

REFERENCE	TOPIC	FAQ	ANSWER
<p>Regulation (EU) No 965/2012 as amended by Regulation (EU) No 83/2014</p>	<p>1. Status of the EASA FAQ</p>	<p>What is the legal status of the EASA FAQ? My own understanding of this document is that it has no legal standing at all, insofar as it is neither an Implementing Rule (IR), Acceptable Means of Compliance (AMC), Alternative Means of Compliance (AltMoc) nor even Guidance Material (GM).</p>	<p>EASA is not the competent authority to interpret EU Law. The responsibility to interpret EU Law rests with the judicial system, and ultimately with the European Court of Justice. Therefore, any information included in these FAQs shall be considered as EASA's understanding on a specific matter, and cannot be considered in any way as legally binding.</p> <p>The answers provided represent EASA's technical opinion and also indicate the manner how EASA is evaluating, as part of its standardisation continuous monitoring activities, the application by national competent authorities of the respective regulatory provisions.</p> <p>In the margins of its future rulemaking activities, EASA will consider the opportunity to include some of these FAQ in Subpart FTL as GM.</p>
	<p>2. Applicability of FTL requirements of Regulation (EU) No 965/2012</p>	<p>Why should we comply with the FTL requirements of Regulation (EU) No 965/2012, since we have a policy in our company that says otherwise?</p>	<p>Regulation (EU) No 965/2012, including Subpart FTL, is mandatory in all Member States (MS).</p> <p>This means that an operator cannot maintain a 'policy' it has had before the date of application of Subpart FTL of Regulation (EU) No 965/2012, unless the policy has been found compliant with that Regulation.</p> <p>The competent authority of the operator is responsible for checking for compliance and for taking enforcement measure when a non-compliance is found.</p>

	<p>3. Applicability of Regulation (EU) No 965/2012</p>	<p>What is the meaning of "<i>applicable national flight time limitation legislation</i>" in Article 8 (4) of Regulation 965/2012?</p>	<p>Article 8(4) of Regulation (EU) No 965/2012 stipulates that specialised operators continue to comply with <i>applicable national flight time limitation legislation</i> until EU implementing rules are adopted and apply. '<i>Applicable national flight time limitation legislation</i>' is understood to mean the national law of the Member State in which the operator has its principal place of business, or, where the operator has no principal place of business, the place where the operator is established or resides.</p>
	<p>4. Collective Labour Agreements (CLA) Regulation (EU) No 83/2014</p>	<p>Our company has a Collective Labour Agreement (CLA) and an approved IFTSS. Both contain rules about FPD's, DP's and rostering. Which one is leading?</p>	<p>Recital (4) of Regulation (EU) No 83/2014 stipulates that: 'The provisions of this Regulation do not preclude and should be without prejudice to more protective national social legislation and CLA concerning working conditions and health and safety at work.' This means that more protective measures concerning FDP, DP and rostering, agreed under a CLA, are 'leading'.</p>
<p>ORO.FTL.100 Scope</p>	<p>5. Applicability of Subpart FTL (see also ORO.AOC.125)</p>	<p>Does Subpart FTL apply in relation to non-revenue flights (ferry flights)?</p>	<p>Any flight conducted by an AOC holder falls under Subpart FTL with the exception of:</p> <ul style="list-style-type: none"> – some non-revenue flights such as: non-commercial, test, training, delivery, ferry and demonstration flights; – air taxi, single pilot and emergency medical services operations by aeroplane; and – CAT operations by helicopter, including HEMS. <p>However, aircraft positioning conducted by an AOC holder, immediately before or after a CAT sector counts as FDP and sector.</p>
<p>ORO.FTL.105 Definitions</p>	<p>6. Acclimatisation ORO.FTL.105(1)</p>	<p>How should we determine the state of crew member acclimatisation in complex rotations?</p>	<p><u>Acclimatised crew members</u> A crew member is considered to be acclimatised to the time zone of the reference time for the first 48 hours.</p>

			<p>In the following example there are 4 departure places: A, B, C and D and the crew member is in a known state of acclimatisation all the time.</p> <ul style="list-style-type: none">• between A and B there is a 2-hour time difference• between A and C – a 4 hour-time difference• between A and D – a 6-hour time difference <p>Day 1: The crew member starts acclimatised at A and finishes at B. The reference time is the local time at A, because the crew member is acclimatised at A and reports at A. The time difference between A and B is 2 hours. That means that after resting at B, the crew will be considered acclimatised at B.</p> <p>Day 2: The crew member reports at B acclimatised to the local time at B for an FDP to C. At C the crew member has a rest period and becomes acclimatised to C. He/she has now covered 4-hour time difference, but in 2 days.</p> <p>Day 3: The crew member reports at C acclimatised to the local time at C for an FDP to D. At D the crew member has a rest period and becomes acclimatised to D. He/she has now covered 6-hour time difference.</p> <p>Day 4: The crew member reports again considered to be acclimatised at D. The local time at D is the reference time. The FDP between D and A covers 6-hour time difference. Crossing 6-hour time difference in one day (one FDP) induces time zone de-synchronisation. If the rotation finishes at A, the rest requirements in CS FTL.1.235 (b)(3)(i) are applicable.</p> <p><u>Unknown state of acclimatisation</u></p>
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	<p>7. Reporting point ORO.FTL.105 (2)</p>	<p>The global COVID-19 pandemic necessitated, on a number of occasions, a change to the typical aircrew reporting point. How should the operators address this change?</p>	<p>Aircrew typically used to report for duty at a crew room, at their home base or at outstation. The global COVID-19 pandemic caused disruptions in flight operations and necessitated, on a number of occasions, a change to the typical aircrew reporting point. Here below are some considerations that operators and aircrew should account for when addressing such change.</p>

			<p>Notification to crew members. The operator must inform the crew about any change of the reporting point prior to operating as this is part of operator’s responsibilities under ORO.FTL.110.</p> <p>Travelling time to the reporting point. Due to the change of reporting point, the otherwise duty time may turn into travelling time, thus extending the usual travelling time that a crew member is accustomed or prepared for. Therefore, the operator should make sure that the impact of the change of reporting point on traveling time and consequently on crew fatigue is not significant. The operator’ SMS has to manage the change of reporting point by assessing the potential negative impact on aircrew fatigue levels, based on evidence of adequate time frames and/or a comparison between the time necessary to report to the new point and the typical reporting point. In assessing the impact, the operator should account for additional operational factors e.g. standby call out times. The operator should address reporting at a place other than a crew room in the OM.</p> <p>Commencement of duty. Duty starts from reporting for duty at the reporting point designated by the operator e.g. when the crew member checks-in in a crew room. In cases where the crew member is required by the operator to commence an activity prior to entering a crew room or a non-public area of an airport, so as to obtain flight documents at a check-in counter or ticket office, pass a security checkpoint or update the EFB, the duty starts at the point of commencing this activity. At airports where the crew members can access the non-public area or reach the departing gate through more than one security checkpoints, the operator should make sure that commencement time is the same for the same duty.</p> <p>Aircrew briefing. The time for aircrew briefing is a duty time no matter where it takes place. If the briefing takes place at the gate where other people are also present, the operator should arrange for</p>
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	<p>8. Accommodation ORO.FTL.105 (3)</p>	<p>Can the airport crew lounge be considered as “accommodation” for the purpose of standby or split duty? Can a hotel room for several crew members of the same gender be considered as “accommodation” for the purpose of standby and split duty?</p>	<p>As long as an airport crew lounge or a shared hotel room fulfils all criteria of ORO.FTL.105 (3) it could be used as accommodation.</p>
	<p>9. Disruptive schedule ORO.FTL.105(8)</p>	<p>Which criteria should be applied to determine a duty as disruptive if there is a time zone difference between the reporting point and the place where the duty finishes?</p>	<p>The criteria to be applied is the reference time e.g. the local time (LT) where the crew member reported for duty.</p> <p>Example with “Late type” of Disruptive schedule: LT in A = LT in B + 1 hour.</p> <p>Day 1: The crew member starts the FDP acclimatised to A. He/she reports at 15:00 (LT-A) and finishes FDP in B at 23:30 (LT-B). It is a</p>

			<p>'Late finish' because he/she is acclimatised to A, and FDP finishes at 00:30 (LT-A). Rest in B. After resting in B, which is within two hours' time difference from A, the crew member gets acclimatised to B.</p> <p>Day 2: The crew member reports in B at 15:00 (LT-B) and finishes FDP in A at 00:30 (LT-A). It is not a late finish, because he/she is acclimatised to B, and the FDP finishes at 23:30 (LT-B).</p>
	<p>10. Definition of duty and duty period ORO.FTL.105 (10) ORO FTL 105 (11)</p>	<p>Must the time for self-preparation (e.g. preparing for the checks associated with initial or recurrent training) be entered in the schedule of the crew members and recorded?</p>	<p>The time needed for self-preparation, is not a duty and is not recorded.</p>
	<p>11. Single day free of duty ORO FTL 105 (23)</p>	<p>A 'single day free of duty' consists of one day and two local nights. Does the last day of several consecutive days free of duty need to contain at least one day and two nights?</p>	<p>Whenever one of the local days prescribed by Clause 9, Directive No 2000/79/EC, is assigned as a single day, it must contain two local nights. Whenever consecutive local days are assigned, the last day may not contain a local night. However, from a fatigue management perspective, planning the last day to end at midnight, reduces the restorative effect of that last day to a minimum. Rising before midnight to report at 00:01 on the last day could generate sleep debt.</p> <p>The term 'single day free of duty' has been included in Regulation No 965/2012 in order to enable the implementation of Directive No 2000/79/EC, in particular its Clause 9:</p> <p><i>'Clause 9 Without prejudice to Clause 3, mobile staff in civil aviation shall be given days free of all duty and standby, which are notified in advance, as follows: (a) at least seven local days in each calendar month, which may include any rest periods required by law; and</i></p>

			<p><i>(b) at least 96 local days in each calendar year, which may include any rest periods required by law.'</i></p> <p>Clause 9 above employs the term 'local day' i.e. a period of 24 hours finishing at 00:00 LT. At the same time, a 'single day free of duty' is a period of one day, including two local nights, that may finish between 06:00 and 08:00 LT, depending on the local night start and end times.</p>
	<p>12. Sector ORO.FTL.105 (24)</p> <p>(see also ORO.FTL.205 (f)(6))</p>	<p>In an abnormal or emergency situation a take-off might not be executed meaning that a sector was not completed. Such situation is likely to increase flight crew workload and fatigue. How could this be mitigated?</p>	<p>In such cases, in order to mitigate the increased workload and fatigue, the commander has the possibility to exercise commander's discretion and decide on reducing the maximum daily FDP or increasing the minimum rest period.</p> <p>ORO.FTL.205 (f)(6) requires operators to implement a non-punitive process for the use of commander's discretion.</p> <p>Also, if as a result of such situation a flight crew member feels unfit due to fatigue, he/she may discontinue his duties on the aircraft for the day.</p> <p>Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation, requires the ability for crew members to report fatigue.</p>
<p>ORO.FTL.110 Operator responsibilities</p>	<p>13. Changes to a published roster</p>	<p>Is it possible to make changes to a published roster?</p>	<p>Yes, provided that the changes do not breach the limitations of the operator's Individual Flight Time Specification Scheme (IFTSS).</p> <p>All changes must be notified to the crew member before the pre-flight rest period commences so that the crew member is able to plan adequate rest as required by ORO.FTL.110 (a).</p>

			<p>In support of this requirement the minimum period of time for notification of changes should be established by the operator and available in the Operations manual.</p>
	<p>14. Change of FDP after reporting</p>	<p>Can a rostered FDP be changed (re-planned) after crew members have reported?</p>	<p>There are no specific provisions and conditions for such changes except in unforeseen circumstances, where, on the day, a Commander may use the provisions of Commander’s Discretion:</p> <ul style="list-style-type: none"> – to continue with an FDP which exceeds the maximum FDP that the crew will operate or reduces the minimum rest period, or – to reduce the actual FDP and/or increase the rest period, in case of unforeseen circumstances which could lead to severe fatigue. <p>The operator may not plan or change an FDP at any time such that it exceeds the maximum applicable FDP.</p> <p>FTL rules build upon the predictability of rosters so that crews can plan and achieve adequate rest (ORO.FTL.110 (a) and (g)). Operators are expected to plan sufficient capacity, at their operating bases, to deal with disruptions normally expected in daily operations using the specific FTL provisions (e.g. stand-by, reserve). Therefore, FDP changes after reporting should be an infrequent event as such changes can create roster instability and may generate fatigue. An aircrew member remains at all times under the responsibilities set out in CAT.GEN.MPA.100 (c)(5) to report unfit to fly, if s/he suspects fatigue which may endanger flight safety.</p> <p>If changes to planned duties are to be made on the day of operation, all applicable limits apply: in particular the limits established pursuant to ORO.FTL. 205(b), (d), (e) or ORO.FTL.220. If a duty has not been planned with an operator’s extension under ORO.FTL.</p>

			<p>205(d), it cannot be changed into a duty with such extension on the day of operation.</p> <p>In addition, the operator must ensure that the impact on forward duties and days off, and importantly on cumulative limits, is accounted for.</p> <p>EASA recommends that changes made on the day of operation to duties and FDP's are monitored through appropriate performance indicators that operators use to demonstrate they fulfil all the required elements within ORO.FTL.110. The 33% exceedance threshold on the max FDP as set out in ORO.FTL.110 (j) may not always be adequate to capture negative trends.</p> <p>EASA also recommends that appropriate performance indicators for FDP changes after reporting be part of the operator's approved IFTSS to ensure that any resulting fatigue hazards are properly identified and mitigated.</p>
	<p>15. Roster publication (see also AMC1 ORO.FTL.110(a) and ORO.GEN.120)</p>	<p>Are airline operators allowed to publish monthly rosters in less than 14 days in advance?</p>	<p>According to AMC1 ORO.FTL.110 (a), rosters should be published 14 days in advance.</p> <p>This requirement is an acceptable means of compliance (AMC). The AMC is one example of how operators could demonstrate compliance with this rule. In accordance with ORO.GEN.120, an operator may use an alternative means of compliance.</p> <p>It is therefore possible to use an alternative means of compliance (AltMoc) for the publication of rosters, provided the operator has demonstrated that the requirements of ORO.FTL.110 (a) are met.</p>

			<p>An alternative means of compliance requires prior approval from the competent authority.</p> <p>The competent authority must notify all approved alternative means of compliance to EASA.</p>
	<p>16. Reporting times ORO.FTL.110(c)</p> <p>(see also ORO.FTL.205(c))</p>	<p>Can the pre-flight reporting time for non-augmented flight crew members reporting for the same FDP be different?</p>	<p>No. The pre-flight reporting time for all non-augmented flight crew members reporting for the same FDP is the same.</p> <p>The minimum reporting times, which have been defined by the operator in the Operations manual for different types of aircraft, operations and airport conditions, shall always apply to all flight crew.</p> <p>Reporting time for the same FDP may be different between flight crew and cabin crew in accordance with ORO.FTL.205(c).</p>
	<p>17. Operational robustness ORO.FTL.110(j)</p>	<p>How should operational robustness be assessed?</p>	<p>The operator is required to have measures in place to protect the integrity of schedules and of individual duty patterns.</p> <p>The operator must monitor for exceedances to the maximum flight duty periods and if the maximum flight duty periods in a schedule are being exceeded more than 33% during a scheduled seasonal period, change a schedule and/or crew arrangements.</p> <p>Operational robustness should be measured through performance indicators to determine if the planning is realistic and the rosters are stable.</p> <p>The operator may measure the cases where a rostered crew pairing for a duty period is achieved within the planned duration of that duty period.</p>

			<p>Performance indicators may also be established to measure the following:</p> <ul style="list-style-type: none"> • difference between planned and actual flight hours; • difference between planned and actual duty hours; • difference between planned and actual number of days off; • number of unscheduled overnights; • number of roster changes per scheduled seasonal period; • use of commander’s discretion; • changes of schedule carried out after published roster <p>With regard to operator’s responsibilities, in particular operational robustness of rosters, we also recommend guidance material to ORO.FTL.110 developed by UK CAA.</p>
<p>ORO.FTL.115 Crew member responsibilities</p>	<p>18. Flying activities outside an AOC (see also ORO.FC.100)</p>	<p>How will activities as an instructor or an examiner performed by an operating crew member in their free time be considered for the purpose of duty time and rest periods?</p>	<p>The purpose of Subpart-FTL is to ensure that crew members in commercial air transport operations are able to operate with an adequate level of alertness. It does not regulate the activities performed by crew members in their free time. Nonetheless, it is the responsibility of crew members to make optimal use of the rest periods and to be properly rested so they will not perform duties when unfit due to fatigue.</p> <p>A crew member in commercial air transport operations may be required to report to the operator his/her professional flying activities outside the commercial air transport operation to allow the operator to discharge its responsibilities (ORO.FTL.110) appropriately.</p> <p>An operator should establish its policy with regard to crew members conducting these kinds of activities.</p>
<p>ORO.FTL.125</p>	<p>19. Deviation from the applicable CS</p>	<p>What does a deviation from the applicable CS mean or derogation from an implementing rule?</p>	<p>The flight time specification schemes of an individual operator (IFTSS) may differ from the applicable CS / IRs under strict conditions.</p>

<p>Flight time specification schemes</p>	<p>ORO.FTL.125 (c) (see also ARO.OPS.235)</p>		<p>The operator has a number of steps to follow before implementing a deviation/derogation.</p> <p>Additionally, the competent authority has a number of steps to follow before approving a deviating/derogating IFTSS.</p> <p>All the steps are described in this Evaluation Form (link) developed by EASA to facilitate NAAs and operators in this process.</p>
	<p>20. Flight time specification scheme for air taxi operations (see also Articles 2 (6) and 8(2) of Regulation (EU) no 965/2012)</p>	<p>An air taxi operator has both an aeroplane with less than 19 seats and one aeroplane with more than 20 seats. What FTL regulation shall the crew who is flying both types follow?</p>	<p>The operator implements Subpart ORO.FTL for its operations with aeroplanes of 20 seats or more.</p> <p>For air taxi operations with aeroplanes of 19 seats or less, the operator complies with EU OPS, Subpart Q.</p> <p>However, the aim of the requirements is to ensure that crew members are able to operate at a satisfactory level of alertness. Fatigue accrued during an operation in one fleet might impact on the performance of a crew member when conducting a following flight in the other fleet.</p> <p>Therefore, from a fatigue management perspective, it makes sense to apply a common FTL scheme under Subpart ORO.FTL consistently to pilots in such operations.</p>
	<p>21. Approval of Individual Flight Time Specification Schemes (IFTSS) (see also ARO.OPS.235)</p>	<p>May a competent authority give ONE approval for an individual flight specification scheme to be used by three different operators with three AOCs?</p>	<p>No. Each operator needs its own approved individual flight time specification scheme.</p>

<p>ORO.FTL.205 Flight duty period (FDP)</p>	<p>22. Unknown state of acclimatisation GM1 ORO.FTL.205(b)(1)</p>	<p>If the crew member is in an unknown state of acclimatisation, what is the reference time?</p>	<p>In that case, there is no reference time. For crew members in an unknown state of acclimatisation Table 3 in ORO.FTL.205 (b)(2) or Table 4 <i>ibidem</i> applies. These Tables do not contain any reference time.</p>
	<p>23. Unknown state of acclimatisation ORO.FTL.205(b)(3)</p>	<p>What are the daily FDP limits when crew members are in an unknown state of acclimatisation under fatigue risk management (FRM)?</p>	<p>Table 4 in ORO.FTL.205 (b)(3) establishes the limits of the maximum daily FDP when crew members are in unknown state of acclimatisation and the operator has implemented FRM.</p> <p>The maximum FDPs applied in an unknown state of acclimatisation (up to the values in table 4) must be supported by safety data for each route and pairing The operator must establish a safety case criteria and develop SPI's to monitor them.</p>
	<p>24. Mixing FDPs extended without in-flight rest and FDP's extended due to in-flight rest ORO.FTL.205 (d) ORO.FTL.205 (e)</p>	<p>Is it possible to roster two extended FDPs without in-flight rest and one extended FDP with in-flight rest in 7 consecutive days?</p>	<p>Yes. The limit of two extensions of up to 1 hour in 7 consecutive days specified in ORO.FTL.205 (d) (1) only applies to the use of extensions without in-flight rest by an individual crew member.</p>
	<p>25. Planned FDP extensions ORO.FTL.205(d)</p>	<p>Must planned extensions be included in the operator's roster?</p>	<p>Published duty rosters may or may not include extended FDPs.</p> <p>However, FDPs extended in accordance with ORO.FTL.205 (d) must be planned and notified to crew members in advance i.e. allowing each crew member to plan adequate rest.</p> <p>The time limit for notification of a planned extended FDP to an individual crew member need to be established by the operator in line with ORO.FTL.110 and specified in the OM-A.</p>

	<p>26. Planned FDP extensions ORO.FTL.205(d)</p> <p>(see also ORO.FTL.105(1))</p>	<p>Can a crew member acclimatised to the local time of the departure time zone ('B' state), but not acclimatised to the local time where he/she starts the next duty ('D' state), be assigned a planned extended flight</p>	<p>While it may be legal to roster an extended FDP (no in-flight rest) to a crew member who is not acclimatised to the local time where the actual duty starts, the actual operational environment may be such that it would be very fatiguing for a particular crew member to perform that FDP.</p> <p>Although operations on an extended FDP are possible under ORO FTL.1.205(d), the operator still needs to comply with the fatigue management obligations stemming from ORO.FTL.110 and especially to ensure that the crew members are sufficiently rested to operate.</p>
	<p>27. Commander's discretion ORO.FTL.205(f)</p>	<p>Do we need to use Commander's discretion if actual FDP is going to last more than planned but less than the maximum daily FDP allowed?</p>	<p>No. If the actual FDP is less than the maximum allowed, commander's discretion is not needed.</p>
	<p>28. Commander's discretion ORO.FTL.205(f)</p>	<p>When should commander's discretion be used?</p>	<p>Commander's discretion may be used to modify the limits on the maximum daily FDP (basic or with extension due to in-flight rest), duty and rest periods in the case of unforeseen circumstances in flight operations beyond the operator's control, which start at or after the reporting time.</p> <p>Considering the ICAO definition of 'unexpected conditions', unforeseen circumstances in flight operations for the purpose of ORO.FTL.205(f) are events that could not reasonably have been predicted and accommodated, such as adverse weather, equipment malfunction or air traffic delay, which may result in necessary on-the-day operational adjustments.</p> <p>Commanders cannot be expected to exercise discretion without an understanding of the events that constitute unforeseen circumstances. It is therefore necessary that they receive appropriate training on the use of commander's discretion along with how to recognize the symptoms of fatigue and to evaluate the risks</p>

			<p>associated with their own mental and physical state and that of the whole crew.</p> <p>Operators should ensure that sufficient margins are included in schedule design so that commanders are not expected to exercise discretion as a matter of routine.</p>
	<p>29. Commander's discretion ORO.FTL.205(f)</p> <p>(see also ORO.FTL.205 (d))</p>	<p>1. What is the maximum FDP extension allowed under commander's discretion?</p> <p>2. How would commander's discretion apply when the FDP of a non-augmented crew has already been extended in accordance with ORO.FTL.205 (d))?</p>	<p>1. Up to 2 hours for two pilot crew and up to 3 hours for augmented crew.</p> <p>2. For a two pilot extended FDP operation, the use of commander's discretion is always based on the maximum daily FDP table ORO.FTL.205 (b) (1).</p> <p>For example, when 1 hour has already been added to the maximum daily FDP in accordance with ORO.FTL.205 (d), then only 1 hour is left for commander's discretion.</p>
	<p>30. Commander's discretion ORO.FTL.205(f)</p>	<p>Referring to commander's discretion, do I need to consider the reporting time and number of sectors?</p>	<p>Yes. The commander needs to consider the actual number of sectors that the crew members will complete as this may be different from the plan. This FDP calculation would be based on the time the crew member actually reported.</p>
<p>ORO.FTL.210 Flight time and duty periods</p>	<p>31. Conversion/line checks Post flight duty ORO.FTL.210</p>	<p>How should briefings and debriefings during conversion/line checks be accounted for?</p>	<p>In accordance with the definition of duty, conversion/line training is duty.</p> <p>Any duty (including the briefing and debriefing for training purposes) after reporting for a duty that includes a sector or a series of sectors until the aircraft finally comes to rest and the engines are shut down, at the end of the last sector on which the crew member acts as an operating crew member, is considered flight duty period.</p> <p>Post flight duties, on the other hand (including debriefings also for training purposes), are considered as duty period.</p>

	<p>32. Post-flight duty AMC1 ORO.FTL.210(c)</p>	<p>What should the operator do if the actual post flight duty time is longer than the established time in the OM?</p>	<p>The operator needs to implement a monitoring system to ensure that the minimum time period for post-flight duties is adequate since rest or shortened rest could potentially impact fatigue.</p> <p>The commander or a cabin crew member should inform the operator where the post-flight duties have taken longer than planned and this is then accounted for in duty and rest periods.</p>
<p>ORO.FTL.215 Positioning</p>	<p>33. Positioning for purposes other than operating ORO.FTL.215 (b)</p>	<p>How should time spent to travel from the place of rest or home base to a simulator (when outside the base) be taken into account?</p>	<p>The time spent to travel from a place of rest or home base to a simulator, at the request of the operator, counts as a duty period.</p> <p>Any transfer of a non-operating crew member from one place to the other at the request of the operator is called positioning and is counted as a duty period.</p> <p>Travel from a crew member’s private place of rest to the reporting point at home base and vice versa, and local transfers from a place of rest to the commencement of duty and vice versa are travelling, but not positioning, and so not counted as duty period.</p>
	<p>34. Positioning ORO.FTL.215</p>	<p>Does positioning begin when the crew member arrives at the airport/train station or when the aeroplane/train leaves?</p>	<p>Positioning begins after reporting at the designated reporting point.</p> <p>The operator should publish reporting times taking into account the time necessary for completing the travelling procedures depending on the mode of transportation (e.g. registration of passengers and baggage, security checks, etc.).</p> <p>First example: Crewmember 1 is required to position from A to B on the commercial flight of an airline other than the airline which Crewmember 1 is flying for. This commercial flight is departing at 10:00, but airport A is an international airport and the time necessary for passenger and baggage registration and security checks is 2h before departure time. In this case, the positioning begins 2h before departure time.</p>

			<p>Second example: Crewmember 2 is required to position from A to B on a high speed train. This train is departing at 10:00 and the time necessary for passenger and baggage registration and security checks is 15 minutes before departure time. In this case, the positioning begins 15min before departure time.</p>
	<p>35. Positioning ORO.FTL.215</p>	<p>Shall a positioning between active sectors count as a sector for a pilot or cabin crew?</p>	<p>No, any positioning within an FDP does not count for the sector calculation of the FDP limit but counts towards the FDP.</p>
<p>ORO.FTL.220 Split duty</p>	<p>36. Split duty ORO.FTL. 220</p>	<p>Is it possible to have more than one split duty within one FDP?</p>	<p>No. ORO.FTL.220 provides for a break on the ground which implies a single break on the ground, for the purpose of extending the basic daily FDP.</p> <p>A Member State can propose an amendment to ORO.FTL.220, in particular, and to the implementing rules, in general, in accordance with Article 71 of Regulation (EU) 2018/1139.</p>
<p>ORO.FTL.225 Standby and duties at the airport</p>	<p>37. Standby ORO.FTL.225(a)</p> <p>(see also CS FTL.1.225 and GM1 CS FTL.1.225(a))</p>	<p>Can a standby be finished before the planned “end time notified in advance”, after a notification during the standby (saying that there will be no assignment) and the rest period be initiated at the time of the notification of the new standby end?</p>	<p>Yes. According to ORO.FTL.225 (a), a time period with a start and end time, during which a crew member must be available to be contacted to receive an assignment, must be defined.</p> <p>A crew member may, during the standby period, be notified that standby has ceased. CS FTL.1.225 establishes further conditions.</p> <p>GM1 CS FTL.1.225 (a) explains that a minimum rest period according to ORO.FTL.235 should be provided after the notification of the revised end of the standby period.</p>
<p>ORO.FTL.230 Reserve</p>	<p>38. Reserve ORO.FTL.230</p>	<p>Can a reserve, during which no flight was assigned, be considered as a day off afterwards?</p>	<p>No, a reserve period may not retrospectively be considered as part of a recurrent extended recovery rest period.</p>

<p>ORO.FTL.235 Rest periods</p>	<p>39. Rest prior to an FDP ORO.FTL.235 (a)</p>	<p>If a crew member with office duties spends one day in the office, what should be the duration of the rest before his/her reporting for an FDP?</p>	<p>The minimum rest period at home base before undertaking an FDP shall be in accordance with ORO.FTL.235 (a) (1) and (2).</p> <p>Time spent at the office is duty time in accordance with ORO.FTL.105 (10).</p>
	<p>40. Rest prior to a duty other than FDP ORO.FTL.235 (a)</p>	<p>What is the duration of the rest period prior to a duty without FDP?</p>	<p>The term ‘minimum rest period’ under the Regulation (EU) No 965/2012 is only used for the recovery period before an FDP.</p> <p>Otherwise, it is an off-duty period. The Regulation does not contain requirements for off-duty periods prior to a duty without FDP.</p> <p>Example: FDP1 – off duty – DP1 – off duty – DP2 – rest – FDP2.</p> <p>Nevertheless, the operator needs to be able to demonstrate they have considered the fatiguing nature and cumulative effects of these duty periods under their operator responsibilities as they can generate fatigue that could affect crew member’s ability to rest prior to his/her next FDP.</p> <p>Also, the national law of the Member State regarding working time (as required by Council Directive 2000/79/EC) would be applicable and should be reviewed as it may contain minimum rest periods for crew members based in that Member State.</p>
	<p>41. Reduction of recurrent extended recovery rest by commander’s discretion ORO.FTL.235(d)</p>	<p>Can the extended recovery rest period be reduced with commander’s discretion?</p>	<p>No, commander’s discretion cannot be applied to an extended recovery rest period.</p>

	(see also ORO.FTL.205(f))		
	<p>42. Increase of interval between two recurrent extended recovery rest periods by commander's discretion ORO.FTL.235(d)</p> <p>(see also ORO.FTL.205(f))</p>	<p>May the crew member exercise his/her discretion to finish back at home base exceeding the 168 hours' time between two extended recovery rest periods? For example, a crew member is planned to finish his last FDP flying back to home base, two hours prior to reaching 168 hours. There is a departure delay which occurred after reporting. As a result, the crew member would exceed the 168 hours by 1 hour.</p>	<p>No. Extension of the 168 hours between two recurrent extended recovery rest periods is not allowed.</p> <p>The operator must better plan duties and rest times. The Regulation does not say that exactly 168 h must be reached; they are not a target, they are a maximum threshold.</p>
	<p>43. Increase of interval between two recurrent extended recovery rest periods ORO.FTL.235(d)</p>	<p>Can the 168h limit between two extended recovery rest periods be extended?</p> <p>For example, a crew member reports at Paris on Monday at 7am and ends a series of flights in Singapore, on Sunday, at 8 pm; he/she should be given his/her extended recovery rest period in Singapore, but might be willing to come back to his/her base, hence infringing the 168h limit through positioning.</p>	<p>No. The 168h limit between two extended recovery rest periods can only be extended through an amendment of ORO.FTL.235 (d).</p> <p>A Member State can propose an amendment to ORO.FTL.235 (d), in particular, and to the implementing rules, in general, in accordance with Article 71 of Regulation (EU) 2018/1139.</p>
	<p>44. Re-planning of recurrent extended recovery rest period ORO.FTL.235 (d)</p>	<p>Is re-planning of a recurrent extended recovery rest period allowed and when?</p>	<p>Yes. This is provided that re-planning of rest is completed and notified before the rest period has started and the re-planning practices do not conflict with a crew member's opportunity to plan adequate rest as required by ORO.FTL.110 (a).</p> <p>In any case, the time between the end of one recurrent extended recovery rest period and the beginning of the next recurrent extended recovery rest period cannot be more than 168 hours.</p>

			<p>Operator’s procedures for re-planning should describe by which means the opportunity for crew members to plan adequate rest is provided in the case of re-planning.</p>
<p>ORO.FTL.245 Records of home base, flight times, duty and rest periods</p>	<p>45. Record keeping ORO.FTL.245</p>	<p>Do records required in ORO.FTL.245 have to reflect planned or actual FDP, DP and rest?</p>	<p>Planned rosters may differ substantially from achieved rosters.</p> <p>In order to ensure appropriate oversight of FTL by the competent authority, operators need to maintain (for a period of 24 months) records of the actual values of flight times, FDP, rest periods and days free of all duties.</p> <p>According to AMC1 ORO.FTL.110 (j) on operational robustness operators should establish and monitor performance indicators for operational robustness rosters.</p> <p>This can only be done if operators keep records of both, planned and achieved rosters.</p>
	<p>46. Individual crew members’ records of flight time and duty periods ORO.FTL.245 (see also ORO.FTL.105)</p>	<p>Our employer does not provide individual records of the time spent for e-learning and for certain administrative tasks such as visa renewal.</p>	<p>The purpose of subpart FTL is to mitigate the risks related to fatigue. Therefore, maintaining crew member's records is to ensure compliance with the requirements of that subpart.</p> <p>A proper implementation of ORO.FTL.245 would fully account for the term ‘duty’ i.e. any task assigned by the operator must be recorded in crew members’ individual records.</p> <p>The time required for crew training at the behest of the operator and when required by Regulation (EU) No 965/2012 is a duty.</p> <p>For example, the time needed to complete an e-learning task, if assigned by the operator, is to be notified in advance and recorded as duty time.</p>

			<p>The same applies to some ground activities, such as administrative tasks, (including the visa renewal, a second passport when required) or training (briefing or debriefing when required).</p> <p>Tasks that are part of pilot’s individual responsibility such as renewal of the medical certificate need not be rostered or registered.</p> <p>In accordance with ORO.FTL.245 records of duties are maintained for a period of 24 months. Moreover, in accordance with ORO.MLR.115, records of crew member training, checking & qualifications must be retained for 3 years.</p> <p>These records are necessary for the operator and crew member to be able to not only account for a particular duty, but also for the cumulative limits stipulated in ORO.FTL.210 (a).</p>
CS FTL.1			
CS FTL.1.200 Home base	47. Home base change CS FTL.1.200(b)	Is it correct to understand that if a crew member is asked to report for an FDP at a reporting point other than his/her home base without extension of his/her recurrent extended recovery to 72h incl. 3 local nights, immediately prior to that FDP, the home base has not been changed for the purpose of Subpart FTL?	Yes. In such case, the requirements for reporting out of home base apply.
CS FTL.1.205 Flight duty period (FDP)	48. Consecutive night duties CS FTL.1.205(a)(1)	What does ‘consecutive’ mean in the context of the requirements and limits of CS FTL.1.205?	<p>‘Consecutive’ is referring to two night duties only separated by a rest period.</p> <p>Two night duties would not be considered as ‘consecutive’, if there is a recurrent extended recovery rest period between them or if they are separated by rest periods surrounding a non-night duty.</p>

	<p>49. Night duties CS FTL.1.205(a)(2)</p> <p>(see also GM1 CS FTL1.205 (a)(2))</p>	<p>Is it necessary to have an ‘<i>approved</i>’ FRM to operate long night duties (FDP over 10hrs)?</p>	<p>No, for night duties of over 10 hours an appropriate fatigue risk management applies. Guidance for that is provided in GM1 CS FTL1.205 (a) (2).</p> <p>A FRM compliant with ORO.FTL.120 is only required in two cases: reduced rest and crew members in unknown state of acclimatisation on a longer FDP.</p> <p>Additionally, the approval of FRM is not a stand-alone approval. FRM, if required, is approved as a constituent part of the IFTSS approval.</p>
	<p>50. In-flight rest CS FTL.1.205(c)</p>	<p>Is it possible to extend the FDP, if not all pilots get an in-flight rest?</p>	<p>CS FTL.1.205(c)(1)(ii) specifies that, for the purpose of FDP extension, each crew member needs to have an in-flight rest period.</p> <p>First example where an extension of the FDP due to in-flight rest is possible:</p> <p>Pilot 1 and Pilot 2 commence a FDP from A to B (1:30 h sector). When arriving at B, a third pilot (Pilot 3) joins the crew and they fly from B to C (11 h sector).</p> <p>The length of the flight from B to C allows each crew member on board (pilots 1, 2 & 3) to have the minimum in-flight rest period during cruise phase: 2 consecutive hours for the flight crew members at control during landing and consecutive 90-minute period for the third pilot.</p> <p>Second example, where an extension of the FDP due to in-flight rest is not possible:</p> <p>Pilot 1 and Pilot 2 commence a FDP from A to B (7 h sector). When arriving at B, a third pilot (Pilot 3) joins the crew and they fly from B to C (5 h sector).</p>

			<p>The length of the flight from B to C does not allow each crew member on board (pilots 1, 2 & 3) to have the minimum in-flight rest period during cruise phase: 2 consecutive hours for the flight crew members at control during landing and consecutive 90-minute period for the third pilot.</p>
	<p>51. Maximum daily FDP with the use of extensions due to in flight rest CS FTL.1.205(c)(2)</p>	<p>Why does the ‘maximum daily FDP with the use of extensions due to in flight rest’ not take into account the start of FDP at reference time?</p>	<p>An extended duty period will usually involve operating during the WOCL. The in-flight rest opportunity during the WOCL mitigates the absence of reduction of the FDP based on the reference time.</p> <p>The limits of CS FTL.1.205(c) (2) are therefore irrespective of the WOCL of crew members, on the condition that the minimum flight crew is augmented and in-flight rest facilities, meeting certain standards, are available to provide recuperative sleep.</p>
	<p>52. Delayed reporting CS FTL.1.205(d)(1)</p>	<p>Is it possible to inform crew members of a delay without giving the new reporting time?</p>	<p>No. An actual reporting time must be given when the crew member is informed that the delayed reporting procedure is activated.</p> <p>If an operator does not have a delayed reporting procedure, then it can’t be used.</p>
	<p>53. Delayed reporting CS FTL.1.205(d)(1)(iii)</p>	<p>Why does delayed reporting with a delay of less than 4 hours not account for the WOCL? Is there any scientific evidence for this?</p>	<p>There is no scientific evidence, on the basis of which a delay of less than 4 hours does not take the WOCL into account.</p> <p>In any case, operator’s procedures on delayed reporting should avoid or minimise the negative effect of WOCL encroachment.</p> <p>Importantly, the maximum FDP will never become longer due to a delayed reporting time:</p> <ul style="list-style-type: none"> • If the delay is less than 4 hours – the maximum FDP as originally planned, remains the same.

			<ul style="list-style-type: none"> • If the delay is more than 4 hours – the maximum FDP will be shorter than the originally planned FDP, because the delayed reporting time has a limiting effect on it. <p>Procedures for delayed reporting must be described in the OM, including a notification time that allows the crew member to continue his/her rest when the delayed reporting procedure is activated.</p> <p>A delayed reporting procedure may be triggered by the operator, while the crew member is still at home or in the suitable accommodation facility, when prior to the beginning of a flight duty period an unforeseen event occurs which will delay the planned flight departure.</p>
<p>CS FTL.1.220 Split duty</p>	<p>54. Split duty (see also ORO.FTL.205 (b)(2) and ORO.FTL.220)</p>	<p>Can split duty be scheduled when crew members are in an unknown state of acclimatisation?</p>	<p>Yes, but any extension of the FDPs limits in Table 3 of ORO.FTL.205 (b)(2) falls under the requirement for a FRM.</p>
	<p>55. Split duty CS FTL.1.220 (b)</p>	<p>Are the 30 minutes for post and pre-flight duties as well as travelling counted in total or 30 min for post flight duties, 30 min for travelling after post flight duties, 30 min for travelling before pre-flight duties and 30 min for pre-flight duties?</p>	<p>CS FTL.1.220 (b) instructs the operator to specify actual times for post and pre-flight duties and for travelling in its operations manual. The minimum for the total is 30 minutes.</p> <p>The operator must demonstrate how travelling in both directions, and post and pre-flight duties are accomplished in the time defined in the OM.</p>
	<p>56. Split duty CS FTL.1.220(d)</p>	<p>Should suitable accommodation be provided for a split duty?</p>	<p>Suitable accommodation as defined in ORO FTL 105 (4) is required to be provided for a break of 6 hours or more or for a break that encroaches the WOCL.</p>

<p>CS FTL.1.225 Standby</p>	<p>57. Rest after airport standby or other-standby CS FTL.1.225 (a)(1)& CS FTL.1.225 (b)(4)</p>	<p>What is the basis for rest calculation after a standby followed by an FDP? Is it the reporting time for standby or the “actual reporting time” for the assigned FDP?</p>	<p>The minimum rest period depends on the length of previous duty.</p> <p>Airport standby counts as duty for the purpose of ORO.FTL.235. Therefore, the rest calculation after airport standby followed by an FDP is based on the reporting time for that standby. This also applies to airport duty.</p> <p>Other standby does not count as duty for the purpose of rest (it counts partly as duty for the purpose of ORO.FTL.210 only). Therefore, the rest calculation after other-standby followed by an FDP is based on the reporting time for the assigned FDP.</p>
	<p>58. Airport standby CS FTL.1.225 (a)(2)(ii)</p>	<p>Why does CS FTL.1.225 (a)(2)(ii) not stipulate the maximum duration of airport standby?</p>	<p>The maximum duration of airport standby is defined indirectly by the limits of the combined duration of airport standby and FDP.</p>
	<p>59. Airport standby CS FTL 1.225(a)(2)(ii)</p> <p>(see also ORO.FTL.205 (b)&(d); CS FTL 1.205 (a) (2))</p>	<p>We understand that the limit of 16 hours is not applicable when airport standby is followed by an FDP with in-flight rest. Does that mean that there is no limit for that kind of situation?</p>	<p>Yes, there is no limit.</p> <p>The limit of 16 hours only applies to maximum basic daily FDPs without in-flight rest under ORO.FTL.205 (b) and to extended daily FDPs without in-flight rest under ORO.FTL.205 (d).</p> <p>Furthermore, the operator applies appropriate fatigue risk management to actively manage the fatiguing effect of night duties of more than 10 hours in relation to the surrounding duties and rest periods.</p>
	<p>60. Other-standby followed by an FDP CS FTL.1.225(b)(2)</p>	<p>How shall an operator expect a crew member to use whole or part of a standby for sleep when there are disturbance factors like difficulty to fall asleep, disturbed sleep due to sick children, waking-up by external noise, etc.?</p>	<p>According to CS FTL.1.225 (b)(2), the operator designs its standby procedures in a certain way. The expectation is on the design of the procedure by the operator, not on the individual crew member.</p> <p>The expectation on the crew member is to follow the procedure to the best of his/her abilities and in good faith at all times.</p>

	<p>61. Awake time CS FTL 1 225 (b)(2)</p>	<p>Who is responsible for making sure that the 18h are not exceeded? The crew member or the operator? Can the operator fully transfer the responsibility to the crew member?</p>	<p>The operator is only required to have established such procedures (control mechanisms) so as to prevent situations where the combination of standby and FDP would lead to more than 18 hours awake time.</p> <p>18 hours awake time is mentioned in the context of the combination of other-standby prior to an FDP and the FDP itself. A simple mathematical equation between the sum of the standby time and FDP, on the one hand, and the time awake on the other, is not possible to do, because the start time of the awake period is an unknown value i.e. the operator may be unable to verify how long a crew member has been awake.</p> <p>It is reasonable for the operator to expect crew members to manage their rest and sleep opportunities during pre-duty rest periods and while on standby in order to be able to perform FDP.</p> <p>The procedure and expectation for the crew to rest appropriately during their standby should also be included when training crew on FTL and fatigue management.</p> <p>The following are examples of what an operator should consider when designing procedures:</p> <ul style="list-style-type: none"> • the duties and rest periods prior to the scheduled standby; • the time of the day in which the rest period prior to the scheduled standby occurs; • a minimum of 8 hours' sleep opportunity before or within the scheduled standby, during which the crew member is not disturbed; • the length of the standby and the subsequent FDP; • the time for post flight duties and for travelling to the suitable accommodation if away from home base; • provision of training and advice to crew members
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			The NAAs are responsible for verifying that the above procedures have been established and are effective.
	<p>62. Other-standby CS FTL.1.225(b)(2)</p> <p>(see also CAT.OP.MPA.210(a)(3))</p>	Would using a controlled rest procedure while the flight crew member is at his/her assigned station break the 18-hour awake time?	<p>No. Controlled rest procedure is a countermeasure to manage unexpected fatigue, whilst the 18-hour awake time target is part of the operator roster planning procedures.</p> <p>According to CAT.OP.MPA.210 (a)(3) controlled rest organised by the commander, if workload permits, shall not be considered to be part of a rest period for purposes of calculating flight time limitations nor used to justify any extension of the duty period.</p> <p>Under CS FTL.1.225 (b)(2), the operator designs standby procedures in a way that makes unexpected fatigue unlikely by avoiding excessive awake times.</p> <p>The frequent use of controlled rest after having been called from other-standby could indicate that the standby procedure does not fulfil the expectation to avoid excessive awake times.</p> <p>Controlled rest procedure to manage unexpected fatigue should be described in the operations manual. (ref. AMC3 ORO.MLR.100).</p> <p>The operator should be able to monitor the use of controlled rest to evaluate effectiveness of mitigation strategies.</p>
	63. Other-standby CS FTL.1.225(b)(3)	How is the time spent on other-standby before an assignment accounted for?	According to CS FTL.1.225 (b) (3), 25% of time spent on other-standby counts as cumulative duty.
	64. Other-standby CS FTL.1.225 (b)	Is it possible during other-standby to assign an FDP with a reporting time after the rostered end of that standby period has elapsed?	It is possible during other-standby to assign a duty that will start after the rostered end of the standby period.

	<p>(see also ORO.FTL.105 (25))</p>		<p>Duties assigned during other-standby should in principle start within the operator’s defined response time from the call. For example, a cabin crew while on home standby between 08:00h and 14:00h (as planned in the roster) receives a call at 13:55 h to report for duty at 14:55 h since the operator’s response time is 60 min. The response time between the call and reporting is considered a continuation of the standby, notwithstanding the rostered end of the standby; this time also includes travelling to the reporting point.</p> <p>Operators describe their procedures and practices regarding standby, including reporting after the rostered standby period ends, in the OM-A. In doing so, they take into account that the Regulation provides a number of cumulative protections to crew member from excessive periods of combined standby and duty:</p> <ol style="list-style-type: none"> 1. Operators shall only use the rostered standby availability period to place their call for duty. ORO.FTL.105 (25) defines standby as the period of time during which a crew member is required by the operator to be available to receive an assignment for a flight; 2. The maximum duration of other-standby is 16 hours. In its OM-A however, the operator may specify shorter periods considering its type of operation and the impact of the time spent on standby on the duty that may be assigned. Under the obligations of ORO.FTL.110 (b & e), operators must carefully evaluate what duration of standby is safely allowable within their particular operation; 3. The combination of standby and FDP do not lead to more than 18 hours awake time (see FAQ # 60); 4. The maximum FDP is reduced, if the standby period ceases after the first 6 hours (or 8 hours in case of extended FDP); 5. A crew member is always able to consider whether his/her duties on board an aircraft will be performed with the necessary level of alertness (CAT.GEN.MPA.100(c))
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			<p>If no duty has been assigned during the rostered standby availability period, other-standby is followed by a rest period in accordance with ORO.FTL.235.</p>
	<p>65. Other-standby modified to airport standby CS FTL.1.225</p> <p>(see also ORO.FTL.105 (25))</p>	<p>Can other standby be modified to airport standby during the standby? For example, can a pilot on home standby be required to go to the airport to continue on airport standby? What limits must be used?</p>	<p>Yes. During a standby period, any duty may be assigned (ORO.FTL.105 (25)). That includes airport standby or duty at the airport.</p> <p>Limits for assignment of airport standby after home standby are not explicitly mentioned in CS FTL.1.225.</p> <p>The assignment of airport standby is considered as airport duty and the subsequent FDP counts from the airport reporting time as stated in ORO.FTL.225 (d).</p> <p>If the other-standby lasts less than 6 hours, the maximum FDP counts from reporting for the airport standby. If the other-standby lasts more than 6 hours, a reduction is applicable to the subsequent FDP.</p> <p>If an FDP is assigned during the airport standby, the combination of home standby and FDP does not lead to more than 18 hours awake time.</p>
CS FTL.1.230 Reserve	<p>66. Reserve and other-standby CS FTL.1.230</p>	<p>While a crew member is on reserve, can his/her assignment be changed and continue as a home standby?</p>	<p>No, but the crew member can be assigned a home standby after the end of the reserve period.</p>
	<p>67. Reserve CS FTL 1.230(b)</p>	<p>Is there any rest requirement after a reserve period, if there is no assignment of duty period during the reserve?</p>	<p>Reserve times do not count as duty period for the purpose of ORO.FTL.210 and ORO.FTL.235.</p> <p>That means that there is no requirement for a minimum rest period after reserve, if no duty has been assigned.</p>

<p>68. Reserve CS FTL.1.230 (d)</p>	<p>Is it necessary to have an FRM to protect an 8-hour sleep opportunity during reserve?</p>	<p>No. Operators are however encouraged to apply appropriate fatigue risk management techniques to be able to fulfil their responsibilities under ORO.FTL.110.</p> <p>The techniques described in the ICAO Fatigue Management Guide for Airline Operators may be useful reference to assist operators developing their approach.</p>
<p>69. Reserve CS FTL 1.230(d)</p>	<p>Should the period of 8 hours run consecutively or is it possible to break it in two different periods?</p>	<p>The period of 8 hours consists of 8 consecutive hours.</p>
<p>CS FTL.1.235 Rest periods</p> <p>70. Rest between disruptive schedules CS FTL.1.235(a)(1)</p> <p>(see also ORO.FTL.105(8))</p>	<p>The rule for transition between late finish/night duty and early start says that the rest between the FDPs needs to include a local night. Does this mean that the rule only applies if the late finish/night duty and the early duty are FDP's?</p>	<p>It depends on the type of the early duty following a late or night duty.</p> <p>If an early duty is a standby or a duty at the airport that leads to an FDP, then the rest period before that early duty must include a local night.</p> <p>Otherwise, the rest period between the 2 <i>other duties</i> or between a FDP and <i>other duty</i> (e.g. night training in a simulator) does not need to include 1 local night.</p> <p>Nevertheless, Subpart FTL provides a system of measures which jointly act to reduce the risk of increased fatigue and reduced alertness and performance levels of crew members, and to mitigate the acute disruption of the sleep pattern in the case of disruptive schedules.</p> <p>For example, the operator must avoid practices that cause a serious disruption of an established sleep/work pattern, such as alternating day/night duties (ORO.FTL.110).</p>

	<p>71. Rest compensation for time zone differences CS FTL.1.235(b)(3)(i)</p>	<p>How should we count the time elapsed (h) since reporting for the first FDP in a rotation involving at least 4 hour time difference to the reference time?</p>	<p>Elapsed time (h) should be counted from the first FDP including at least 4 hour time difference to the reference time, as the rest compensation for time zone differences is given when the crew becomes affected by the time zone differences.</p>
	<p>72. Reduced rest CS FTL.1.235(b)(3)(ii) (see also ORO.FTL.235 (c) and (e))</p>	<p>Is it possible to reduce the 14h rest away from home base following an FDP involving a 4-hour time difference or more?</p>	<p>No. CS FTL.1.235 (b)(3)(ii) does not foresee a reduction of the 14h rest away from home base to compensate for time zone crossing.</p> <p>ORO.FTL.235 (c) describes the conditions under which the minimum rest periods according to ORO.FTL.235 (a) and (b) may be reduced.</p> <p>ORO.FTL.235 (e) establishes the rest periods to compensate the effects of time zone crossing.</p> <p>Additional rest periods to compensate the effects of time zone crossing shall be specified in flight time specification schemes.</p>
	<p>73. Rest to compensate for time zone differences CS FTL.1.235(b)(4)</p>	<p>What does Eastward-Westward or Westward-Eastward transition mean?</p>	<p>For the purpose of CS FTL.1.235 (b) (4), 'Eastward-Westward and Westward-Eastward transition' means the transition at home base between a rotation in one direction and a rotation in the opposite direction, each involving a 4-hour time difference or more.</p> <p>At least 3 local nights of rest at home base are provided between such alternating rotations.</p> <p>However, irrespective of where the transition occurs - at home base or away from home base, the operator, using safety risk management processes, should monitor rotations in opposite directions in terms of their impact on crew members' circadian rhythm and fatigue, and provide sufficient rest to crew members between such rotations.</p>

	<p>74. Monitoring Time Zone Differences CS FTL.1.235(b)(5)</p>	<p>Does the requirement to monitor combinations of rotations require FRM in accordance with ORO.FTL.120?</p>	<p>No. FRM is not required. However, CS FTL.1.235 (b)(5) requires that fatigue risks arising from combinations of rotations be monitored under the operator’s management system.</p> <p>The techniques described in the <i>ICAO Fatigue Management Guide for Airline Operators</i> (associated to ICAO Doc 9966) may be useful reference to assist operators developing their approach.</p>
	<p>75. Reduced rest CS FTL.1.235(c)(5)</p>	<p>Is it possible to apply reduced rest to two consecutive rest periods?</p>	<p>Yes. Up to 2 reduced rest periods in any 168 hours are allowed. They may be consecutive.</p> <p>Reduced rest is only possible under FRM, as part of an approved IFTSS.</p>
	<p>76. Nutrition ORO.FTL.240</p>	<p>Are nutrition provisions subject to a specific NAA's approval and can they be documented elsewhere in the OM-A, not necessarily Chapter 7.</p>	<p>Nutrition is part of the operator’s individual flight time specification scheme (IFTSS) which is subject to approval by the competent authority under ARO.OPS.235 (a).</p> <p>Chapter 7 of the OM-A is the place where the operator describes its IFTSS. Nutrition opportunities during duty periods are therefore to be included under that Chapter.</p> <p>In cases where nutrition provisions are documented elsewhere in the OM-A, the operator should provide references in Chapter 7 to those nutrition provisions to enable aircrew to easily trace and read about the applicable nutrition arrangements. Irrespective of the place where nutrition opportunities are described in detail, they are part of the IFTSS and subject to NAA’s approval.</p> <p>IFTSS is customised to the operator’s specific operating conditions e.g. routes and airports served, specific rest requirements and duty length. The later in turn impacts nutrition opportunities – timing, duration and other arrangements.</p>

			<p>The content of the OM need be presented in a form that can be used without difficulty by crew members. The same applies to the operator’s IFTSS.</p>
	<p>77. Fatigue management training ORO.FTL.250 AMC1 ORO.FTL.250</p>	<p>What should be the minimum requirements for a fatigue management instructor? Is a CRMi course enough? Is a safety manager ready and without other training to deliver a course? Can someone that has received a few hours course in accordance with AMC1 ORO.FTL.250 repeat the course to others?</p>	<p>Although ORO.FTL does not contain prescriptive requirements determining the qualification of fatigue management instructors, those instructors are an operator’s personnel and hence, need to acquire at least the knowledge specified in AMC1 ORO.FTL.250.</p> <p>Any operator needs to demonstrate to the competent authority that their personnel has acquired at least the knowledge as per the syllabus in AMC1 ORO.FTL.250.</p> <p>In essence, the fatigue management training is a competency-based training. The operator should identify what training and competences are needed for each personnel group: aircrew, instructors, rostering and management staff to perform their roles effectively, and what means of measuring the level of competency attained by each person who receives the training is available.</p> <p>For example, a fatigue management instructor must have the training required by AMC1 ORO.FTL.250. The operator may, in addition to that, require that the instructor also complete training normally required for FRM inspectors in accordance with AMC5 ARO.GEN 200(a) (2).</p> <p>Recommended fatigue management training topics for specific groups of employees can be found in the ICAO Doc 9966 Manual for the Oversight of Fatigue Management Approaches/Second Edition 2016.</p> <p>Operators who aim to establish a system for fatigue risk management (FRM), should consider including the following</p>

			<p>additional subjects, for aircrew, FSAG members, FRM instructors, FRM auditors, managers, according to their functions:</p> <ul style="list-style-type: none">• the science behind FRM;• requirements of Part-ORO with respect to FRM;• components of the FRM of that particular operator and its functioning;<ul style="list-style-type: none">○ FRM predictive, reactive and proactive processes○ roster fatigue metrics○ fatigue safety performance indicators• employees' responsibilities with respect to the FRM;• use of fatigue reporting systems and implementing mitigations;• collection of fatigue data (both subjective and objective) to feed the FRM system. <p>The content and frequency of fatigue management training should be proportional to the operator's fatigue risk exposure. For example, a scheduled airline and an on-demand night cargo operator are likely to establish different syllabus and frequency for their aircrew training. Also, an airline with crew members commuting long hours to/from their home base, should particularly focus on the use of company's airport or hotel crew rooms for fatigue mitigation of disruptive schedules when providing fatigue management training.</p>
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