



INDIANA UNIVERSITY

BORKENSTEIN
COURSE

Center for Studies
of Law in Action

Alcohol and Flying: What Is the Law?

by

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ALCOHOL and FLYING



A DEADLY Combination



U.S. Department of Transportation
Federal Aviation Administration
Office of Aviation Medicine

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ALCOHOL & FLYING: WHAT IS THE LAW?

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ALCOHOL & FLYING: WHAT IS THE LAW?

*“There are old pilots and
bold pilots, but no old,
bold pilots.”*

E. Hamilton Lee, 1949



E. Hamilton Lee (1892-1994)

ALCOHOL & FLYING: WHAT IS THE LAW?

OVERVIEW. There are various federal and state statutes and federal regulations concerning aircraft operation and alcohol use. They prohibit acting as a civil aircraft crew member by a person who is intoxicated by or under the influence of alcohol, has a blood or breath-alcohol concentration equal to or greater than stipulated thresholds, or is otherwise disqualified in an alcohol-related manner. Most aviation-related alcohol involvement occurs in general aviation, or aircraft support operations. Recently, there have also been highly publicized instances of air transport pilots suspected of violating the above laws or regulations, and subsequently subjected to alcohol tests with positive results.

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OVERVIEW. (continued) Inappropriate alcohol use and flying is an obvious aviation and public safety hazard. However, there are gray areas with respect to jurisdiction and enforcement issues. There is also an overarching need for rigorous adherence to legal mandates and requirements as well as assured scientific validity of alcohol testing and interpretation of tests results in the alcohol-and-flying arena.

Pilot use of alcohol and flying is controlled and regulated in three ways by -

- Federal statute law
- State statute laws
- Federal regulations
 - Federal alcohol testing in the workplace rules
 - Federal Aviation Regulations

There is substantial overlap among these control measures.

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LEGAL ASPECTS

Federal Criminal Law (July 2006)

U. S. Code Title 18, Chapter 17A – Common Carrier Operation Under the Influence of Alcohol or Drugs

§ 341. Definitions. As used in this chapter, the term “common carrier” means a locomotive, a rail carrier, a sleeping car carrier, a bus transporting passengers in interstate commerce, a water common carrier, and an air common carrier.

§ 342. Operation of a common carrier under the influence of alcohol or drugs. Whoever operates or directs the operation of a common carrier while under the influence of alcohol or any controlled substance (as defined in section 102 of the Controlled Substances Act (21 U.S.C. 802), shall be imprisoned not more than fifteen years or fined under this title, or both.

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LEGAL ASPECTS, continued

Federal Criminal Law (July 2006)

U. S. Code Title 18, Chapter 17A – Common Carrier Operation Under the Influence of Alcohol or Drugs

§ 343. **Presumptions.** For purposes of this chapter –

- 1) an individual with a blood alcohol content of .10 percent or more shall be presumed to be under the influence of alcohol; and
- 2) an individual shall be presumed to be under the influence of drugs if the quantity of the drug in the system of the individual would be sufficient to impair the perception, mental processes, or motor functions of the average individual.

Source: U. S. Code, released by Law Revision Counsel, U.S. House of Representatives, 7/7/06. (<http://uscode.house.gov>).

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STATE LAWS [Example: Oklahoma Statutes, 1999]

Title 3, § 301. Operation of aircraft under the influence of intoxicants...

- A. It is unlawful and punishable as provided in Subsection D of this Section for any person to operate an aircraft within this state who:
 - 1. Has a blood or breath alcohol concentration, as defined in Section 305 of this title, of four-hundredths (0.04) or more within two (2) hours after the arrest of such person; or
 - 2. Is under the influence of any intoxicant...
- C. 2. "Operate" means manipulating any of the levers, the starting mechanisms, the brakes or other mechanisms or device of an aircraft, setting in motion any aircraft, or piloting any aircraft.

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Workplace Alcohol Testing – Federal Regulations Relevant to Aviation

U.S. Department of Transportation Rules (~ 12 Million Covered Workers)

Authority: Omnibus Transportation Employee Testing Act of 1991: Public Law 102-143, 1991.

Department-Wide Rules: 49 CFR Part 40 (7/31/06) – Procedures for Transportation Workplace Drug and Alcohol Testing Programs:... Subparts J, K, L, M, N (Alcohol Testing)

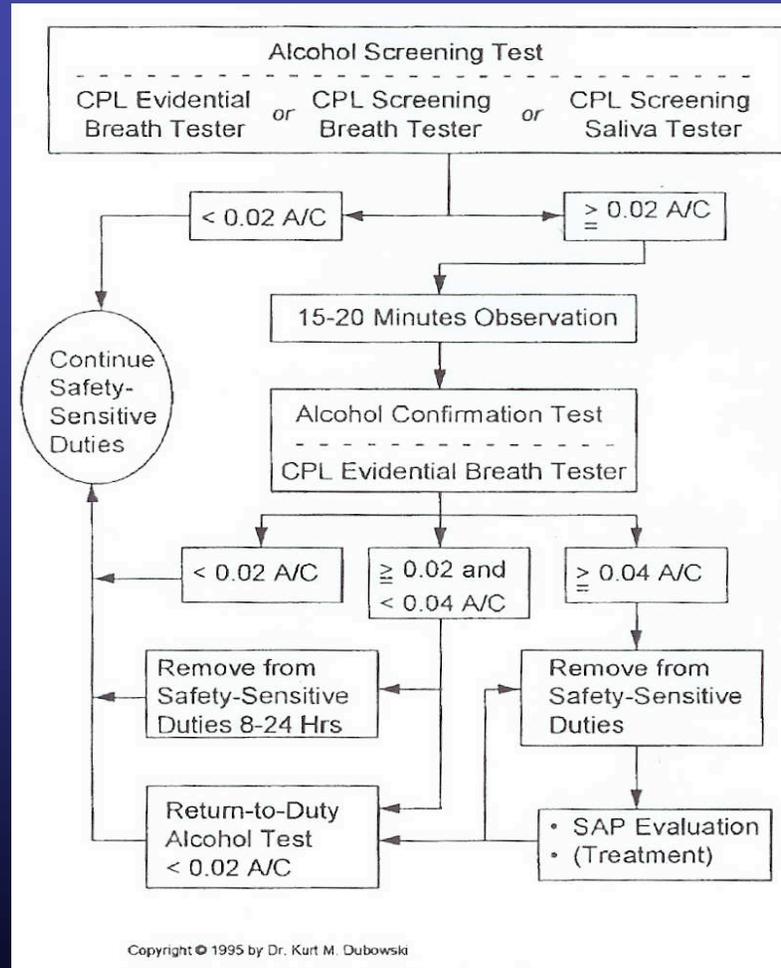
Federal Aviation Administration Rules (~525,000 Covered Workers)

Agency-Wide Rules: 14 CFR Parts 61, 121, 135 et al.
Federal Aviation Regulation 91.17

For details, consult

K. M. Dubowski and Y. H. Caplan: "Alcohol Testing in the Workplace," in MEDICAL-LEGAL ASPECTS OF ALCOHOL, 4th ed., ed. by J. C. Garriott. Tucson, Judges & Lawyers Publishing Co., 2003, pp. 411-435.

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DOT Workplace Alcohol Testing Schema

Dubowski & Caplan, 2003

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Federal Aviation Regulation § 91.17 Alcohol or Drugs (Excerpts) [July 21, 2006]

- a) No person may act or attempt to act as a crewmember of a civil aircraft –
 - 1) Within 8 hours after the consumption of any alcoholic beverage.
 - 2) While under the influence of alcohol
 - 3) While using any drug that affects the person's faculties in any way contrary to safety; or
 - 4) While having an alcohol concentration of 0.04 or greater in a blood or breath specimen. Alcohol concentration means grams of alcohol per deciliter of blood or grams of alcohol per 210 liters of breath...

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Federal Aviation Regulation § 91.17 Alcohol or Drugs (Excerpts) [July 21, 2006], continued

- c) A crewmember shall do the following:
 - 1) On request of a law enforcement officer, submit to a test to indicate the alcohol concentration in the blood or breath, when -
 - i. The law enforcement officer is authorized under State or local law to conduct the test or to have the test conducted; and
 - ii. The law enforcement officer is requesting submission o the test to investigate a suspected violation of State or local law governing the same or substantially similar conduct prohibited by paragraph (a)(1), (a)(2), or (a)(4) of this section...

History: The FAA instituted the 8-hour “bottle-to-throttle” rule in 1971, when alcohol was cited as a contributing factor in 12.6% of all fatal accidents on flights other than on airliners or military aircraft. In 1985, the FAA adopted an 0.04 Alcohol Concentration on-duty threshold for flight crews.

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Federal Aviation Regulation §61.14, 61.15 and 61.16 Offenses Involving Alcohol and Drugs; Refusals (Exerpts)

- Under 14 CFR 61.14, pilots may not refuse to take an alcohol or drug test required under the provisions of Appendix I to Part 121 or Appendix J to Part 121 [Workplace Alcohol/Drug Testing]
- Under 14 CFR 61.15, pilots are subject to suspension or revocation of any FAA certificate, rating, or authorization issued under Part 61 upon (1) **conviction** for violation of any Federal or State statute relating to operation of a motor vehicle while intoxicated, or impaired, or under the influence of alcohol or a drug; or (2) upon cancellation, suspension, or revocation of a MV license related to an alcohol or drug related condition.

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Federal Aviation Regulation §61.14, 61.15 and 61.16 Offenses Involving Alcohol and Drugs; Refusals (Exerpts), continued

- Under 14 CFR 61.15, pilots must provide a written report of each ***motor vehicle action*** within 60 days of that action, to the FAA, Civil Aviation Security Division (AMC-700), PO Box 25510, Oklahoma City, OK 73125. ***[There is no FAA form for this report.]***
- Under 14 CFR 61.16, FAA certificates, rating, or authorizations are subject to suspension or revocation for refusal to submit to an alcohol test under FAR §91.17 or to release the results of such tests.

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SCIENTIFIC ASPECTS

Safe flying performance requires high levels of cognitive functioning and psychomotor skills. Alcoholic impairment is especially deleterious with respect to flying because of the special physical demands of aircraft operation in three dimensions, navigation, communications, etc. in an environment with decreased partial pressure of oxygen. The alcohol-impaired CNS functions of judgment, reasoning and decision-making, memory, as well as impaired vision, increased reaction time, and inner-ear vestibular system effects adversely impact capabilities and activities particularly crucial to pilots. Consequently, aircraft pilots should be alcohol-free and without hangover or after-effects of prior alcohol intake when operating aircraft.

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FACTOIDS

- In 2005, there were approx. 610,000 active non-military pilots in the U.S.: 87,213 student, 228,619 private, 120,014 commercial, 141,992 air transport, 90,555 flight instructors.
- Aviation pilots are included in the “covered employee” category engaged in “safety-sensitive functions” and required to undergo federally-regulated workplace alcohol and drug testing under U.S. Department of Transportation rules, together with air traffic controllers, other aircrew members, and commercial motor vehicle operators, etc.
- Approx. 10,000 U.S. air transport pilots annually undergo federally-mandated on-duty random breath-alcohol testing administered by their employers. The 2003 positive rate for such tests was 0.0007%.

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FACTOIDS, continued

- During 1999-2003, toxicological examinations were performed by FAA/CAMI (Oklahoma City) on 1587 pilot fatalities. Ethanol was found in 101 cases (=6.4%). Ethanol was found in 4 of the 122 air transport pilot fatalities (3.2%).

Note: The presence of ethanol in postmortem specimens does not necessarily imply pre-flight alcohol consumption.

Source: DOT/FAA/AM-05/20 Final Report, Nov. 2005

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Some High-Profile Pilot Alcohol Involvements

- Jan. 1990. Captain (BAC = 0.13%), first officer (BAC = 0.06%), flight engineer (BAC = 0.08%) uneventfully flew a NW Airlines B-727 airliner and 58 passengers from FAR to MSP. Arrested, tried, and convicted on federal and state charges. Served prison sentences.
- July 2002. Captain (BrAC = 0.091%) and first officer (BrAC = 0.084%) were ordered by ATC to return America West Airbus 319 enroute to PHX with 124 passengers, to the gate at MIA after alerting by TSA screeners. Arrested on state charges [because 18 USC § 342 stipulates a 0.10% BAC threshold], tried, and convicted. Served prison sentences.
- Oct. 2002. Captain (BAC = 0.11%) of B-737 with 154 passengers on board for IAH-ATL flight was confronted by an Air Marshal. Discharged by airline.

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Some High-Profile Pilot Alcohol Involvements, continued

- Dec. 2002. Pilot (BAC = 0.07%) of B-757 Delta flight ORF-CVG removed from aircraft after TSA screeners smelled alcohol. Suspended by airline.
- Apr. 2003. Pilot (BAC = 0.12%) of American Eagle GRR-DFW flight preparing to take off at 5:45 AM tested by airport police after being alerted by TSA screeners. Suspended by airline.
- Sept. 2003. Captain (BrAC = 0.087%) of China Airlines Airbus 340 preparing for ANC-JFK flight was tested after TSA screener smelled alcohol.

Source: *B. M. Sweedler, ICADTS T2004 Proceedings.*

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The Dubowski Perspective

Alcohol and flying are incompatible. Given the large numbers of active private, commercial, and air transport pilots and of individual flights, the number of known instances of alcohol misuse by pilots is minuscule. There is probably some under-recognition and under-reporting of pilot alcohol involvement. Regulation of flying and alcohol use is a public safety issue, and required appropriate enforcement at the federal level. The regulatory schemes in place for pilot alcohol use are complex – too complex – and confusing to all parties concerned. A single set of statutory and regulatory controls would be an improvement over the current situation, as would an absolute zero BAC/BrAC tolerance for flight crews. A zero BAC/BrAC would also be a clearer decision point. Unfair media attention and sensationalizing isolated pilot alcohol involvement instances are neither warranted nor helpful. Neither is volunteer vigilante activity in the detection of alleged violations. Stay tuned. There is assuredly more to come.