

# Subject: "In a Sleep-like State"

LETTER FROM A11

NATCA ANC ATCT  
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Dear Mr. Amor:

Without any specific directive to employees, on March 23, 2005, the Agency advised NATCA A11 of its latest interpretation of "on duty" as it relates to sleeping or being in a sleep-like state. I anticipate a directive to employees will be forthcoming.

In anticipation of that directive, I request a definitive explanation of the term "sleep-like state". If, for instance, I were to close my eyes while sitting in the break room, would I be guilty of the heinous offense of being in a sleep-like state while on duty? A casual observer might jump to the conclusion that I was asleep, if they saw me sitting in a chair in the break room with my eyes closed. I may be engaged in prayer or spiritual meditation. For what duration can one safely close one's eyes while awake before being declared "sleep-like"?

Additionally, is a "sleep-like state" defined by pose, stance, or posture? Can one be in a sleep-like state while standing or must one be in the prone or seated position? If defined by closed eyelids, could one be in a "sleep-like state" while standing with eyes closed, as a horse is capable of doing, or is a combination of pose and eye lid condition required?

Is a "sleep-like state" to be determined subjectively by the application of individual supervisor's personal criteria, or will the Agency provide employees with a firm definition? In the interest of fairness, I believe something as nebulous and bizarre a concept as "a sleep-like state" requires a solid definition.

The American Heritage Dictionary defines sleep as "a natural periodic state of rest for the mind and body, in which the eyes usually close and consciousness is completely or partially lost, so that there is a decrease in bodily movement and responsiveness to external stimuli". Closed eyes is usually a condition of sleep, but not requisite. I have observed partial loss of consciousness and a decrease in bodily movement and response to stimuli in controllers who are on a break recovering from a busy session or, more commonly, attending weekly briefings. This would qualify as a "sleep-like state" under the preceding definition. To avoid the appearance of being in a sleep-like state while on a break, should an employee exhibit bodily movement and reaction to external stimuli by continually twitching and making frequent guttural utterances?

During sleep the brain in humans and other mammals undergoes a characteristic cycle of brain-wave activity that includes intervals of dreaming. The only definitive, measurable indicator of a sleep-like state is this brain wave activity. During periods of relaxation,

while still awake, our brain waves become slower, increase in amplitude and become more synchronous. These types of waves are called alpha waves. For example, such brain waves are often associated with states of relaxation and peacefulness during meditation. Recent evidence indicates that activities that promote alpha wave activity have positive health benefits.

The first stage of sleep is characterized by theta waves, which are even slower in frequency and greater in amplitude than alpha waves. The difference between relaxation and stage 1 sleep is gradual and subtle. As the sleeper moves to stage 2 sleep, theta wave activity continues, interspersed with two unusual wave phenomena, which occur periodically every minute or so, and are defining characteristics of stage 2 sleep. There is a sudden increase in wave frequency and amplitude. Stages 1 and 2 are relatively "light" stages of sleep. In fact, if someone is awoken during one of these stages, he or she will often report not being asleep at all.

I suggest we attach brain wave monitors to all employees to continuously determine the level of brain-wave activity. This is the only fair and scientific way to determine if a tired, hard-working shift worker on a break has temporarily succumbed to the natural, rejuvenating power of sleep. When employees vehemently deny being asleep, the Agency can provide evidence to the employee in the form of encephalograms.

Thanks for your attention to this matter.

Sincerely,

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Larry E. Lescanec