European Aviation Safety Agency

Recommendation N° IFTSS/2016/T/004/BE on the notification by the Kingdom of Belgium about its intention to grant an approval for a temporary flight time specification scheme deviating from certain provisions of CS FTL-1 on the basis of <u>Article 22(2)</u> of Regulation (EC) No 216/2008.

A) BACKGROUND

By letter dated 23 May 2016, the Belgian Civil Aviation Authority (hereafter BCAA) notified EASA a temporary deviation from CS FTL.1.205 (c) on the basis of Article 22(2)(d) of Regulation (EC) No 216/2008¹.

In the notification letter BCAA explains that it has approved a temporary individual flight specification scheme for the Belgian AOC holder "Jetair Fly Belgium (JAF)" (hereafter the operator) with AOC approval number B-3044, deviating from the certification specification requiring that in-flight rest facilities fulfil the minimum standards described in CS FTL.1.205 (c).

The documents provided by BCAA to support the proposed deviation describe the temporary deviation as follows:

"Jetair Fly, with AOC approval number B-3044, can continue the operations with augmented flight crew and the currently installed in-flight rest facilities on the B767 for the schedule flights from 05 May until 05 September 2016 in exemption to the Temporary Revision 2015-113 Chapter 7.6.4 Extension of FDP due to in-flight rest (CS FTL.1.205 (c)), in-flight rest minimum standards"."

The documents provided by BCAA to support the proposed deviation describe the following conditions for the temporary deviation:

- 1- This exemption concerns only the provision of the rest facilities on the B767 (OO-JNL).
- 2- In addition to the point 4.1 (5) and 4.2 (5), (SAFETY CASE REGARDING FLIGHT TIME LIMITATIONS), and taking into account the following evidences, as non-exhaustive:

With reference to the GM1.ORO.FTL.105(1)(a) and (b):

- (a) A crew member remains acclimatised to the local time of his/her reference time during 47 hours 59 minutes after reporting no matter how many times zones he/she has crossed.
- (b) (...). As soon as 48 hours have elapsed, the state of acclimatisation is derived from the time elapsed since reporting at reference time and the number of time zones crossed.

¹ Regulation (EC) No 216/2008 of 20/02/2008 of the European Parliament and of the Council on common rules in the field of civil aviation and establishing a European aviation Safety Agency and repealing Council Directive 91/670/EEC, regulation (EC) No 1592/2003 and Directive 2004/36/EC.



As the rest time allocated by JAF to the crew member in outstation (41h55min and 20h10min) is a short duration and does not permit the crew member to acclimatize in the local time of the outstation in the goal to maintain an optimal and good physical and safety conditions to avoid risk of fatigue during return flight to Brussels, in the case and in addition to the 72 hours, included 3 local nights, allocated by JAF, as a minimum requirement based on the table 1 of ORO.FTL.205(b)(1), for the crew member at home base, as a BCAA condition if JAF wishes to benefit of this exemption.

- 3- The point 2, here above, is not concerned and subject to the exemption number BCAA/Exemption/OPS/2016-05, concerning home base.
- 4- The crew that made the rotation day 4 or day 7 (part of derogation) shall not be planned for the same rotation after his rest. JAF shall ensure a crew rotation.
- 5- JAF shall inform FCM/CCM that he can refuse to make flight(s), at any time, due to fatigue or if he considers that he will be out of his duty or in deficit of a rest duty.
- 6- JAF must maintain a list of the name of the volunteers FCM/CCM who falls under this exemption.
- 7- This exemption concerns only the flights indicated hereafter. Copy of JAF request must be annexed to this exemption.
- 8- JAF shall ensure that this exemption does not impact on the rest of the provisions and implementation of the EASA FTL as submitted and accepted by BCAA into the TR 2015-113.
- 9- JAF shall ensure that corrective actions taken into account, following BCAA remarks, and listed on the JAF letter from 26 OCT 2015 (ref: ABE: 2015-276 L2 and ABE: 2015-220 L1), are effectively implemented to avoid problems detected during BCAA audits.
- 10- JAF shall maintain a copy of this exemption on board of the A/C for SAFA inspection when required.
- 11- JAF shall give a copy of this exemption to the concerned FCM/CCM.
- 12- JAF shall notify the BCAA without delay any modification to the schedule that might affect the conditions of issuance of this exemption.
- 13- BCAA draws the attention of JAF that BCAA inspectors will conduct an announced and/or unannounced check in-flight and/or in the JAF office (scheduling department)."

The documents provided by BCAA to support the temporary deviation explain that

 the currently installed in-flight rest facilities on the B767 with registration mark OO-JNL (one class 1 for flight crew members and four economy class passenger seats for cabin crew members) are not complying with the minimum standards as described in the



- operator's Temporary Revision 2015-113, Chapter 7.6.4 Extension of FDP due to in-flight rest, in-flight rest minimum standards;
- the operator has demonstrated that it has not been possible to find adequate seats to comply with the standard of a class 3 in-flight rest facility as described in CS FTL.1.205(c) for the operator's B767 configuration on the market; and
- the operator has demonstrated its willingness to equip the aircraft with adequate in-flight rest facilities no later than September 2016. To that end, the operator has formalised an agreement with the seat manufacturer Aviointeriors.

The documents provided by BCAA to support the temporary deviation highlight that the operator has elaborated a safety case to assess the effectiveness of the mitigating measures proposed to control the risk level originated by temporarily providing in-flight rest to cabin crew members in economy class seats on the operator's scheduled route Brussels (BRU) – Santo Domingo (SDQ) – Montego Bay (MBJ) – Brussels (BRU), planned to be operated with the operator's B767 registration mark OO-JNL on Thursdays (day 4) and Sundays (day 7) until 05 September 2016 with a crew change in Santo Domingo.

B) LEGAL FRAMEWORK

Article 22 (2) of the Basic Regulation states the following:

"With regard to flight time limitation:

- (a) the Agency shall issue the applicable certification specifications to ensure compliance with essential requirements and, as appropriate, the related implementing rules. Initially, the implementing rules shall include all substantive provisions of Subpart Q of Annex III to Regulation (EEC) No 3922/91, taking into account the latest scientific and technical evidence;
- (b) a Member State may approve individual flight time specification schemes which deviate from the certification specifications referred to in point (a). In this case the Member State shall without delay notify the Agency, the Commission and the other Member States that it intends to grant approval for such an individual scheme;
- (c) upon notification the Agency shall, within one month, assess the individual scheme on the basis of a scientific and medical evaluation. Thereafter the Member State concerned may grant the approval as notified, unless the Agency has discussed the scheme with that Member State and proposed changes thereto. Should the Member State agree with these changes, it may grant the approval accordingly;
- (d) in the event of unforeseen urgent operational circumstances or operational needs of limited duration and non-repetitive nature, derogations to certification specifications may apply provisionally until the Agency expresses its opinion;
- (e) should a Member State disagree with the Agency's conclusions concerning an individual scheme, it shall refer the issue to the Commission to decide whether that scheme complies with the safety objectives of this Regulation, in accordance with the procedure referred to in Article 65(3);
- (f) the contents of individual schemes which are acceptable to the Agency, or on which the Commission has taken a positive decision in accordance with point (e), shall be published."

The deviation refers to CS FTL.1.205 (c), which reads:

"[...]'Class 3 rest facility' means a seat in an aircraft cabin or flight crew compartment that reclines at least 40° from the vertical, provides leg and foot support and is separated from passengers by at least a curtain to provide darkness and some sound mitigation, and is not adjacent to any seat occupied by passengers.[...]"



C) EVALUATION

The Agency reviewed the proposal with the help of a panel of experts². The experts were provided in advance with the documents submitted by BCAA. The experts were invited to comment on the operator's proposal, the BCAA's assessment of the operator's proposal and on the Agency's comments. Documents and comments were discussed during a WebEx meeting on 07 July 2016 with BCAA.

The following remarks result from the examination of the documents submitted by BCAA to support the temporary deviation:

- Article 2 of COMMISSION REGULATION (EU) No 83/2014³ offers the possibility for Member States to delay the application of the provisions concerning in-flight rest.
- The Kingdom of Belgium did not choose to delay the application of the provisions of point ORO.FTL.205(e) of Annex III to Regulation (EU) No 965/2012 and continue to apply the existing national provisions concerning in-flight rest until 17 February 2017.
- The temporary deviation only concerns scheduled route operated with the operator's B767 with registration mark OO-JNL from 05 May 2016 until 05 September 2016.
- BCAA has a granted an exemption from CS FTL.1.200 (b) (Home Base) to the operator following
 the terrorist attack at Brussels airport (ICAO code EBBR). The documents provided by BCAA to
 support the temporary deviation do not describe the conditions of this exemption. BCAA stated,
 however, during the WebEx on 07 July 2016 that travelling time between EBBR and the temporary
 home base is accounted for as part of the flight duty period (FDP) before the first sector as an
 operating crew member and as duty period after the return from any rotation departing at the
 temporary home base.
- The panel highlighted that the temporary deviation only affects cabin crew members (CCM).
- The panel criticised that the information provided by BCAA on comfort of the seats used for inflight rest of CCM (e.g. recline angle of seats adjacent to bulk heads) was incomplete.
- The panel suggested that BCAA should assess the comfort of the seats used for in-flight of CCM.
- The panel recommended that a lack of comfort could e.g. be compensated by reducing the workload of each CCM and providing a longer in-flight rest to each CCM.
- Panel members found the operator's mitigation measure to increase the rest times at the
 outstation and at home base after each rotation under the provisions of this temporary deviation
 effective to avoid cumulative fatigue.
- The panel noted that the proposed mitigating measures did not include a control of the biomathematically predicted fatigue level for the rotation immediately before the rotations under the temporary deviation beyond the operator's general fatigue management guideline to avoid reaching a predicted fatigue level of 5.4 on the Samn Perelli (SP) scale⁴.
- The panel underlined that the outbound flight of the rotation under the temporary deviation is an
 early start. CCMs' rosters should avoid starting a rotation under the temporary deviation already
 with a sleep debt resulting from the sleep loss originating from the rotation immediately before
 the rotation under the temporary deviation.

⁴ The Samn Perelli (SP) is a 7-point scale with possible scores ranging from 1 ("fully alert, wide awake") to 7 ("completely exhausted, unable to function effectively"). This scale has been validated and widely used in aviation (Samn & Perelli, 1982; Samel et al, 1997).



² Panel composition IFTSS 2016/T/004/BE shared with Advisory Bodies on Circabc.

³ COMMISSION REGULATION (EU) No 83/2014 of 29 January 2014 amending Regulation (EU) No 965/2012 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

- The panel highlighted that a meaningful assessment of bio-mathematically predicted fatigue levels must include an assessment of
 - o the duration; and
 - o the phase of flight during which peak levels of fatigue are reached.
- The panel noted that the documents provided by BCAA did not contain information regarding
 - o the operator's fatigue reporting system; and
 - o the operator's performance in the field of operational robustness of rosters.

D) CONCLUSION

Having reviewed the temporary deviation notified by the Kingdom of Belgium and taking into account that in-flight rest facilities on all other aeroplanes under the oversight of BCAA comply with the minimum standards of in-flight rest facilities described in CS FTL.1.205 (c), the Agency sees no reason to consider that the proposed measures do not lead to an overall equivalent level of protection to that attained by the application of CS FTL-1, provided the following conditions are fulfilled:

- 1. BCAA shall ensure that the travelling time between EBBR and the temporary home base is accounted for as FDP before and as duty time after any rotation under this temporary deviation.
- 2. BCAA shall require the operator to assess the comfort of the seats used to provide in-flight to CCM and compensate a lesser comfort than that provided by a Class 3 in-flight rest facility with an increase of the duration of the in-flight rest provided to each CCM.
- 3. BCAA shall require the operator to assess the rotation immediately preceding a rotation under the temporary deviation without an intervening extended recovery rest period with a view of avoiding to start a rotation under the temporary deviation with sleep debt.
- 4. BCAA shall require the operator to actively collect data on the effectiveness of the mitigating measures of the temporary deviation in the form of a fatigue survey.
- 5. BCAA shall require the operator to establish and monitor performance indicators for the rotation under the temporary deviation measuring at least how often the planned FDPs of the rotation are achieved within the planned duration.

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