



2018 AOCOPM Midyear Educational Meeting
San Antonio

Pilot Mental Health


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Overview


- Suicide by aircraft
- Statistics
- German Wings crash (and others)
- Weaknesses in current system
- AME responsibilities
- Mental status exam by AME
- Pearls



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Psychiatric Pearls


- Crazy people do crazy things
- Normal people do crazy things
- Crazy people do normal things
- Normal people do normal things
- No ironclad way to predict
- But there are indicators
- Systemic failures



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Suicide by Aircraft


- Jones 1977. Split S into runway
- 1994. Morocco. 44 dead.
- 1997. 104 dead. Pilot recently demoted
- Egyptair 1999. 217 dead. Nantucket
- Botswana 1999. Grounded for medical reasons. Unauthorized takeoff in turboprop plane. Deliberately crashed it into 2 other planes on ground



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Suicide by Aircraft


- Spirit Airlines. Haiti. 2010. Erratic behavior and history of same. Self medicating with St. John's Wort. Disconnected autopilot and executed high G pullup with passengers on board
- Malaysia flight 370 March 2014
- Common theme of denial by authorities after apparent suicide by aircraft. Embarrassing



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Statistics

- Bills, Grabowski, Guhoa 2005
- 1983-2003. 37 pilots
- All male. All General Aviation
- Alcohol 24%. Drugs 14% (combined-38%)
- Social problems 46 %
- Legal problems 40 %
- Psychiatric problems 38 %



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Suicide Statistics

- Suicide risk with ETOH abuse is 60-120 times general population
- NIMH. 90% of suicides committed by those who suffer from some form of mental illness
- 62 % pilot suicides October-March
- 38 % pilot suicides April-September
- Pilots tempted to hide mental illness
- Pilots tempted to hide all illness



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Pilots/Docs

- Doc is natural enemy of pilot
- Pilots like to win, defy gravity, adapt, innovate, overcome, conquer, progress
- Flight physical is no win situation
- Best outcome is status quo
- Worst outcome is precipitous end to flying career/income/identity
- Much is at stake



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Why Hide?

- MD licensure versus pilot licensure
- If MD had to pass FAA Class I Flight Physical each 6 months in order to exercise privileges of MD license----- ???????
- Would MD with physical/psychiatric history be tempted to minimize history?
- Just asking



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Weaknesses in system

- Pilot suicide very rare
- Not expected
- Pilots generally a happy bunch
- Love flying and airplanes
- Train to avoid crashes, not cause them
- Privacy issues
- Pilots tempted to hide from Docs



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Germanwings Crash

- March 24, 2015
- Andreas Lubitz, Copilot, A320
- Barcelona to Dusseldorf
- Locked Pilot out of cockpit
- Autopilot descent from 38,000 to 100 feet
- Impacted mountain at 6,000 feet
- Suicide by aircraft. 150 dead



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Background

- 27 years old
- Flying since age 14 (gliders)
- Described as gifted and precise
- Quiet but fun. Affable
- Airline training 2008 Bremen/Phoenix (5%)
- Training interrupted for 6 months
- Depressive episode



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Background

- Lived with girlfriend (Montabaur)
- And parents (Dusseldorf)
- Always laughing and happy
- Visited glider club late 2014. Seemed fine
- Treated by psychotherapists for suicidal tendencies long before flight training
- No one in Germanwings knew



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Background

- Depressive episode 2008/2009
- Not first episode (Depression prior to age 14)
- No issues 2010-2011
- Commercial Pilot Certificate 2012
- Germanwings Flight Attendant 2013
- Awaiting Copilot Slot for 11 months
- Copilot 2014



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Background

- Flight medical August 2014. Passed
- Security check January 2015. Passed
- Visited numerous Doctors (double digits)
- Numerous somatic complaints
- Vision difficulties. Psychosomatic?
- Did not inform employer



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Background

- Notes from specialists
- Unfit for work
- Did not give these to employer
- Torn scraps found in wastebasket
- Hid depressed mood from employer
- Hid depressed mood from friends/family



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Ronald Crews 2002

- Pilot Cessna 402 Commuter Airline
- Diabetic seizure at controls
- Overflew Hyannis Port Eastbound
- Melanie Oswald, Student Pilot (Security)
- Landed plane gear up
- Crews hid IDDM from FAA for years
- Prison time



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Audit 1988 FAA

- Computer cross checks
- 27 pilots
- Lied ref drug/ETOH convictions
- Legal sanctions
- Not a new problem
- Occasional grounding item hidden



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Weaknesses

- Pervasive privacy culture
- Strict data protection rules
- Lack of systemic screening
- Medical and Aviation systems separate
- Inadequate communication
- Oversight failure
- Lufthansa/German Wings unaware



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More Weaknesses

- Psychiatry has poor track record for predicting specific actions in specific individuals
- We do not read minds
- People lie to us, and we believe them



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More Weaknesses

- No reliable way to predict with accuracy when and where an individual will snap
- Vast majority of pilots are safe/stable
- We do not expect to discover severe medical or psychiatric problems in a pilot



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AME Responsibilities

- Fiduciary responsibility to public
- Objectivity crucial
- Transference/Countertransference
- Disqualifying conditions: Yes or no
- Do not hide problems
- Would you fly with this pilot?



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AME Responsibilities

- Aviation is very unforgiving of carelessness, incapacity, or neglect
- Explore background and report accurately
- 15 disqualifying conditions. 5 psychiatric
- Think aeromedical significance
- Think impairment, incapacitation
- Do not ignore psychiatric indicators
- Would you fly with this pilot?



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Mental Status Exam (AME)

- Not a full Psychiatric exam
- Screening exam
- Look for Bipolar, Psychosis, Depression, Personality Disorder, Substance problems
- Describe findings
- Report accurately
- Would you fly with this pilot?



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Mental Status Exam

- General to specific
- Appearance, gait, orientation, consciousness
- Mood and affect
- Delusions, hallucinations, Psychosis
- Thought processes and content
- Cognition, insight, executive function
- Would you fly with this pilot?



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Suicide Indicators/Risk Factors

- Loss, real or imagined, Social isolation
- Alcohol problems
- Crises: Legal, social, financial
- Serious medical illness, delirium
- Depression, Psychosis, Cancer, Renal failure
- Previous attempt
- Positive family history



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More Indicators

- Prior Psychiatric diagnosis
- Personality disorder
- Lack of rapport with examiner
- Hopelessness, intolerable pain
- Isolation, loneliness, lack of belonging
- Life-long coping difficulties
- Vague answers to specific questions



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Jones' Rule of Irrational Data

If you don't understand what a flyer means, assume it is your problem. Ask again, clearly. If the flyer tries hard to explain, and you try hard to listen, and you still don't get it, it's probably the flyer's problem. Find out what it is. Possibilities include simple misunderstandings, language barrier, education, culture, intelligence, neurological or psychiatric problems.



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AME Pearls

- Past behavior is the best predictor of future behavior
- Suicidal pilots are very rare. You will probably never see one. Very hard to detect
- Flying training selects for well adjusted, trustworthy individuals and weeds out the vast majority of those who are not



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AME Pearls

- Vast majority of applicants are honest and trustworthy, but the temptation to hide a grounding item is always possible
- Watch for the rare pilot who has successfully hidden a severe psychiatric or medical problem over time
- Explore indicators



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AME Pearls

- Depressed people make you feel depressed
- Crazy, disorganized people make you feel crazy and disorganized
- Jones' rule
- Get a good history, particularly if any of the indicators are seen
- Would you let your family fly with this pilot?



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