

Virtual Flight Surgeons® Inc.

“Our Physicians...Your Solution”

Quarterly Aeromedical Newsletter

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FAA Aeromedical Certification Policy Update



New Light on “Failure to Report” on the Medical Application

Time and time again we hear about airmen and controllers getting bad advice not to report a medical visit or medication on the FAA Form 8500-8, Application for Airman Medical Certificate. Many have heard the VFS mantra to “report completely, yet discretely” giving enough detail to satisfy the FAA that your condition does not pose an aviation safety hazard. Recently, the point was driven home when the DOT IG and Social Security Administration IG in the San Francisco Region conducted “Operation Safe Pilot” looking for fraudulent SSA disability claims by comparing these records with history reported on the FAA Form 8500-8. Reportedly only the most egregious cases were pursued resulting in 40 pilot indictments in California and a few additional referred to other states. Should you find yourself in a potential “failure to report” situation, VFS recommends you seek professional assistance in making your history a matter of record.

Medication Update



Lunesta® as a low risk sleep aid?

Lunesta® (eszopiclone) is a relatively new sleep aid that has been marketed as the only prescription sleep aid approved for long term use. As with any prescription sleep aids, there is a potential for side effects such as dizziness and difficulty with coordination. Lunesta® also has a risk of memory problems, dependence, withdrawal symptoms, and changes in behavior. It’s also not recommended during breast feeding and should be used with caution during pregnancy. The FAA does not approve Lunesta® or related prescription sleep medications. After talking with your clinician (stopping abruptly can be dangerous), Lunesta® should be stopped at least 24 hours before returning to flying if taken less than a week and as long as your underlying condition does not pose a threat to aviation safety. If taken for more than a week, you must wait at least 48 hours before returning to flying. Remember that the visit to your doctor for sleep issues is reportable.

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Medication Update (Continued)

Provigil®

Provigil® (modafinil) is another relatively new medication indicated to improve wakefulness in patients with excessive sleepiness associated with narcolepsy, obstructive sleep apnea/hypopnea syndrome and shift work sleep disorder. This medication is also not authorized by the FAA. Should you have sleep problems, be sure to read the article on sleep apnea on our website or review the medication section for guidance on a specific medication. Should you need additional information, as always a VFS physician is also just a phone call or email away.

Advocacy: Health and Aviation Safety



Aviation Safety - VFS Goal

Dr. Quay Snyder met with the Federal Air Surgeon, Dr. Jon Jordan, and his staff at FAA headquarters on 13 September to discuss a variety of medical standards issues for pilots and air traffic controllers. This regular quarterly dialogue stresses enhancing aviation safety, while protecting careers and improving aviation professionals' health. The Federal Air Surgeon seeks to respond to FAA customers' suggestions and improve processes for medical certification/qualification in a world of rapidly advancing medical technology. VFS brings a unique perspective of hundreds of daily contacts with pilots and controllers around the world with medical concerns. Together, the Federal Air Surgeon staff and VFS physicians identify areas for potential change and work cooperatively to improve the aviation professions interactions with FAA medical representatives. The VFS staff also enjoys a cooperative relationship with

the Aeromedical Certification Division in Oklahoma City, the FAA Regional Flight Surgeons and the Federal Air Surgeon.

Human Intervention and Motivation Seminar (HIMS), September 20-22, 2005 Denver, Colorado

VFS welcomed FAA physicians from both Washington DC and Oklahoma City in Denver for the joint ALPA-FAA HIMS training seminar. HIMS is a program established in 1979 as a cooperative effort between airlines, pilot unions and the FAA medical staff to identify, intervene, treat and return pilots to flying who suffer from alcohol and drug abuse addiction. Several hundred representatives from international and US airlines and pilot unions attended. Dr. Don Hudson and Dr. Keith Martin of VFS presented talks to the attendees. Dr. Snyder serves on the HIMS advisory council and worked with representatives of business aviation to help establish a similar health and safety program for this group of professional pilots. See www.AviationMedicine.com/hims.htm and www.himsprogram.com for more details on this important program.

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Pilot and Controller Health



The tail section (AFP photo) of the Boeing 737 was one of the few bits recognizable as part of an aircraft. (Kathimerini, English Edition, August 16, 2005)

Hypoxia: Still an Insidious Threat!

By Phillip Parker, MD, MPH

The recent Athens crash of a Helios Boeing 737-300 killing 121 and the 1999 widely publicized crash of the Learjet 35 carrying golfer Payne Stewart serve as striking reminders that hypoxia is still very much a threat in the aviation environment. This is particularly an issue if you become focused on resolving a problem or running emergency procedures and allow yourself to become task saturated, which may have occurred with the Helios crash. Identification of your hypoxic signs and symptoms, and quick response to hypoxia before you exceed

your time of useful consciousness are the keys to survival.

GA pilots are not immune to the dangers of hypoxia just because they rarely get above 12,000 ft. All pilots should be conscious of the insidious effects of hypoxia when flying above 10,000 MSL or above 5,000 MSL at night. As a reminder, hypoxia symptoms are a result of not enough oxygen getting to the tissues. Hypoxic hypoxia caused by decreased partial pressure of oxygen in air at altitude is the condition most of us think about when flying. There is also hypemic hypoxia due to reduced capacity of the blood to carry oxygen (e.g. smoking, carbon monoxide poisoning, medication reactions, etc.), histotoxic hypoxia due to tissue's inability to take oxygen from the blood (e.g. alcohol, narcotics, or cyanide poisoning), and stagnant hypoxia due to interruption of normal blood flow (e.g. heart failure or the physiologic effect of pulling Gs). Notably any one or more than one of these causes of hypoxia can occur in flight and their effects can be more than additive.



Factors Influencing Hypoxia

Altitude	Rate of Ascent	Duration of Altitude
Temperature	Physical Exertion	Inherent Tolerance
Fitness	Acclimatization	Emotional State

Table 1

From the factors listed above, it's evident that the onset of symptoms can be highly variable between individuals and even each airman's experience with hypoxia can vary greatly depending on the exact situation. The stages of hypoxia are illustrated in Table 2 on page 4.

(Hypoxia Continued on Page 4)

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Pilot and Controller Health (Continued from Page 3)

Stages of Hypoxia

Stage	Altitude in Feet		
	Breathing Air	Breathing 100% O2	Arterial O2 Saturation 100%
Indifferent	0-10K	34-39K	95-90
Compensatory	10-15K	39-42.5K	90-80
Disturbance	15-20K	42.5-44.8K	80-70
Critical	20-23K	44.8-45.5K	70-60

Table 2

Of particular importance to GA is that adverse effects on dark adaptation and night vision (especially color vision) can manifest as low as 5,000 ft, which can be well below airfield altitude in some cases. EKG changes have also been noted to occur at this altitude. Unfortunately there are sometimes no subjective sensations up to the time of unconsciousness.

Time of Useful Consciousness (TUC) is the period of time an airman has before useful function is lost and the individual is no longer capable of taking corrective action. Table 3 shows average TUCs for a good frame of reference, but as noted previously, a great deal of individual variation can occur. Bottom line, the higher the altitude, the shorter TUC you would expect.

Times of Useful Consciousness at Rest

Altitude	Time of Useful Consciousness
FL 180	20 – 30 min
FL 220	10 min
FL 250	3 - 5 min
FL 280	2.5 – 3 min
FL 300	1 – 2 min
FL 350	0.5 – 1 min
FL 400	15-20 sec
FL 430	9-12 sec
FL 500 & above	9-12 sec

Table 3



High Altitude Chamber,
Randolph AFB Texas

A rapid decompression, as possibly occurred in the Helios tragedy, may reduce these estimates by as much as 50%. As most pilots are aware, when it comes to hypoxia the best solution is to know your symptoms and remain vigilant. If available to you, an altitude chamber flight gives the airmen the chance to identify their particular reactions to hypoxia and

thereby increase your chances of detecting a problem early. The treatment is to get 100% oxygen immediately and descend. Usually recovery is within 15 seconds, but impairment can last for several hours. The best decision is to land and have yourself and your plane checked out.

VFS Attends Oshkosh AirVenture 2005



VFS Booth, Oshkosh 2005

Dr. Phillip Parker and Catherine Cazorla are pictured left at EAA's Annual AirVenture in Oshkosh, Wisconsin. VFS's debut appearance at Oshkosh was quite well-received. In addition to the numerous consultations, Dr Parker gave a presentation regarding Aeromedical certification tips. Recognizing VFS expertise in the Aeromedical certification arena, the chairman of EAA's Aeromedical Council invited Dr. Parker to attend their annual council member reception dinner charting the future for EAA Aeromedical advocacy efforts.

The group discussed the implications of the relatively new Sport Pilot (SP) rule. The overriding concern of many aviators is that they can not fly under sport pilot provisions if they had their last medical application suspended, denied, or revoked. In essence, they view taking their third class medical as a potential gamble risking both the 3rd class and possible SP flying. VFS has been able to decrease the risk for some of these pilots by "prescreening" their cases for potentially disqualifying issues that do not necessarily present a safety of flight issue.

The council also discussed ways to partner with VFS and other organizations to assist the FAA in addressing the large backlog of special issuance (SIA) cases. Even with expert case preparation as performed by VFS, SIA review can take up to 3-5 wks at times depending on FAA staffing. Unfortunately, as presented by the council, the standard times can be much longer for cases submitted by individual pilots or aviation medical examiners, particularly when documentation is incomplete or does not address all aeromedical issues.

Later Dr. Parker was invited to attend the general reception for all EAA Aeromedical volunteers. The entire week was a great success and a wonderful opportunity for VFS to offer to GA pilots the same level of professional assistance known to our corporate clients.



VFS News

Cessna Safety Stand Down Wichita Kansas

Cessna Aircraft Corporation will hold a Safety Stand Down day in early November. Dr. Snyder has been invited as the guest speaker to discuss medical certification issues, FAA waiver policies and tips for taking FAA medical examinations. He will also address individual pilot concerns. Dr. Snyder participated in the development of training standards of the Very Light Jets, including Cessna's Mustang, in his role on the NBAA Safety Committee.

ABS Annual Convention Dallas, Texas

Dr. Phillip Parker was invited as a guest lecturer for the American Bonanza Society meeting in Dallas, Texas on September 10th. The average age of the 10,000 member strong ABS group is 58, and proactive protection of the medical certificate was on many attendee's agenda. Because of his interest in Women's Health issues and their potential impact on Aeromedical certification, Dr. Parker was also asked to speak at an afternoon plenary session on Women's

Health issues to a packed audience while at the ABS meeting. His advice will also be featured in upcoming issues of Aviation for Women.

NBAA Business Aviation Regional Forum Centennial Airport, Colorado

Dr. Snyder joined NBAA President Ed Bolen at NBAA's Business Aviation Regional Forum at Centennial Airport on September 15th to speak on health issues for pilots. Other topics presented included Rocky Mountain Ski Airport operations, Management tools for Good Flight Department, Aircraft Ownership tips, Maintenance and Fuels management.

Virtual Flight Surgeons to exhibit at the NBAA Annual Convention in Orlando, FL.

VFS will attend the NBAA Annual Convention in it's new location in Orlando, Florida. Dr. Snyder will speak to the membership and be available to answer a full spectrum of aeromedical questions related to FAA policies and certification standards. NBAA will announce booth assignments at a later date.



ATCS Sector

NATCA Presentations

VFS represents the 15,000 members of the National Air Traffic Controllers Association (NATCA) in protecting their health and medical qualification status with their employer, the FAA. As part of this relationship, physicians from VFS give educational seminars to NATCA facility and Regional representatives.



Keith Martin, MD

Great Lakes Region -- Dr. Keith Martin gave a presentation in September for the Great Lakes Region at their meeting in Phoenix. He will next speak at the **Northwest Mountain Region** meeting to be held in San Diego in late September. Dr. Quay Snyder will speak to the members of the **Eastern and New England Regions** when they meet in Galloway, New Jersey in October.

VFS welcomes requests to speak at Regional meetings and can provide a comprehensive briefing on aeromedical issues as they relate to medical certification. If you would like to request one of our physicians to speak at an upcoming Regional meeting, please contact Catherine Cazorla to schedule.



Quay Snyder, MD

Send us your Tower. Send a photograph of your tower and we will profile it in an upcoming issue of our newsletter. Send photos by mail or email digital photos to ccazorla@aviationmedicine.com.

Ask the Doc



Question: I have chronic back pain and my doctor has suggested surgery. What do I need to do?

Answer: There are many causes of chronic back pain. In fact it's one of the most common problems in adults. Typically airmen who require surgery should be able to return to flying on their current medical certificate once cleared by their treating provider and not using disqualifying medication. FAR 61.53 (fondly known as the "self-grounding rule") puts the responsibility on the airman to determine if they can safely perform crew duties including all emergency procedures following surgery.

Unfortunately that ruling doesn't necessarily apply to ATCSs. In principle once the same criteria have been met (e.g. you are able to safely return to controlling duty since you've recovered from the surgery, have been released by your treating physician, have no persistent pain that might be distracting while performing duty, and you are not taking any disqualifying medications), then the ATCS can present that information to the Regional Flight Surgeon (RFS) to get a return to safety sensitive duty clearance. You may want to get the advice of an experienced Aviation Medical Examiner (AME) or Aerospace Medicine physician to assist in making this decision to return to work. NATCA members in good standing may contact VFS for assistance as part of your membership benefits. Remember to report the surgery at the time of the next medical. We typically recommend that you take a copy of the Operative Report and the final clinical narrative from your personal physician releasing you to full activities to the RFS and to your AME during the next exam.



Spotlight—Your VFS Staff

To better acquaint you with the physician and administrative team who serves you, VFS will profile a staff member each quarter. This quarter's spotlight is on the President & CEO, Dr. Quay Snyder.



Quay is pictured with his wife Beth and their children, Dane and Sara.

Quay Snyder, co-founder and President/CEO of VFS, has been a pilot since 1974 and earned his flight instructor's rating one year later at the USAF Academy. He continued his flying during medical school at Duke University where he fell for his future wife after a sunset glider flight. Over 3,600 flights later, Quay still actively instructs, serves as an Aviation Safety Counselor and a Designated

Examiner. His greatest love is flying his ASW-19 glider cross country each weekend, having recently earned the Soaring Society of America's Bronze, Silver, Gold and Diamond goal awards. When not flying and helping pilots and controllers with medical issues, he tries to keep up with the local high school swim team each morning. Never one to rest, his vacations in Maine are spent kayaking in the Atlantic Ocean 20-50 miles daily and trying to avoid becoming part of the food chain. After a 25 year USAF career, Quay has "settled" in Colorado with his wife Beth and their two children.

Your VFS Newsletter



Our services are provided to you as a benefit from your company flight department or a membership benefit from your union or aviation association. VFS stands ready as the only board certified aerospace medicine physician group available to provide you the assistance you need. Our physicians are always a telephone call or email click away. We can respond to your medical questions and provide advice on any potential impact on your FAA Airman's Medical Certificate for medical conditions you might develop.

All client discussions with our staff members are completely confidential and risk free. VFS is proud to be your one source for aeromedical advice and FAA medical certification waiver assistance.

We welcome your comments and suggestions! Our goal is to make this newsletter useful and informative for all our clients. If you have an idea for a topic you would like covered or have a comment, please contact our Director of Operations, Catherine Cazorla via email at: ccazorla@aviationmedicine.com.

OPT-OUT: If you do not wish to

continue receiving the quarterly VFS Aeromedical electronic newsletter, please reply to this e-mail and type "REMOVE" in the subject line. We will remove your e-mail address from our mailing list.

Welcome to our Newest Clients:

Professional Helicopter Pilots Association (PHPA)

Editor's Note: VFS shares in the nation's shock and grief over the devastation caused by Hurricane Katrina. VFS has donated a portion of it's profits to Angel Flight West in support of the relief effort.

THE VFS GOAL IS TO KEEP OUR CLIENTS HEALTHY, SAFE & MEDICALLY CERTIFIED!

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