Stress and Safety

By: Capt Bill Trussell, CFI, IA, MEI

The FAA Safety Summit held this past March noted that "Pilots and flight attendants expressed concerns that they continue to feel stress in the workplace, including long work hours under adverse conditions. The group acknowledged that **risk models should also incorporate human factors**."

This Summit was attended by many of the experts in aviation safety, and representatives across the industry including airlines, FAA controllers and ground support personnel. It was significant for the attendees to highlight stress as an issue that has long been known to have an adverse impact on safety. It's back to the future for now.

Pilots will recognize stress as one of the six elements of the memory mnemonic IM SAFE which is used by many to evaluate the impact of conducting an operation. In most cases it involves a flight based on an individual's status for Illness, Medications being taken, recent Alcohol consumption, current Fatigue level and whether the person has Eaten an appropriate amount recently. The one thing that is the hardest to evaluate among IM Safe is Stress. A person's reaction to stress is highly individualized. A small amount of stress is a good thing, it is part of what helps us to achieve a high level of concentration and task performance. Too much stress from outside sources and things can fall apart quickly, often leading to a complete failure or "meltdown."

How important is a fair and accurate evaluation of stress when considering the conduct of any operation? It is well known in the medical community that increased stress for long periods of time has negative physical and mental impacts on a person which can be wide ranging in scope and magnitude. As you might expect, the impacts can, and do vary from person to person. It is also understood that stress can be caused by factors that can occur at home, school, and work….basically any aspect of life…personal and professional. The factors can be based on financial issues, relationships and other interactions with friends, family and co-workers or fellow students. As it turns out, Americans are one of the most stressed-out communities in the world.

The [American Institute of Stress](#) has collected some of the most alarming statistics on this subject, among which are that:

- 55% of Americans are stressed during the day.

- The global average of the number of stressed people out of 143 countries is 35%.

- The current stress level experienced by Americans is 20 percentage points higher than the global average.

- Stress causes 57% of US respondents to feel paralyzed.

- 63% of US workers are ready to quit their job to avoid work-related stress.

- Chronic stress is commonplace at work with 94% of workers reporting feeling stress at work.

- Globally, Greece has the highest reported stress level at 59%.

- Montana is the least stressed US state with a total stress score of 26.81 while Louisiana is the most stressed with 59.94.

Whatever they are doing in Montana it would be good to know so we could all emulate them.

Realizing that **stress can** contribute to mistakes being made in nearly every type of operation resulting in injuries, property or equipment damage, it is important for everyone to know their limits in dealing with short term and long-term stresses in their lives. Even small periods of inattention to hazards around people and delays in reacting to the risks associated with them can cause serious harm and catastrophic loss. The FAA, having recognized the impact that stress can have as a safety issue impacting flight, included stress as part of the IM SAFE checklist.

The severe impact that stress can have is why CAP includes the IM SAFE checklist evaluation as part of the flight release procedure. High Stress periods for individuals is a cause for a "no-go" decision.

With so many people feeling stressed out for so many reasons it is a miracle at times that our safety systems work as well as they seem to. Having Air Traffic Controllers stressed out places an even higher responsibility on pilots to mitigate the risks associated with air and ground operations, and vice versa. Acknowledging that everyone in CAP has a role in the safe conduct of all our activities, the importance of keeping our level of stress out of these activities cannot be over emphasized. If you are thinking about other things outside of the operation at hand, then you are likely stressing over those things, quite literally taking brain cycles away from concentrating on the risks at hand.

If you find yourself at a higher risk due to the stresses in your life, perhaps a "no-go" is the best option.

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