



# Virtual Flight Surgeons® Inc.

“Our Physicians...Your Solution”

## Quarterly Aeromedical Newsletter

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

4th Quarter 2007

Volume 6, Issue 4

1-866-AEROMED



### In This Issue:

FAA Aeromedical Policy Update	1
Medication Update	1
President's Corner	2
VFS News	2
Pilot and Controller Health	3
ATCS Sector	4

## FAA Aeromedical Certification- Policy Update



**New FAA Order 8520.2F “Aviation Medical Examiner System”** – For Aviation Medical Examiners (AME) there is a new FAA Order 8520.2F that modifies AME guidance. The minimum number of physicals required annually and time between examinations is outlined along with modification of office staff training, etc. The new guidance can be found as [www.FAA.gov](http://www.FAA.gov).

**Congratulations!** - Dr. Fred Tilton, FAA Federal Air Surgeon, awarded Civil Aviation Medical Association’s “Bird Award” for outstanding contributions to safety in civil aviation.

**Happy 2008!** Just in time to help you make a New Year’s Resolution, why not view one the FAA’s current Pilot Safety Brochures each month. The brochures listed below are prepared for both general aviation and commercial pilots and can be found at <http://www.faa.gov/pilots/safety/pilotsafetybrochures/>.

- Fatigue in Aviation
- Alcohol and Flying: A Deadly Combination
- Altitude-Induced Decompression Sickness
- Carbon Monoxide: A Deadly Menace
- Deep Vein Thrombosis & Travel
- Fatigue in Aviation
- Hearing and Noise in Aviation
- Hypoxia: The Higher You Fly...The Less Air In The Sky
- Information for Pilots Considering Laser Eye Surgery
- Medical Certification Questions and Answers
- Medications and Flying
- Medications and Flying Poster
- Physiological Training Courses for Civil Aviation Pilots
- Pilot Medical Certification Information for the Aviation Community
- Pilot Vision
- Seat Belts & Shoulder Harnesses: Smart Protection in Small Airplanes
- Smoke
- Spatial Disorientation: Visual Illusions
- Spatial Disorientation: Why You Shouldn't Fly By the Seat of Your Pants
- Sunglasses for Pilots: Beyond the Image

## Medication Update

**Rapamune** (sirolimus) - an immunosuppressant often used to prevent kidney transplant rejection is allowed if tolerated without adverse side effects. Both the medication and the transplant have to be cleared by the FAA before return to aviation duties.



[www.AviationMedicine.com](http://www.AviationMedicine.com)

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



### Depression, Airmen and the FAA

Recent brief comments in several aviation electronic newsletters have highlighted recent Australian studies touting the safety of use of antidepressant medications in pilots. "Pilots on Antidepressants 'Safer'" (AVweb 12/3/07) and others (Flight Safety Info, New Scientist). The physicians of VFS are well aware of these studies and similar, though much smaller scale, reports from Canada. We are working with the Federal Air Surgeon, along with other aerospace medicine physicians and psychiatrists, to advocate for a change in the current policy of the FAA (and most other international aeromedical certification authorities) imposing a blanket restriction on the use of any psychoactive medications in pilots.

Although the newsletters imply that there are no significant differences in the accidents rates after initiation of medication in pilots versus pilots not taking medications, there were some limitations in the methodology making a blanket policy change based on these reports difficult. The study "Antidepressant Use and Safety in Civil Aviation: A Case-Control Study of 10 Years of Australian Data" was published in *Aviation, Space and Environmental Medicine*, the journal of the Aerospace Medicine Association, in August 2007. Unlike the headline of the electronic articles, the study did not report that pilots on antidepressants are safer, only that there were no adverse safety outcomes noted in the study group. Several other related studies and abstracts have been published in the same journal and presented at international aerospace medicine meetings.

Several proposals have been submitted to the Federal Air Surgeon advocating for a change in the current policy restricting the use of antidepressant medications in airmen. Additionally, the Aerospace Medicine Association, with a VFS physician on the committee, has published a position paper advocating a similar change. The FAA is actively studying these proposals and comments from other sources. However, any policy changes by the FAA and the European Joint Aviation Authority will likely impose limitations on the diagnoses considered, medications authorized, initial testing requirements, follow-up reporting intervals and populations of airmen considered for certification.

We believe that a change in airman certification policy regarding the use of antidepressant medications is appropriate for both safety and health reasons. We also believe that a change is forthcoming once the review of current data by the FAA is complete. We anticipate that not all airmen using psychoactive medications will be eligible for Special Issuance / Consideration, but over time, the number of eligible airmen will increase. We recommend reading the available studies and the Aerospace Medicine Association Position Paper at [http://www.asma.org/pdf/compendium/2004/position-paper-SSRIs\\_2004.pdf](http://www.asma.org/pdf/compendium/2004/position-paper-SSRIs_2004.pdf) for more detailed analysis of this very common and significant challenge.

***Best Wishes for a Healthy, Safe 2008!***

*...Signed CP*



**VFS News**

**MMOPA - Tulsa, OK - October 2007** - Dr. Snyder gave the Fred Hyman Memorial Lecture to the Malibu/Meridian Owners and Pilots Association annual safety meeting. His topic "I'M SAFE – Am I Really Safe, Am I Really Legal?" addressed aviation decision making as related to pilot health.

**USAF School of Aerospace Medicine** – On January 15-16, 2008, Dr. Snyder will give presentations to USAF Aerospace Medicine specialists on commercial aviation medicine and alcohol/drug abatement programs in

professional aviation. He will also participate in a panel discussion with medical representatives from ICAO, the FAA, the NTSB, the Aerospace Medicine Association and commercial airlines.

**International Operators Conference** – On March 10, 2008, the National Business Aircraft Association's annual IOC conference with 750 attendees will feature an aviation medicine safety forum. Dr. Snyder will speak on alcohol abatement programs in aviation and participate on a panel on fatigue countermeasures and long duration flight.

**[www.AviationMedicine.com](http://www.AviationMedicine.com)**



## Pilot and Controller Health



### Flu Season Has Arrived

Phil Parker, MD, MPH

It's that time of year again, when Season's Greetings and a handshake or hug may also be accompanied by a not so welcome exchange as the Holiday Season also marks the beginning of the Flu Season which runs from November to May typically peaking in February. In recent years, influenza has caused an average of 225,000 hospitalizations and over 36,000 deaths annually. As with most infectious diseases the elderly and young are particularly at risk.

For those interested in specific information regarding how current vaccine is developed and extensive guideline information, the Center of Disease Control has published the "Prevention and Control of Influenza" update for 2007. The 60 page report can be found at: <http://www.cdc.gov/mmwr/PDF/rr/rr5606.pdf>. Overall, there have been few changes to past recommendations. For those interested in information regarding avian flu, see our 4<sup>th</sup> quarter newsletter from 2005.

The typical cold can usually be differentiated from influenza (flu) based on symptoms. Flu is generally associated with high fevers, sudden onset severe headache, severe muscle aches and fatigue, and usually less of the runny nose, sneezing, and sore throat that accompany a cold. The typical incubation period for influenza averages two days. As noted by the CDC, adults can be infectious from the day before symptoms begin through approximately 5 days after illness onset. Young children also might shed virus several days before illness onset, and children can be infectious for greater than 10 days after onset of symptoms. Severely immunocompromised persons can shed virus for weeks or months.

#### Prevention

For those wanting to minimize chances of infection with influenza, there is hope (see our recommendations). Vaccination is effective and now for those with needle phobia like me, an inhaled vaccine (e.g. FluMist) is becoming more common. Aircrew are cautioned that FluMist can result in temporary nasal congestion and sore throat and so should plan their flying schedule accordingly.

#### Flu Prevention Recommendations

- Hand washing – The first line of defense is careful hand hygiene
- Cover your cough - preventing the aerosolization of virus laden water particles
- Dispose of used tissues in a waste basket
- Avoid traveling when ill
- Consider vaccination especially if your physician feels you are at higher risk

#### Antiviral Treatment

Of the four licensed influenza antiviral medications in the US, only Zanamivir (Relenza) and oseltamivir (Tamiflu) are currently recommended for use. They are chemically related antiviral medications known as neuraminidase inhibitors that have activity against both influenza A and B viruses. Your treating provider is the best source to tell you when these medications are indicated. Current FAA policy allows return to flying 48 hours after administration of either of these medications as long as you are not experiencing adverse side effects or flu symptoms that would interfere with the performance of aircrew duties.

Hopefully by following this advice a lump of coal is the worst you receive this season. Should you have aeromedical certification questions about this or other issues, please do not hesitate to contact the VFS physicians.



**1-866-AEROMED**

**[www.AviationMedicine.com](http://www.AviationMedicine.com)**



## ATCS Sector

### Controller News - NEVER REFUSE A BREATHALYZER when stopped by local law enforcement.

The aeromedical consequences of refusal, separate from the legal actions, are potentially more serious than even a relatively elevated breath alcohol concentration (BAC). In the absence of data on BAC, safety reasons lead to an assumption of significant elevated levels. Even if charges are later reduced, there is no information to refute the assumption of high levels and "use in a physically hazardous manner", one of the FAA criteria for making a diagnosis of alcohol abuse. This diagnosis will result in loss of medical qualifications for safety sensitive duties and requirement for completion of a treatment program before being reinstated.

Please see the comprehensive article in our 2007 2<sup>nd</sup> quarter Newsletter by Dr. Parker, "**Field Sobriety – To Blow or Not to Blow? That Is the Question.**" at <http://aviationmedicine.com/resources/files/VFS%202Q07%20Aeromedical%20Newsletter.pdf>. For questions, contact VFS.



#### Ask the Doc

**Question:** I have a friend who is private pilot and would like to be an air traffic controller, but they have been told they have a slight color vision weakness. How will this affect them?

**Answer:** Current FAA guidance specifies that ATCS applicants must have "normal color vision". People, generally men who have the trait passed from their mothers, can have different degrees of color vision weakness. It is the degree of deficiency that determines whether one of the color vision tests can be passed.

Only a very rare person is truly "color blind." If an applicant can pass the FAA color vision test administered, even if slightly color deficient, they would meet standards and would be qualified. If they can not pass the test, they would generally not be qualified.

The FAA policy for ATCS's who fail the Dvorine test (standard color vision screen with circles containing numbers) is to offer reevaluation with a series of 3 tests, "The Civil Aeromedical Institute (CAMI) Practical Color Perception Test for Air Traffic Control," which reportedly correlates with on-the job performance in the terminal and center operations. Those tests are administered by FAA Regional Flight Surgeons or by CAMI and are summarized below:

1. Dvorine Pseudoisochromatic Plates - repeat this screening test under standardized conditions allowing no more than 2 errors. If passed, no further testing is required.
2. Aviation Lights Test - modified Farnsworth lantern with test procedure and scoring also modified according to CAMI specifications. Passing requires no more than 1 error.
3. Flight Progress Strips Test - test of the ability of a person based on identification of the black and red flight data strips used in ARTCC's. Passing requires no more than 1 error. This test may be eliminated soon due to the variety of color displays in new technology ARTCC equipment.

Also note that the FAA specifically forbids use of vision altering devices such as the X-Chrome lens to assist with color vision discrimination by both controllers and pilots.

The color vision standards for pilots are slightly different with a number of color vision tests being allowed by the FAA. Most Aviation Medical Examiners (AMEs), however, do not have access to all of the alternative tests. These tests may require the ability to perceive a number or shape within a circle of dots of varying shades, or may be a test as basic as naming a color projected from a lamp. Color vision testing is subject to error if improper lighting is used or the examiner gives incorrect instructions. Which test may be easiest depends on the particular weakness.

Pilots will need to provide confirmation of their ability to pass one of the alternate tests or undergo the Tower Signal Light test in order to obtain a Statement of Demonstrated Ability (SODA). By providing documentation to the FAA in Oklahoma City that you do pass one of the acceptable substitute tests, you can obtain a Letter of Evidence (LOE) showing you have normal vision testing and do not have to retake color vision screening every year. Should an airman not be able to pass a suitable alternative test or pass the signal light test, they may be issued a medical with the restriction "Not valid for night flying or by color signal control." Further details regarding this process and the list of alternative tests can be found at our website.

[www.AviationMedicine.com](http://www.AviationMedicine.com)



*Happy Holidays*  
*From Virtual Flight Surgeons*

## 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!**

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

**[www.AviationMedicine.com](http://www.AviationMedicine.com)**

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](mailto:ccazorla@aviationmedicine.com).

### **VFS Welcomes Our Newest Corporate Clients:**

- M & N Aviation**
- Texas Instruments**
- First Energy Service Company**

**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.