



Unite Response to the Transport Select Committee Enquiry into Flight Time Limitations.

1 Introduction

- 1.1 This response is submitted by Unite the Union, the UK's largest trade union with 1.6 million members across the private and public sectors. The union's members work in a range of industries including manufacturing, financial services, print, media, construction, transport, local government, education, health and not for profit sectors. The Civil Air Transport (CAT) membership of Unite, comprises of over 62,000 members working across the aviation sector.
- 1.2 Of particular interest to this enquiry, Unite represents around 20,000 cabin crew and a number of pilots which will be directly affected by these changes.
- 1.3 Whilst the pilot's role is critical in directing and monitoring the aircraft's flight, it is the cabin crew's role to become all three of the emergency services should there be an incident on board. It is therefore critical that all crew on board are not fatigued before commencing duty.

2 Medical Effects

- 2.1 In 2007 the CAA produced a paper entitled "Aircrew Fatigue: A Review of Research Undertaken on Behalf of the UK Civil Aviation Authority"¹. As a result of the European Aviation Safety Agency (EASA) proposals to amend these rules, scientific expertise was also sought which not only reviewed these papers but other scientific studies into fatigue.
- 2.2 These reports highlighted that the assessment of fatigue and its effects on air safety were difficult to correlate given the relatively small number of accidents occurring in the industry. The CAA reports highlighted a report drafted for the US Federal Aviation Administration² demonstrating a relationship between accident risk and distance travelled based on an analysis of 55 accidents over more than 20 years.
- 2.3 The CAA report also highlighted the results of an earlier study which suggested that after a 10 hour eastward flight some individuals took 6 days to recover. This finding was echoed in the scientific report commissioned for EASA which concluded that adaptation to the new time zone would not be complete after spending 36 hours free of duty or 72 hours conducting duties at the layover

¹ http://www.caa.co.uk/docs/33/CAAPaper2005_04.pdf

² Goode JH. Are Pilots at Risk of Accidents due to Fatigue? J Safety Res 34(3): 309-313, 2003.

destination. The three scientists agreed in their reports that acclimatisation occurs gradually and depends on the time difference and the direction of the time zone transition. Normally, adaptation to westward time zone transitions is easier.

- 2.4 Both reports pointed to a study by Van Dongen in 2003³ which suggested that fatigue was known to build up in a cumulative manner over consecutive days as well as work by Tassi and Muzet in 2000⁴ relating to the duration of time it took to wake up from a period of disturbed sleep. In 2003 Goode⁵ demonstrated an increased relationship between the risk of aircraft accidents and long duty hours. Paradoxically, work by Foushee in 1986⁶, Thomas and Petrelli in 2006⁷ suggested that with an increase in fatigue levels in pilots increased the level of cross checking, use of automation etc. increasing awareness once the pilot became aware of the high level of fatigue they were suffering from.
- 2.5 Highlighted in the EASA study were factors such as the distance crew need to travel from their home to the respective airport home base of operations and the duration of any pre flight activities/ briefings prior to commencing duty.

3 Problem Areas

- 3.1 The new scheme is supposedly designed to mitigate and prevent fatigue from operating as crew. No measures are included, however, to consider the social welfare of crew. Analysing the EASA proposals and comparing them to the UK's CAP371⁸ limitations, Unite is concerned over the provision of minimum standards relating to flight duty periods, night duty, home base, standby and rest provisions.
- 3.2 **Flight duty periods (FDP).** Under the EASA proposals it would allow FDPs of up to 1 hour 45 minutes longer than is recommended by the scientific reviews equating to a 17% increase during the most dangerous hours of the day.

In addition, the proposals offer only vague guidance to operators that fatigue inducing rosters could be deemed permissible. Unite therefore believe a higher degree of specification is needed on additional limits on flying.

- 3.3 CAP 371 7.1 states "*Sleep deprivation, leading to the onset of fatigue, can arise if a crew member is required to report early for duty, or finishes a duty late, on a number of consecutive days. Therefore, not more than 3 consecutive duties that occur in any part of the period 0100 to 0659 hours local time can be undertaken, nor may there be more than 4 such duties in any 7 consecutive days. Any run of consecutive duties (Late Finishes or Nights or Early Starts) can only be broken by*

³ Van Dongen HPA, Maislin G, Mullington JM, Dinges DF. The cumulative cost of additional wakefulness: dose-response effects on neurobehavioral functions and sleep physiology from chronic sleep restriction and total sleep deprivation. *Sleep* 2003; 26:117-26.

⁴ Tassi, P; Muzet, A. (2000) "Sleep inertia". *Sleep Medicine Reviews* 4(4):341

⁵ Goode JH (2003). Are pilots at risk of accidents due to fatigue? *Journal of Safety Research* 34 309-313.

⁶ Foushee, H. Clayton, J.K. Lauber, M.M. Baetge and D.B. Acomb (1986) : Nocturnal Sleep and Daytime Alertness of Aircrew after Transmeridian Flights. *Aviation, Space and Environmental Medicine*, 57, (12 suppl.) B43-552.

⁷ Thomas, M.J.W., Petrilli, R.M., Lamond, N., Dawson, D. & Roach, G.D. (2006). Australian Long Haul Fatigue Study, In *Enhancing Safety Worldwide: Proceedings of the 59th Annual IASS*. Alexandria, Virginia, US.: Flight safety Foundation.

⁸ <http://www.caa.co.uk/docs/33/CAP371.PDF>

a period of not less than 34 consecutive hours free from such duties. This 34 consecutive hours may include a duty that is not an Early, Late or Night duty. “

- 3.4 The proposals allow extensions to an FDP without sufficient provisions for mitigating fatigue. Under CAP371 Annex F there are highly detailed mitigation measures which will not be replicated in such detail. If exploited fully, however, the EASA proposals encourage regular working weeks of increased duty periods which will induce cumulative fatigue and work significantly longer hours than employees covered under the Working Time Directive. Equally the direction on defining reporting times and off duty times is very imprecise as opposed to that used under CAP 371 B 13.1
- 3.5 **Standby** provisions which may result in the crew member being in uniform at the airport, effectively on duty, for up to 12 hours before joining a flight. If they then commence a flight, none of the first 6 hours spent on standby count towards their flight duty period. Under these provisions FDP's are limited to a maximum of 14 hours but may result in a total duty period which could exceed 20 hours despite the science recommending an FDP should not be more than 10 hours in duration.
- 3.6 **Rest provisions** are not compulsory whilst on duty resulting in the possibility of crew being expected to work a whole flight without having a break. The provision of rest breaks is down to the discretion of senior member of staff on-board but when flights operate with a single cabin crew member, uninterrupted breaks are often impossible to achieve.
- 3.7 Additionally the proposals contain a caveat which allows a 25 percent reduction in the rest period between flights below that which is recommended and the current reduced minimum rest. Although the proposal talks about 10 hours rest it does not state that the room needs to be available for this period. As a result crew may end up sitting in the lobby of a hotel for several hours before they can relax. This is a common problem experienced by crew which is covered by CAP371.
- 3.8 The proposals provide insufficient rest periods on return from flights with many time zone crossings. This is in blatant disregard of the scientific recommendations.
- 3.9 **Night duty**:- The changes reduce the amount of rest a crew member might receive before returning to the home base and may result in the crew member receiving less than 8 hours sleep with a duty start time of 6 am local time. These proposals would allow a FDP 10 percent longer than is scientifically recommended.
- 3.10 **Home Base** and crew who may be called upon to treat a range of airports as their home base, as there is no limitation on the number of changes that can be made to their allocation or even the number of home bases. This could result in excessive commuting to these locations prior to the commencement of a shift or crew needing to relocate their families with just 3 days off to achieve this. The relaxation of the rules increase the likelihood of operators globally transferring employees at will.
- 3.11 Following British Airways and other carriers cull of regional bases i.e. Belfast, Manchester, Glasgow, staff based here have to commute to Heathrow before

they start work primarily on long haul flights. As the EASA proposals remove the current definition of positioning flights, crew face long commutes by car, plane, train etc. before starting their duty..

- 3.12 The use of an empty aircraft for use as crew accommodation is specifically not excluded from these proposals but at least the proposals include provision for food and drink to be provided to crew which were not present previously.

4 Improvements

- 4.1 The changes from the current CAP371 rules are not all negative. EASA proposals improve the working conditions by clearly defining :-
- **Acclimatised** – As flying between time zones has been shown to disrupt the internal body clock or circadian rhythms. Although referred to by CAP 371 it was not previously defined.
 - **Eastward-Westward/Westward-Eastward** – recognition that flying in one direction is better for your circadian rhythms than flying in the other.
 - **Late finish** – unsurprisingly representatives of the operators had called for this definition to be deleted but EASA instead followed the scientific recommendation in stating that this will be midnight.
 - **Rest facility** - makes it clear an economy seat onboard a flight does not fulfil the criteria for a rest facility to enable crew to would allow to gain enough restorative sleep to justify an FDP extension. Although the definition of a rest facility specifies that it must be separate from the flight crew compartment and the passenger's cabin, in an area that allows the crew member to control light, and provides isolation from noise and disturbance, the proposals do not include the provision of temperature controls. It is therefore possible for the area to be unheated and therefore below zero.
 - **Ultra long range operations** - now clearly defined as means long range flights having a planned flight duration greater than 16 hours or a flight duty period that exceeds 18 hours.
 - **Window of Circadian Low (WOCL)** - equally the definition has now been clearly been defined as the period between 02:00 and 05:59 hours in the time zone to which the crew is acclimatised. This is the period of the night when sleep is most critical in averting fatigue.
- 4.2 There are some additional benefits to the proposed FDP table which are significantly better than the original proposal in several areas. Pilot and cabin crew will now be working to the same FDP in the vast majority of situations. The differences for pre-flight duties will now result in the FDP being the same.

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