

AsMA Pilot Mental Health Working Group Recommendations – Revised 2015

Atlantic City 2016

Philip J. Scarpa, Jr. MD, MS

Aerospace Medical Association





2012 AsMA Recommendations

- Following Jet Blue Pilot Mental Health Incident and other incidents
- Recommendations developed from Pilot Mental Health Working Group
- Improve awareness and identification of pilot mental health issues especially during the aeromedical assessment
- Distributed, posted, and published

Ref: Aerospace Medical Association Ad Hoc Working Group on Pilot Mental Health. Aviation, Space, and Environmental Medicine, Vol. 83, No. 12, Dec 2012



AsMA Recommendations – Revised 2015

- Following mishap Germanwings Flight 9525, Pilot Suicide as probable cause
- Met again in Orlando, 2015
- Revised recommendations Sept 2015
- Distributed worldwide and posted



2015 Recommendations

- **“Mental well-being and absence of mental illness are essential to the safe performance of pilot and aviation safety-sensitive duties.”**



2015 Recommendations

- **“Mental health should be evaluated as part of the aeromedical assessment of pilots.”**



2015 Recommendations

- **“Serious mental illness such as acute psychosis is relatively rare, and its onset is difficult to predict”**
 - AsMA believes that in-depth psychological testing for detecting serious mental illness as part of the routine periodic pilot aeromedical assessment is neither productive nor cost effective and therefore not warranted.
 - An initial appropriate psychological evaluation established by subject matter experts is recommended for pilots entering airline employment and recurrently for pilots with a history of mental illness.



2015 Recommendations

- **“However, more attention should be given to less serious and more common mental health issues and conditions during the aeromedical assessment of pilots”**
 - There are many other mental health conditions, such as grief, psychosocial stress, depression, anxiety, panic disorders, personality disorders, and substance misuse/abuse, which are far more common, show patterns that facilitate early detection, and have proven effective treatment strategies.



2015 Recommendations

- **“Methods should be utilized to build rapport and trust with the pilot in a nonthreatening environment”**
 - Questions and interview techniques can be used to assess mental health that will have a minor impact on the current examination and should not prove burdensome for the pilot or examining physician. Asking questions regarding mood, quality of sleep, current sources of stress (such as work, fatigue, financial, home and family), alcohol and/or substance use are recommended. These questions should be woven into the conversation with the pilot during the aeromedical examination as part of a general health promotion discussion that addresses a variety of health issues, both mental and physical. Training demonstrations or videos may be helpful.



Useful Screening Tools

- The Altman Self-Rating Mania Scale
Altman EG, Hedeker D, Peterson, JL, Davis JM. Biol Psychiatry 1997; 42:948-55
- The CAGE Questionnaire
Ewing, JA. JAMA 1984; 252:1905-7
- An Ultra-Brief Screening Scale for Anxiety and Depression: the PHQ-4
Kroenke K, Spitzer RL, Williams JBW, Lowe B. Psychosomatics 2009; 50:613-21
- The NIDA Quick Screen
National Institute on Drug Abuse.
<http://www.nida.nih.gov/nidamed/screening/nmassist.pdf>



Useful Guidance

- ICAO guidance on Mental and Behavioral Health questions and Health Promotion at periodic medical examinations

The International Civil Aviation Organization (ICAO) Manual of Civil Aviation Medicine (Doc 8984-AN/895, Part I, Chapter 2), www.icao.int/publications/pages/publication.aspx?docnum=8984.

- ICAO guidance on competency based training for medical examiners, including building rapport with applicants and the evaluation of psychiatric and psychosocial factors

The International Civil Aviation Organization (ICAO) Manual of Civil Aviation Medicine (Doc 8984-AN/895, Part V, Chapter 1), www.icao.int/publications/pages/publication.aspx?docnum=8984.



2015 Recommendations

- **“It is recognized that there may be barriers affecting a frank discussion of mental health issues between an aeromedical examiner and a pilot”**
 - Cultural barriers exist – Pilots are highly independent, value control, and fear losing their medical certification.
 - Successful approaches that improve rates of reporting, discussion, and participation aim to provide a “safe zone” for such activities. These approaches enhance aviation safety and optimize pilot mental health while minimizing career jeopardy and the stigma of seeking mental health assistance.



APA Project Wingman

- Allied Pilots Association (APA - American Airlines pilots union)
- Provides confidential “safe zone” of peer employee assistance program (EAP) personnel
- Provides counselling, referral to a competent health professional authority, public outreach to increase awareness, and de-stigmatization of mental health care
- Resulted in an increase reporting and counseling



ALPA HIMIS

- Air Line Pilots Association, International Human Intervention Motivation Study Program
- Collaboration between aviation employers, pilot unions, aviation psychiatrists and psychologists, senior aeromedical examiners and the regulator preserving careers and increasing aviation safety
- Confidential self-referral option and peer/management intervention options with career preservation
- Return to flying monitored carefully by peers, management, psychiatric and psychological specialists, and aeromedical examiners with periodic reports to the regulator
- Trust and Just Culture environment for reporting well established and accepted among pilots



Delta PAN

- Delta Airlines Pilot Assistance Network
- Similar to APA Project Wingman with broader pilot union involvement
- Pilots self-refer to peers – given full spectrum of resources for assistance (peers, EAP, and union aeromedical services)
- The Training department and Chief pilots can alert PAN committee members to a pilot with potential problems if difficulties are identified. Then situation is handled peer-to-peer with company agreement to restrict pilot from flying duties if appropriate until situation resolved safely
- 24/7 confidential hotline manned by peer volunteers on pilot union telephone tree
- Destigmatizes mental health issues, encourages reporting and treatment with financial protection and career preservation



2015 Recommendations

- **“Physicians performing aeromedical assessments should receive additional training in aviation mental health issues”**
 - This should be emphasized as part of the initial and periodic aeromedical examiner training programs.
 - This training would also include guidance for when an aeromedical examiner should consult/refer to a mental health specialist provider or other aeromedical resource.



2015 Recommendations

- **“Clinicians not trained in aeromedical assessment should be provided guidance for when to seek aeromedical expertise”**
 - Aerospace medicine is a unique area of expertise related to optimizing the health, safety and performance of aircrews.



2015 Recommendations

- **“Similarly, aircrew, their families and flight organizations (civil and military) should be made more aware of mental health issues in aviation”**
 - Extended awareness beyond the physician should facilitate greater recognition, reporting and discussion.
 - Pilot training to improve management of impairment or incapacitation due to mental health conditions can be emphasized and incorporated into Crew Resource Management (CRM) education.
 - To the extent possible, such training should be standardized throughout the global aviation community.



2015 Recommendations

- **“All aviation regulatory authorities and aviation employers should establish a policy and strategy on substance misuse and abuse”**
 - Consult the International Civil Aviation Organization (ICAO) guidance on this topic.

Ref: The International Civil Aviation Organization (ICAO) *Manual on Prevention of Problematic Use of Substances in the Aviation Workplace* (Doc 9654-AN/945).



2015 Recommendations

- **“There should be clear and universally accepted guidelines provided to health care providers on when their obligation to report aeromedical concerns to authorities supersedes their responsibility to patient confidentiality”**
 - This reporting should be similar to other mandatory medical reporting such as for infectious diseases in public health laws.
 - The risk to public safety should be clearly evident.
 - The reporting should be anonymous where this approach is acceptable.
 - The reporting should be without legal risk to the health care provider.



Summary

- Continues to emphasize the importance of assessing and optimizing Pilot Mental Health, esp. less serious and more common conditions
- Training for AMEs and Non-AMEs, families and peers
- Building trust and rapport between AME and Pilot
- Optimizing Peer Support Programs (“safe zones”)
- Utilizing aviation mental health and aeromed specialists
- Medical confidentiality vs. public safety

- Reviewed regularly and revised as needed



2015 Recommendations Published

- Distributed Worldwide
- Posted on AsMA Website
 - www.asma.org
- AsMA Journal
 - Aerospace Medicine and Human Performance, Vol. 87, No. 5, May 2016
- Endorsed by
 - European Society of Aerospace Medicine (ESAM)
 - European Association of Aviation Psychologists (EAAP)
 - European Cockpit Association (ECA)
- Cited in BEA Final Report on GW accident



Back up Slides



WG Recommendations Conclusions

“The Aerospace Medical Association is committed to the safety of the flying public and supports the current medical standards agreed upon internationally that aviators suffering from any medical condition that jeopardizes flight safety (including mental illness) should be restricted from flying duties. We offer the above recommendations and measures and encourage data collection to validate their effectiveness. Success of these recommendations to promote mental health awareness and improve mental health screening will require involvement of the entire aviation community of air crew, employers, regulators, and health care providers. We recognize that there are no simple solutions, that testing for mental illness is not infallible, that some measures will take time without showing immediate effect, and that the risk of hazards in flying will never be zero, but we believe these implemented recommendations should help reduce the already low flight safety risk due to mental illness.”



The CAGE Questionnaire

CAGE Questions

1. Have you ever felt you should cut down on your drinking?
2. Have people annoyed you by criticizing your drinking?
3. Have you ever felt bad or guilty about your drinking?
4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?

CAGE Questions Adapted to Include Drug Use (CAGE-AID)

1. Have you ever felt you ought to cut down on your drinking or drug use?
2. Have people annoyed you by criticizing your drinking or drug use?
3. Have you felt bad or guilty about your drinking or drug use?
4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?

≥2 = potential abuse



The Altman Self-Rating Mania Scale

0-4 scoring

Question 1 – happiness level

Question 2 – self-confident level

Question 3 – need for sleep level

Question 4 – talking level

Question 5 – activity level

Score ≥ 6 = high probability of mania/hypomania



The Ultra-Brief Screening Scale for Anxiety and Depression: the PHQ-4

Over the last 2 weeks how often have you been bothered by these problems?	Not at All	Several Days	More Days than Not	Nearly Every Day
Feeling nervous, anxious, or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Feeling down, depressed, or hopeless	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3

Scores = normal (0-2), mild (3-5), moderate (6-8), and severe (9-12)



The NIDA Quick Screen

In the past year, how often have you used the following?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
Alcohol -For men, ≥ 5 drinks/day -For women, ≥ 4 drinks/day					
Tobacco Products					
Prescription Drugs for Non-Medical Reasons					
Illegal Drugs					

Positive = "Yes" to any



References

1. Aerospace Medical Association. Information on aerospace medicine. Accessed on August 30, 2015, from: <http://www.asma.org>.
2. Air Line Pilots Association. International Human Intervention Motivation Study Program. Accessed on December 8, 2015 from: <http://www.himsprogram.com/>.
3. Allied Pilots Association. Accessed on December 8, 2015 from: <http://www.alliedpilots.org>.
4. Altman EG, Hedeker D, Peterson, JL, Davis JM. The Altman Self-Rating Mania Scale. *Biol Psychiatry* 1997; 42:948-55.
5. Delta Pilot Assistance Network committee conference summary. True Headings, 15-04, April 7, 2015, Delta MEC. Accessed on December 8, 2015 from: <https://dal.alpa.org/DesktopModules/Bring2mind/DMX/Download.aspx?PortalId=0&TabId=86&EntryId=7725>
6. Ewing, JA. Detecting Alcoholism: The CAGE Questionnaire. *JAMA* 1984; 252:1905-7.
7. International Civil Aviation Organization. Guidance on Competency Based Training for Medical Examiners, Including Building Rapport with Applicants and the Evaluation of Psychiatric and Psychosocial Factors, Manual of Civil Aviation Medicine, International Civil Aviation Organization, 3rd ed. Montreal: ICAO;2012, Doc 8984-AN/895, Part V, Chapter 1. Accessed on August 30, 2015, from: www.icao.int/publications/pages/publication.aspx?docnum=8984.
8. International Civil Aviation Organization. Guidance on Mental and Behavioral Health Questions and Health Promotion at Periodic Medical Examinations, Manual of Civil Aviation Medicine, International Civil Aviation Organization, 3rd ed. Montreal: ICAO;2012, Doc 8984-AN/895, Part I, Chapter 2. Accessed on August 30, 2015, from: www.icao.int/publications/pages/publication.aspx?docnum=8984.
9. International Civil Aviation Organization. Guidance on Substance Misuse/Abuse, Manual on Prevention of Problematic Use of Substances in the Aviation Workplace, International Civil Aviation Organization, Montreal: ICAO; Doc 9654-AN/945.
10. Kroenke K, Spitzer RL, Williams JBW, Lowe B. An Ultra-Brief Screening Scale for Anxiety and Depression: the PHQ-4. *Psychosomatics* 2009; 50:613-21.
11. National Institute on Drug Abuse. The NIDA Quick Screen; National Institute on Drug Abuse. Bethesda, MD: NIDA; Accessed on August 30, 2015, from: www.nida.nih.gov/nidamed/screening/nmassist.pdf.
12. Pilot Mental Health: Expert Working Group Recommendations. *Aviat, Space, Environ Med*, 2012; 83:1184-5.



Working Group members

- Philip Scarpa, Chair
- Fanancy Anzalone
- Thomas Bettes
- Kris Belland
- Gary Beven
- Robert Bor
- Volker Damann
- Tracey Dillinger
- Nigel Dowdall
- Sally Evans
- Christopher Flynn
- Vivianne Fonne
- Christopher Front
- Consuelo Gonzalez
- John Hastings
- Kevin Herbert
- Cheng Chun Hon
- Martin Hudson
- Raymond King
- Marvin Lange
- Robin Low
- Roy Marsh
- Luis Humberto Martinez
- Joseph McKeon
- Kent McDonald
- William McDonald
- Stuart Mitchell
- Russ Rayman
- Carlos Salicrup
- David Salisbury
- David Schroeder
- Joerg Siedenburg
- Warren Silberman
- Ries Simons
- Jarnail Singh
- Quay Snyder
- Richard Tan
- Claude Thibeault
- Roland Vermeiren
- Feng Wei
- Anthony Evans
(observer)