



# NTSB ***SAFETY ALERT***

National Transportation Safety Board



## **Pilots: Understand Impairment Risk**



### ***Over-the-Counter and Prescription Drugs Can Cause Impairment***

#### ***The problem***

- Toxicology tests of pilots involved in fatal aviation accidents increasingly show evidence that a wide variety of over-the-counter (OTC) and prescription drugs have been used, including drugs that are potentially impairing.
- Pilots may be using OTC or prescription drugs without realizing that they can cause impairment.
- Pilot impairment reduces the safety of flight and increases accident risk.
- Pilot impairment due to the effects of drugs is preventable.

#### ***Related accidents***

- On May 5, 2012, a Cessna 177B impacted terrain after experiencing an aerodynamic stall about 300 feet above the ground during a go-around. The investigation found no preaccident anomalies with the aircraft. Postaccident toxicology testing of the fatally injured pilot showed that the pilot had taken diphenhydramine, an OTC sedating antihistamine commonly marketed under the names Benadryl and Unisom. The drug's effects and pilot impairment were contributing factors in the accident. ([ERA12FA319](#))
- On March 30, 2011, a Cessna 310R impacted terrain while conducting a nonprecision approach to a mountain top airport that was obscured by clouds and fog. The investigation found no preaccident anomalies with the aircraft. Toxicological testing of the fatally injured pilot found significant amounts of doxylamine, a sedating antihistamine, in combination with other drugs that suggested use of an OTC cold medicine such as a Nyquil or an Aldex product. The drug's effects and pilot impairment were contributing factors in the accident. ([ERA11FA218](#))
- On July 7, 2010, a Eurocopter AS-360-B2 helicopter flying during the day in good visibility impacted trees and terrain. The investigation found no preaccident anomalies with the aircraft. Toxicological testing of the fatally injured pilot showed

the presence of numerous medications, including hydrocodone, a controlled substance used by prescription as a narcotic pain medication commonly marketed with the names Vicodin and Norco; diazepam, a controlled substance available by prescription with sedative effects commonly marketed with the name Valium; and chlorpheniramine, an OTC sedating antihistamine commonly marketed with the name Chlor-Trimeton. The probable cause of the accident was the pilot's impaired judgment due to multiple medications. ([CEN10FA424](#))

### ***What can pilots do?***

- Discuss EVERY medication you take regularly, including OTC, prescription, and other drugs, with your aviation medical examiner during your medical certification exam.
- Make sure anyone prescribing medication for you knows that you are a pilot. Ask if the medication is safe to take before or while flying or if there is an alternative that would be less likely to cause impairment.
- DO NOT FLY if you notice you are feeling sleepy, “out of it,” or jittery after using any drug. These feelings mean you are probably impaired.
- For medications that have a warning about using caution when driving a vehicle, the Federal Aviation Administration (FAA) recommends waiting at least 5 times the longest recommended interval between doses before flying to be sure you are safe to fly.
  - For example, if the dosing interval states, “take every 4 to 6 hours” that means waiting 30 hours (5 times the longest dosing interval of 6 hours).
- When choosing OTC medications, read the label. If it has a warning that states, “Use caution when driving a vehicle or operating machinery,” ask the pharmacist if there is something else you can use that will not increase your risk of impairment.

### ***Interested in more information?***

See the FAA pilot safety brochure, [Medications and Flying](#), at <http://www.faa.gov/pilots/safety>.

The NTSB safety study *Drug Use Trends in Aviation: Assessing the Risk of Pilot Impairment* can be accessed from the NTSB's [Safety Studies](#) web page under report number NTSB/SS-14/01.

This NTSB safety alert and others can be accessed from the NTSB's [Safety Alerts](#) web page. The reports for the accidents referenced in this safety alert are accessible by accident number from the NTSB's [Accident Database & Synopses](#) web page.