You and your team face a complex problem. What is your first response? What are your thoughts and feelings about the situation or words that describe the issues?

Take the word “snow.” What comes to mind? What thoughts does it prompt? Knowing the snow is of the blizzard variety rather than a mere dusting gives you better clarity and precision as you translate your thoughts into words and then deeds. You have a better understanding of what’s taking place, and what action to take, whenever you have a more precise meaning.

While traipsing through northern Canada in the 1880s, noted anthropologist Franz Boas discovered that Alaska’s Inuits had 50 words for snow—words like “aqilokoq” for “softly falling snow” and “piegnartoq” for snow that’s “good for driving sled.” There is little wonder they had an array of nuanced definitions for snow, given how it impacted virtually every aspect of their lives.

Language shapes our thinking and our culture. It shapes our lives and livelihoods, how we go about our day, how we make decisions, major and minor, in our private and professional lives. In our professional lives, if we think through

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a problem using a systematic process, and everyone in the group knows the precise meaning of the words used, we start with a strong foundation for moving toward better outcomes.

What’s more, if we ask others to state their assumptions or to clarify their purposes, we have a common language from which to exchange perspectives, and to discover whether they’re aligned with the facts, with the information at hand, and the conclusion we’ve drawn—or not.

**Three Important Questions in a “Thinking Culture”**
- What are my assumptions?
- What points of view should I consider?
- What is the purpose of my thinking?

This thinking language advances the cause of critical thinking itself and creates a thinking culture.

"Can Do" Attitude and Uncritical Thinking

How about the term “can-do”? It is generally used to characterize leaders and teams and enjoys a positive connotation. But is it always a good thing? Does that mean it always leads to positive outcomes?

Vice Admiral Terry J. Benedict, director of the Navy’s Strategic Systems Programs (SPP) was determined to find out. Benedict and his staff have the major responsibility of nuclear deterrence. Needless to say, the working environment is fraught with great tension and risk, with little margin for error. The program has been fulfilling its mission for 60 years.

But to Benedict, who took over in 2010, SSP can’t rest on its laurels. The stakes are too high.

The year after he assumed the helm of the SSP, the Fukushima disaster occurred on March 11, 2011. A massive earthquake triggered a major tsunami. The Fukushima Daiichi Nuclear Power Plant structures were not capable of enduring a major tsunami, nor the powerful ground motion of an earthquake. These events disabled the power supply and hence the ability to cool three of the Fukushima nuclear reactors. Their cores melted over the next 3 days.

The Fukushima Analysis

This was a wake-up call for Benedict. He pored over the comprehensive report that described the chain of events that led to the wholesale safety breakdown at Fukushima. The report essentially blamed the failure to prepare against earthquakes and tsunamis on the Japanese culture of compliance and deference to authority and of unilateral control in the decision-making hierarchy.

What particularly impacted Benedict was the report’s finding that the culture’s devotion to sticking with its existing safety program, come what may, its reluctance to question authority, and the prevalent “group mentality” all contributed to the disaster. These characteristics drove how decisions were, or were not, made by a risk-ignorant culture that worshiped at the altar of a detrimental sort of “can-do” attitude.

In the acquisition workforce, both leaders and teams often seek to cultivate a version of the can-do attitude. In the case of Benedict and the SSP, it is meant to be done in a deliberate way that ideally leads to greater safety awareness.

**The Lesson of Risk Ignorance**

After reading the detailed accident report on Fukushima, Benedict was prompted to ask how much of the kind of mindset that existed among employees at the Fukushima Daiichi Nuclear Power Plant was engrained in his own organization and culture. He further wondered if the can-do attitude in the SSP culture also is overdone. Can it lead to the same kind of risk ignorance as it did in Fukushima?

One principle lesson that Benedict gleaned from the report along with a greater appreciation of Heinrich’s Law was this: If you ignore all the little or so-called minor things in safety—mishaps, accidents, near misses and oversights—and a big event strikes like the tsunami that triggered a cascade of subsequent catastrophes at Fukushima, then you realize in retrospect that it was the little things that had been happening all along that led to the tragedy. The tsunami itself of course was unavoidable, but much of what unfolded in its wake would have been far less ruinous if there had been a sound critical thinking culture surrounding the safety program at the power plant.

Benedict understood full well the human tendency to read a report like this and conclude after the fact, “We should have seen it coming.” It is always easy to see such things with perfect clarity in hindsight. But to him, it was necessary to have this kind of clarity of insight—without blind spots—while the situation unfolds in real time, rather than afterward. Ostensibly, personnel had ignored repeated minor mishaps at Fukushima Daiichi Nuclear Power Plant, because they didn’t really grasp their potential significance and therefore didn’t respond appropriately. The staff at the plant did not possess the risk-aware culture that Benedict envisioned.

Benedict and his team of officers sought to examine other safety calamities that had root causes similar to Fukushima—i.e., the fatal 2012 attack against American diplomats in Benghazi, Libya, as well as the USS Greeneville collision and the NASA space shuttle disasters. He did so to ensure that he was promoting at the SSP a risk-aware rather than a risk-ignorant culture. The culture Benedict pursued was one in which all those involved in the enterprise possessed a pervasive willingness to rethink, a sense of accountability, and purposeful courage—a very different kind of “can-do” attitude than the one at Fukushima and the other disasters his team investigated.

In Benedict’s view, success is a lousy teacher—and so the 60 years of success that the SSP enjoyed actually served as even greater impetus for him to “carry it forward” and to make sure
that the culture he was developing within his organization was populated with critical thinkers. Yet he worried: Are we just one incident away from Fukushima?

His team also studied the USS Greeneville disaster, a high-profile case in which a U.S. Navy submarine off the Japanese coast surfaced right under a fishing vessel, killing nine of the fishing boat’s crew members. When the incident was investigated, it was discovered that chaos had been the norm for that submarine’s culture. What connected Fukushima with the Greeneville accident was that personnel in both cases were supremely risk ignorant and also, to a lesser extent, risk averse. Their culture was characterized by the pervasive behavior of rushing through safety procedures, with careless accommodation providing the norm, rather than operating within the boundaries of good practice and normal protocol—very much the wrong kind of can-do attitude.

When Benedict’s team studied both the Challenger and Columbia space shuttle disasters they also found a deleterious kind of “can-do” attitude inspired by past successes. This created a kind of groupthink that discouraged individuals from stepping up and questioning flawed safety practices.

**Elements of a Strategic Systems Program**

- Deliberately designs a risk aware/risk evaluation culture
- Promotes a questioning attitude
- Encourages ideas and criticism
- Has transparent decision support
- Has rigor and open self-appraisal
- Practices humility and leadership by example

**Risk Aware Thinking—a Deliberate Design**

To Benedict, it was of paramount importance to deliberately design a risk-aware culture—because he was keenly aware that if you don’t design a culture yourself, one will be created in the vacuum, and quite possibly be of the risk-ignorant variety.

The culture that Benedict set about creating after pondering the in-depth comparative studies by his staff was one that encouraged the continual generation of new ideas related to safety, and that valued above all else a questioning attitude—vital attributes for a thinking culture.

**Attributes of a “Thinking Culture”**

- Establishes critical thinking as a habit
- Clarifies thinking and rationale
- Involves thinking and collaboration with others
- Uses deliberate practice, evaluation and feedback to realize improvement

Benedict had in effect deliberately designed a thinking culture. In order to make critical thinking an ingrained habit, he established a protocol in which everyone who joins the SSP is made aware from the get-go that the goal is to strive relentlessly to be risk aware. New personnel orientation includes

Fukushima, and the lessons to be learned that relate to the SSP’s own mission.

Furthermore, new employees are issued a card that enumerates essential human traits and mitigating risk-aware behaviors, along with an explanation of why it is vital for achieving the SSP’s one-of-a-kind mission. As a member of the SSP, employees also must be able to explain the reasoning behind a recommended decision. What’s more, the decision-making process itself is extremely transparent. As a consequence, there is no unilateral authority, and so no single person has the power to make a decision—a bedrock component of Benedict’s culture of deliberate design. Additionally, there are numerous checks and balances among the different groups in this “flat organization” that has little hierarchy. All SSP staff work together and interact as part of an integrated whole with a shared sense of mission and purpose in this high-consequence, high-tension environment.

Moreover, as part of the overarching goal of creating a risk-aware culture, everyone at the SSP has the right to ask, and is encouraged to ask, “Why are you doing this?” Staff members are given considerable autonomy intermingled with regular feedback from peers. This keeps everyone on track and on board. Those who perform exceptionally well in promoting and promulgating this risk-aware kind of can-do culture are rewarded and recognized—not just those within the government who work directly for the SSP, but their industry partners as well.

Frank Kendall, Under Secretary of Defense for Acquisition, Technology, and Logistics, has stressed that critical thinking is “necessary for success” and that it means “figuring out the best course of action in a specific circumstance, balancing all of the complex factors that apply to a given situation.” He could well have been describing the culture of Benedict’s program and the crucible in which thoughtful decisions are made every day so that the SSP continues successfully with its mission. SSP truly is characterized by a critical thinking, can-do culture.