at the end of the last flight on which they are an operating crew member.²

Maximum Basic Flight Duty Period (without extensions)

- 13 hours for up to 2 sectors.
- Sector reduction for more than a 2 sector FDP is 30 minutes per sector up to a max. total reduction of 2 hours.
- FDP further reduced by the impact of the WOCL³:
 - If the FDP starts between 0200 and 0559 (local time), the flight duty is reduced by the amount of time that falls within this period (max. 2 hours reduction).
 - If the FDP finishes in or fully encompasses 0200 and 0559 (local time), the flight duty is reduced by 50% of the time that falls into this period.

Extensions

- An FDP may be extended by 1 hour by the operator, a maximum of 2 times in any 7 consecutive days.
- The FDP with extension is limited to 6 sectors.
 - This is further reduced to 4 sectors if the FDP encroaches the WOCL by up to 2 hours, or
 - further reduced to 2 sectors if the FDP encroaches WOCL by more than 2 hours.
- If the FDP starts between 2200 and 0459, the maximum FDP with extensions is 11 hours 45 minutes.
- If extensions are used, the rest period is increased by either:
 - 2 hours extra rest hours before and after the extended FDP, or by
 - 4 hours after the extended FDP.

² An “operating crew” is a crew member who carries out their duties in an aircraft during a flight or during any part of a flight.

³ WOCL (Window of Circadian Low) is the period in which the human body clock is “programmed” for sleep and psycho/physical performance levels are at their lowest.

3. Rest

A rest period is an uninterrupted and defined period of time during which a crew member is free from all duties and airport standby⁴.

- At home base, daily rest is as long as the preceding duty period or 12 hours, whichever is the greater.
- Away from home base, daily rest is at least as long as the preceding duty period or 10 hours, whichever is the greater.
- Weekly rest:
 - 36 hours which must include 2 local nights⁵, such that there shall never be more than 168 hours between the end of one weekly rest and the start of another, (earliest report after a weekly rest is 0600).
 - However, 168 is the total number of hours in 7 days, so by wording it this way it allows for the possibility of working on 8 consecutive days.
 - There is the option if the weekly rest period has a duration of at least 40 hours, then the second local night may start at 2000 (this results in possible earliest report time of 0400).
- Daily rest may be reduced by the Authority if the operator demonstrates that its request produces an equivalent level of safety.

4. Cumulative Limits for Duty Hours & Block Hours

Block Time – The time between an aeroplane first moving from its parking place for the purpose of taking off until it comes to rest on the designated parking position and all engines or propellers are stopped.

Cumulative duty hours:

- 190 duty hours in any 28 days
- 60 duty hours in any 7 consecutive days

Cumulative block hours:

- 100 in any 28 consecutive days
- 900 in a calendar year⁶

5. Positioning

Positioning is the transferring of a non-operating crew member from place to place, at the behest of the operator, excluding travelling time⁷. It is taken into account as follows:

- All time spent on positioning is counted as duty,
- Positioning after reporting - but before operating - is FDP but not counted as a sector,
- Positioning immediately after operating is duty and will be taken into account in the calculation of minimum rest.

⁴ For standby (at and away from airport) see section 8 below.

⁵ Local night is at least 8 consecutive hours between 2200 and 0800 local time.

⁶ The European Working Time Directive for Mobile Workers in Civil Aviation also states maximum block hour annual total of 900 hours and a maximum duty hour total of 2000 hours.

⁷ Travelling time is time from home to a designated reporting place (home base is the intent) and vice versa; time for local transfer from place of rest (e.g. hotel) to the commencement of duty & vice versa.

6. Commander's Discretion

In the event of unforeseen circumstances during actual flight operation, the flight duty, duty and rest periods may be modified. It must be acceptable to the Commander after consultation with all other crew members.

- The FDP may be increased by 2 hours. However, if the flight crew has been augmented⁸ the FDP may be increased by 3 hours.
- If on the final sector, after take off, unforeseen circumstances occur which entail that the permitted increase will be exceeded, the flight may continue to the planned destination or alternate.
- In the event of such circumstance, the rest period following the FDP may be reduced when away from home base, but not below 10 hours.
- To ensure flight safety, the Commander shall reduce actual FDP and/or increase the rest time if they believe the circumstances could lead to severe fatigue.
- The Commander shall submit a report for any use of discretion to extend an FDP or reduce rest; where the use of discretion exceeds one hour, a copy of the report will go to the Authority within 28 days.

7. Operational Robustness

Operators shall take action to change a schedule or crewing arrangements where the actual operation exceeds the maximum FDP on more than 33% of the flights in that scheduled seasonal period.

8. Standby

Whether and to what extent standby is taken into account depends on whether it is standby at the airport or somewhere else. In both cases national Authorities have (an important) say, in particular for non-airport standby.

Airport Standby:

- Counts in full for cumulative duty totals.
- Where an airport standby is called to operate without an intervening rest period, the relationship between the airport standby and the assigned flight duty will be defined by the Authority; the airport standby will be added to the duty period for the purpose of calculating minimum rest periods.
- If no immediate flight assignment is given, the airport standby shall be followed by at least a rest period as regulated by the Authority.
- The operator must provide a quiet and comfortable place not open to the public.

Other forms of Standby (incl. at a hotel or at home):

Shall be regulated by the Authority, but must have the following:

- be rostered / notified in advance,
- start and end time will be defined and notified in advance,

⁸ "Augmented" = More than the minimum number required to operate the aeroplane, such that crew member can leave their post and be replaced by another appropriately qualified flight crew member.

- maximum length will be determined,
- the relationship between the standby and any assigned flight duty shall be defined,
- the counting of standby times for cumulative duty hours shall be defined.

9. Nutrition

A meal and drink opportunity must occur when the FDP exceeds 6 hours.

10. Records to be Maintained

The Operator shall ensure crew members records include:

- block times,
- start, duration and end of each duty or flight duty periods,
- rest periods and days free of all duties,
- copies of these records will be made available to the crew member upon request.

If the operator's records do not cover all the crew members' flight duty, duty and rest periods, the crew member will present his/her records on request to any operator who employs them prior to commencing a flight duty period and they will include:-

- block times,
- start, duration and end of each duty or flight duty periods,
- rest periods and days free of all duties.

Records shall be kept for 15 months or longer if required by national laws. Operators shall retain Commander's discretion reports for at least six months after the event.

11. The following areas are not covered by Subpart Q and left to national regulation. Some of these areas are subject to a scientific/ medical review carried out by the European Aviation Safety Agency (EASA).

- No rules for augmented crews
- No rules for split duty
- Incomplete standby rules
- No duty hour limits for 14 consecutive days
- No consecutive days off requirements or minimum monthly days off
- No restrictions on early or night duties.

* * *

Final, 22 Aug. 2007