

**Docket No. SA-538**

**Exhibit No. 14-G**

**NATIONAL TRANSPORTATION SAFETY BOARD**

**Washington, D.C.**

Excerpts – 14 CFR Part 117

(6 pages)

## Attachment 6

to the Human Performance Group Chairman's Factual Report

DCA13MA133

Excerpts – 14 CFR Part 117

14 CFR part 117 states, in part:

**§117.1 Applicability.**

- (a) This part prescribes flight and duty limitations and rest requirements for all flightcrew members and certificate holders conducting passenger operations under part 121 of this chapter.
- (b) This part applies to all operations directed by part 121 certificate holders under part 91, other than subpart K, of this chapter if any segment is conducted as a domestic passenger, flag passenger, or supplemental passenger operation.
- (c) This part applies to all flightcrew members when participating in an operation under part 91, other than subpart K of this chapter, on behalf of the part 121 certificate holder if any flight segment is conducted as a domestic passenger, flag passenger, or supplemental passenger operation.
- (d) Notwithstanding paragraphs (a), (b) and (c) of this section, a certificate holder may conduct under part 117 its part 121 operations pursuant to 121.470, 121.480, or 121.500.

**§117.5 Fitness for duty.**

- (a) Each flightcrew member must report for any flight duty period rested and prepared to perform his or her assigned duties.
- (b) No certificate holder may assign and no flightcrew member may accept assignment to a flight duty period if the flightcrew member has reported for a flight duty period too fatigued to safely perform his or her assigned duties.
- (c) No certificate holder may permit a flightcrew member to continue a flight duty period if the flightcrew member has reported him or herself too fatigued to continue the assigned flight duty period.
- (d) As part of the dispatch or flight release, as applicable, each flightcrew member must affirmatively state he or she is fit for duty prior to commencing flight.

The FAA published guidance to demonstrate acceptable methods of compliance with part 117.5 in AC117-3 “Fitness for Duty.”

**§ 117.7 Fatigue risk management system.**

- (a) No certificate holder may exceed any provision of this part unless approved by the FAA under a Fatigue Risk Management System that provides at least an equivalent level of safety against fatigue-related accidents or incidents as the other provisions of this part.
- (b) The Fatigue Risk Management System must include:
  - (1) A fatigue risk management policy.
  - (2) An education and awareness training program.
  - (3) A fatigue reporting system.
  - (4) A system for monitoring flightcrew fatigue.
  - (5) An incident reporting process.
  - (6) A performance evaluation.

**§ 117.9 Fatigue education and awareness training program.**

- (a) Each certificate holder must develop and implement an education and awareness training program, approved by the Administrator. This program must provide annual education and awareness training to all employees of the certificate holder responsible for administering the provisions of this rule including flightcrew members, dispatchers, individuals directly involved in the scheduling of flightcrew members, individuals directly involved in operational control, and any employee providing direct management oversight of those areas.
- (b) The fatigue education and awareness training program must be designed to increase awareness of:
  - (1) Fatigue;
  - (2) The effects of fatigue on pilots; and
  - (3) Fatigue countermeasures
- (c) (1) Each certificate holder must update its fatigue education and awareness training program every two years and submit the update to the Administrator for review and acceptance.
- (2) Not later than 12 months after the date of submission of the fatigue education and awareness training program required by (c)(1) of this section, the Administrator shall review and accept or reject the update. If the Administrator rejects an update, the Administrator shall provide suggested modifications for resubmission of the update.

The FAA published guidelines for developing a fatigue education and awareness training program in AC117-2 “Fatigue Education and Awareness Training Program.”

**§117.11 Flight time limitation.**

- (a) No certificate holder may schedule and no flightcrew member may accept an assignment or continue an assigned flight duty period if the total flight time:
  - (1) Will exceed the limits specified in Table A of this part if the operation is conducted with the minimum required flightcrew.
  - (2) Will exceed 13 hours if the operation is conducted with a 3-pilot flightcrew.
  - (3) Will exceed 17 hours if the operation is conducted with a 4-pilot flightcrew.
- (b) If unforeseen operational circumstances arise after takeoff that are beyond the certificate holder's control, a flightcrew member may exceed the maximum flight time specified in paragraph (a) of this section and the cumulative flight time limits in 117.23(b) to the extent necessary to safely land the aircraft at the next destination airport or alternate, as appropriate.
- (c) Each certificate holder must report to the Administrator within 10 days any flight time that exceeded the maximum flight time limits permitted by this section or §117.23(b). The report must contain a description of the extended flight time limitation and the circumstances surrounding the need for the extension.

**§117.13 Flight duty period: Unaugmented operations.**

- (a) Except as provided for in §117.15, no certificate holder may assign and no flightcrew member may accept an assignment for an unaugmented flight operation if the scheduled flight duty period will exceed the limits in Table B of this part.
- (b) If the flightcrew member is not acclimated:
  - (1) The maximum flight duty period in Table B of this part is reduced by 30 minutes.
  - (2) The applicable flight duty period is based on the local time at the theater in which the flightcrew member was last acclimated.

**§117.15 Flight duty period: Split duty.**

For an unaugmented operation only, if a flightcrew member is provided with a rest opportunity (an opportunity to sleep) in a suitable accommodation during his or her flight duty period, the time that the flightcrew member spends in the suitable accommodation is not part of that flightcrew member's flight duty period if all of the following conditions are met:

- (a) The rest opportunity is provided between the hours of 22:00 and 05:00 local time.
- (b) The time spent in the suitable accommodation is at least 3 hours, measured from the time that the flightcrew member reaches the suitable accommodation.
- (c) The rest opportunity is scheduled before the beginning of the flight duty period in which that rest opportunity is taken.
- (d) The rest opportunity that the flightcrew member is actually provided may not be less than the rest opportunity that was scheduled.
- (e) The rest opportunity is not provided until the first segment of the flight duty period has been completed.
- (f) The combined time of the flight duty period and the rest opportunity provided in this section does not exceed 14 hours.

**§117.25 Rest period.**

- (a) No certificate holder may assign and no flightcrew member may accept assignment to any reserve or duty with the certificate holder during any required rest period.
- (b) Before beginning any reserve or flight duty period a flightcrew member must be given at least 30 consecutive hours free from all duty within the past 168 consecutive hour period.
- (c) If a flightcrew member operating in a new theater has received 36 consecutive hours of rest, that flightcrew member is acclimated and the rest period meets the requirements of paragraph (b) of this section.
- (d) A flightcrew member must be given a minimum of 56 consecutive hours rest upon return to home base if the flightcrew member: (1) Travels more than 60° longitude during a flight duty period or a series of flight duty period, and (2) is away from home base for more than 168 consecutive hours during this travel. The 56 hours of rest specified in this section must encompass three physiological nights' rest based on local time.
- (e) No certificate holder may schedule and no flightcrew member may accept an assignment for any reserve or flight duty period unless the flightcrew member is given a rest period of at least 10 consecutive hours immediately before beginning the reserve or flight duty period measured from the time the flightcrew member is released from

duty. The 10 hour rest period must provide the flightcrew member with a minimum of 8 uninterrupted hours of sleep opportunity.

- (f) If a flightcrew member determines that a rest period under paragraph (e) of this section will not provide eight uninterrupted hours of sleep opportunity, the flightcrew member must notify the certificate holder. The flightcrew member cannot report for the assigned flight duty period until he or she receives a rest period specified in paragraph (e) of this section.
- (g) If a flightcrew member engaged in deadhead transportation exceeds the applicable flight duty period in Table B of this part, the flightcrew member must be given a rest period equal to the length of the deadhead transportation but not less than the required rest in paragraph (e) of this section before beginning a flight duty period.

**§117.27 Consecutive nighttime operations.**

A certificate holder may schedule and a flightcrew member may accept up to five consecutive flight duty periods that infringe on the window of circadian low if the certificate holder provides the flightcrew member with an opportunity to rest in a suitable accommodation during each of the consecutive nighttime flight duty periods. The rest opportunity must be at least 2 hours, measured from the time that the flightcrew member reaches the suitable accommodation, and must comply with the conditions specified in §117.15(a), (c), (d), and (e). Otherwise, no certificate holder may schedule and no flightcrew member may accept more than three consecutive flight duty periods that infringe on the window of circadian low. For purposes of this section, any split duty rest that is provided in accordance with §117.15 counts as part of a flight duty period.

**Table A to Part 117—Maximum Flight Time Limits for Unaugmented Operations Table**

Time of report (acclimated)	Maximum flight time (hours)
0000-0459	8
0500-1959	9
2000-2359	8

**Table B to Part 117—Flight Duty Period: Unaugmented Operations**

Scheduled time of start (acclimated time)	Maximum flight duty period (hours) for lineholders based on number of flight segments						
	1	2	3	4	5	6	7+
0000-0359	9	9	9	9	9	9	9
0400-0459	10	10	10	10	9	9	9
0500-0559	12	12	12	12	11.5	11	10.5
0600-0659	13	13	12	12	11.5	11	10.5
0700-1159	14	14	13	13	12.5	12	11.5
1200-1259	13	13	13	13	12.5	12	11.5
1300-1659	12	12	12	12	11.5	11	10.5
1700-2159	12	12	11	11	10	9	9
2200-2259	11	11	10	10	9	9	9
2300-2359	10	10	10	9	9	9	9