PRISM

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SAFETYWIRE

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 aviator 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.

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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, workplace 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 provides 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."

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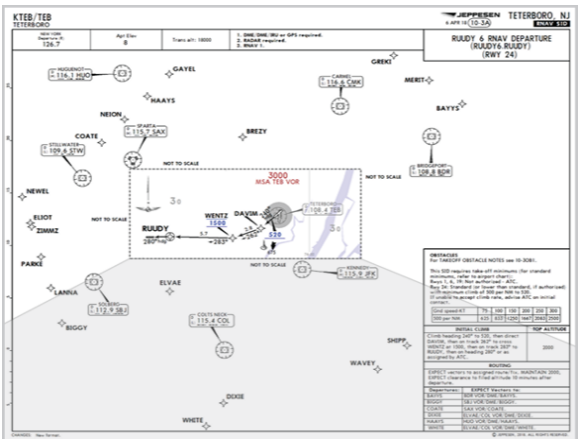
The Ruudy 6

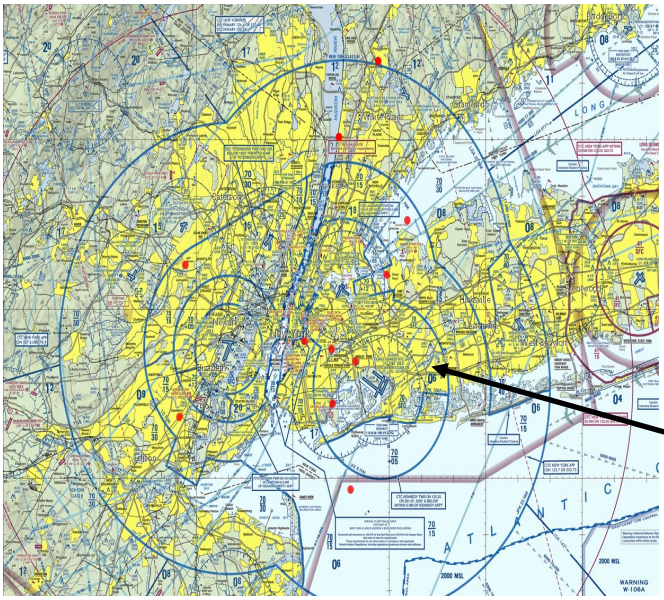
BY: Rhodri Norton-Quick; PRISM (Source: FAA Safety Team and the Teterboro Users Group)



"N12SFT runway 24 RNAV Wentz, Cleared for Take Off." Ahh Teterboro, the shining jewel of New Jersey. We have all been there, most of us have been there 3 times in one day. Generally cruising up and down the I-95 corridor between New York and Palm Beach. But, for some reason, almost like some strange need to have a face to face meeting with the arrivals into Newark we continue to deviate from one of the most simple SID's. "V1, Rotate, positive rate gear up, turn 20 degrees right and stop climb at 1500 ft." That's all there really is to this SID, but its deceptively tricky. In this article adapted from the Teterboro Users Group, we are going to break down some strategies.

A little Background

Teterboro sits in one of the most heavily trafficked airspaces, New York. Everyone knows about JFK, LGA, EWR. What is easily forgotten are all the other airports that are fed through that arrival corridor. Philadelphia and its surrounding airports, Washington DC, Boston, Atlantic City, anyone headed to MVY and ACK. That's not even including the local NY terminals, HPN, MMU, ISP, lets not leave out our rotor friends, think about all the Heli traffic in and out of the city. All these arriving and departing aircraft factor into Teterboro's procedures. The fact we can use the airspace at all is mind boggling. This means that the smallest variation from the norm causes mass delays, and incidents. When you combine that with the "chaotic" nature of GA aviation schedules it's a recipe for disaster.



The FAA has made the RUUDY 6 a hot item to highlight for safety moving forward. A keyword search of the ASRS database will return 201 reports involving the RUUDY 6. That's quite a few reports for just one single departure. I admit, some of these are well known avionics issues with certain aircraft, but that in no way explains 200 reports for a single departure. We can argue about whether it was poorly designed, but the reality is it's a necessary procedure for the airspace it's serving. Let's instead dive in and toss around some idea's for utilizing it.

(Look at all those airports!)

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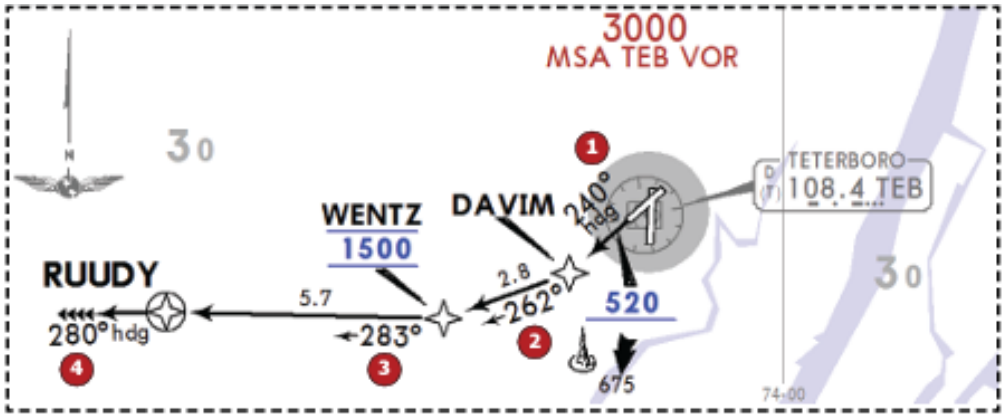

There are 4 simple steps to the RUUDY 6 Departure procedure out of Teterboro:

1. **Climb heading 240° to 520', then direct DAVIM**
2. **Then on track 262° to cross WENTZ at 1500'**
3. **Then on track 283° to RUUDY climbing to 2000'**
4. **Then on heading 280° unless instructed otherwise by ATC**

The catch with the RUUDY is the speed. In a modern turbine aircraft by the time you've finished SAYING 500ft out loud you're through it, which is no problem until you think about how quickly that means you're going to hit 1500 ft, and while you're paying attention to the altimeter, lets not bust 250 kts, finish your checklists and flows, and explain to the passengers that New York in the summer is a paint shaker, add inexperience or exhaustion into the mix and we all know how the headline will read.

Cool, we know this so what do we do?

BRIEF THE DEPARTURE!!!!

I can't begin to tell you how many flight decks I've been in where the PIC will say "we all know what we're doing" or some version of that…….. STOP IT.

BRIEF. EVERY. DEPARTURE

Pax are onboard, they have their vodka soda and snacks, the APU is running so we're all comfortable. Take the 5 minutes to go over it as a crew. If for no other reason than not having to talk on the phone after a long day. (If you know, you know). There are many ways to brief. My preferred method was to brief the plate prior to taxi while I was conducting the taxi brief and then hit the highlights at the hold short line as a refresher. Do whatever you want, just make sure you do it.

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Auto Pilot Management

During your brief make sure to include the modes you're going to use and the plan of action. Personally, I preferred to hand fly to 1500ft and DAVIM to lessen the workload and movements. That required an absolutely sterile cockpit, and it meant that I had to make sure my Co-Pilot was aware I was going to work that hard. Others preferred to go autopilot on at the first possible moment. The only problem was our jet wouldn't activate NAV on the ground so you had to switch from heading to NAV at the "flaps up" call. Lots of reaching and distractions. No right or wrong way here. Just be aware that some systems will fly this and some won't. Make sure you know yours.

Speed Control

Fly her as slowly as you can based on the experience of your seat mate. If you're flying with a brand new FO or CPT give them the best possible amount of time to catch up. Like we know, things happen fast up there. This is a deceptively easy SID on the chart, so an inexperienced crew member probably won't recognize the short time frame. Secondly, this will give you time to react. I would personally fly her to 1500 ft and then accelerate to 250. This gave me the best amount of time to manage my altitude and complete the required tasks without interrupting the flow.

Sterile Cockpit

I understand well the comfort level of a crew that gets along, has been functioning at a very high level, and has been together for as long as we tend to fly together over on the GA side. But cut the chatter. New York is about as busy as it gets, Chicago may be fast, DC may be bordered by heavily restricted airspace, LA may have a "step down heavy" arrival/ approach, but New York is congested. The radio is clogged, the traffic volume is high, and everyone is trying to get in and out of there as quickly as possible. We all know that we're going to have to wait for an hour holding short of 24, Talk there. With the brake set.

Confession

Own up to the mistake. Look, I have messed this departure up, we didn't realize that the nav button had not engaged so we were still in heading mode. It happens, we all make mistakes. We owned up to it and let them know as soon as we could. No harm, no foul, just fly this heading and proceed direct Wentz. I'm not saying that is guaranteed to be your outcome, but the odds are significantly higher it will be if you own up to it. Not to mention, the only real purpose of the RUUDY 6 is to keep you from an abrupt meeting with United going into Newark. I'm sure everyone would like to know BEFORE that happens.

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WRONG ALTITUDE!

Double Check Everything Before Departure

Especially the altitude. There have been some recent changes to the SID, and the most glaring is the removal of the altitude restriction at RUUDY. However, that was never the one that everyone seemed to be miss. 1500 at WENTZ. It's on the chart. Take the time holding short to check that 1500 is set in the altitude selector, that your heading matches the desired course, and that you are appropriately configured.

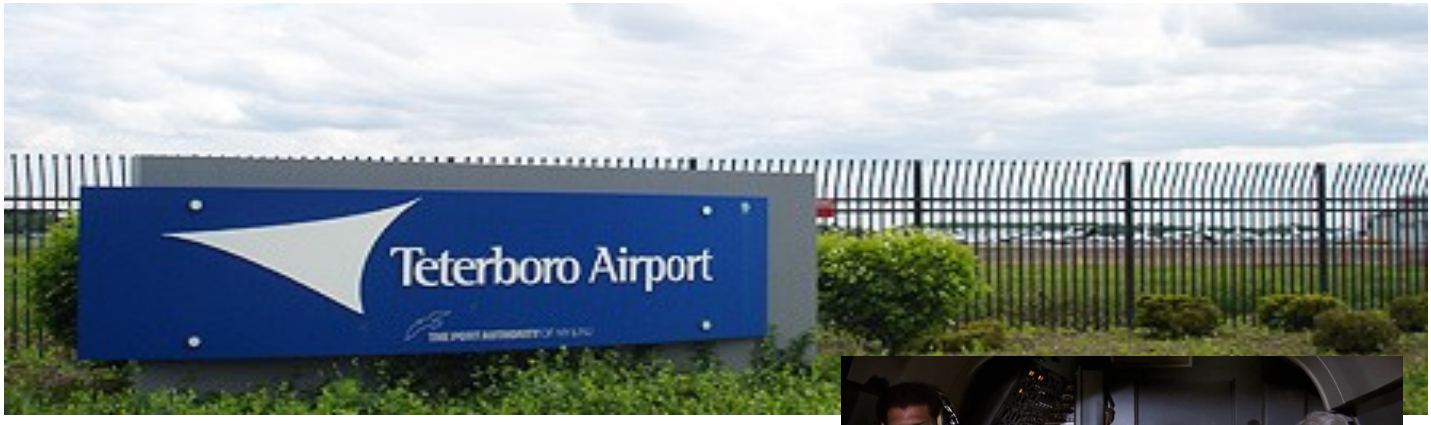
Training

Some operators might elect to have their sim provider go over this with new hire initials, recurrent, and upgrade rides. Others might opt to make it a briefing item in their INDOC classes. The point is, do some training. This is routinely violated to the point that the FAA released LTA-47 on the RUUDY 6. It's a short paragraph highlighting the need to cross WENTZ at 1500 ft.

In short, do that pilot stuff. Fly the airplane, stay engaged, and monitor the instruments when George is flying. Don't let experience, or the lack of experience cause a mishap that would normally be easy to avoid.

Last but not least: BRIEF. THE . DEPARTURE . EVERYTIME ! Happy flying everyone. I have to go collect my soap box.

(Where dreams are made)



Captain Oveur **BRIEFS ALL HIS DEPARTURES**…..
Be like captain Oveur, over.

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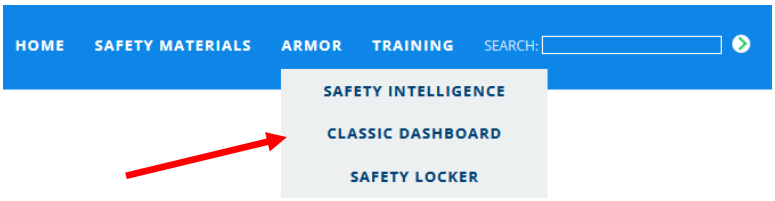
SAFETY MANAGER'S CORNER

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.

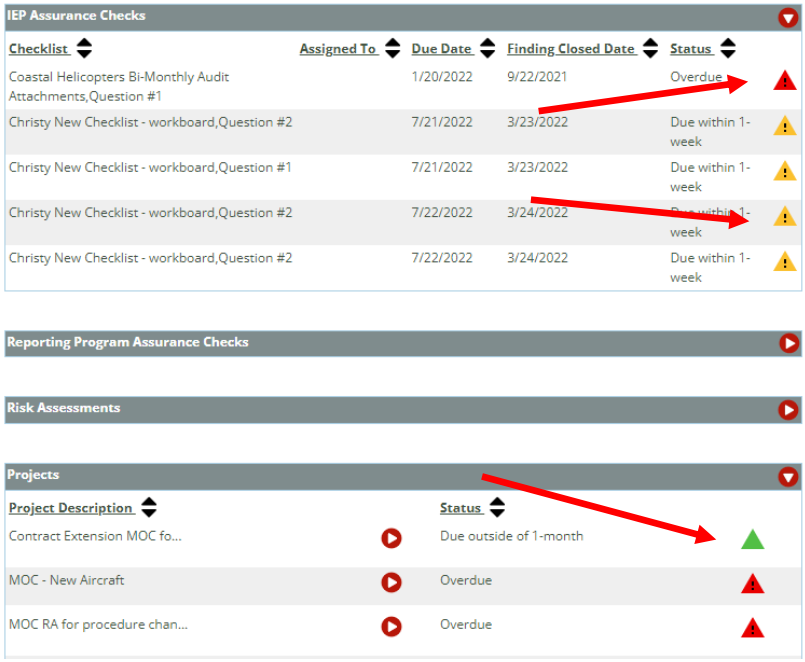
Step 1. From the ARMOR Menu, select Classic Dashboard



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.



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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

Fatigue, Pressure and Stress are common causes to errors and they can all have a significant impact on your mental health. Be aware of your mental health, take care of yourself and you will be in a better position to manage distractions and make every moment of the day count. 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.