**Journal Scan**


Analysis of the risk of an alcohol-related accident among pilots with a driving-while-intoxicated (DWI) conviction is an important topic in human factors and aviation safety. Although most accidents do not involve pilots with DWI convictions, past studies have shown that pilots with convictions are at an increased risk of pilot-error accidents, even when alcohol is not a factor in the crash.

The author studied a total of 308912 pilot records over a 10 year period and analyzed using logistic regression. The author concluded that, pilots with DWI convictions were about 3.5 times more likely than pilots without conviction to have alcohol related general aviation accidents.


The purpose of aircraft accident investigation is, first, to determine the cause of accident so that future recurrences can be prevented or minimized. Second, to analyze cause and nature of injuries sustained by aircrew and other occupants which helps in identifying possible features within the cockpit environment that may have resulted in such injuries. The authors retrieved Federal Aviation Administration’s autopsy database for pilots involved in fatal helicopter accidents from 1993 to 1999.

The results revealed that, blunt trauma was the primary cause of death in 88.1% of the cases. Further the data revealed most commonly occurring bony injuries being fracture of the ribs (73.8%) and skull (51.2%). Most commonly occurring visceral and organ injuries being Brain (61.9%) and Lungs (60.7%).

Authors strongly recommended introduction of Cockpit Air Bag System (CABS) in military helicopters to reduce fatalities in helicopter crashes.


With increased awareness and interest in health and natural remedies, yogic techniques including pranayams are gaining importance and becoming increasingly acceptable to the scientific community. It has been reported that practice of pranayam modulates cardiac autonomic status and improves cardio-respiratory functions. Keeping this in view, the authors designed this study to determine whether pranayam training has any effect on ventricular performance as measured by Systolic Time Interval (STI) and Cardiac Autonomic Function tests (AFT). Twenty four school children were divided into two groups. Group I (pranayam) subjects were given training in nadishuddhi, mukhbhasrika, pranav and savitripranayams and practiced the same for 20 minutes daily for 03 months. Group II (control) were not given any training.

STI in the terms of qs2 (electromechanical systole) and LVET (left ventricular ejection time) and AFT in terms of RRIV (RR interval variation) were measured in both groups at the beginning and at the end of 03 months.

The authors concluded that three months of
pranayam training modulates ventricular performance by increasing parasympathetic activity and decreasing sympathetic activity.


We all know positive pressure breathing for G-protection (PBG) reduced the need for fighter pilots to use fatiguing anti G straining maneuver (AGSM). This original research undertaken with the aim to determine the cerebral blood flow during flight with an extended-coverage anti-G suit (ECGS) with AGSM or with PBG.

The SPECT (Single Photon Emission Computed Tomography) showed the decrease of about 30% of regional cerebral blood flow during in-flight +6 Gz acceleration without any significant regional difference in the hypoperfusion of the brain for both Flt-AGSM and Flt-PBG.

The result is remarkable considering that PBG practically eliminates the need for straining, so that pilots feel less fatigue and their operative performance enhanced.