



Virtual Flight Surgeons® Inc.

“Our Physicians...Your Solution”

Quarterly Aeromedical Newsletter

14707 E. 2nd Ave., Suite 210
Aurora, Colorado 80011

3rd Quarter 2007

Volume 6, Issue 3

1-866-AEROMED

FAA Aeromedical Certification- Policy Update



Fatigue in Aviation Brochure - a new Fatigue in Aviation Brochure is available written by Dr. Salazar who is currently the Southwest Regional Flight Surgeon. The brochure can be downloaded at www.faa.gov/pilots/safety/pilotsafetybrochures/

Planned **Modifications to the Airman Medical Application** were recently announced by the Federal Air Surgeon to assist in identifying those airmen who have claimed government awarded disabilities. This new change will resemble the existing warning advising of the FAA’s search of the National Driver’s Registry and in this case will inform the airman that the FAA may cross reference other databases to determine if accurate reporting on the medical application has occurred. Please see our previous articles regarding falsification of airmen medical applications for related details.

Important Breaking News – FAA Compliance and Enforcement Program - On October 1, 2007, the FAA announced a change in Order 2150.3B dealing with enforcement actions. This change deals primarily with sanctions against airmen who falsify their medical applications with respect to alcohol or drug related convictions. The notice in the Federal Register includes a statement indicating that the previous order from 1989 allowed for sanctions less than revocation of all certificates (pilot, medical, maintenance, air traffic control, etc.) held by the individual who falsifies a medical application, but the new policy requires revocation of all FAA certificates held by the individual who falsifies a medical application.

The Notice in the Federal Register is found at <http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/pdf/07-4823.pdf> while the full 339 page [2150.3B FAA Compliance and Enforcement Program](#) is available on the FAA web site.

The implications of the Order are significant. All airmen should be certain that they comply both with 14 CFR 61.15 regarding reporting of alcohol/drug-related motor vehicle actions within 60 days to the FAA Securities and Enforcement Division AND they report the incident on their next FAA medical application Form 8500-8 on question 18v. Please see the VFS section on [DUI and Alcohol Motor Vehicle Action Reporting](#) at www.AviationMedicine.com.

Congress held recent hearings regarding airmen falsifying their medical applications by omitting information on medical conditions. Chairman Oberstar (D-MN) is also encouraging the FAA to more aggressively pursue airmen who falsify the Form 8500-8. VFS encourages all pilots and controllers to be honest and accurate when completing their medical applications. Our staff will be happy to explain reporting responsibilities and give instructions on how to complete the form.

DO NOT make a mistake in this area. It could cost you your CAREER!

In This Issue:

FAA Aeromedical Policy Update	1
Medication Update	2
President’s Corner	2
VFS News	4
Pilot and Controller Health	5
ATCS Sector	6
Staff Spotlight	7

www.AviationMedicine.com



Medication Update

Sleep Medication Use for Pilots – Fatigue when flying due to disrupted sleep schedules and travel across time zones is a nearly universal problem for professional pilots. The inability to obtain adequate sleep during limited rest opportunities is a significant aviation safety risk. Fatigue has been a documented contributing factor to several Part 121 and Part 135 accidents and is undoubtedly an undocumented factor in numerous other accidents.

Pilots often resort to over the counter medications (Tylenol PM, Benadryl and many others) and alcohol to help them get to sleep while remaining in compliance with FAA policy prohibiting use of medications. The unfortunate result is prolonged subtle mental impairment due to the residual effects of the medication or alcohol. These effects often persist for 16 or more hours, frequently during the next duty period. Alcohol may make a pilot drowsy, but impairs the restorative REM sleep.

Current FAA policy prohibits use of prescription sleep medications, with one exception, while on duty or on layovers. The limited exception allows the use of Ambien (zolpidem) by pilots up to two times per week if not used within 24 hours of flight duties and not used for circadian desynchrony (jet lag). This policy really is only useful for pilots returning home from trips or those with layovers greater than 36 hours.

The Federal Air Surgeon's office is considering a policy change authorizing the use of shorter acting sleep medications for pilots and possibly for Air Traffic Control Specialists. However, the current policy remains in effect until safety analyses are completed. We recommend that pilots do not use non-approved medications while on flight duty. VFS will post changes to the FAA policy if and when they are formally approved.

Tekturna - Tekturna (aliskiren) is a new type of blood pressure medication that acts to directly inhibit a substance called renin. This is not approved by the FAA. Tekturna was just recently FDA approved and as such the FAA will typically wait at least year before considering its use in aviation. Note that almost all other modern medications for blood pressure are allowed (see our article on hypertension at www.AviationMedicine.com).

Januvia - The FAA has announced a policy change on Januvia (sitagliptin), a popular oral medication for diabetes. The medication is now authorized for both pilots (all classes) and air traffic controllers after review and approval of the airman's medical records by the FAA. Completion of the standard FAA protocol for diabetes and favorable review by the FAA medical staff is required for initial special issuance/special consideration. Subsequent renewal of the medical certification may be done through the AME Assisted Special Issuance process for all classes of certificate. Certain restrictions apply to the use of Januvia with other diabetic medications and the observation period required prior to requesting initial certification. Please contact Virtual Flight Surgeons for specific information on the use of Januvia.

President's Corner - Quay C. Snyder, MD, MSPH



Critical Performance Numbers for Pilots - Part III - PSA and Prostate Cancer

This is the fourth in a running series of articles on critical numbers for pilot health. Previous articles covered blood pressure and cholesterol. They are available on our website at www.AviationMedicine.com under the VFS News section.

This month's critical number is the PSA level. "PSA" stands for Prostate-Specific Antigen. A protein measured in the blood, PSA is secreted by the prostate gland. Because the PSA may be elevated in some cases of prostate cancer, it is also termed a "tumor marker". Tumor markers are often used to screen for early or recurrent cancers. However, the screening process is not perfect. This article explains the rationale, meaning, risks and benefits of using PSA to screen for prostate cancer as well as point out alternatives to the PSA test.

Continued on page 3

www.AviationMedicine.com

President's Corner (continued from page 2)

Risk factors for prostate cancer include age over 65 years, a family history (brothers and fathers) for cancers before age 60, African-American ancestry and diets high in animal fats.

There are two types of screening for prostate commonly used in the US. The Digital Rectal Examinations (DRE), also known as the “finger wave” and many other notorious terms is the oldest screening test. The DRE attempts to locate firm bumps (nodules) and irregular enlargement of the prostate gland. Many early prostate cancers will not have any of these signs. Men with some of these signs may also have other conditions that are non-cancerous.

The second commonly used screening test is the PSA level. Although PSA levels usually rise with prostate cancer, other common conditions may also show an elevated PSA level. These conditions include benign prostatic hypertrophy (BPH), prostate infections (prostatitis) and recent ejaculation. Smokers may also have a relatively elevated PSA level. Falsely low PSA levels may be seen in men using medications for BPH or using the herbal supplement saw palmetto. Use of the PSA level as a screening tool for cancer must be done with caution and education.

Levels are characterized as:

0.0 – 2.5 ng/l	- Low
2.5 – 10.0 ng/ml	- Slightly to Moderately Elevated
10.0 – 19.9 ng/ml	- Moderately Elevated
20.0 and higher	- Significantly Elevated

There is no “Normal” PSA level. Levels vary in each person with age and other factors. The traditional cutoff for performing additional screening for prostate cancer is a PSA level greater than 4.0 ng/ml. A single elevated PSA level does not mean an individual has prostate cancer or needs more aggressive evaluation. Elevated PSA levels should be monitored by repeating the test in several months. If confirmed, additional testing such as a prostate ultrasound or biopsy may be indicated.

Physicians may also consider the “PSA velocity” or the rate of rise of the PSA level before recommending additional testing. A slow PSA velocity is less worrisome than a fast one. Another consideration is the “age-adjusted PSA level” in which a younger man should have a lower level than an older man with a larger prostate due to BPH. A similar concept is the PSA density that compares the PSA level to the size of the prostate to give some indication of risk of prostate cancer. More specific markers of prostate cancer are under research. One promising protein marker is the EPCA-2 or early prostate cancer antigen-2. Researchers at Johns Hopkins University found a higher true positive rate and a lower false negative rate for prostate cancer using a cutoff of 30 ng/ml for the EPCA-2.

Why is there caution in using the PSA as a screening test? First, use of the PSA has not been shown to save lives, yet. Secondly, there are costs associated with the PSA test, without definite benefits over a population as a whole, although certain individuals have definitely benefited from early detection using PSA.

There are risks and morbidities associated with testing for prostate cancer based on elevated PSA levels. Approximately 25 million men in the US have elevated PSA levels, but only about 1 in 100 will have prostate cancer. Annually, about 1.6 million US men will have a biopsy for prostate cancer, but only about 20% will show prostate cancer on biopsy. If only PSA is used to screen for prostate cancer, approximately 15% of men with the disease will go undetected because they have “normal” PSA levels.

Medicare and most insurance companies will pay for PSA screening in men age 50 years and older. Younger men may have PSA screening covered if there are risk factors or certain signs or symptoms. The US Preventive Services Task Force states there is insufficient evidence to recommend for or against using PSA and DRE to screen for prostate cancer.

Continued on page 4

President's Corner (continued from page 3)

According to the American Cancer Society website, no major scientific or medical organizations, including the American Cancer Society (ACS), American Urological Association (AUA), US Preventive Services Task Force (USPSTF), American College of Physicians (ACP), National Cancer Institute (NCI), American Academy of Family Physicians (AAFP), and American College of Preventive Medicine (ACPM) support routine testing for prostate cancer at this time. Most state that prostate cancer screening should be discussed and offered to men over age 50 and to younger men with significant risk factors.

Please see the articles on Prostate Cancer and Benign Prostatic Hypertrophy on the VFS website at www.AviationMedicine.com by typing these terms in the search box or looking under Information Resources Medical Articles.

The bottom line is that pilots should be educated about the potential benefits and risks associated with prostate cancer screening in each individual. Visits to physicians are reportable on FAA medical applications. Although the diagnosis of prostate cancer is disqualifying for medical certification or qualification, once treatment is complete, clearances to resume safety sensitive duties are readily obtained. As always, the VFS staff recommends that all pilots and controllers should take care of their health first, which will prolong their career and optimize their quality of life.



VFS News

Fly Safely, Stay Healthy ...Signed CP



M & N Aviation - Laramie, WY - Aug 07: Dr. Snyder spoke at the M & N Aviation Safety Stand-down on the topic of "Am I Safe, Am I Legal...to Fly?" and "Healthy Living for Pilots."

Bechtel Aircraft Operations- Sep 07: Dr. Parker hosted a teleconference for the pilots of Bechtel Aircraft Operations during their flight department meeting. The safety presentation focused on tools available to assist airmen in making appropriate "Go/No-Go" decisions.

Airline Medical Directors – Dr. Snyder is a member of the Air Transport Committee Periodicity Working Group (PWG) studying the content and frequency of airmen medical examinations worldwide. In the efforts to harmonize standards through ICAO, yet respect individual countries' specific needs, the PWG is working toward establishing evidence based medical examinations of pilots designed to improve safety and reduce costs. An international team of physicians participate in the lively discussions, with Dr. Snyder leading the discussions on the psychological and psychiatric aspects of aviation.

HIMS Seminar - Denver, CO - Sep 07: The joint FAA-ALPA HIMS seminar, an educational program on alcohol and

substance abuse abatement in the airline industry, was held in Denver. Dr. Don Hudson of AMAS was the primary moderator. Dr. Snyder spoke on, "Identification of Pilot Substance Abuse". He also participated in a panel on "Starting a New Program" with union and management representatives from a business aviation provider that has created an industry leading program implemented over the last 12 months. Dr. Martin discussed "Drug and Alcohol Testing" with respect to 14 CFR 121 Appendix I and J regulations. The FAA has indicated its desire to support business aviation entities in assisting pilots with alcohol and chemical dependency have a healthy recovery while preserving their careers. Contact VFS for more information on this topic.

National Gay Pilots Association (NGPA) - Provincetown, MA - Sep 07: Dr. Quay Snyder spoke at the NGPA annual meeting on "Current FAA Medical Policies and Standards."

NBAA Annual Convention - Atlanta, GA - Sep 07: VFS was on-hand as an exhibitor for this annual NBAA event. Dr. Snyder also participated in the Safety Committee's quarterly meeting and annual Safety Town Hall meeting.



Pilot and Controller Health



Blood Pressure Revisited

By Phil E. Parker, MD, MPH

In our first quarter newsletter this year, Dr. Snyder walked through the critical numbers for hypertension. That President's Corner message as well as our clinical article on blood pressure can be found at www.AviationMedicine.com. This message is targeted for the more pragmatically inclined, and perhaps should be thought of as a "how to" guide to avoid getting grounded for this extremely common condition.

OK, I've got high blood pressure...now what?

As the referenced articles outline, almost any blood pressure medication on the market is going to be acceptable to the FAA. **KEY EXCEPTIONS:** The FAA typically does not authorize some medications used mainly in the 1950's and 1960's, namely guanethidine, reserpine, guanadrel, guanabenz and methyldopa. Tekturna (aliskiren), a new type of blood pressure medication that acts to directly inhibit a substance called renin and therefore is being pushed by drug reps as the new greatest thing since sliced bread, was only recently FDA approved and therefore not expected to be approved by the FAA until at least summer of 2008. A short ground trial is in order to make sure the medication is effective without adverse side effects. You then go back to flying and prepare to report at the time of the next medical using the FAA's Protocol for Evaluation of Hypertension located at (http://www.aviationmedicine.com/resources/files/PDF/FAA_Protocols/fBP.pdf).

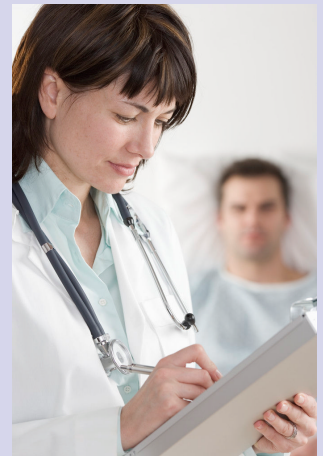
Unfortunately, many busy provider's are not inclined to read the fine print in the protocol. In these cases, there's no need to fear or get your blood pressure up further! If you download the VFS Hypertension Provider Template located at http://www.aviationmedicine.com/resources/files/PDF/VFS_attachments_07/VFS%20Hypertension%20WkSheet.pdf and have your treating provider fill in all the blanks, you will satisfy the FAA.

As noted, you should also attach a copy of relevant laboratory studies along with an EKG and submit to your Aviation Medical Examiner at the time of your next medical and then annually thereafter.

The examination required by the FAA may be performed by any treating physician, not necessarily the AME or a cardiologist. Note that the maximal stress test specified in the FAA Protocol for Evaluation of Hypertension is optional. It should be performed **IF CLINICALLY INDICATED**. If your physician recommends additional tests **BECAUSE THEY ARE MEDICALLY INDICATED**, do the testing and protect your health. We strongly advise **AGAINST** doing testing that is not medically indicated "just because the FAA might want to see it." If the FAA wants it, they will ask for it. Extra testing can cause significant problems, administrative delays and expense.

What will my AME do when I bring this information to my next medical?

That of course is the million dollar question. Fortunately, most AMEs are fully aware of the FAA's policy on blood pressure. It's always a good idea to call your AME in advance to make sure they will issue when your medical is coming due. If unsure, the physicians at VFS would be glad to review your clinical documentation and assist with interim FAA reporting if necessary to minimize the risk of inappropriate grounding while waiting for a lengthy FAA review. For a more specific personal explanation to your questions or those concerning Aeromedical certification, contact VFS for a private consultation. For help in reporting treatment for and obtaining clearance from the FAA to fly or control with these or other conditions, refer to the VFS Confidential Questionnaire or contact us at 1-866-AEROMED. If you are a VFS Corporate Member, these services are FREE to you.



www.AviationMedicine.com



Ask the Doc



Question: I suffer from Mountain Cedar allergies every Fall and my doctor suggested Zyrtec. Is that allowed?

Answer: If you have not already done so, I would refer you to our section on medications in the Information Resources pages of our website found at www.AviationMedicine.com. You may also be interested in using the keyword search for "allergies" to read an article that addresses this issue more extensively as well.

To address your specific situation, Zyrtec is not authorized, but non-sedating antihistamines such as Claritin and Allegra are authorized by the FAA after taking the medication for several days without side effects. Inhaled nasal steroids are also allowed by the FAA as long as tolerated without adverse side effects such as nose bleeds. If your allergies are severe, you may also want to discuss with your treating provider to consider desensitization therapy as noted in the article referenced above.

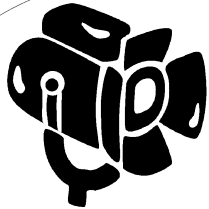
Return to controlling or flying assumes that the underlying condition is improved enough so that it does not interfere with safety sensitive duties. For controllers, you do have a reporting requirement to the Regional Flight Surgeon (RFS). Also remember to report the physician visit on your next FAA medical application. The RFS may want a brief narrative from your treating physician stating why you need the medication, that your underlying condition is controlled, and that you have no adverse side effects.

Question: I understand that allergies are not typically disqualifying if controlled, but what about asthma?

Answer: Your question is a timely one in that we often see an increase in calls regarding allergies and asthma in the Fall. For many people cold air and poorly controlled allergies with post nasal drip tend to worsen an already reactive airway. Some medications such as Singulair can treat allergies, asthma, or both at the same time. This medication is approved after successful ground trial, but generally requires accompanying clinical documentation of the condition being treated. Controllers have to clear through their Regional Flight Surgeon before return to duty on this medication as well.

A controller or airman with asthma or "reactive airway disease" can be medically qualified in the overwhelming majority of the cases. Those with this diagnosis will need to provide information from the treating physician indicating the frequency, severity and duration of symptoms, treatment required for acute episodes, maintenance therapy required and whether there are any ER visits or hospitalizations. The report should also include a clinical exam of the lungs and typically basic pulmonary function tests.

Controllers and airmen with asthma having occasional symptoms that do not require maintenance medication usually hold a standard medical qualification. Those on maintenance medications or with more severe symptoms requiring oral steroids such as Prednisone in low doses can hold medical qualification with special consideration and will have to provide annual reports with their FAA physicals. The FAA typically limits the dosage of Prednisone for both controllers and airmen to 20 mg or less per day total. Controllers would have to clear both the diagnosis and the medication with the Regional Flight Surgeon before returning to controlling duty.



Spotlight: Your VFS Staff

To better acquaint you with the physician and administrative team that serves you, VFS will profile a staff member each quarter. This quarter's spotlight is the VFS Senior Case Manager, Jay Clyde.



Jay is pictured above at his desk in the VFS office.

Jay has been part of the VFS staff since the fall of 2000, joining our organization after a distinguished career in the Air Force and over 25 years in Aerospace Medicine. Prior to entering the aerospace medicine career field, Jay served in Vietnam as a crew member on EC-47 "Gooney Birds" as an airborne intelligence analyst for missions in Southeast Asia. He later became one of the initial Corpsman Practitioner's in the Air Force while stationed at Wilford Hall USAF Medical Center, providing primary medical care to Air Force personnel. Jay's successes led him to several leadership positions including Superintendent at the USAF School of Aerospace Medicine where he oversaw the training of hundreds of USAF physicians and aeromedical technicians in Aerospace and Battlefield Medicine. His last assignment was on

the staff at the Air Education and Training Command Surgeon's Office as Superintendent of the Aerospace Medicine and Standards Division, where his staff was responsible for processing medical waivers for all applicants to USAF flying training and accession programs. Jay has called Colorado his home after retiring from the Air Force as a Chief Master Sergeant in 2000 and over 18 changes of assignment moves all over the world. The transition to VFS was a natural one for Jay as he continued his outstanding service to aviators seeking assistance with medical certification. He holds a Bachelor of Science degree in Medical Administration with Associate degrees in Allied Health Sciences and Instructor Technology. In his role as senior case manager, Jay assists the physician staff with review of medical documentation and FAA case preparation. Jay also works closely with our clients, providing paraprofessional assistance in support of our physician staff. When time permits, Jay enjoys Colorado's trout fishing opportunities and outdoor landscaping at home with his wife and boys.

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 e-mail at ccazorla@aviationmedicine.com.

VFS Welcomes Our Newest Corporate Clients:

Altria Corporate Services

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.

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

www.AviationMedicine.com