

The Adrenaline Driven Pilot
by
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Risk takers increasingly are taking to the air for thrills, and occasionally spills. While barn storming is nothing new, neither is the thrill that comes with your first solo flight, or the excitement from free fall just before the parachute opens. All of these feelings have one hormone in common, adrenaline. This chemical is secreted by our adrenal glands when subjected to sudden stress. In life threatening emergencies it helps save lives, through the so-called 'fight or flight' response.

When a person appears addicted to the effects of adrenaline, activities that stimulate the adrenal glands become a passion. This can include high-risk sports such as technical mountain climbing, white water rafting, auto racing, hang gliding, bungee jumping, surfing, mountain top skiing, and aviation sports such as skydiving, aerial acrobatics, and aerobatic 'dog fighting.'

The colloquialism used to describe somebody who appears addicted to such thrills is 'adrenaline junkie.' The key elements of addiction are these: 1. An altered state of consciousness (in this case called an 'adrenaline rush'), which causes desirable physiological and psychological effects. 2. The altered state eventually disappears, leaving a 'crash' in its wake, usually involving feelings of disappointment and depression. 3. During the crash phase, craving for another rush manifests itself, prompting a search for a new rush. This creates a pattern which is reminiscent of the classical addiction cycle, so often seen with mind-altering drugs.

The adrenaline rush is often accompanied by an increase in endorphin activity. These specialized hormones are responsible for feelings of well being as well as pain relief. Similar effects can follow vigorous physical exertion, hearty laughter, as well as other stimuli to intense satisfaction. While the effects of adrenaline are largely positive, prolonged or excessive stimulation can lead to hypertension, heart disease, and other stress-related illnesses.

The popularity of the adrenaline rush is evident in such diverse entertainments as recent movies, rock music albums, and SoBe sports drinks by the same name. For thrill seeking pilots there is a new strap-on 'SoloTrek XfV helicopter,' powered by a two-stroke engine and two monster turbines. It is rated to fly nearly 80 KTS and will cost around \$100,000. If the engine fails, you'd better pray you're flying over a mattress factory, though it should be quite thrilling to land one next to your business partner's new Eclipse.

Similarly advertized is the new Seawind 300C which offers amphibian flying in style, with a spacious cabin, a 310-horsepower engine, and which flies at speeds of 190 KTS or faster. If you like the freedom of landing on water, without VASI, Localizers, or tower commands, this \$320,000 go-anywhere airplane may be your next adrenaline rush.

Having described the effects of adrenaline and the popularity of these new and old high-risk sports, I would also make a case for conserving our adrenaline, holding those adrenal hormones in reserve for true emergencies. More and more, as aviation medical examiner and wellness

physician, I see pilots with burnout, depression, and chronic fatigue that come from borrowing future reserves of energy and using up vital force prematurely for momentary thrills. The law of gravity tells us that what goes up must come down, and there are laws of cause and effect that govern our bodies, not just the fuselage and power plant of a Mooney, a Cherokee or a Skyhawk. Every pilot knows that a complete preflight safety check, must include personal questions, like, ‘Am I fit to fly today?’

Sleep deprivation, too much stress, or excessive stimulants like potent caffeine-laced energy drinks, can set up the cockpit occupants for a tragedy, often reported by the NTSB as simply ‘pilot error.’ A good night’s sleep of 7-8 hours may be just what your body needs, for better judgment calls concerning bad weather, or the quick maneuvering to avoid a mid-air collision. Pilots need these health reminders from time to time, since we are subject to social pressure as well as creatures of habit. The lives you save in safer flying may be your best friend’s, your spouse’s, or your own.

*[Doctor Hansen, author of the popular book on home health care, **Get Well At Home**, currently serves as medical director of the **Emerald Valley Wellness Clinic**, and its **Live-for-Health Seminars** in Creswell, Oregon. Pilots who for health reason are having trouble passing their medical should contact us. For further information or inquiries, contact: clinic1@emeraldwellness.com]*