European Aviation Safety Agency

Assessment N° IFTSS 2018/001/FR of a deviation from CS FTL.1.200 (a) ('Paris single home base deviation') under ARO.OPS.235 (d) of Regulation (EU) No 965/2012

A) BACKGROUND

- 1. On 5 February 2018, the Directorate of Civil Aviation Safety (DSAC), Directorate of the General Directorate of Civil Aviation (DGAC), ('the French competent authority') requested an assessment of the report of the company Air France ('the operator') on the implementation of 'Paris single home base deviation', in accordance with ARO.OPS.235 (d) of Regulation (EU) No 965/20121.
- 2. Single home base deviation for Paris is an individual deviation from CS FTL.1.200 (a) of Regulation (EU) No 965/2012 approved by the French competent authority following a positive evaluation of EASA (Report No IFTSS/2015/003/FR).
- 3. According to CS FTL.1.200 (a), the home base is a single airport location. Given the proximity between Roissy Charles de Gaulle (CDG) and Orly (ORY) airports, the deviation allows the operator to assign these two airports to crew members as a single home base.
- 4. In accordance with ORO.FTL.125 (d), the operator submitted to the French competent authority a Report² on the scientific study carried out for the purpose of analysing the effects of the approved deviation on aircrew fatigue. The Report indicates that some of the assumptions that have been made during the initial evaluation of the case need to be revised.
- 5. On the basis of the conclusions of the Report, the operator proposes new fatigue risk mitigation measures. The French competent authority deems those measures satisfactory and supports them.
- 6. Furthermore, the French competent authority states that the operator has the necessary procedures, tools and skills to guarantee an acceptable control of the conditions associated with this deviation and an appropriate implementation of the mitigation actions.

B) LEGAL FRAMEWORK

- 7. ARO.OPS.235 of Regulation (EU) No 965/2012 reads as follows:
 - The competent authority shall approve flight time specification schemes proposed by CAT operators if the operator demonstrates compliance with Regulation (EC) No 216/2008 and Subpart FTL of Annex III to this Regulation.
 - (b) Whenever a flight time specification scheme proposed by an operator deviates from the applicable certification specifications issued by the Agency, the competent authority shall apply the procedure described in Article 22(2) of Regulation (EC) No 216/2008.

² Evaluation of Paris-based crew fatigue levels operating under the Air France derogation from CS FTL.1.200(a) – Final report V3, Clockwork Research, December 2017



¹ Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council

- (c) Whenever a flight time specification scheme proposed by an operator derogates from applicable implementing rules, the competent authority shall apply the procedure described in Article 14(6) of Regulation (EC) No 216/2008.
- Approved deviations or derogations shall be subject, after being applied, to an assessment to determine whether such deviations or derogations should be confirmed or amended. The competent authority and the Agency shall conduct an independent assessment based on information provided by the operator. The assessment shall be proportionate, transparent and based on scientific principles and knowledge."
- 8. ORO.FTL.125 of Regulation (EU) No 965/2012 reads as follows:
 - Operators shall establish, implement and maintain flight time specification schemes that are appropriate for the type(s) of operation performed and that comply with Regulation (EC) No 216/2008, this Subpart and other applicable legislation, including Directive 2000/79/EC.
 - Before being implemented, flight time specification schemes, including any related FRM (b) where required, shall be approved by the competent authority.
 - (c) To demonstrate compliance with Regulation (EC) No 216/2008 and this Subpart, the operator shall apply the applicable certification specifications adopted by the Agency. Alternatively, if the operator wants to deviate from those certification specifications in accordance with Article 22(2) of Regulation (EC) No 216/2008, it shall provide the competent authority with a full description of the intended deviation prior to implementing it. The description shall include any revisions to manuals or procedures that may be relevant, as well as an assessment demonstrating that the requirements of Regulation (EC) No 216/2008 and of this Subpart are met.
 - For the purpose of point ARO.OPS.235 (d), within 2 years of the implementation of a deviation or derogation, the operator shall collect data concerning the granted deviation or derogation and analyse that data using scientific principles with a view to assessing the effects of the deviation or derogation on aircrew fatigue. Such analysis shall be provided in the form of a report to the competent authority.'
- 9. The requirement concerning home base is laid down in ORO.FTL.200 as follows:

'An operator shall assign a home base to each crew member.'

- 10. The deviation refers to CS FTL.1.200 (a), which reads:
 - The home base is a single airport location assigned with a high degree of permanence.'

C) EVALUATION

- 11. On 15 February 2018 EASA requested the following additional evidence from the French competent authority:
 - a. Information how the aircrew has been made aware of the deviation;
 - b. Information how the operator has monitored the effectiveness of mitigation measures throughout the two year period;
 - c. An updated risk assessment including newly proposed mitigations; and
 - d. Information how the French competent authority has reached the conclusion that the new mitigating measures are satisfactory.



- 12. The French competent authority provided additional evidence on 1 March 2018.
- 13. As required by ARO.OPS.235 (d), EASA, assisted by a panel of FTL/FRM experts³, conducted an independent assessment of the Report and supporting documents provided by the operator. The panel met on 15 March 2018. The French competent authority was also given the possibility to attend the panel meeting in order to answer questions and provide clarifications.

14. The examination of the documents showed that:

- The quality and analysis of the data (sample, data collection means, etc.) are adequate for the purpose of evaluation of the deviation.
- The communication between the operator and aircrew concerning the deviation was not effective. The crew members were not well informed about the deviation, in particular about the impact of the choice of airport they would make, about the benefits of using temporary accommodation closer to the far airport, when commuting for more than 90 minutes, and about the availability of suitable accommodation at the far airport. As a result, the pilots and mostly cabin crew did not use the suitable accommodation provided at the airport. Furthermore, the suitable accommodation at the airport was not sufficient to satisfy the needs of those who knew about it.
- The effectiveness of mitigations such as accommodation at the airport crew quarters before
 or after FDP or in hotel rooms, was lessened by the lack of detailed and focused fatigue
 management training for the affected crew members.
- The airport chosen by crew members as ill-favoured, was wrongly assumed to be the far airport. This had one notable negative consequence in that crew members who did not make their choice fell out of the scope of mitigation measures.
- The operator's initial assumption that the maximum difference in the commute time between
 the two airports would be 42 minutes proved adequate for all cases except in the cases of
 travelling in rush hours to ORY when based at CDG. The study proved that that difference
 could reach 60 minutes.
- In redesigning the mitigation measures the operator took into account the conclusions of the fatigue study about the ill-favoured airport. Updated mitigation measures would apply to operations from the far airport and not to the ill-favoured airport.
- In assessing effectiveness of the mitigation measures the operator took into account the risks associated with the main fatigue threats: long awake duration, sleep debt, high workload and perturbation of circadian rhythms.
- The operator therefore proposes to increase the rest period before and after the FDP in order
 to avoid the creation of a sleep debt. Moreover, crew members with disruptive FDPs (early
 starts and late finishes) that may generate a higher sleep debt will be able to use suitable
 accommodation at the airport crew quarters before or after the FDP or a hotel room at the
 far airport.
- The operator also proposes to mitigate the higher workload on the day of operation through a reduction of the FDP by 60 minutes as well as by providing hotel rooms at the airport before an early start or after a late finish. This reduction is aimed to ensure that even for an FDP starting at the far airport at rush hour, the maximum awake time of 18 hours will not be exceeded.
- The operator proposes to cancel one of the IFTSS 2015/003/FR recommendations, notably "no more than one FDP from the far airport between 2 extended rest periods". Thus, between 2 extended rest periods (7 consecutive days), a crew member may be assigned with two

³ Panel composition IFTSS 2018/001/FR published on Circabo



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rotations from the far airport where the FDPs has been extended in accordance with ORO.FTL.205 (d) plus one or more rotations from the far airport where the FDPs is established in accordance with ORO.FTL.205 (b)(1) (basic daily FDP). The French competent authority believes that the reduction by 60 minutes of the max FDP instead of limiting the number of rotations within 7 days would also be efficient as mitigation.

D) CONCLUSION

- 15. EASA concluded that the continuation of the deviation would ensure a level of protection equivalent to CS FTL-1 on the following conditions:
 - The extension of the rest period, to mitigate the extended travelling time to the far airport, should be based on the minimum rest requirements at home base according to ORO.FTL.235

 (a). Consequently, the operator should increase by 1 hour the minimum rest period of crew members concerned, prior to and after an FDP starting and ending at the far airport, to account for the increased commuting time.
 - 2. The reduction of the maximum FDP starting from the far airport, to mitigate the extended travelling time to that airport, may be calculated on the basis of an extended FDP in accordance with ORO.FTL.205(d), only if the additional rest required therein is ensured.
 - 3. The operator should provide an *in-depth fatigue management training* to the aircrew affected, as soon as possible and sooner than currently planned (2018/2019).
 - 4. The operator should monitor and manage the use of *suitable accommodation*, including hotel rooms, for operations from/to the far airport.
 - 5. The operator should monitor the implementation of the deviation, in particular through the operator's fatigue reporting system based on relevant *fatigue risk performance indicators*.
 - In order to increase crew members' awareness, the operator should inform them about the
 use of temporary accommodation as a personal mitigating measure, as well as about the use
 of the suitable accommodation provided by the operator at the airport crew quarters or at a
 hotel.
 - 7. The operator needs to provide *information* to their crew members on the scope of the deviation and its potential impact on fatigue, as well as on how it monitors that impact.

0 5. JUNI 2018 Signed on

Executive Director