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In This Issue:

- Year in Review
- Use of Kava Kava and Kratom: Cognitive Impacts, Implications for Aviation Safety and Pharmacological Aspects
- OAM and CAMI Train the NTSB Chairman
- Bariatric Surgery in Aeromedical Certification
- Summary of Results: Aerospace Medical Certification Services Airman Satisfaction Survey 2021
- Medical Certification Policy Updates
- In Memoriam
- Aviation Medical Examiner Information Links

Year in Review By Susan Northrup, MD, MPH Federal Air Surgeon



As the holidays approach and the National Air Space gets even more busy, I want to thank each person in the Aerospace Medicine family for your dedication and professionalism. The Office of Aerospace Medicine has taken many positive steps in the last year to advance our policies and systems. Hopefully, many of you have availed yourselves of the document upload feature. For any readers who are not aware, AMEs can directly upload documents into the medical systems here at the FAA if they meet certain size requirements. We are already seeing significant benefits with fewer letters crossing in the mail.

Further, we have updated the Guide for Aviation Medical Examiners to include more checklists, CACIs, and medications. Please take a look monthly for updates. We are planning our Second Aeromedical Summit to get suggestions on what we can do better, what we should do more of, and what we should keep doing. Many of our recent efforts came out of discussions during our first one in November of 2020. I look forward to any and all suggestions.

With the holidays, take time to reflect on the positive. Please take care of yourselves. Rest enough. Eat healthy foods. Exercise regularly. Reach out for help if you need it before issues get out of hand. Spend time with family and friends. Fly if you are able. This was an amazingly busy year with lots of hot topics. The number of applicants increased by six percent – mostly in First Class Airman Medical Certificates. We need you.

Be safe.

-Susan

Use of Kava Kava and Kratom: Cognitive Impacts, Implications for Aviation Safety and Pharmacological Aspects

By Ariel Motta, MD and Priscila Freitas, MD



The whole kava plant, kava roots and the powder of kava roots

In this article, we will discuss the use of the substances Kava Kava (Piper methysticum) and Kratom (Mitragyna speciosa), which are widely available without a prescription, and explore the cognitive effects associated with the use of these substances. Furthermore, we will highlight the potential risks that this use poses to aviation safety when a pilot uses these substances that are increasingly widespread in the population, including recreational use. Both substances have distinct botanical roots, Kava Kava originating from the Pacific Islands and Kratom from Southeast Asian regions.

Cognitive Effects and Risk Factors:



Kava Kava, derived from the roots of Piper methysticum, contains six psychoactive cavalectones that bind to GABA receptors, dopamine receptors and opiate receptors, reducing muscle impulses and also serving as a muscle relaxant. Furthermore, it is important to highlight that, among all anxiolytic herbs, Kava Kava is the most studied and shows the best results in the treatment of mild anxiety and anxiety disorders in humans.

On the other hand, Kratom (Mitragyna speciosa), a plant from the coffee family, contains active alkaloids, such as mitragynine, which act as mu-opioid receptor agonists in the brain, resulting in stimulant and analgesic properties. These effects may vary according to the dose and form of consumption, with low doses generally producing stimulant effects and higher doses resulting in depressant effects similar to opioids. The main forms of consumption in the USA are powdered extract in capsules, liquid formulations and tea.



Despite the promising anxiolytic effects of Kava Kava and the analgesic and stimulant properties of Kratom, the use of these substances in aircraft pilots raises significant concerns similar to those found in studies with car drivers, such as cognitive impairment in general and mainly regarding the judgment of

temporal order. Both can compromise concentration, decision-making and critical judgment, essential aspects of aviation safety.

Both Kava Kava and Kratom have important side effects to consider, such as hepatotoxicity in the case of Kava Kava use and even respiratory depression in large doses of Kratom. Even deaths related to the large quantity use of these substances have also been reported.

Drug Interactions and Additional Considerations:

It is important to recognize that the use of Kava Kava and Kratom can interact with other medications pilots are taking. These interactions can result in unpredictable side effects and exacerbate challenges associated with the safe operation of aircraft.

Additionally, both Kava Kava and Kratom have the potential to lead to addiction. Dependence on these substances poses a substantial risk to pilot fitness and, by extension, aviation safety.

FAA Regulations and Medical Recommendations:

The Federal Aviation Administration (FAA) strictly prohibits the use of substances that could harm aviation safety. Therefore, it is essential that pilots avoid the use of Kava Kava and Kratom, especially in the vicinity of flights. The FAA urges pilots to seek medical advice from an Aviation Medical Examiner (AME) before considering the use of these substances so that each individual's clinical situation is personalized and appropriately addressed to maintain everyone's safety.

Conclusion:

In conclusion, it is vitally important that pilots are aware of the potential risks associated with the use of Kava Kava and Kratom, as well as the implications for aviation safety. The FAA reaffirms its commitment to aviation safety and emphasizes the need to strictly adhere to relevant regulations regarding the use of substances that may affect flight performance. The safety of pilots and passengers must remain the highest priority, and appropriate medical advice is critical to ensure these considerations are taken seriously.

Anxiety represents a topic of increasing relevance in the contemporary global sphere. It is imperative to establish robust collaboration between medical professionals and aviators in order to thoroughly investigate therapeutic approaches for anxiety that comply with guidelines established by the Federal Aviation Administration (FAA).

Ariel Motta, MD and Priscila Freitas, MD are residents of Aerospace Medicine at the Civil Aerospace Medical Institute

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<<back to top

OAM and CAMI Train the NTSB Chairman By J.R. Brown



Roger Storey (far left) escorted NTSB Administrator, Jennifer Homendy (pictured center), into CAMI's PROTE for hypoxia awarness training. JR Brown instructed both a pre and post flight safety briefing.

While at the EAA Oshkosh Fly-in 23, we had a chance to meet and train the NTSB Administrator, Jennifer Homendy. Jennifer Homendy is not only the NTSB Administrator but is also a student pilot. While touring the FAA Safety Center at Oshkosh, she expressed a desire to experience hypoxia in our Portable Reduced Oxygen Training Enclosure. After a quick "safety briefing" by JR Brown, Jennifer entered the PROTE at a simulated altitude of 27,000 feet and experienced her personal symptoms of hypoxia. While under the watchful gaze of Roger Storey, within two minutes she experienced the typical hypoxia symptoms of lightheadedness, tingling in the extremities and mental confusion. At or about two minutes, she donned her mask and the symptoms of hypoxia immediately disappeared. And now, our good Administrator knows what hypoxia feels like and realizes what her personal symptoms are, and that they, more than likely, will be with her for the rest of her life. Upon completion, the Administrator expressed how effective this training is, and how scary it is when you realize how fast hypoxia can occur.

Mr. Brown is a training specialist in Airman Education, with the Civil Aerospace Medical Institute (CAMI).

<<back to top

Bariatric Surgery in Aeromedical Certification By Daniel Alejandro Mendoza Mantilla, MD; Adriana Zuluaga Serna, MD; and Charles Mathers, MD

Obesity is a growing global issue and is similarly on the rise within the aviation industry. For pilots and cabin crew, obesity heightens the risk of various health conditions, including diabetes mellitus, hypertension, sleep apnea, and dyslipidemia, all of which increase cardiovascular risk and could lead to

disqualification in both civil and military aviation sectors. Ricaurte et al. analyzed autopsy reports from civil aviation accidents recorded by the Civil Aerospace Medical Institute from 1990 to 2005. Out of the 6,241 fatalities, 442 cases were examined where the pilot had a body mass index (BMI) of 30 or higher, with an average BMI of 33 (ranging from 30 to 69). They found cardiovascular comorbidity in 33% of these individuals, with hypertension and arrhythmias being the most common, followed by abdominal pathologies at 30%, ophthalmologic at 15%, and neuropsychiatric conditions at 13%.

Bariatric surgery serves as a method to manage obesity and its related conditions. Bariatric surgery includes procedures such as Roux-en-Y gastric bypass (RYGB), biliopancreatic diversion with or without duodenal switch (BPD/DS), and laparoscopic adjustable gastric banding (LAGB). These procedures lead to significant, sustained weight loss over at least 10 years, with outcomes three to four times greater than those of non-surgical treatments. Bariatric surgery has been identified as a protective factor against certain cancers, reducing the incidence of esophageal and gastric malignancies and associated mortality. Cognitive improvements have been observed in 43.8% of patients who are post-bariatric surgery, along with reduced inflammation, leptin levels, blood pressure, medication use for comorbid conditions, and increased physical activity. However, clear guidelines from civil aviation authorities worldwide regarding the post-operative management of aeronautical personnel who have undergone such surgery are lacking. It is vital to review potential complications following these procedures to implement interventions that can mitigate associated risks.

Bariatric surgery long-term risks

Alongside the benefits of bariatric surgery, it is crucial to consider health implications and nutritional changes that may arise because of the procedure, which varies according to the type of surgery performed. As a result of bypassing or modifying parts of the digestive tract, individuals who undergo bariatric surgery are at risk for micronutrient deficiencies. Without adequate nutrition and micronutrient supplementation, these deficiencies can show up years after the surgery was performed. The American Society for Metabolic and Bariatric Surgery (ASMBS) recommends nutrient assessments every three to six months in the first year after bariatric surgery and then on an annual basis thereafter. While many individuals remain attentive to this recommendation, some are not as diligent, thus putting themselves at risk for micronutrient deficiencies.

Anemia is a notable complication following bariatric surgery, particularly after sleeve gastrectomy (SG). Studies indicate that while the prevalence of anemia ranges from 0 to 30% prior to surgery, it escalates to between 3.6 to 51% within the first 12 months postoperatively. This increase is primarily due to iron, vitamin B12, or folate deficiencies, with a significant proportion of patients—33 to 49%—developing anemia within two years after the procedure. The incidence is higher in women, with 32% experiencing anemia compared to nearly 10% of men after the first-year post-surgery. Postoperative monitoring shows that ferritin levels decrease over time, suggesting that iron storage depletion is a progressive concern. Since unrecognized anemia can predispose pilots to subtle incapacitation, diligent postoperative nutritional monitoring and supplementation are crucial to mitigate this risk. More serious neurological complications such as peripheral neuropathy, vitamin B12 deficiency, Guillain-Barré syndrome, Wernicke's encephalopathy, and copper deficiency occur in 4.6% to 16% of cases postoperatively. Bariatric surgery is also linked to a rise in gastroesophageal reflux disease (GERD), with 25% to 40% of patients developing de novo GERD post-sleeve gastrectomy (SG), and approximately 10% developing Barrett's esophagus after SG. These complications also highlight the need for thorough post-surgery follow-up.

Bariatric surgery is linked to an increased risk of alcohol abuse, particularly among patients who underwent a gastric bypass procedure. While we don't know for sure, this may be due to increased potency of alcohol due to increased transit and absorption into the bloodstream. Co-morbid psychiatric disease may also contribute. It is also important to note that mortality from suicide is increased in bariatric surgery patients. Given the growing prevalence of mental health disorders in the United States, attention to these issues from the standpoint of aeromedical safety is paramount. Bariatric surgery is a key strategy for managing morbid obesity; however, the lack of adequate long-term follow-up means few studies provide insight into the long-term outcomes or potential secondary complications such as nutritional issues, weight control maintenance, and mental health. Aviation authorities must consider the long-term consequences of bariatric surgery and its complications when medically certifying pilots.

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Dr. Adriana Zuluaga Serna is a Resident of Aerospace Medicine at the National University of Colombia.

Dr. Charles Mathers is a Medical Officer in the Policy and Standards Branch in the FAA's Office of Aerospace Medicine.

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<<back to top

Summary of Results: Aerospace Medical Certification Services – Airman Satisfaction Survey 2021

By Kylie Key, PhD; Casey Yetter, PhD; and Suzanne Thomas

The Civil Aerospace Medical Institute (CAMI) of the Federal Aviation Administration (FAA) has surveyed pilots who recently sought medical certification every approximately two years since 2006. The survey examines satisfaction with Aerospace Medical Certification Services (AMCS) provided by Aviation Medical Examiners (AME), FAA Regional Flight Surgeons (RFS), and the FAA Aerospace Medical Certification Division (AMCD) in Oklahoma City. Each survey aims to evaluate the degree of customer satisfaction with AMCS, identify areas in which the FAA may improve these services, and assess change in customer satisfaction because of improvements from previous iterations of the process. The 2021 survey included additional items to assess the costs of obtaining a medical certificate and additional tests, asked for suggestions for making medical certification easier, and included additional demographic items to gather age data and information on flight hours in the last year and overall.

The Office of Aerospace Medicine (OAM) use survey results to improve the process by which pilots apply and are evaluated for medical certificates to receive their license to fly. Administration of the survey meets federal requirements set forth initially by Executive Order No. 12862, "Setting Customer Service Standards," and the Government Performance and Results Act of 1993. The purpose of this report is to communicate a brief overview of the results of the 2021 AMCS survey, to inform how medical certification processes may be improved.

An invitation to complete the survey was distributed via email to a sample of pilots who sought medical certification for Class I, II, and III within the 24 months leading up to the survey (*N*=10,927 [2018]; *N*=10,793 [2021]). Some Class III pilots indicated that they used BasicMed to apply for their most recent medical certification. The *FAA Extension, Safety, Security Act of 2016* (FESSA) included BasicMed as relief for pilots to fly without going through medical certification if they meet certain requirements. This program is not in the purview of the AMCS; therefore, those results are not included in this report.

Airmen were offered the option to either complete the survey online via the Internet using a computer or mobile device, or to request a paper survey to complete and return via US Postal mail. Invitees were informed that completion of the survey, or any part of the survey, was voluntary.

All steps in the process of obtaining a medical certificate were evaluated, including filing an application on MedXPress (the system in which anyone requiring an FAA Medical Clearance or Medical Certificate can electronically complete the FAA forms), AME services, medical examination appointments, and FAA medical representative services (see Table 1). Satisfaction ratings for MedXPress were collected only if the respondent reported using the service to submit their application.

Overall, 5,162 invitees responded to the survey. Of those, 215 opted out and 4,947 (45.9%) provided responses to the survey. There were 4,858 respondents who sought a Class I, Class II, or Class III medical certificate in the 24 months prior to the survey and the remainder used BasicMed to apply for their medical certification.

Pilots indicated that their level of satisfaction towards services and support by responding to items using a 5-item scale ranging from (1) very dissatisfied to (5) very satisfied. Pilots also provided responses to open-response questions, where prompted. Responses were self-paced, and the survey took approximately 15 minutes to complete. Pilot satisfaction with certification and support services was examined for the 24-month period prior to participation.

Satisfaction ratings between the years 2018 and 2021 are presented in Table 1. Overall, satisfaction with medical certification services remained high with minimal fluctuation between 2018 and 2021. Satisfaction with AME services and exam appointments held steady between 2018 and 2021, while satisfaction with the performance of MedXPress and the FAA medical representative services decreased.

Overall Satisfaction							
2018	2021	Services and Support	2018	2021	Change		
n	n		%	%	%		
4,706	4,489	AME Services	87.6	88.1	0.5		
4,705	4,492	Exam Appointment	84.6	85.2	0.6		
4,413	4,232	Performance of MedXPress*	73.0	71.2	-1.8		
1,328	1,264	FAA medical representative services**	35.7	30.2	-5.5		
		Average Satisfaction	70.2	68.7	-1.6		

Note. *Respondents were included only if they indicated they used MedXPress to submit their application. **Respondents were included only if they indicated they had contact with an FAA medical representative.

Respondents reported the costs associated with obtaining their medical certification. Most respondents (68.7%, *n*=4,834) reported spending between \$100 and \$200 for their medical examination (excluding additional testing) with 85% (*n*=4,821) paying out of pocket. Additionally, 16.7% of those who sought additional required testing reported spending more than \$1,000 (*M*=\$7,331.86, *SD*=\$22,033.33).

AMEs identified or alerted 11.5% of pilots to new medical conditions and of those, 42.8% required treatment for their medical certification. Additionally, AMEs identified or alerted 14.9% of pilots to preexisting health conditions that required treatment to obtain their medical certification. Of those, 88.1% of pilots received treatment for their preexisting health condition. When asked about previous medical certification exams, 10.4% of pilots reported that their AME alerted them to new medical conditions and of those, 45.6% required treatment for medical certification. Additionally, 13.6% of pilots reported that in previous medical certification exams, their AME alerted them to preexisting health conditions that required treatment to obtain their medical certification and of those, 91% received treatment.

When comparing respondents who needed a special issuance to those that did not, 54% of those without special issuances reported 'none or not applicable' when asked about costs of additional requirements, whereas only 16.7% of the special issuance group reported no additional expenses. Conversely, 30.9% of the special issuance group reported additional requirement costs totaling more than \$1,000 whereas only 12.9% of those without a special issuance reported spending more than \$1,000 on additional requirements.

Respondents who indicated dissatisfaction with the quality of service provided by FAA medical representatives were asked to explain the reason behind their decision. Of the 578 respondents who answered, 27.9% were dissatisfied because their medical certificates were denied, 60.2% were dissatisfied because of the poor communication on where their application was in the review process, and 68.7% were dissatisfied because the FAA took too long to complete the review of their medical certificate. However, many airmen (58.3%) seeking medical certificates received their certification on the same day as their exam appointment.

The quality of services item allowed respondents to select multiple responses; therefore, the percentage is based on the number of respondents to the item. Other responses and a comparison to 2018 results are shown in Table 2.

2018	2021	Dissatisfaction Items	2018	2021	Change
n	n		%	%	%
196	161	Denied my medical certificate	34.6	27.9	-6.8
57	57	Not treated with courtesy and respect	10.1	9.9	-0.2
198	193	Not adequately informed of requirements for additional documents	35.0	33.4	-1.6

Table 2

Table 1

Dissatisfaction with quality of services responses

179	180	Failed to explain requirements for additional documentation	31.6	31.1	-0.5
202	225	Not informed of status of application	35.7	38.9	3.2
289	348	Poor communication on where application was in the review	51.1	60.2	9.1
		process			
357	397	Took too long to complete the review	63.1	68.7	5.6
240	273	Other reason(s)	42.4	47.2	4.8

Note. n may sum to greater than the number of respondents to the item due to them providing multiple responses. The % of respondents is based on the total number of respondents to the item.

Airmen thought the FAA medical certification process ensured the safety of the National Airspace System (NAS) to a great extent (25.6%), to a considerable extent (35.6%), to a moderate extent (19.6%), to a limited extent (15.1%), and not at all (4.1%).

A primary opportunity for improvement lies with improving the communication of requirements, expectations, and status of their medical certificates. When asked how the FAA could make the certification process easier, respondents expressed the desire to be able to track the status of their medical certificates (55.6%), to be provided with a list of approved medications (39.3%), and to be able to attach supporting documents in MedXPress (46.8%). The next round of AMCS surveys will be administered digitally in the Fall of 2023.

Acknowledgments

This research was completed with approval from the Federal Aviation Administration's (FAA) Office of Aviation Medicine Airman Certification Division. We would like to thank our FAA sponsor Dr. Susan Northrup. This executive summary was prepared by FAA's in-house research support contractor, Cherokee Nation 3S.

If you would like to discuss findings and implications, please contact the FAA's Principal Investigator, Dr. Kylie Key (kylie.n.key@faa.gov). As a reminder, responses are confidential and kept private to the extent provided by law. FAA researchers do not know which responses are associated with which airman.

Kylie Key works for the Civil Aerospace Medical Institute (CAMI). Casey Yetter and Suzanne Thomas work with Cherokee Nation Support, Services, & Solutions.

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<<back to top

Medical Certification Policy Updates By Judith Frazier, MD, MBA

The Policy and Standards branch continues to focus on helping Aviation Medical Examiners (AMEs) more easily obtain the information needed to make a medical certification decision. This version highlights policy changes and updates published between June 2023 and October 2023. The full list of changes is hyperlinked in the <u>Archives and Updates</u> section of the AME Guide.

ADHD – A new <u>FAST TRACK</u> was introduced. If there is no history of a psychiatric diagnosis or treatment (ever) and no use of ADHD meds or symptoms (in the past 4 years), evaluation can be performed by a local provider (psychologist or neuropsychologist) and review of clinical records. If all items on the FAST

TRACK – FAA ADHD Summary are "No", the AME can issue. There is a new disposition table and added guidance for community providers.

The previous certification criteria for ADHD remains as the STANDARD TRACK. Evaluation and testing should be performed by a HIMS Neuropsychologist. If the AME defers; required evaluation data is listed.

<u>Atrial Fibrillation (AFib)</u> – There is a revised and shortened <u>Non-Valvular Atrial Fibrillation (AFIB)/A-</u> <u>Flutter Recertification Status Summary</u> to key questions for cardiologist.

<u>Frequently Used Webpages</u> – This document was added as quick resource to find the most often requested information.

HIMS AME Step Down Transition – Allows HIMS AMEs to make the decision to transition a pilot from on Special Issuance for substance dependence from Phase 2 to Phase 3 and Phase 3 to Phase 4. AAM will then review the HIMS AME decision. For all others, AAM will make the determination.

<u>Pharmaceuticals</u> – Expanded the <u>Do Not Issue (DNI) – Do Not Fly (DNF)</u> section and expanded the <u>Over the Counter Medications</u> section, revised the <u>Acceptable Combination of Diabetes Medications</u>.

Polycystic Ovarian Syndrome (PCOS) – PCOS has been removed from the Prediabetes CACI. A new disposition table has been added. There is a new CACI with expanded medications.

<u>Prediabetes</u> – Updated the disposition table. Updated CACI. AASI updated. New Status Summary. AASI updated. Removed PCOS (see above).

<u>Weight Loss Management</u> – New disposition table. New CACI. AASI updated. This allows AMEs to issue if specific criteria are met. For all others, the AME defers; required evaluation data is listed. A new pharmaceutical page for <u>Weight Loss Medication</u> was added.

Help us improve the AME Guide! Send your comments or suggestions to: <u>AMEGuide@FAA.gov</u>. (This mailbox does not answer case questions.)

Dr. Frazier is the Manager of the Policy and Standards Branch in the Office of Aerospace Medicine.

<<back to top

In Memoriam

Dr. Terry Jakubaitis, MD

The best physicians are eternal students and educators. Office of Aerospace Medicine Deputy Regional Flight Surgeon Dr. Terry Jakubaitis, MD was always willing to teach others and provide a firm understanding of FAA regulations and processes.

November 17, 2023, Dr. Jakubaitis passed away. He was 67 years old.

Dr. Jakubaitis became Deputy Regional Flight Surgeon for the Great Lakes Region in 2018, after more than a decade as a Senior Aviation Medical Examiner (AME) which was obtained in 2011. He served as an AME assisting Airmen in the Great Lakes Region seeking medical certification. He devoted his life to protecting the NAS by ensuring pilot fitness to fly and evaluating the health of FAA air traffic controllers.

Dr. Jakubaitis also served as a Human Intervention Motivational Study (HIMS) AME. The HIMS program afforded Dr. Jakubaitis a chance to help airmen struggling with substance abuse an opportunity to seek

treatment and turn their lives around. This industry-wide effort helped many airmen preserve their careers while enhancing air safety.

His medical career highlights include more than two decades of providing care in the Waukesha County Mental Health Center and working seven years for the Intensivist-Critical Care at Aurora St. Luke's Medical Center in Milwaukee, Wisconsin. Dr. Jakubaitis took great pride in his work at St. Luke's, responding to medical, respiratory, neurosurgical, cardiac, cardiovascular and surgical ICU demands.

Prior to St. Luke's, Dr. Jakubaitis helped launch the initial startup of the Aurora eICU, a telemedicine program that monitors the 270 ICU beds in the system. Once it as up and running he became the program's assistant medical director. This roll incorporated Dr. Jakubaitis' passion for medicine and engineering.

Dr. Jakubaitis received his doctorate from Rush Medical College in 1989. He earned a master's degree in civil engineering from Northwestern University in 1980 and a physics bachelor's degree from Florida State University in 1977.

The devoted husband and proud family man leaves behind a wife and several now adult stepchildren.

Dr. Charles Chesanow, DO

Dr. Chesanow was the FAA Chief Psychiatrist for 20 years, and won the 2023 AAM Mission Support Award. Below is the nomination writeup which does a good job of capturing a distinguished career:

Through Dr. Chesanow's leadership, powerful AAM mental health programs were implemented that have promoted pilot mental health and the safety of the National Airspace. His ability to navigate the complex challenges at the interface between mental health and pilot safety make him a national authority in Aviation Psychiatry.

For 20 years, Dr. Charles Chesanow has been the Chief Psychiatrist of the FAA, and the one to whom 5 Federal Air Surgeons (FAS) have turned for advice on safeguarding the national airspace. For 17 of those years, he has been the only one. The past three years, he has presided over a 300% increase in psychiatry staffing, despite a critical shortage of mental health professionals nationwide. AAM's ability to successfully recruit is a direct result of the high professional standards and collegial environment he has created. He has selected and assisted in the training of a cadre of HIMS psychiatrists which has now grown to 97 nationwide. These community practitioners are critical to a thorough, aeromedically saavy evaluation of pilots and good certification decisions.

He reviewed and made certification recommendations to the Federal Air Surgeon on up to 550 cases in a year. This while also providing expert witness support for a myriad of complex legal cases. His Board Certifications in both Addiction Psychiatry and Forensic Psychiatry coupled with his ability to distill an argument quickly to its essence render him uniquely qualified and highly sought-after by the FAA's enforcement attorneys.

In 2010, it was to him the FAS turned to push the controversial and stagnated Selective Serotonin Reuptake Inhibitor (SSRI) program into reality. Carefully evaluating candidate antidepressants, developing program rule-outs, and constructing a strong follow-up safety net has resulted in a program that safely returned over 1500 pilots to flying and later expanded to air traffic controllers.

In 2015, he was selected as a member of the Administrator's Aviation Rulemaking Committee (ARC) convened in response to the Germanwings murder suicide. He was a leading voice in proceedings which drafted critical but practical recommendations to prevent future similar occurrences. Subsequently, he expertly directed AAM's development of an updated mental health training curriculum for all Aviation Medical Examiners in response to the ARC recommendation. Further, in 2020, Dr. Chesanow co-authored

a highly respected peer-reviewed publication analyzing one of the most difficult aviator safety issues of our time: pilot suicide by aircraft.

In 2022, the National Transportation Safety Board challenged the FAA to implement career-long follow up of pilots with substance dependence. Dr. Chesanow's extraordinary knowledge and decades of experience guiding the phenomenally successful HIMS program was key to the effort. Working collaboratively with industry, HIMS Chairs, and mental health professionals, critically assessing the value of various elements of the recovery program, and recognizing the lifelong, chronic, relapsing nature of the disease, the innovative "Step-down" program was developed. A program that had already supported over 1700 pilots' safe return to flying just got better.

<<back to top

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Guide for Aviation Medical Examiners <u>AME Seminar Schedule & Registration</u> <u>AME Online Training Information</u> <u>AMCS Online Support</u> <u>Regional Flight Surgeon Contact Info</u> <u>Aeromedical Safety Brochures</u> <u>Medical Certification Information</u> <u>MedXPress Login & Help</u> <u>AME Minute Playlist</u> <u>Pilot Minute Playlist</u> <u>CAMI Library Services</u>

> Sleep Apnea Information OSA Protocol OSA Information Brochure

> > <<back to top

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