I Was Zoned Out

Photo by PH1(NAO) Jim Hampshire

By AT2 Brian Dale

Petty Officer Dale reports a common problem. He is not a psychologist or physiologist, but his research is in line with studies and presentations I've seen. The Naval Safety Center Aeromedical Department offers a medical opinion at the end of AT2 Dale's story.—Ed.

I was walking across a dark, busy flight deck and was heading toward turning props and moving aircraft. I was like a zombie and made it nearly half-way across the flight deck before I came out of my "zone." I stopped, got my bearings, and tried to figure out where I was and why I was there.

I often have thought about what happened that night and on other nights when I felt zoned out. This problem isn't restricted to the flight deck; it also has happened while driving and during other menial, yet dangerous tasks. Talking with shipmates, I have found I'm only a small percentage of a dangerous statistic. I talked to 12 other maintainers about this problem, and they all admitted having the same moments. What causes this? I have not read any articles in safety magazines and never have seen anything on TV, so I researched the problem on my own and offer a lay-persons perspective.

Sleep or rest is a big factor. On the day I strolled merrily across the flight deck, I was operating on only three-to-four-hours sleep. In the week before my near-incident, I had slept only four to five hours per night. I now know this was not enough sleep. I have seen reports that say humans need eight-hours sleep to be safe and productive, but other reports range between four to 10 hours.

The word "average" does not consider a typical Sailor's 12-to-14-hour workday and doesn't take into account the extreme heat, stress, and physical labor related to our workplace. With these facts in mind, the right amount of rest depends on the person. Every Sailor must monitor his sleep habits to determine the right length time necessary to maintain effectiveness.

Getting the proper amount of quality sleep over a significant period of time is critical. Two major factors will help: a good diet and reduced stress. These items can be hard to comply with at sea. Our galleys try hard to provide a good meal—chock full of vitamins and minerals, but Sailors don't always eat what is offered, relying on "geedunks," rather than beneficial items from the food triangle. We also know that excessive caffeine, sugars and fat are not good for us. These items are hard to avoid on board our ships. I know some Sailors who drink three to four sodas a night. With all the caffeine and lack of restorative fluids in the body, it is no wonder sleep gets impaired.

We face stress every day, and we must find ways to combat this "sleep-and-attention killer." Stress can be good and bad. When it hones our skill, it's good, but, when it affects our ability to make a decision, makes us lose sleep, or interferes with safety, it is bad. I often have been tired but lie awake in my rack, looking at the ceiling and thinking about life's problems. I know some readers have done the same thing. This problem happens, and we still are expected to work just a few hours later. When this happens, the stress I had the night before is not released, and it tends to build up. That vicious cycle must be broken.

The Navy offers stress-management classes, but most people just need to take the time to relax, to stay focused, and to think through problems rationally. If you need to, talk to your supervisor, chaplain or the docs. We often get bent out of shape about things we can't control and later realize the item was trivial.

Petty Officer Dale wrote this story while assigned to VAQ-131. He now works at Naval Air Maintenance Training Unit, Whidbey Island, Wash.

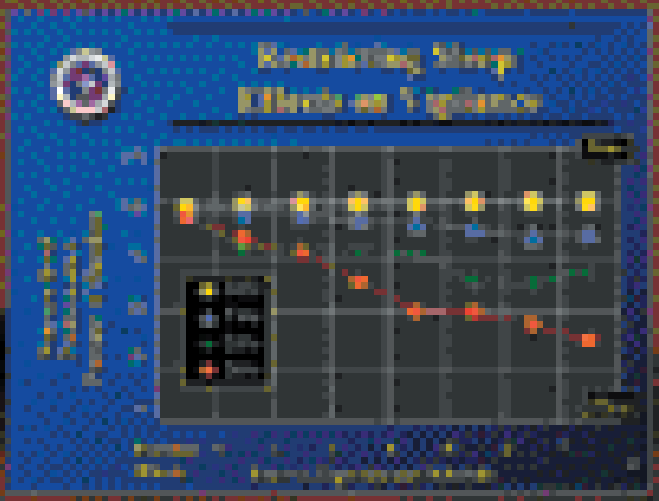
AT2 Dale does an excellent job of describing the effects of fatigue, which is a common problem and we frequently see it as a contributing factor in mishaps. Fatigue is not just a Navy and Marine Corps problem. It is a problem throughout our society. We all live in real-world where staying up late and getting up early

is the norm. Although long working hours sometimes are the reason we don't get enough rest, we more frequently choose to stay up too long to be with our friends, to watch TV, or to read a book. However, experimental data repeatedly has shown that all adults need about eight hours sleep per day to function at our optimum mental and physical condition. Some people think they need less than about eight hours, but, in reality, they only have become accustomed to functioning in a constant state of fatigue. The graph depicted below shows us that we can get by with less than eight hours of sleep per day, but we will pay a penalty for it. This slide shows mental performance, as measured by response speed across eight days on various nightly sleep schedules. If you spend nine hours in bed, you will obtain about eight hours of sleep. The yellow squares show that this amount of sleep sustains mental performance. If you obtain just one hour less sleep per night or about seven hours of sleep per night, your mental performance almost immediately falls off slightly, and the difference clearly is obvious after about four days. Obtaining only five hours of sleep per night results in immediate and fairly substantial mental-performance deficits. These deficits level off after about four days, but performance remains well below the eight-hour level. Restricting sleep to three hours per night causes immediate and devastating performance deficits. These deficits continue to mount across nights. After the seventh night of sleep restricted to three hours, mental performance is reduced to about 30 percent of well-rested levels.

–Capt. James Fraser, Naval Safety Center surgeon.

For more info…

This graph is taken from a brief that can be accessed and downloaded from our Naval Safety Center website http://www.safetycenter.navy.mil/aviation/aeromedical/performancemanual.htm. The NavMed P-6410, *Performance Maintenance During Continuous Flight Operations-A Guide for Flight Surgeons,* and the Naval Safety Center *Aeromedical Brief on Performance Maintenance During Continuous Flight Operations* discuss the topics of sleep, circadian rhythms, fatigue, and how fatigue affects performance. The brief also discusses strategies and ideas that can be used by the air wing, squadron and individuals to face the problems of fatigue.



A Lack of Sleep Equals a Lack of Good Judgment

By AME2(AW) Mark C. Hedrick

Keeping "your head in the game" is crucial to avoiding tragic consequences. I had been stationed at VP-30 for about six months when I earned my CDI Qual. Everything ran smoothly for the next two months, but I guess I took things for granted.

We had been working on duty weekends, and everyone was being driven to get aircraft fixed in the best way they could. I always strive to do good maintenance, anyway, and try to keep everyone up to date on my progress. I also go out of my way to give aircrew an answer—even if I'm in the middle of something