### Mental Health Issues in the FAA

Aerospace Medicine Course Presented to: South African Civil Aviation Authority By: Penny M. Giovanetti, D.O., M.S.P.H. Date: October 21, 2021



# **FAA Philosophy**

In a pilot, with a mental health diagnosis... return him/her to flying...as long as it is safe to do so.



## **Special Mental Health Programs**

- Human Intervention Motivation Study (HIMS)
- Selective Serotonin Reuptake Inhibitors (SSRI)



## **HIMS Program**

- Success story
- Prior to 1974 permanent grounding for substance dependence – no exceptions
- Coordinated effort between management, unions, volunteers, medical professionals and FAA
- 2,317 Airmen on special issuance for substance use disorders
- 85% relapse free



#### Medical Certification of Airmen Special Issuances-Substance Dependence (CY 2020 as of 12/13/20)

	Class 1	Class 2	Class 3	Total
Alcohol Abuse	496	111	113	720
Alcohol Dependence	872	63	64	999
Drug Abuse	349	57	68	474
Drug Dependence	94	9	21	124
	1811	240	266	2317



#### **HIMS Team**

- Employers
- Pilot Unions
- FAA
- HIMS AMEs
- Treatment Facilities
- Psychiatrists
- Peer Support Groups
- Peer Pilot

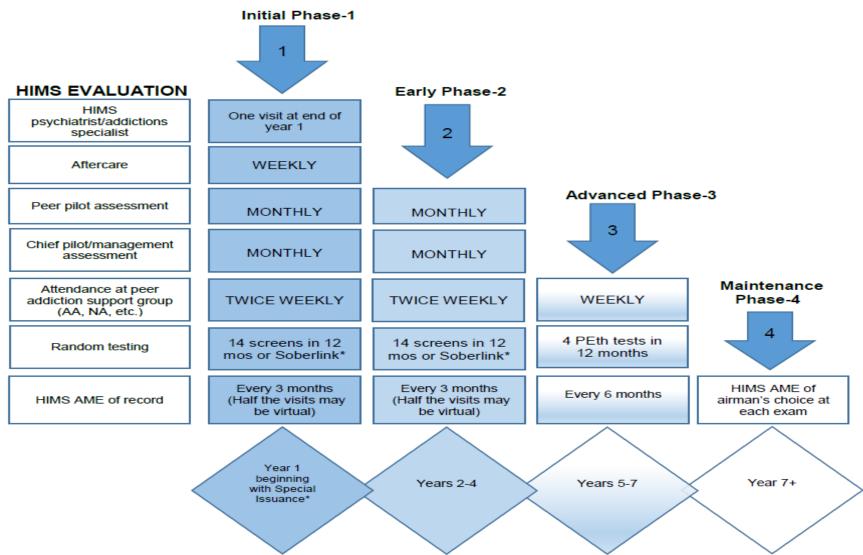




- Dependence vs. abuse vs. one-time stupid
- Formal treatment program 28 day inpatient or intensive outpatient
- Group aftercare
- Peer support group e.g. AA
- Compliance testing
- Evaluation by HIMS psychiatrist
- Initial neurocognitive assessment
- Maintain abstinence



#### **HIMS STEP DOWN PLAN**



\*Soberlink or similar portable, alcohol breath-monitoring system that has facial recognition and cellular transmission technology.



## **Goals of Step Down Plan**

- Support strong recovery program
- Extended follow up of life-long disease
- Responsible fact-based use of resources
- Satisfy as many stakeholders as possible



## **Role of the HIMS AME**

- Coordinate care
- Administratively manage case
- Regular meetings with pilot
- Evaluate the quality of the recovery
- Make a recommendation regarding safety for special issuance



## **HIMS AME Qualifications**

- Experienced AME
- Approved by Regional Flight Surgeon
- Attend HIMS Basic Seminar 2 1/2 days
- Pass written test
- Complete refresher training every 3 years



#### **HIMS AME Checklist**

#### •Drug and Alcohol Monitoring – RECERTIFICATION

1.	HIMS AME FACE-TO-FACE, IN OFFICE EVALUATION: Required EVERY 6 months for ALL CLASSES	
	Any concerns that the airman is not successfully engaged in a continued abstinence-based recovery program	N
	or is not working a good program based on your clinical interview/evaluation and review of reports?	
	<ul> <li>Interval evaluations (every 3 months or as required by Authorization Letter) were unfavorable?</li> </ul>	
	Any evidence or concern the airman has not remained abstinent?	
	Any positive drug or alcohol tests since last HIMS evaluation?	
	<ul> <li>Any evidence of noncompliance or concern the airman is not working a good recovery program</li> </ul>	
	<ul> <li>Any NEW condition(s) that would require Special Issuance? (Do not include any new CACI qualified condition.).</li> </ul>	
2	. TREATING PSYCHIATRIST REPORT or HIMS PSYCHIATRIST REPORT: Required EVERY 12 months	

for ALL CLASSES unless a different time interval is specifically stated in the Authorization Letter.

- Report(s) is/are favorable (no anticipated or interim treatment changes) ......
- The psychiatrist recommends no additional treatment or monitoring.....

#### Items 3 - 5: The AME should review. Do not submit these items (3-5) to the FAA unless concerns are noted.

 AFTERCARE COUNSELOR REPORTS: For 1<sup>st</sup> and 2<sup>nd</sup> class: Required every 3 months; 3<sup>rd</sup> class: Per Authorization Letter.

- Show continued participation and abstinence-based sobriety?
- 4. CHIEF PILOT REPORT(S): Required monthly for commercial pilots holding first- or second-class certificates (N/A for third-class):
  - Report(s) is/are favorable?
- PEER PILOT REPORTS: Required monthly for commercial pilots holding first- or second-class certificates (N/A for third-class):
  - Report(s) is/are favorable with continued total abstinence?

#### 6. ADDITIONAL REPORTS: Required ONLY when specified by the Authorization letter

- HIMS related (AA attendance, therapy reports, etc.) are favorable and meet authorization requirements.
- Reports required for other non-HIMS conditions all meet Authorization requirements......

7. I have no other concerns about this airman and recommend re-certification for Special Issuance.....

#### N/A Yes No

Yes

Not

Due

Yes

No

o

N/A	Yes	No

N/A	Yes	No

N/A	Yes	No
	Yes	No



#### HIMS Certification Aid – Drug and Alcohol INITIAL Sample

#### **#5 NEUROPSYCHOLOGIST EVALUATION AND RAW TEST DATA**

#### The neuropsychologist report MUST address:

- 1. Qualifications: State your certifications and pertinent qualifications.
- 2. Records review: What documents were reviewed, if any?
  - a. Specify clinic notes and/or notes from other providers or hospitals; and
  - **b.** Verify if you were provided with and reviewed a **complete copy** of the airman's FAA medical file.
- **3. Results of clinical interview**: Detailed history regarding psychosocial or developmental problems; academic and employment performance; family or legal issues; substance use/abuse (including treatment and quality of recovery); aviation background and experience; medical conditions and all medication use; and behavioral observations during the interview and testing. Include any other history pertinent to the context of the neuropsychological testing and interpretation.
- 4. Mental status examination

#### 5. Testing results:

- a. CogScreen-Aeromedical Edition (CogScreen-AE); and
- **b**. Remainder of the core test battery.

#### 6. Interpretation:

- a. The overall neurocognitive status of the airman;
- b. Clinical diagnosis (es) suggested or established based on testing, if any;
- **c.** Discuss any weaknesses or concerning deficiencies that may potentially affect safe performance of pilot or aviation-related duties, if any;
- **d.** Discuss rationale and interpretation of any additional testing that was performed; and include
- e. Any other concerns.
- 7. Recommendations: Additional testing, follow-up testing, referral for medical evaluation
  - (e.g., neurology evaluation and/or imaging), rehabilitation, etc.



#### **HIMS Document Links**

HIMS-TRAINED AME CHECKLIST

**Drug and Alcohol Monitoring – INITIAL Certification** 

https://www.faa.gov/about/office\_org/headquarters\_offices/avs/offices/aam/ame/guide/media /HIMS\_DA\_Monitoring\_Initial\_Certification.pdf

FAA CERTIFICATION AID

HIMS Drug and Alcohol Monitoring – INITIAL Certification

https://www.faa.gov/about/office\_org/headquarters\_offices/avs/offices/aam/ame/guide/media /FAACertificationAid-HIMSDrugandAlcohol-Initial.pdf

HIMS AME CHECKLIST

**Drug and Alcohol Monitoring - RECERTIFICATION** 

https://www.faa.gov/about/office\_org/headquarters\_offices/avs/offices/aam/ame/guide/media /HIMS\_Drug\_Alcohol\_Monitoring\_Checklist.pdf

FAA CERTIFICATION AID

HIMS Drug and Alcohol Monitoring – RECERTIFICATION

https://www.faa.gov/about/office\_org/headquarters\_offices/avs/offices/aam/ame/guide/media /Drug\_Alcohol\_Monitoring\_Recertification\_Aid.pdf



## **HIMS Program Issues**

- Incorrect regulatory determination
- Drug/alcohol monitoring test results
- FAA delays for initial Special Issuance



#### Title 14, CFR Part 67.107(4)

Substance dependence...as evidenced by:

- Increased tolerance, OR
- Manifestation of withdrawal symptoms, OR
- Impaired control of use, OR
- Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.



#### DSM 5

#### Alcohol Use Disorder

 A problematic pattern of alcohol use leading to clinically significant impairment or distress as manifested by at least two of the following, occurring within a 12 month period.



## **SSRI Program History**

- General observation that pilots on antidepressants were doing well
- General awareness that mild/moderate depression is very common
- Publication in Federal Register April 5, 2010
- 4 approved medications chosen for most favorable side effect profile



## **Diagnoses Treated with SSRI's**

Depression 61%
Anxiety 39%
Major depression 12%
Obsessive/compulsive 0.05%
PTSD 0.02%
Dysthymia 0.02%



### Antidepressants

- Mild/moderate depression or other diagnosis
- Stable 6 months
- No history psychosis, suicidal ideation, multiple meds, electroconvulsive therapy
- Use of fluoxetine, sertraline, citalopram or escitalopram only
- Recurrent major depressive disorder must be treated



### Antidepressants

- Ongoing monitoring by psychiatry, treating physician, neuropsychology, HIMS AME
- Dosage changes will invalidate special issuance authorization
- Changes of medical monitor require prior coordination with FAA
- Changes in condition must be reported to HIMS AME and FAA immediately



## The "Rule Outs"

- Psychosis
- Suicidal ideation
- History of electroconvulsive therapy (ECT)
- Concurrent use of multiple antidepressants
- History of use of antidepressant plus other psychiatric drugs
- Psychiatric hospitalizations
- Bipolar spectrum disorders
- Affective instability



### **Airliner Assisted Suicide**

- Germanwings flight 9525
- March 24, 2015
- French Alps
- 150 fatalities





### **Airliner Assisted Suicide**

- LAM Airlines ERJ 190; Namibia 11/29/13
- EgyptAir B767; Atlantic Ocean 10/31/99
- Silk Air B737; Indonesia 12/19/97
- Royal Air Maroc ATR42; Morocco 8/21/94
- Japan Airlines DC-8; Japan 2/9/82



### Germanwings

- Very small percentage of mental illness is dangerous
- Mishap pilot had track record of depression
- Treating physician recommended not flying
- No indication of crew concern on outgoing leg
- Failure to disclose/failure to report



### **Failure to Disclose**

- Airman does not recognize problem
  - Diagnosis associated with poor insight
  - Symptoms minimized/mischaracterized
- Airman chooses to conceal
  - Financial hardship
  - Career impact
  - Stigma



### **Non-waiverable Conditions**

- Psychosis
- Bipolar disorder
- Untreated recurrent major depression
- ADHD either on medication or with persistent signs/symptoms



## **Cognitive Concerns**

- SSRI
- HIV
- ADHD
- Substance dependence
- Brain injury
- Aging aviator
- Neurodegenerative
   disease





## Myth: Denial Is a Common Event

- 396,104 Applications submitted FY2019
- 35,502 Special Issuances (9%)
- 5,415 Initial denials (1.4%)
- 93% of those denied failed to pursue





#### **Psychiatric Special Issuances All Classes** (as of 12/13/20)

Conditions	#
Depression	655
Anxiety	558
ADD/ADHD	141
<b>Obsessive Compulsive</b>	45
PTSD	111



### Psychiatric Special Issuances Class 1

#### CY 2019 = 745

#### CY 2020 = 797

#### New case disqualification rate for all classes about 15%



**Aviation Rulemaking Committee** Recommendation 5, June, 2016 Report

The FAA should assemble and disseminate information on benchmark pilot support programs, which includes pilot assistance programs, to serve as a resource for air carriers to develop new or improve existing programs.



### **Issues of Concern**

- Acceptable medications
- Frequency of cognitive testing
- Adequacy of cognitive testing
- Advocacy in the professional community
- Falsification and cheating



# "I didn't know where I was in the air."



#### **Simone Biles**





#### The Message

- Mental status is a performance issue and a safety issue
- Naming it facilitates communication
- Communication facilitates recognition
- Recognition decreases fear
- Decreased fear enables action



#### **Mental Health Continuum**





#### **Questions?**

#### We're all headed the same direction





Federal Aviation Administration