Six Mistakes of Risk Management

By Don Henderson | VanAllen

In reviewing an article in the *Harvard Business Review*: "The Six Mistakes Executives Make in Risk Management" (Taleb, Goldstein, and Spitznagel, October 2009), I was struck by the relevancy in our little corner in business aviation. The article was a reflection on the strategies that contributed to the financial collapse in 2009 but I was struck by the relevancy of the article to business aviation. Specifically, the critical intersection of strategic risk for both the executive to whom aviation reports and the aviation team. Below are the six mistakes outlined in the article and how I feel they translate to business aviation.

1) "We think we manage risk by predicting extreme events." I wonder how many aviation teams try to manage the risk around catastrophic events? How many hours are spent developing Emergency Response Plans (ERP) dealing with aircraft accidents that may happen on international soil while carrying a foreign dignitary who prefers chocolate cake instead of truffles? While ERP's need to address major events, the volume of effort focused on high impact, low likelihood events is not consistent to the actual risks found in daily aviation operations. We worry about future disasters but may ignore realities such as cognitive impairment of technicians and pilots who are going through major life changes. I would offer as Taleb, Goldstein, and Spitznagel suggest, energy is wasted when we try to predict what monster is hiding around the corner.

2) "We are convinced that studying the past will help us manage risk." What? This seems to be the basis of risk management in aviation. A few days ago, Sonnie Bates and Andrew Day (CEO and Senior Director at Wyvern) and I were chatting about what we (collectively) look for in aviation risk tracking systems. We agreed that it is healthy but rare when aviation teams ask the question, "If we keep doing X, or start doing Y, what are the risks?". We still find that a majority of risk identification is rear facing. What happenED? Past tense. If you lead an aviation team, this is a great time as we hammer shut the door on last year, to look through all the risk reports filed by your team. How many of the reports identified risks proactively rather than attempt to predict future risks by using past events? If you are an executive to whom the aviation function reports, consider asking your vendor or aviation leader to do this analysis for you. It is healthy to review, quarterly or semi-annually, a summary of the risks being identified within the aviation function.

3) "We don't listen to advice about what we shouldn't do." I am still surprised by the number of operations that I stumble across that don't implement a basic "Don't Do "THIS" in Aviation" list. Define non-negotiable boundaries within your team. This can include things like fatigue management (for pilots, flight attendants, AND technicians), tool tracking, passenger manifest accuracy, or even the frequency your team meets to discuss continuous improvement. In my personal life, I could prevent significant future issues by not speeding, not overeating, or not skipping my morning meditation time.

Six Mistakes of Risk Management (continued):

4) ***"We assume risk can be measured by standard deviation."*** Quantitative analysis of risks may distort the attention we need to give a particular risk. Aviation teams have struggled to develop meaningful "Safety" metrics. I often see metrics that review the data captured by Flight Risk Assessment Tools (FRAT) or Flight Operations Quality Assurance (FOQA) programs. FOQA gatekeepers beam with pride as they present charts showing that their flight crews execute a stabilized approach 99.7% (3 standard deviations) of the time. In an operation with 2,000 approaches, this indicates there are 6 non-stabilized approaches every year. Still sounds good…Except the consequence of one unstablized approach at the wrong airport at the wrong time, could introduce significant risk. I don't want to be a passenger on that leg. Risk metrics may provide a false sense of comfort.

5) ***"We don't appreciate that what's mathematically equivalent isn't psychologically so."*** How we frame risk data influences how much risk we are willing to take. To use our previous example, which sounds riskier?

A. "Come ride on our aircraft once a year. You will only be exposed to a non-stabilized approach once every 333 years."
B. "Come ride on our aircraft, we are 99.7% confident we will not have an unstabilized approach."

I would quickly choose Option A as it "sounds" less risky. As you review your risk metrics for 2020 and 2021, are there any presentation biases? Is data intentionally skewed to present greater or lesser risk?

6) ***"We are taught that efficiency and maximizing shareholder value don't tolerate redundancy."*** Most aviation leaders and reporting executives regularly defend themselves against the financial bulldozer that says, "Build us a budget with only what you absolutely need." This approach in business and at the hangar may create risks because of the absence of redundancy. I was recently working with an aviation team that is operating three aircraft with five pilots and one technician, primarily driven by the efficiency focus of the company. What has made the company successful in the marketplace is unfortunately introducing operational risk in the aviation department. Everything must always work perfectly for this aviation team to avoid a bad day.

This year has been exhausting. We have all run around pointing our fingers as risks. The great mask debate, social distancing, disinfectants, lost connections, political turmoil; I feel like I have spent most of the year stuck in the agitating cycle of a washing machine. The volume level of risk conversations we have daily may be impinging on our ability to quantify risk in our respective worlds accurately. I resonate with the way Taleb, Goldstein, and Spitznagel closed their article:

"Remember that the biggest risk lies within us: We overestimate our abilities and underestimate what can go wrong. The ancients considered hubris the greatest defect, and the gods punished it mercilessly. Look at the number of heroes who faced fatal retribution for their hubris: Achilles and Agamemnon died as a price of their arrogance; Xerxes failed because of his conceit when he attacked Greece; and many generals throughout history have died for not recognizing their limits."

As we move into the new year, this is a great time to calibrate how you approach risk. What's being measured? Are you turning a blind eye to risks for which you have become comfortable? I too will take on this challenge; what risks am I accepting in our engagements? Am I properly counting the costs of my observations? Am I doing the right thing?