

Flying High – Alcohol Impaired Airline Pilots – How Big is the Problem and What Are the Countermeasures?

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Background

The number of recent incidents of airline pilots attempting to operate an aircraft while under the influence of alcohol has brought the issue to the forefront. More than 10 such incidents involving pilots from the United States, United Kingdom and other countries since 2002 have pointed out that regulations and programs in place to prevent this dangerous behavior are not fully effective and are in need of thorough review and improvement.

The arrest of two America West pilots in Miami, Florida, USA in July 2002 brought quite a bit of attention to the issue. The aircraft had left the gate on a flight to Phoenix, before it was ordered back by air traffic controllers, based on reports from security checkers that the pilots' breath smelled of alcohol. The captain's BAC was 0.091% and the first officer's BAC was 0.084%¹. Those levels are above the Florida legal driving limit of 0.08% and well above the U.S. Federal Aviation Administration (FAA) standard of 0.04%. Similar incidents have been reported that involve pilots from British Airways, Lufthansa Airlines, Delta Air Lines, Royal Air Maroc, Continental Airlines, Aero Mexico, Virgin, and China Airlines.

This paper discusses the regulations, the enforcement programs, testing results and joint industry/labor rehabilitation programs. The paper also recommends needed improvements to the current system established to prevent alcohol-impaired pilots from operating aircraft.

Discussion

Summary of Recent Incidents – United States

- July 29, 2002 – Wilmington, North Carolina – Atlantic Southeast Airlines (ASA) (subsidiary of Delta Air Lines) – Co-pilot on an EM-120 flight to Atlanta tested after screener smelled alcohol. Test showed a BAC of 0.16%. He resigned from ASA.²
- August 9, 2002 – Little Rock, Arkansas – Mesa Airlines – Captain of an EM-145 breath tested after screeners smelled alcohol, resulting in a 0.06% BAC. Fired by airline.³
- October 15, 2002 – Houston, Texas – Continental Airlines – Pilot of B-737-900, with 154 passengers already on board for a flight to Atlanta, was confronted by an Air Marshall. He tested positive (BAC of 0.110 %) and has been fired.⁴
- December 27, 2002 – Norfolk, Virginia – Delta Air Lines – Pilot of B-757 preparing for a flight to Cincinnati removed from aircraft after screeners smelled alcohol. His BAC was 0.07% and he has been suspended.⁵
- April 22, 2003 – Grand Rapids, MI – American Eagle – Pilot was preparing to take off at 5:45 am for Dallas, when he was tested by airport police after being alerted by Federal screeners. He tested at 0.12% BAC, and was suspended, pending the outcome of the company investigation.⁶
- September 25, 2003 – Anchorage, Alaska – China Airlines – Captain of Airbus 340 preparing to fly to New York was breath tested after security screeners smelled

alcohol. His BAC was .087%. He was also carrying an open alcoholic beverage bottle in his carry-on luggage.⁷

- December 19, 2003 – Washington, Dulles International Airport – Virgin Atlantic Airlines – Pilot of a B-747-400 preparing to depart for London with 383 passengers aboard, was removed from the cockpit by airport police, who were alerted by security screeners and airline officials. The pilot was arrested and charged with violating Virginia's attempting to fly under the influence (FUI) law.⁸

Incidents in other Countries

- November 11, 2003- Oslo, Norway – British Airways – The Captain and the First Officer of an A-320 with 55 passengers preparing to depart for London, were breath tested and arrested by police as they reported for their early morning flight. A cabin purser was also found to be alcohol positive. The two pilots subsequently resigned.⁹
- January 25, 2003 – Stockholm, Sweden – British Airways – Pilot of an A-320 tested by Swedish Police found to have a BAC of 0.02% shortly before flight to London, with 79 passengers, was due to depart. The pilot was fired, but is now flying for a different British air carrier.¹⁰
- December 20, 2002 – Helsinki, Finland – Lufthansa Airlines – Two B-737 pilots preparing to depart for Frankfurt, Germany were asked to leave the cockpit and take breath tests, when other crew members became concerned. Both pilots tested positive for alcohol, have resigned from the airline, and face criminal prosecution in Finland.¹¹
- July 25, 2000 – Barcelona, Spain – British Airways – Captain filmed by TV crew heavily drinking night before flight to London. He got only two hours sleep and slept during the flight. The flight was piloted by the First Officer who it was claimed also drank heavily. An investigation by BA led to the firing of the two pilots. Other pilots have resigned or been given warnings.¹²
- January 14, 2000 – Amsterdam, The Netherlands – Royal Air Maroc – Captain of a B-737, with 125 passengers onboard for a flight to Tangiers was stopped by police who reported he was stumbling and had slurred speech. After first refusing, he took a breath test. The BAC was 0.22%, four times the legal driving limit in the Netherlands. He was fined 2500 guilders (about \$1150) and not allowed to fly until the next day. He did pilot the plane back to Tangiers the next day.¹³
- October 1, 1999 – In flight from Wellington to Gisborne, New Zealand – Eagle Air (subsidiary of Air New Zealand) - Metroliner. First Officer allegedly became sick while piloting the early morning flight and vomited. The Captain took control of the aircraft and landed safely. The FO had been drinking the night before and crashed his car. His BAC test at 12:43 am was 0.0743%. He resigned from the airline.¹⁴

Perhaps the most widely reported case in the U.S. occurred in 1990, when three Northwest Airline crew members flew a B-727 from Fargo, North Dakota to Minneapolis, Minnesota after drinking heavily the previous night. The captain (BAC of 0.13%), first officer (BAC 0.06%) and flight engineer (BAC of 0.08%) were all convicted and sentenced to prison.¹⁵

There continues to be alcohol involved general (private) aviation accidents, but records do not list a single passenger air carrier crash in the United States caused by alcohol use. However, at least one such crash occurred in another country. In 1961, an Aero Oy (which later became Finnair) DC-3 crashed on a scheduled morning flight on the west coast of Finland, killing all of the 22 passengers and three crew members onboard. The pilot's BAC was found to be at least 0.20% and the copilot's was 0.156%. The accident investigation report describes heavy drinking by the pilots the night before the crash.¹⁶

U.S. Federal Regulations

Under FAA rules pilots are prohibited from flying with a BAC of .02% and are considered legally intoxicated at a 0.04% BAC. Pilots are also prohibited from consuming alcohol eight hours prior to flying.

The FAA regulations require airlines to conduct random breath tests of about 10,000 U.S. airline pilots each year. There is a failure rate of less than 0.1%. Because of the low positive test results, the regulations allow that only 10% of safety-sensitive airline workers be randomly tested for alcohol each year. The random drug testing rate in the aviation industry is 25%. Reasonable suspicion and post-accident tests are also conducted. Drug testing began in 1989 and alcohol testing in 1994. The following figure shows some test results.

Number of Commercial Pilots Testing Positive¹⁷

	2000	2001	2002	2003
Alcohol-Random	5	5	5	7
Alcohol-Reasonable Suspicion	5	4	20	9
Drugs-Random	37	37	39	33

The FAA also has a program in place to attempt to identify pilots who may have an alcohol problem. Airline pilots are required to renew their medical certificates either every six months or every year, depending on their flying position. The FAA now checks a pilot's driving records for DWI convictions when they apply to renew their medical certificate. These checks and follow up examinations led to the revocation or suspension of the licenses of 230 pilots' licenses in 2000 and 220 in 2001. Data for more recent years is not available.

The industry, in cooperation with labor unions and the FAA has an excellent rehabilitation program for pilots who turn themselves in or are reported by colleagues. It consists of a 28 day inpatient treatment program, followed by 90 days in therapy. Participating pilots also must attend group support meetings twice a month. Eventually, pilots who go through this program and agree to close monitoring, which includes random alcohol tests for many years, can gain the FAA's approval to return to commercial flying. There are currently more than 800 U.S. airline pilots who are in this program, flying with a special exemption medical certificate. This exemption is needed, since the disease of alcoholism is grounds for denying a pilot a medical certificate.

Based on the testing data it is interesting to note that the number of pilots found positive for alcohol when randomly tested has not changed. On the other hand, those found

positive when tested for reasonable suspicion increased greatly in 2002. After the September 11, 2001 terrorist's attacks, flight crews were checked much more carefully by airport security screeners. Airport/local police are also more sensitive to the issue and a number of States have passed improved FWI legislation. It is possible that this enhanced scrutiny at airports is the reason for the increased number of pilots found to be positive for alcohol. The lack of any increase in the number of pilots found positive when randomly tested would tend to corroborate this thesis. In other words it doesn't appear that there are more commercial pilots in the U.S. attempting to fly after September 11, 2001, but that more of them are being detected.

As a result of the recent incidents, in January 2003 the FAA changed its procedures. Their inspectors have now been instructed that when a pilot tests positive for alcohol that they must revoke both the pilot's medical certificate and airman's certificate. Both certificates must be valid for a pilot to fly. Pilots must now wait a year and be retested on their flying skills when they complete rehabilitation and regain their medical certificates. Previously, the FAA had been treating alcohol abuse as a medical issue and generally revoked only the pilot's medical certificate and didn't question the pilot's ability to fly. The pilots' union has expressed concern that this punitive step could be counterproductive, since it could discourage other people from turning in pilots who abuse alcohol.^{18 19}

Programs in Other Countries

All other countries have prohibitions against flying while impaired, but it appears that no other country has a comprehensive testing program.

In the UK, the Railways and Transport Safety Act of 2003, which was expected to take effect in March 2004, sets a BAC limit of 0.02% for pilots and gives police the power to conduct tests based on reasonable suspicion. There is no provision for random testing. Both British Airways (BA) and Virgin Atlantic state that pilots are not allowed to drink alcohol within eight hours of flying and consumption must be moderate within 24 hours of reporting for duty.²⁰

Following the July 2000 incident in Barcelona, mentioned above, BA has been negotiating with the British Airline Pilots' Association (BALPA) for the right to conduct random alcohol tests. BALPA reportedly has rejected the idea of random testing stating that the current peer pressure system that encourages employees to report alcohol abuse by fellow workers is a sufficient control.²¹ It is interesting to note that random testing programs have been accepted by labor groups and are in use in the UK in the rail and commercial trucking industries.

There are 10,000 commercial pilots on the UK register, of which 12 to 15 a year lose their licenses for alcohol offences - 85% of them later regain their licenses after treatment and medical checks.²²

Conclusions

While not a major aviation safety problem, the recent incidents of pilots attempting to fly while under the influence should certainly be taken seriously by regulatory bodies, airlines and labor organizations. It appears that airport security screeners and airport police have become the first line of defense -- not the last. The system needs to be improved so that airline pilots who abuse alcohol can be identified well before they show up at the airport to fly a plane load of passengers. Certainly, programs that encourage co-workers to report pilots with alcohol problems should be implemented. However, there is also a need for testing programs in countries other than the U.S. that include random checks in addition to

tests for those suspected of drinking and tests following an accident. Some use has been made of pilot's driving records to check for incidents of DWI. The FAA doesn't usually take action until at least a second DWI offense. Perhaps any DWI event, especially one at a high BAC by a pilot, should trigger a careful review of the pilot's fitness to fly. This same approach should be considered by other countries. The FAA should also reduce the 0.04% legal BAC to zero. Improved airport procedures are also required. In many of the recent incidents, the pilots came very close to piloting their airplanes. In one case the plane had already left the gate and had to be called back by air traffic controllers. Better guidance for airport police and airline personnel should be developed to make sure any suspicions of pilot drinking are fully checked well before an airplane is set to depart.

Let's not wait for an alcohol-related airline crash before these prudent preventive steps are taken.

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