

VIEW U42 AWOS ON-LINE

The U42 AWOS software/website provider has upgraded the AWOS information on-line viewing software.

Just drop the end... "/sai.html" and the website will detect if you are using a smart-phone or a PC. You will then be directed to the new FLASH page or the PHP script for the smaller cell-phone screen.

The name-change from Salt Lake City Airport II to South Valley Regional Airport also appears on the display now. Visit http://www.saiawos3.com/KU42*/sai.html to view current U42 on-line AWOS information.

FIGHTING FATIGUE

By Vincent Czaplyski in Piper Magazine

What do the Chernobyl and Three Mile Island nuclear accidents, the space shuttle Challenger explosion, and the Exxon Valdez grounding have in common? Answer: The official investigations in each case determined that fatigue played a causal or contributory role in the outcome.

Accidents like these are especially dramatic examples of what can happen when humans become fatigued. But each year thousands of other less spectacular accidents occur across a range of activities, a by-product of a 24/7 world where sleep loss and circadian disruption are the norm for many individuals. For example, by one legitimate estimate as many as 100,000 auto accidents in the United States each year result from driver fatigue, causing an estimated 1,500 fatalities and 76,000 injuries.

Aviation has had its share of fatigue-induced accidents too. Fatigue has been a factor in aviation accidents large and small, including the 1993 crash of a McDonnell Douglas DC-8 cargo plane during a landing attempt at Guantanamo Bay, Cuba. In that accident the NTSB ruled that "the probable causes of this accident were the impaired judgment, decision-making, and flying abilities of the captain and flight crew due to the effects of fatigue." This marked the first time in the NTSB's history

that the agency identified fatigue as a probable cause of a major U.S. aviation accident. Four years later the NTSB ruled that fatigue was a contributing factor in the 1997 Korean Air Boeing 747 controlled flight into terrain (CFIT) accident in Guam too.

It can be difficult to conclusively prove that fatigue caused a particular accident. That's one reason the NTSB took as long as it did to finally recognize its role in a major accident. But there is a growing consensus among scientists that official accident statistics greatly understate the problem. Across all modes of transportation, as many as 15 to 20 percent of accidents are likely fatigue related. Put another way, fatigue has played a role in a large number of aviation accidents where it was not specifically identified as a factor. We all know what it's like to feel tired, but from a scientific viewpoint, fatigue is primarily the result of two physiological factors-sleep (or lack of) and the circadian clock.

Sleep, is as critical to human survival as air, food, and water. Adults tend to require anywhere from six to ten hours nightly, with around eight hours being the average. The amount an individual needs is probably genetically determined and can't be modified much. When we don't get enough, the "lost" sleep accumulates into a sleep deficit. As the deficit grows over multiple sleep and wake cycles, fatigue increases, our performance and alertness levels deteriorate, and our health often suffers.

Many factors affect the quality and quantity of sleep we get each night, but age, alcohol use, and sleep disorders are probably the biggest variables. More than 90 sleep disorders have been identified, and there's a greater chance their effects will be more severe when multiple disorders are involved. Even if you don't develop a sleep disorder, after age 50 the amount of deep sleep you manage to get each night will probably start to decrease. Many people turn to alcohol, the most widely used sleeping aid, to try to make up for these disruptions. But alcohol

FEDERAL LAW ENFORCEMENT HOTLINES

Report All Suspicious Aviation Activities:

1-866-AIR-BUST or 1-866-GA-SECUR

actually has the opposite effects, as it tends to reduce both the length and the quality of sleep.

The other big determinant of your alertness and performance levels is the circadian clock, a brain function that controls the approximately 24-hour cycle of sleep and wakefulness. The circadian clock is most affected by light. Gradually changing the cycles of light and dark can reset your circadian clock to a new time zone or schedule shift. But doing so abruptly... flying across many time zones, for instance, causes your circadian clock to become desynchronized. This negatively affects almost every aspect of your performance, including overall mood, decision-making skills, reaction time, memory, ability to communicate, and alertness.

There are two distinct periods of alertness and two periods of tiredness in each 24-hour cycle. For most people, maximum tiredness occurs at the low point in the circadian cycle from about 3 to 5 a.m., with a second period of tiredness 12 hours later from 3 to 5 p.m. The two windows of maximum circadian alertness occur from approximately 9 to 11 a.m. and again from 9 to 11 p.m.

Interestingly enough, the Guantanamo Bay accident occurred during the afternoon low point in the circadian cycle. Two of the three crewmembers had an acute sleep loss in the 72 hours prior to the accident, and all three had a significant accumulated sleep deficit over that time. Each also had been continuously awake for an unusually long time, ranging from 19.5 to 23.5 hours.

There are noticeable effects of fatigue in all kinds of flight operations, including long- and short-haul airline operations, overnight cargo, corporate, and charter flying. While they differ in style, each can be fatigue inducing in its own way. (Most of us don't fly a fulltime flight schedule for a living, but you can still find yourself piloting an airplane while tired on any given day.) One thing holds true across the board: When a pilot gets fatigued, performance suffers and accidents become more likely.

Mitigating fatigue hazards

So what does all this mean to pilots? In short, fatigue might be an inevitable part of flying, but there are things you can do to minimize its dangers.

The first thing is to educate yourself about the subject of fatigue so you can recognize when you're most at risk. The next step is to put in place some practical alertness strategies to keep from becoming a statistic. There is no one-size-fits-all solution, but there are many coping mechanisms that can help, depending on the individual. Here are just a few recommendations:

- When possible, avoid flying in the first place when you know you're not going to be sharp because of fatigue.
- Develop good long-term exercise, sleep, and diet habits. These can all contribute to better energy levels and less overall fatigue.
- Don't depend on alcohol as a regular sleep aid.
- Take advantage of strategic napping opportunities that can "recharge your batteries" when you've hit a wall. Even though the effect may be temporary, a 20-minute snooze on the FBO's couch before the flight home can help refocus your energy

HELPFUL POINTS OF CONTACT

For GA operational, facilities maintenance, aviation newsletter, airfield, and SLC Title 16 questions call: Steve Jackson, SLCDA General Aviation Manager, 647-5532 or e-mail at steve.jackson@slcgov.com.

For hangar lease and repair questions call: Mike Rawson, Properties Management Specialist, at 575-2894 or e-mail at mike.rawson@slcgov.com.

For aviation security questions call: Connie Proctor at 575-2401.

For gate access problems call: Airport Control Center at 575-2401.

For emergencies call: at SLCIA, 575-2405
at TVY or U42, 911 then 801-575-2405

For common General Aviation information call the GA Hotline: 575-2443

and attention on the flight.

- Make judicious use of caffeine to give you a temporary alertness boost, but don't overdo it.

No pilot wants to fly when fatigued. But the reality is, like it or not, you'll probably find yourself flying sometime when you'd rather be snoozing in an easy chair. Recognizing the danger and knowing which countermeasures work best for you can help ensure you reach that easy chair after a successful flight.

ELECTRONIC GA NEWS

If you would like to receive the Salt Lake City Department of Airports' monthly general aviation newsletter by e-mail, send your e-mail address to: steve.jackson@slcgov.com.

UPCOMING EVENTS

Leading Edge Aviation Logan (LGU) - Leading Edge Aviation has a free breakfast in their hangar on the 2nd Saturday of each month from 8:00 am to 10:00 am. They'd enjoy seeing you there. For more information about Leading Edge and its events, visit www.leaviation.com.

Local FAA Seminars During the month of April the SLC FAA Safety Team is sponsoring the following seminars which anyone may attend:

Certified Flight Instructor Workshops. St. George, 15 April at Dixie State College Hangar at the SGU airport 6-9 PM; Salt Lake City, 22 April at Cornerstone Aviation, Kibbie Executive Terminal on the General Aviation (east side) of SLC International Airport 6-9 PM.

The subjects of the workshops this quarter are Light Sport Aircraft, Summer Weather Flying, and Integrated Airman Certification and/or Rating Application (IACRA).

Times, directions and additional information may be found at www.faasafety.gov under events/seminars or contact Dennis Seals FAA Safety Program Manager, at 801-257-5056.

Do not fuel aircraft in hangars.

