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**ROTARY WING NEWSLETTER** 

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# **SAFETYWIRE**



Mental Wellness— Post COVID Tackling Rotorcraft's Dirty Dozen SAFETY MANAGER'S CORNER:

**Classic Dashboard** 

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## **Mental Wellness Gets Post-Covid Safety Focus**

(Source: AIN online, James Wynbrandt)

The Covid pandemic's long-term effects include a renewed focus on mental health's role in aviation safety and overall wellness, a development welcomed by experts at the Flight Safety Foundation's Business Aviation Safety Summit (BASS) in May in Savannah, Georgia.

"The silver lining about Covid is that we are recognizing compromises that [result from] stress and [a lack of] mental wellness," said



Quay Snyder, M.D., president and CEO of Aviation Medicine Advisory Service and moderator of the Summit's Wellness and Mental Health session. "Before it was kind of a secret and now it's out in the open."

New approaches to managing psychological wellness on an individual and institutional basis can mitigate risks, as showcased in presentations at BASS. But these issues predate Covid, the experts acknowledged. Stress has long been the number-three cause of pilot disability, Snyder noted. Mental health issues are also among the top five causes of loss of pilots' licenses, according to ICAO; and some fatal commercial air transport accidents from 1980 to 2011 were most commonly related to psychiatric conditions, including abuse of psychotropic drugs and alcohol, as other panelists pointed out.

But during Covid, anxiety and depression among the general population jumped from a baseline of about 8 to 10 percent to "38 to 40 percent of the population—and that includes pilots," said Piyush Gandhi, v-p of Presage Group, an aviation safety consultancy.

And, added Snyder, "This is relevant to maintainers and dispatchers. Everyone in the aviation organization suffers from the same conditions and deserves the same support."



The current approach to mental wellness appears to be to take a holistic view of the state of the psyche as a fluid and dynamic continuum. Previously, it "has been talked about mostly in a negative context," Snyder said. "The message today is, 'We want to normalize mental wellness, with proactive programs to put us in the optimal situation to function as well as we can.""





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Snyder also cast safety as a matter of duty, calling it "everyone's personal responsibility to be safe when you're flying, from a physical and mental perspective," though pilots seem reluctant to accept that obligation. When he asked for a show of hands, all session attendees attested to conducting a preflight inspection of their aircraft, but few hands remained up when Snyder asked how many conducted preflight self--assessments of mental fitness.

Most pilots "are not willing to check themselves," Snyder told attendees, asking rhetorically, "Which is the part of our safety system most likely to fail?" He added, "We fail in subtle ways, and that's changing all the time, so it's appropriate to reassess our fitness for duty all the time."

The crash of Germanwings Flight 9525 in 2015 was cited more than once at the summit as a turning point for recognition of mental health's importance in aviation safety. In its aftermath, the FAA established the Fitness Aviation Rulemaking Committee (Snyder is a member of the medical working group), and EASA launched its analogous Germanwings Task Force. Both groups recommended that operators provide counseling and peer-support programs, and training for aviation medical examiners (AMEs) in recognizing and treating mental health issues among aviation professionals.

Meanwhile, from 2015 through 2020, the NTSB added a requirement to its annual 10 Most Wanted list of safety improvements: professionals had to be medically fit for duty when operating a vehicle.

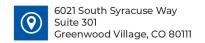
Presage's Gandhi, formerly Bombardier's chief test pilot, was managing operations at a Canadian carrier at the time of the Germanwings accident. Having previously learned that one of his pilots had been under treatment for suicidal thoughts, though no one at the company had been informed, Gandhi said the Germanwings crash brought home "how important mental health is to all our safety."

Yet conclusive evidence of the link between mental health and aviation safety is "elusive," said Gandhi's boss, psychologist Martin Smith, Presage founder and CEO. "We simply don't have the data to make a positive connection," he said.

"We have plenty of research data on mental illness, on substance abuse, and degradation of cognitive performance, but not for the pilot population specifically."



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Smith, a former airline pilot, earned a psychology degree in pursuit of his interest in behavioral issues affecting aviation safety; he was trying to discover, for example, "the tipping point at which mental health compromises safety" through behavioral science research and data.

Presage aims to apply the results in operating procedures and protocols for real-world applications. The Burlington, Ontario, Canada company provides operation--specific procedures for some 22 airlines globally and is developing go-around decision-making tools for Gulfstream Aerospace and the Citation Jet Pilots and Owners Association that rethink traditional stabilized approach guidelines.



Organizationally, commitment from flight department and corporate management, as well as individual pilots and support professionals, is critical to effective mental wellness initiatives, according to the experts' consensus, but neither group of stakeholders has traditionally voiced interest.

Pilots' reticence often stems from "our personalities," Snyder said. "We're tight-lipped, stoic, egotistical," he noted, adding "obsessive-compulsive" and "problem--solver" to the list of common avia-

tor traits "that make us less likely to ask for help."

Gandhi noted the high costs pilots perceive they would pay for full disclosure: fear of the potential impact on their reputation, careers, livelihood, lifestyle, and loss of their identity as a pilot. Even requesting a schedule swap to deal with an emotionally trying situation can provoke a fear of reprisal, he said.

Smith cited new data that quantifies the impact these concerns have on pilot healthcare. Just over 56 percent of pilots reported a history of avoiding healthcare due to fear of losing their aeromedical certificate, according to a study by Hoffman. More than 45 percent sought informal, rather than formal, medical care for that same reason, and more than 26 percent misrepresented or withheld information on a written healthcare questionnaire because of those concerns.

Management, meanwhile, has engaged in collective denial and "chronic and systemic underreporting" of mental health problems and unrealistic expectations that pilots will report such issues on their own, Gandhi said: "We can't rely on pilots to self-identify, and EAPs [Employee Assistance Programs], and HR [human resources departments] are not equipped to deal with 40 percent of a population that is suffering from anxiety," he said.







Gandhi himself, though initially reluctant, goes to therapy weekly, he said, adding, "Now I think anyone who doesn't see a therapist is crazy."

Sound policies can encourage employees to seek counseling, and Smith cited three: leadership normalization and endorsement of mental health treatment; an emphasis on early intervention to prevent more severe problems; and treatment tailored to the occupational context, incorporating peer support, and cognitive behavioral therapy. He also said SSRIs (selective



serotonin reuptake inhibitors)—a class of drugs on the FAA's approved list of medications used to treat depressive and anxiety disorders—are "extremely effective" for some individuals.

Adopting a "resiliency strategy, a personal checklist you can take with you," can also help individuals deal with mental challenges, Smith said. The first part of his suggested four-step strategy is listening to your body and knowing your baseline, and being "mindful of becoming symptomatic when you drift." Secondly, recognize the triggers that can upset stability (such as death, separation, work-place stress, and family issues), as well as your biases and denial mechanisms that deter you from seeking help. Third, validate your perceptions by asking peers and confidants about your state and behavior. Finally, if evidence indicates you need help, be proactive and "engage a therapeutic option."

Overall, about 80 percent of mental health issues can be resolved through peer support, Snyder said, and a "huge majority" of the remainder can be treated effectively with counseling.

At the operational level, traditional self-assessments including PAVE (personal/pilot, aircraft, environment, and external pressures) and IM SAFE (illness, medication, stress, alcohol, fatigue, emotions) still work in a high-tech world, he pointed out.

Signs of evolving organizational attitudes were evident at the summit. During the Safety Leadership Panel, Jeff Wofford, director of operations and chief pilot at CommScope, saw positive signs of change in a strong showing of hands of attendees whose companies had conducted third-party audits in the last two years and in the percentage of those audits that surveyed both corporate culture and corporate climate. But the show of hands revealed that many of the accountable executives were not interviewed during these audits, which he called "disturbing."







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"You can't just say our director talks to our accountable executive all the time," Wofford said. "Of course you do—but did you talk about your SMS? Did you talk about how your safety performance indicators are trending? There's got to be some type of trail to document that."

Asked how many believe their organization has a positive safety culture, almost all attendees raised their hands, to which Wofford said, "Maybe you need to uncover more rocks."

Meanwhile, technological advances promise new safety solutions. At the Future of Business Aviation Panel, Kyle Ellis, manager of NASA's System-Wide Safety Project, explained ways the digital transformation of air traffic management could enhance the safety and efficiency of air operations but stressed the need for industry collaboration to move ahead.

"Help inform NASA, help us invest our research portfolio into things that actually make a difference for you in day-to-day operations," Ellis said. "We have an opportunity to have a conversation about the advance of science for safety and figure out what this will look like."

# FOUNDATION OFFERS POST-ACCIDENT PEER SUPPORT FOR PILOTS

In the wake of new EASA rules, Germany's Stiftung Mayday widens access to CISM counseling for pilots in distress.

Pilots' mental health care programs are important not only in possibly preventing accidents but in helping pilots recover from them, according to Germany's Stiftung Mayday (the Mayday Foundation), which pro-



vides peer support and counseling for pilots, crewmembers, and next-of-kin affected by aircraft accidents or critical incidents.

Indeed, the greatest need for counseling among pilots usually "originates from a specific incident experienced as critical [that is, perceived as life-threatening] by an individual," said Hans Rahmann, a director of the volunteer group.







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Funded entirely by donations, and supported by ICAO, IATA, pilot unions, and other aviation organizations, Stiftung Mayday's program is staffed by all-volunteer peers—specially trained pilots—complemented by professionals. The latter include psychologists, medical doctors, lawyers, and financial advisors, all with a comprehensive understanding of the aviation environment.



The charitable organization was founded in 1994 after a fatal accident at the ILA Berlin airshow and established its Critical Incident Stress Management (CISM) program in 1998. It aids some 300 people annually, "and it's growing," Rahmann said.

"If you are suffering from any symptoms related to such stress, our peers will help you to rebound as quickly as possible," said Rahmann. "Those who may need further support to recover are cared for by professionals. The good news is the success rate for aviators is remarkably high—about 85 percent."

EASA's Germanwings Task Force, formed in 2015 following the crash of Flight 9525 in 2015, determined to be deliberately caused by a suicidal copilot, brought the ideas and initiatives Stiftung Mayday and other organizations were championing into the mainstream. Among its recommendations, the task force urged operators to provide counseling and peer support programs for pilots and training for aviation medical examiners (AMEs) in recognizing and treating mental health issues among aviation professionals. EASA regulations adopted in 2021 in response to those recommendations require air operator certificate (AOC) holders to offer CISM peer-support programs for pilots, in addition to programs to address well-being and substance-abuse issues.

Stiftung Mayday is among the organizations, regulatory authorities, AMEs, and others charged with developing program protocols and standards, such as for training, oversight, and licensing requirements. It has also been tasked with helping AOC holders establish and run peer-support programs.



However, as a charitable foundation, Stiftung Mayday is precluded from signing commercial contracts, so a commercial organization, HF Human Factor, has been founded to handle the contractual aspects of establishing and operating such programs.

Yet despite the progress, "there's a long way to go" in gaining acceptance for such programs, Rahmann said. "We expect it to be 10 years before it is recognized everywhere in Europe."





## Tackling Rotorcraft's "Dirty Dozen"

(FAA Safety Briefing, Jim Tise)

The pilot of the Bell 206 helicopter was returning on a cross-country business trip, flying in good weather with visibility of at least 10 miles. At 4:12 p.m.,



the pilot called a local car rental agency. The rental car employee stated she could not tell that the caller was in a helicopter, but he seemed "busy or distracted" and that she was in "midsentence" when the line was disconnected.

During the last five minutes of the flight, the helicopter's GPS altitude varied between 6,200 and 6,456 ft. Mountains in the area stood at altitudes between 6,000 and 6,400 ft. The helicopter hit terrain at 6,330 ft. The pilot was killed. Based on the information available, the pilot was likely using his cell phone during the low-altitude flight and became distracted, which resulted in a fatal controlled flight into terrain.

A true story. A tragic scenario. And just one of many flying risks that the FAA hopes to mitigate with a webinar on helicopter safety focused on the "dirty dozen" common mistakes that can result in helicopter accidents.

James Dangerfield, FAASTeam manager at the Flight Standards District Office (FSDO) in South Carolina, created a presentation for mechanics and pilots detailing the "Dirty Dozen" safety issues. During the webinar, he discusses "safety nets," methods to avoid them from occurring.

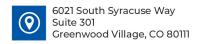
"I've been doing 'The dirty dozen presentation' — which focuses on airplanes — for years and I realized there is a big gap out there for helicopter operators and their mechanics," said Dangerfield. The webinar is designed "to inform them about the areas they need to pay attention to and know the dirty dozen are out there to help mitigate their risk," he added.

Dangerfield is an expert on aviation safety. He was a helicopter mechanic in the U.S. Army working on Cobras, and in the National Guard working on Apaches.



In the presentation, he runs through 12 categories of mistakes made by helicopter operators including distraction fatigue; lack of knowledge, awareness, or assertiveness; complacency; stress and pressure.







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Dangerfield and two FAA Safety Team (FAASTeam) managers in Greensboro and Charlotte, North Carolina, Tim Haley and Ed Shields, then present concrete ideas to avoid these potentially fatal pit-falls.

For example, he talks about the danger and the problems that can occur if the pilot is distracted. "Your mind has completely left the job that you've been tasked [with]," he explained. "I think it happens more than it gets discovered."



Dangerfield suggests using detailed checklists. And don't hesitate to go over old ground, "Going back three steps allows you to double check the last three steps you made without missing anything."

Dangerfield assembled this Dirty Dozen webinar with Haley and Shields. For the past three years, the trio have presented safety webinars on a dozen topics related to fixed-wing flight.

Even before the COVID-19 public health emergency forced many activities to go virtual, webinars offered advantages to in-person seminars. "We're getting a lot more people

than you might see at an in-person seminar," reflected Dangerfield.

Haley also has noticed that some pilots and mechanics may be embarrassed to ask questions in front of their colleagues. "Low-time pilots are afraid to ask questions in front of more experienced pilots," he said. With the relative anonymity of a webinar, Haley also noticed higher quality questions coming in.

View a recording of this Dirty Dozen presentation:

<u>Dirty Dozen for Helicopter/</u> <u>Rotary Wing Aircraft</u>





# **SAFETY MANAGER'S CORNER**

### PRISM/ARMOR Classic Dashboard

The PRISM/ARMOR software has many tools such as FRAT, GRAT, RPT, RAT and others. The Classic Dashboard can help manage the tools and activities in them.

Step 1. From the ARMOR Menu, select Classic Dashboard

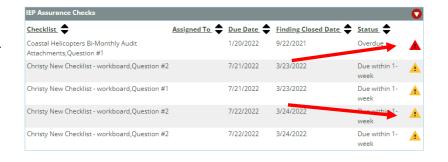


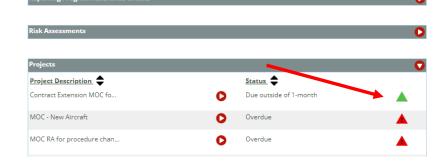


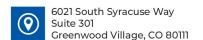
Step 2. The triangles on the right may be blue or red. Blue indicates no data was found and there is no action required. Red indicates there is action required by the Safety Manager.

Step 3. Select the red triangle you would like to review. Tasks may have green, yellow or red icons to indicate their status. Address the items as appropriate.

Step 4. Select the item you would like to address and you will be taken to that item.













# **Quote of the Month**



When you can manage your time and block out unnecessary distractions and mute the "noise" that tends to send you into a state of confusion and disarray, you are better able to give the people, work, and activities the enthusiasm they deserve, to make it every moment of the day count, and to dedicate the time and effort each person deserves.



- Carlos Wallace

It has been said that of the 12 Dirty Dozen Human Factors, there are 3 that influence the others. Fatigue, Pressure and Stress are key issues and mental health has an impact on these. Be aware of your mental health, take care of yourself and you will be in a better position to manage distractions and all 12 Dirty Dozen Human Factors. PLEASE speak up and seek help if you are struggling with ANY mental health issues. The worst thing you can do for yourself and others around you is say nothing.

## On Short Final...



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#### **UPCOMING COURSES**

Aug 22 to Aug 26, 2022—PROS Course **Aviation Lead Auditor Training (ALAT)**Denver, CO

Sept 27 to Sept 29, 2022—PRISM Course

Safety Management System (SMS)

Denver, CO

Oct 3 to Oct 7, 2022—PROS Course

IOSA Auditor Training

Denver, CO

Nov 28 to Dec 2, 2022—PROS Course **Aviation Lead Auditor Training (ALAT)**Denver, CO

Dec 12 to Dec 16, 2022—PROS Course

IOSA Auditor Training

Denver, CO

Go to **Upcoming Training Classes** to register.