

How does the FLSA impact fatigue in ATC and Technical Operations shift schedules?

FLSA requires that employees are scheduled to work no more than 40 hours within a work week (an administrative workweek is the seven-calendar-day-period, which begins at 0000 hour Sunday and ends at 2400 (midnight) hours the following Saturday) and 80 hours within a pay period, not considering overtime.

Therefore, when a work-shift pattern crosses over from Saturday to Sunday, start times for the Sunday shift may be delayed until 0000 Local so that all shift hours are accounted for in the next work week.

This delay results in a later end time for the shift and may result in a reduced period of time off before the start of the next shift in the rotation. This impacts fatigue by reducing the opportunity for sleep, which may lead to a sleep debt, and reduced alertness due to higher circadian pressure to sleep during the hours from midnight to 0500L.

How might an 0000L start time impact alertness?

- Delayed start time:
 - Pushes the shift into the time of day that coincides with the Circadian low point in alertness.
 Generally from 0300-0500 physical and mental activity slow way down and there is a strong push toward sleep.
- Delayed end time:
 - Limits a person's ability to obtain sleep in the morning hours after the shift, when it is more restorative than late-morning sleep.
 - If the following shift is also a midnight shift, there is a reduced opportunity for sleep if the next midnight shift start time is earlier than 0000L.
 - May result in an accumulating sleep debt, which can reduce alertness on subsequent work shift(s).

So ... what actions can you take to maintain alertness when your schedule is adjusted?

These types of schedule adjustments can be planned for, and you can take proactive steps to reduce their impact on your alertness while at work:

- Take a nap in the evening hours that are now available prior to the 0000L start of your later shift. This will
 improve alertness and reduce your accumulating sleep debt during this shift period and over the work week.
- Get plenty of sleep in the days off at the end of the work week (7-9 hours a day minimum). This will enable you to recuperate from any accumulated sleep debt and start the next work week fully alert.
- Always plan to make sleep a priority, especially if your work week includes an 0000L start time during your
 work week. The benefits of sufficient sleep improve alertness for both the immediate post-sleep period and
 subsequent shifts because of the positive effect on your sleep reservoir. By making the most of sleep
 opportunities during the work week, you can more effectively maintain alertness on the later work shift and
 subsequent shifts in the schedule pattern.

Myth: FLSA required shift changes create an unmitigatable fatigue hazard in the NAS

Fact: Scientific fatigue modeling, similar to that used to analyze pilot flight schedules, shows that by taking advantage of pre-shift sleep opportunities, and on-shift recuperative breaks, you can mitigate schedule-driven fatigue and maintain acceptable levels of alertness.