Re: Fitness for duty under 14 C.F.R. § 117.5.

Dear Mr. Schnaubelt,

This is in response to your letter posing several questions about the fitness-for-duty requirements of 14 C.F.R. § 117.5. Our answers to your questions are set out below.

1. Level of fatigue permitted under § 117.5

For your first question, you ask whether a flightcrew member may certify as fit for duty and accept a flight assignment knowing “that there is a good chance of a slight or mild amount of fatigue before the end of the flight.”

Part 117 contains a set of flight, duty, and rest regulations that apply to all part 121 passenger operations and certain part 91 operations. One of those regulations is § 117.5(d), which requires a flightcrew member to “affirmatively state that he or she is fit for duty prior to commencing flight.” Part 117 defines “fit for duty” as “physiologically and mentally prepared and capable of performing assigned duties at the highest degree of safety.”

Section 117.5 does not quantify the amount of fatigue that would render a flightcrew member unfit for duty. Instead, it employs a functional test: whether the individual flightcrew member is capable of performing the assigned duties at the highest level of safety. This individualized determination is based on a multitude of factors, such as the length and difficulty of the assignment and the flightcrew member’s self-knowledge of how he or she reacts to different levels of fatigue. Because of the many individual factors that go into a fitness for duty determination, the FAA declines to categorically find that a slight amount of fatigue that appears at the end of a flight duty period (FDP) would always render a flightcrew member unfit for duty.

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1 14 C.F.R. § 117.1.
2 14 C.F.R. § 117.3 (fitness for duty definition).
2. Certifying fitness for duty after being awake for 16 hours

For your second question, you ask whether a flightcrew member who has been awake for 16 continuous hours may certify that he or she is fit for duty.

As discussed in the previous response, there are a multitude of individual factors that go into a fitness-for-duty determination. While there is a significantly higher likelihood that a person who has been awake for an extended period of time will not be fit for duty, the regulatory text of part 117 does not categorically prohibit a person from being awake for 16 hours. Rather, part 117 requires each flightcrew member to make an individual determination as to whether he or she is fit for duty. The FAA expects that each flightcrew member’s fitness-for-duty consideration will include, as one factor, the amount of time that the flightcrew member has been continuously awake.

3. Certifying fitness for duty as to specific flight segments

For your third question, you provide the following example. A flightcrew member is assigned to an FDP with three flight segments. At the beginning of the FDP, the flightcrew member determines that he or she is fit to fly the first two segments, but will be too fatigued to fly the third flight segment. You ask whether this flightcrew member may commence the FDP and fly the first two flight segments.

The FAA answered a similar question in a document that it issued to clarify the requirements of part 117. In that clarification document, the FAA considered a scenario in which a flightcrew member assigned to a six-segment FDP determined, prior to commencing the fifth flight segment, that he was fit to fly the fifth segment but would not be fit to fly the sixth flight segment. The clarification document concluded that a certificate holder would not be in violation of § 117.5 if it permitted the flightcrew member to fly on the fifth flight segment.

Applying the above analysis to your scenario, a flightcrew member who certifies that he or she is fit to fly the first two segments of a three-segment FDP may fly those segments. That flightcrew member may not fly the last segment for which he or she is not fit for duty. The FAA also emphasizes that under § 117.5(d), a flightcrew member must reassess his or her fitness for duty prior to commencing each flight segment.

4. Fitness for duty with regard to FDP extensions

For your fourth question, you note that § 117.19 allows a certificate holder to extend an FDP by up to two hours. You ask whether a flightcrew member must report to an FDP sufficiently rested to accommodate a possible two-hour FDP extension.

Section 117.5(a) requires a flightcrew member to “report for any flight duty period rested and prepared to perform his or her assigned duties.” (emphasis added). As the emphasized portion of the § 117.5(a) regulatory text indicates, the fitness-for-duty

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requirement applies to duties that are assigned, not duties that could be assigned. Accordingly, until a certificate holder decides that an FDP extension is necessary, a flightcrew member’s fitness-for-duty determination is based on the assumption that the FDP will not be extended.

If a decision is made to extend the FDP, a flightcrew member must reassess his or her fitness for duty to determine whether he or she can continue to serve on the extended FDP. If the flightcrew member determines that he or she cannot serve on an extended FDP, the flightcrew member must immediately notify the certificate holder.

5. **Becoming unfit for duty while airborne**

For your final question, you ask what a flightcrew member should do if he discovers that he is unfit for duty while flying in an airborne aircraft. You ask whether the flightcrew member should declare an emergency and land at the nearest airport or whether non-fatigued flightcrew members should continue the flight while the fatigued flightcrew member takes an inflight nap.

If a flightcrew is augmented and there are non-fatigued flightcrew members who are able to take over a fatigued flightcrew member’s duties, then they should do so to allow the fatigued flightcrew member to obtain inflight rest. If a flightcrew is unaugmented then the decision of whether to conduct an emergency landing will depend on the flightcrew member’s fatigue level. If the fatigued flightcrew member determines that he can safely land the aircraft at the intended destination, then he should continue to that destination and land. However, if the flightcrew member determines that he is too fatigued to safely land at the intended destination, then he should land the aircraft at the nearest suitable location to avoid accumulating additional amounts of fatigue while operating the aircraft.

We appreciate your patience and trust that the above responds to your concerns. If you need further assistance, please contact my staff at (202) 267-3073. This response was prepared by Alex Zektser, Attorney, Regulations Division of the Office of the Chief Counsel, and coordinated with the Air Transportation Division of Flight Standards Service.

Sincerely,

Lorelei Peter
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