

AIRSICKNESS HANDOUT

WHAT IS AIRSICKNESS?

Airsickness is a form of motion sickness where an abnormal physiologic state is experienced with some or all of the following signs and symptoms: stomach awareness, apathy, nausea, fatigue, sweating, drowsiness, headache, salivation, and vomiting. Airsickness is a common problem encountered in aviation training and may affect nearly forty percent of students to some degree. Airsickness is a normal response to abnormal motion.

WHAT CAUSES AIRSICKNESS?

Many factors are involved in airsickness. The most significant factor associated with airsickness is lack of adaptation to the flying environment. Conflicting sensory input between the visual and vestibular systems is the most widely accepted cause of airsickness.

PRE-FLIGHT PREVENTION

- **Diet and Hydration:** Conflicting data exists on whether eating and drinking affect the risk of developing motion sickness. Until you determine what works (or doesn't work) for you, **avoid** greasy, spicy, fatty, acidic foods (i.e., oranges, tomatoes, and grapefruit), excess caffeine and carbonated drinks before flying. Dairy products and meat are not tolerated well by some individuals. Eating a bland meal with adequate carbohydrates 1-3 hours before flying is generally recommended. Ginger (e.g., ginger root tablets) may also help prevent airsickness and has no adverse medical side effects. Recommended dose is 1 –2 grams prior to flying. Maintain proper hydration with water, juice, or a sports drink before and during training flights.
- **Rest:** 7-8 hours of restful sleep is recommended the night prior to a training flight. Adequate rest improves tolerance to Gs, heat, and psychological stress.
- **Anxiety:** Proper preflight preparation with studying and chair flying (ideal with helmet) will help decrease the anxiety associated with learning a new skill. Practice and use diaphragmatic breathing (see below).
- **Physical Health:** Avoid flying when ill or injured because it lowers your airsickness threshold.
- **Mental Health:** It is essential to maintain a positive attitude and healthy degree of motivation.

IN-FLIGHT MANAGEMENT

- Direct cold air vents towards your face and neck.
- Take control of the aircraft or keep your fingertips on the stick if the IP has control.
- Avoid rapid head movements. With turns, first move your eyes to the point, then follow with your head. Keep your Situational Awareness and don't be caught surprised.
- Keep your eyes on the horizon when you can and use a ground reference in turns.
- Perform deep diaphragmatic breathing when airsickness symptoms begin.

DIAPHRAGMATIC BREATHING

1. Assume a comfortable position.
 2. Close your mouth and inhale slowly through your nose so that your abdomen expands more than your chest. This helps to prevent air swallowing and hyperventilation and to pass gastric contents down stream.
 3. Slowly exhale through your mouth. Puckering your lips helps to control the escape of air.
 4. Continue at a slow, comfortable pace. Resume normal breathing once your airsickness symptoms have been controlled.
- Although learning is impaired with airsickness, continue the sortie if possible. This provides additional exposure to the flying environment and will in most cases hasten the resolution of airsickness symptoms.
 - Actively resist the urge to vomit.

POST-FLIGHT MANAGEMENT

A visit to the flight surgeon is required after the second episode of airsickness and every episode thereafter for the duration of primary flight training. Your flight surgeon has several resources available to help you overcome airsickness, including medications, relaxation techniques, adaptation flights, and the Barany chair (aka spin and puke).

The best treatment of airsickness, and the goal of our program, is to keep you flying. Flying will almost always cure airsickness.