

Aviation Human Factors Industry News

Volume VI. Issue 28, August 20, 2010



From the sands of Kitty Hawk, the tradition lives on.

Hello all,

To subscribe send an email to: rhughes@humanfactorsedu.com

In this weeks edition of *Aviation Human Factors Industry News* you will read the following stories:

★Firm Reveals Ingredients for Successful Shiftworkers

★How to Provide Effective Orientation for New, Young and Inexperienced Workers

★Summer Heat is a Real Safety Concern

★The Human Contribution

★Picture This

Firm Reveals Ingredients for Successful Shiftworkers

Employers know that success in any operation begins with having the right people for the job. Employers of operations involving shiftwork know that those right people -- the ones who not only can adapt to but excel the **nontraditional work schedule** -- is sometimes a difficult task. With in mind, CIRCADIAN®, a Stoneham, Mass.-based provider of 24/7 workforce performance and safety solutions for businesses that operate around the clock, offers the following advice to tip the scales in the hirer's favor.



According to CIRCADIAN, these are some of the common attributes that many successful shiftworkers share:

1. **Commit to the shiftwork lifestyle.** A **personal commitment** to shiftwork is the most important factor affecting a person's ability to work shifts. Key to this commitment is a willingness to schedule one's life -- and one's sleep habits -- around a nontraditional work schedule. During hiring interviews, ask people if they have worked shiftwork before and, if so, how they handled it. Look for signs that the person has developed strategies for handling a nontraditional work schedule -- for example, setting up a dark and soundproof place for day sleep or eating a healthy diet to minimize digestive problems.
2. **Have a support network.** Having people in their lives who **understand and accept** their schedules gives shiftworkers an edge. Shiftworkers whose spouses and children respect their need for daytime sleep and recognize that they cannot always attend important events fare well in the long run. **Friends are also important**; someone who can rely on friends to go out with or talk to on the phone is less likely to develop negative feelings about being a shiftworker. While hirers have legal constraints on what they can ask about a person's private life during a job interview, they should be able to elicit some basic information from job seekers that indicates whether they have a support network available to them.

3. **Are “night owl” types.** While most people are comfortable waking up between 7 and 9 a.m. and going to bed around 11 p.m. or midnight, certain people are extreme morning or evening types. **“Owls”** love to sleep into the late morning and can stay awake and alert past 2 or 3 a.m., while **“larks”** rise as early as 4 or 5 a.m. and feel sleepy by 8 or 9 p.m. Research has shown that owls have an **easier time adapting** to night shift work than do larks.

4. **Exercise.** The benefits of exercise are especially relevant to shiftworkers: reduced risk for heart disease, increased stamina, and **improved sleep**. Studies suggest people who exercise daily fall asleep faster and sleep better than those who don't. While shiftworkers need not all be marathon runners, it does help if they at least get some exercise. Someone who merely takes a brisk 20-minute walk every other day is likely to adapt better to a rotating schedule than a true couch potato.

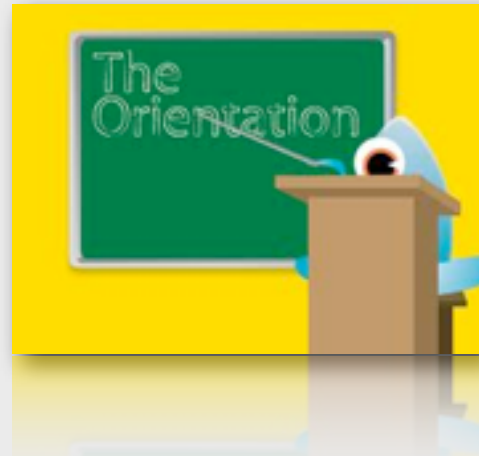
5. **Not have inflexible obligations outside work.** Hobbies not tied to precise times of day are ideal for shiftworkers. For example, athletic shiftworkers can arrange to jog or play tennis with friends at varying times but would be frustrated if they signed up for a softball league and had to miss every other game.

Conclusion: While there are factors that might make someone a more natural fit for shiftwork, it's also critical for companies to **provide training and educational materials** to new hires on how to manage a shiftwork lifestyle. After all, much of what determines who is a successful shiftworker comes down to developing good habits that can be learned (e.g. making sleep a priority, creating a good sleep environment, and eating the right food at night).

CIRCADIAN says hirers might be surprised, but sometimes the difference between those who quit after one month on the job and those who stay for 20 years is having the availability of and sharing the **right information** about shiftwork when they are hired.

How to Provide Effective Orientation for New, Young and Inexperienced Workers

Did you know that new, young and inexperienced workers are **five times more likely to be injured at work** in their first four weeks on the job? It sense. These workers are often unable to perceive the **hazards and risks** because they lack experience; they may over-rate their own skills; young workers in particular may be adrenaline junkies and thrive on **risky behavior**, both on and off the job; and they may have difficulty and applying general orientation training.



You can help keep new, young and inexperienced workers safe by providing **proper safety orientation**. But employee orientation training isn't a one-style-fits-all proposition. People learn in different ways and at different rates. For effective orientation, be sure to choose carefully your timing and pace to **avoid information overload**.

5 Objectives of New Worker Safety Orientation

When providing worker orientation, your **five objectives** are training workers to:

1. Understand their role in a safe workplace;
2. Follow safe operating procedures;
3. Know the hazards of their workplace;
4. Use protective equipment, and
5. Comply with rules.

Summer Heat is a Real Safety Concern

From Abbotsford, BC, to Zephyrhills, FL, summer heat and humidity can be a serious problem for all types of workers, from people employed in agriculture to pizza shop workers. Becoming **overheated on the job** goes far beyond causing workers discomfort. It can be deadly. And temperatures don't need to be unbearably hot in order to spell trouble for workers performing physical jobs.



Supervisors need to take measures to ensure that workers have access to water and shade and are given periodic breaks to prevent heat illness. Workers should also be encouraged to wear loose-fitting, light clothing, along with hats to protect their heads.

High temperatures, humidity, insufficient water intake and physical exertion can quickly lead to heat-related illness.

There are various forms of heat illness. From least-serious to most-serious, they include:

- **Heat rash:** This is the most common problem in hot work environments. Skin that is moist with sweat can break out in a reddish pimple-like cluster or small blisters, especially on the neck, upper chest, groin or in elbow creases. Dusting powder may be applied to reduce discomfort. The situation usually resolves itself after the worker moves to a cooler, drier environment.
- **Heat cramps:** Physical labor in a hot environment, especially when coupled with insufficient water intake, can cause workers to develop an electrolyte imbalance that results in painful cramps in muscles fatigued by heavy labor. The solution is to drink water every 15 to 20 minutes and supplement fluid intake with sport drinks that restore a worker's electrolyte balance.
- **Heat exhaustion:** This is a more serious condition in which excessive heat and insufficient fluid intake cause headache, dizziness, nausea, weakness, fainting and giddiness. Workers with these symptoms need to be taken to a cool area to rest and be provided water. Ice packs are also recommended to cool the worker.

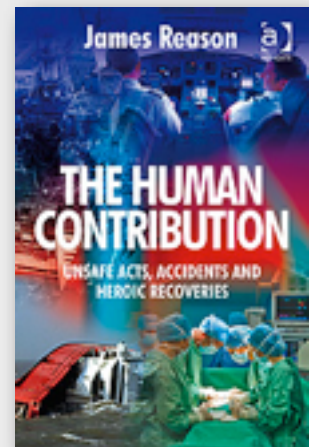
- **Heat stroke:** The most serious heat illness, heat stroke occurs when the body loses its ability to regulate temperature. Without expert medical help, the victim may easily die. Symptoms include confusion, irrational behavior, hot and dry skin, a lack of sweating, loss of consciousness and convulsions. Medical help must be summoned immediately. Before help arrives, the victim should be taken to a shady, cool area. Clothing should be removed and the worker should be doused with cool water, fanned and given water to drink as soon as possible.

The Human Contribution

Unsafe Acts, Accidents and Heroic Recoveries

James Reason, Professor Emeritus, The University of Manchester, UK

This book explores the human contribution to the reliability and resilience complex, well-defended systems. **Usually the human is considered a** – a component whose unsafe acts are implicated in the majority of breakdowns. However there is another perspective that has been relatively little studied in its own right – **the human as hero**, whose adaptations and compensations bring troubled systems back from the brink of disaster time and again. What, if anything, did these situations have in common? Can these human abilities be ‘bottled’ and passed on to others?



The Human Contribution is vital reading for all professionals in high-consequence environments and for managers of any complex system. The book draws its illustrative material from a wide variety of hazardous domains, with the emphasis on healthcare reflecting the author’s focus on patient safety over the last decade. All **students of human factors – seasoned** – will also find it an invaluable and thought-provoking read.

Picture This

Failure to Follow Procedures

The ramp unloaded the front bin first.

