



ECA

European Cockpit Association

D&A Policy and Procedures

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Ethanol and Drugs Found in Civil Aviation Accident Pilot Fatalities, 1989–2013.

Arvind K. Chaturvedi*; Kristi J. Craft; Jeffery S. Hickerson; Paul B. Rogers; Dennis V. Canfield
Aerosp Med Hum Perform. 2016; 87(5):470–476.

- Fatally injured pilots in civil aviation accidents were analyzed for ethanol and drugs
- During 2009–2013, samples from 1169 pilots were analyzed.
- Aircraft involved in the accidents were primarily operating under general aviation
- The use of ethanol and/or drugs by aviators, along with underlying medical conditions, was determined by the NTSB to be cause/factors in 5% of the accidents.



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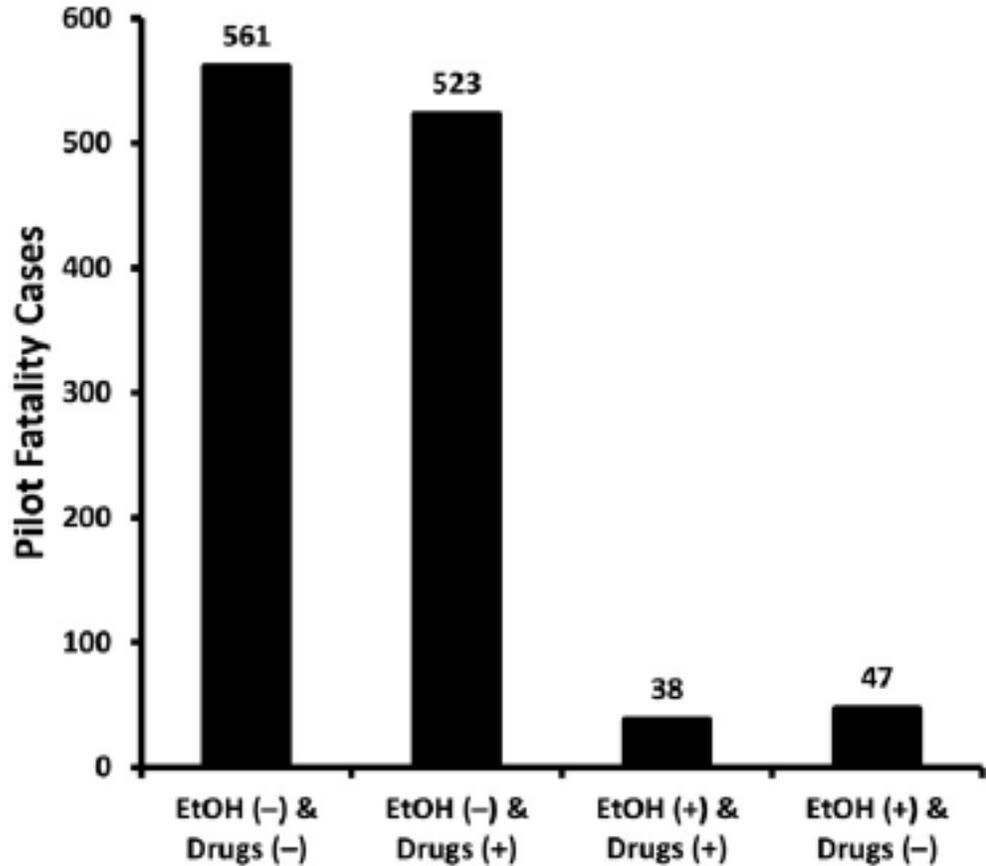


Fig. 2. Pilot fatality cases that were determined to be negative or positive for ethanol (EtOH) and/or drugs. Drugs (-), drugs negative; Drugs (+), drugs positive; EtOH (-), ethanol negative; EtOH (+), ethanol positive.

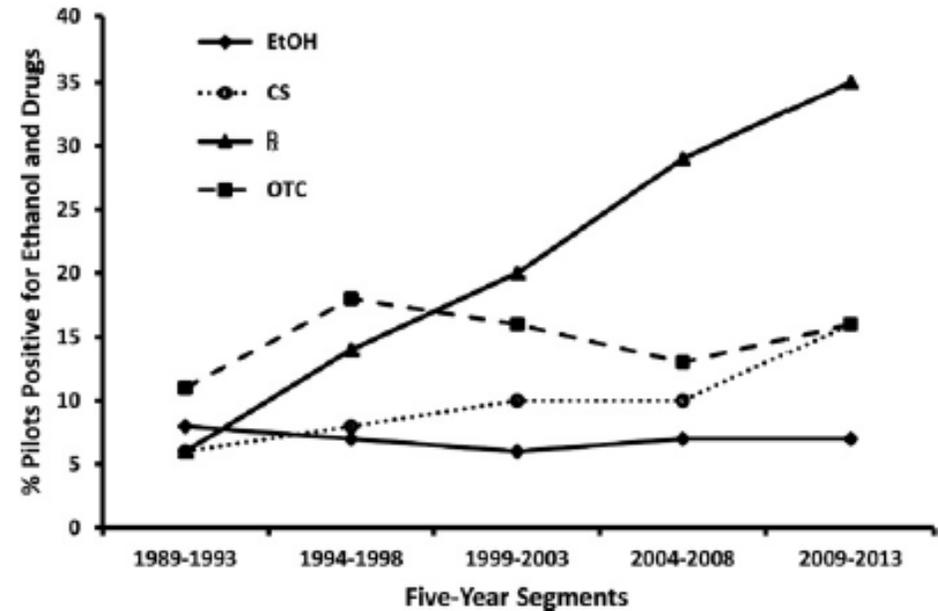


Fig. 3. Percentages of pilots whose postmortem samples were positive for ethanol (EtOH), illicit drugs (controlled substances; CS), prescription (R) drugs, and nonprescription (over-the-counter; OTC) drugs. The 100-percent values of pilot fatalities for the 5-yr segments were: 1845 for 1989–1993²; 1683 for 1994–1998⁴; 1587 for 1999–2003⁵; 1353 for 2004–2008³; and 1169 for 2009–2013. Fatalities in which more than one analyte (EtOH or drugs/metabolites) was detected were counted more than once to account for the presence of each of the analytes under their respective categories.

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However...

- No FAR Part 25 operations were identified with ethanol or illegal drugs in the toxicology database and
- only one identified with ethanol from the database from the autopsy group (2009 onwards) (P. Rogers, personal communication, 2016); Crash Following In-Flight Fire, Fresh Air, Inc. Convair CV-440-38, N153JR. San Juan, Puerto Rico. March 15, 2012.
- NTBS accident report: “because of the varied ethanol levels in the captain’s tissue, the ethanol was not likely from ingestion”



CAT.GEN.MPA.170 Psychoactive substances

- (b) The operator shall develop and implement a policy for ~~flight and cabin crew~~ **all safety-critical professions**, with related testing procedures, to avoid and prevent the misuse of psychoactive substances so that the safety of the aircraft or its occupants is not endangered.
- (c) Without prejudice to provisions laid down in Directive 95/46/EC and to the applicable national legislation on testing of individuals, the operator shall develop and implement an objective, transparent and non-discriminatory procedure for the detection of cases of misuse of psychoactive substances by ~~flight and cabin crew~~ **all safety-critical professions**. This procedure shall take into account the provisions laid down in MED.B.055 of Regulation (EU) No 1178/2011.



AMC1 CAT.GEN.MPA.170(b) Psychoactive substances

POLICY AND PROCEDURES ON PREVENTION OF MISUSE OF PSYCHOACTIVE SUBSTANCES

The operator should provide training and/or educational material to ~~all flight crew and cabin crew~~ **all safety-critical professions** on:



AMC2 CAT.GEN.MPA.170(b) Psychoactive substances

POLICY TO PREVENT MISUSE OF PSYCHOACTIVE SUBSTANCES

- (a) The operator's policy should ensure testing for psychoactive substances at least in the following cases:
- upon employment by the CAT operator;
 - after a serious incident within the meaning of Regulation (EU) No 996/2010;
 - after an accident;
 - with due cause, e.g. following reasonable suspicion; and
 - as part of a follow-up following rehabilitation and return to work.
- (b) The operator should inform the competent licensing authority in case of a confirmed positive test result.
- (c) The operator should provide access to support group in case of a confirmed positive test result.



AMC1 CAT.GEN.MPA.170(c) Psychoactive substances

OBJECTIVE, TRANSPARENT AND NON-DISCRIMINATORY TESTING PROCEDURE

- ✓ Must be strictly confidential
- ✓ must prevent false positives
- ✓ screening tests must have a confirmation test with forensic accuracy
- ✓ conducted by trained and impartial personnel
- ✓ the reason for a positive result has to be determined, i.e. actions based only on tests results not acceptable

The suggested wording captures quite well all these & other requirements 😊



Concluding remarks

- D&A were not involved in the GermanWings tragedy
- NO for random testing:
 - it does not prevent the problem, and
 - it increases expenses;
- YES for the involvement of pilot support groups
- ALL safety-critical professions must be included in the policy and procedures
- The policy and procedures as suggested MUST stay in the AMC's (not GM), are acceptable and should not be changed.



Thank you!

Questions?

