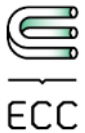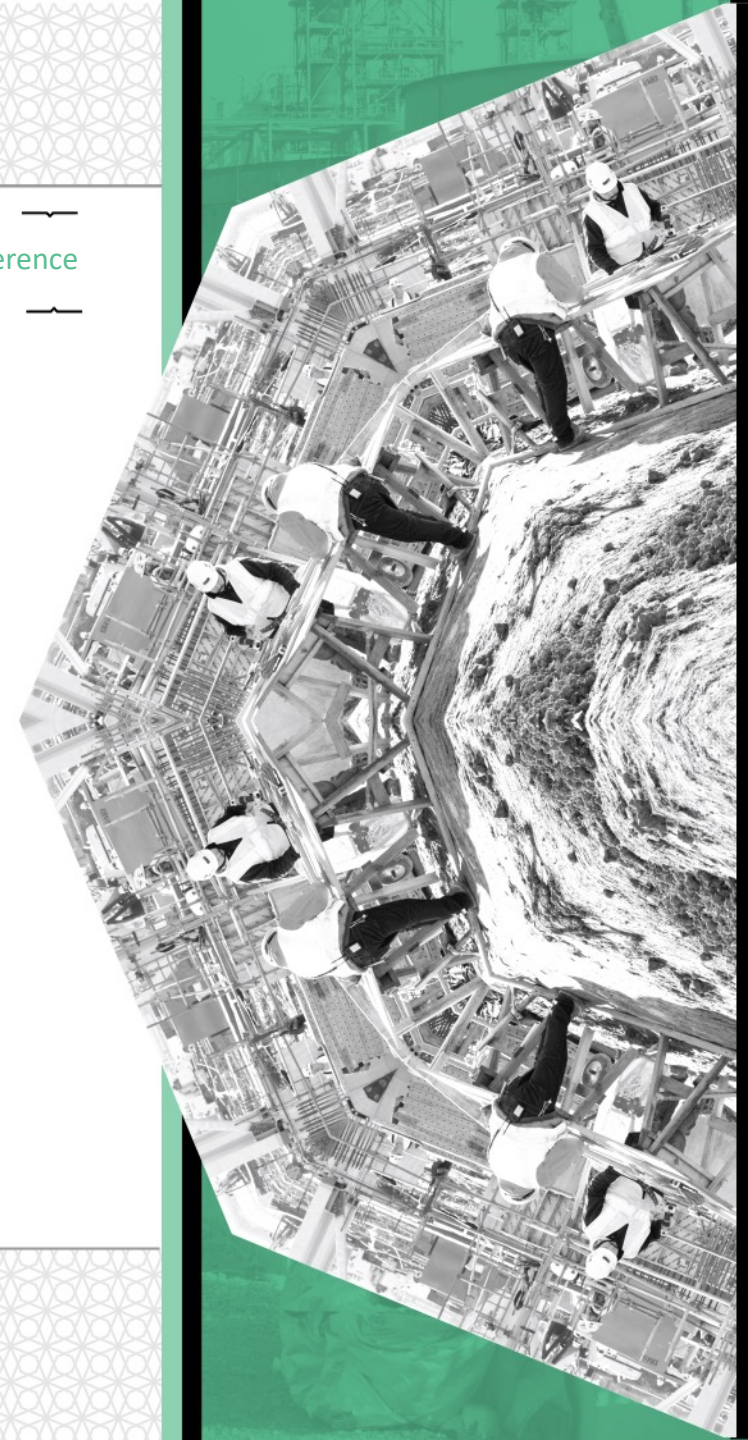# When Bad Things Happen:
How Human Performance Can Shape Safety Culture

John Bolt
S&B Engineers and Constructors, Ltd.

ECC

Team Members:

Presented: **Month Day, Year**

December 8, 2008

The Aftermath

Mishap Investigation Findings

- …a chain of wrong decisions.

- …collectively questionable judgment on the part of the squadron's maintenance department.

- …this was collectively bad decision-making by the duty officer, by the operations officer and by the squadron's commanding officer.

- A senior USMC official said Lt. Neubauer was an "above-average" pilot who "just made a poor decision."

- "While we did not find any evidence of criminal wrongdoing, the responsible parties are being held accountable for their part in this tragic accident," said the assistant commander of the Miramar-based 3rd Marine Aircraft Wing.
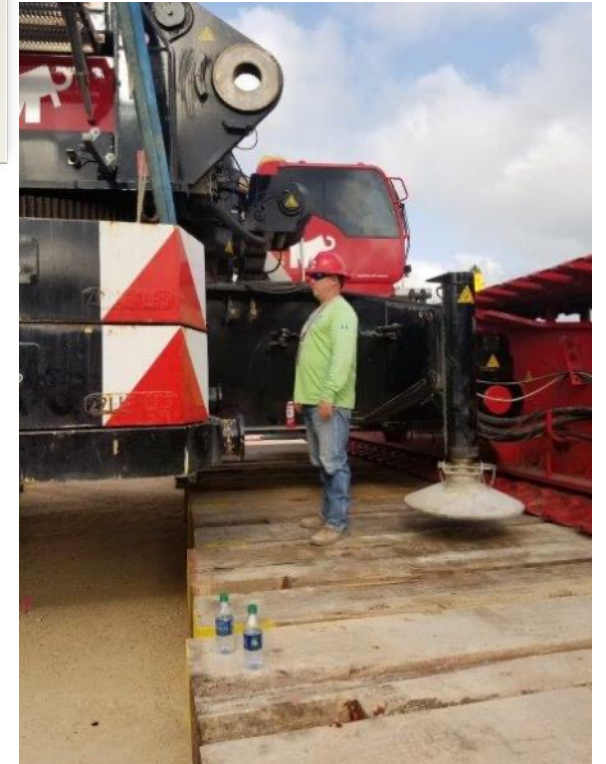
Why Do Bad Things Happen to Good Organizations?

Is This an Indicator of a Good Safety Program?

Employee Location

Impact Location
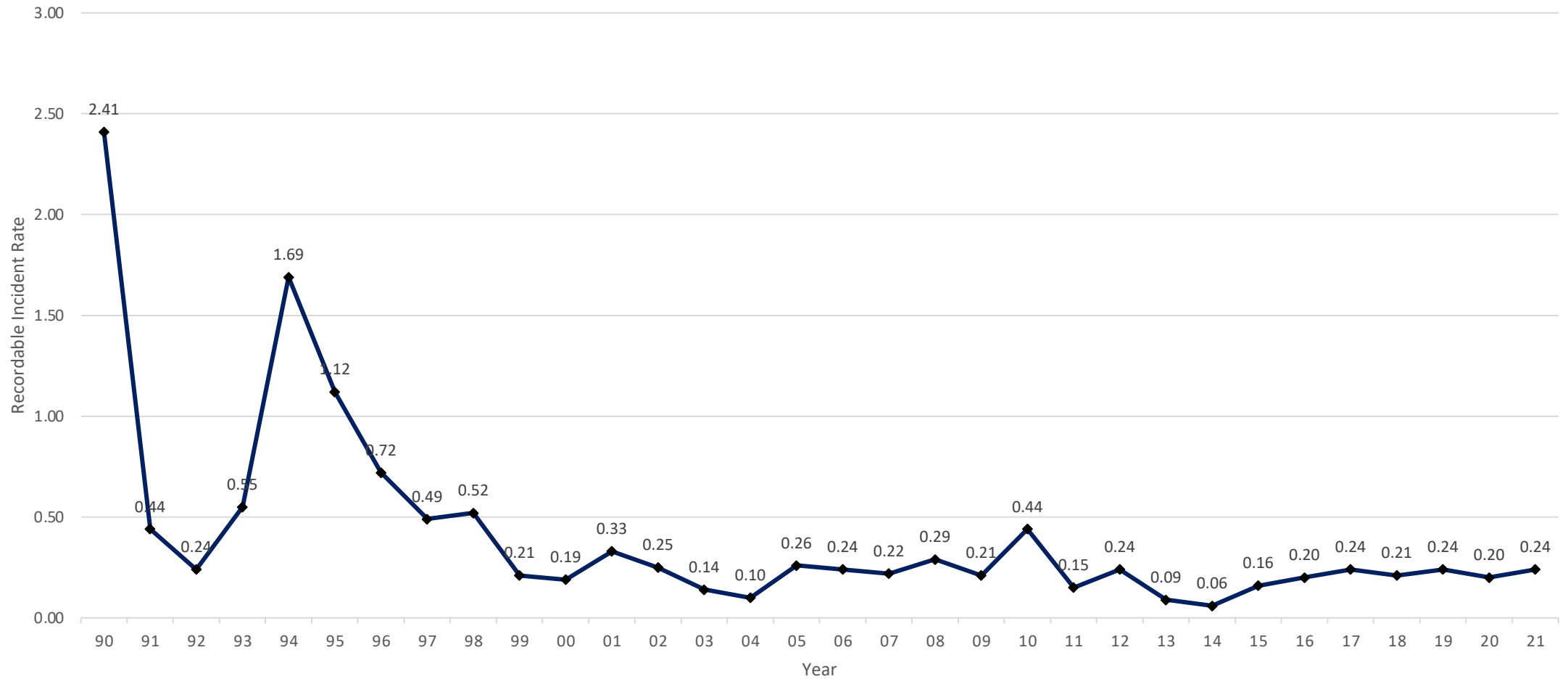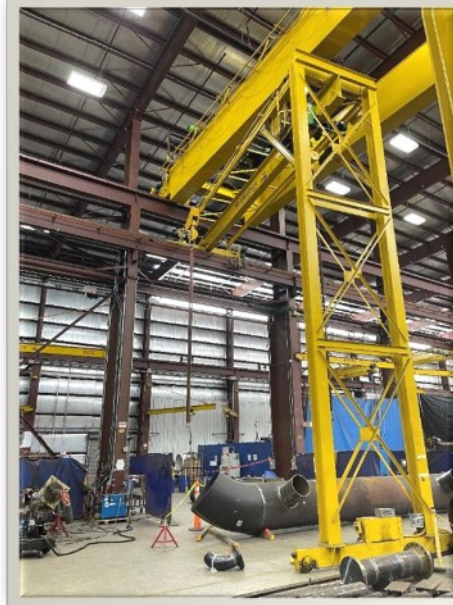
Human Performance

Traditional Safety Thinking

Premise: Workers are considered the cause of poor safety performance. They make mistakes, they violate rules, and they cause our safety metrics to look bad.

That is, worker behavior is the problem in need of fixing.

Human Performance

Traditional Safety Thinking

Because of this, organizations intervene to try to influence behavior.

They develop strict guidelines and tell workers what to do, because they cannot be trusted to operate safely alone.

Human Performance

Traditional Safety Thinking

Worker behavior is the problem to be fixed. We get better safety results by making the workers better.

Organizations measure safety success through the absence of negative events.

We measure what goes wrong instead of what goes right.

Human Performance

Safety as a Value

- What does this statement mean to you?

- Who is your most important customer in this regard?

- How do you deliver this value?

Human Performance

What is Human Performance?

- Based on the premise that humans are error prone

- Not a program!

- A leadership philosophy which, when adopted, fosters trust and open communication

- Gives leaders the terminology, the tone and the platform to disrupt traditional paradigms about safety

- Goal is to build capacity for safe work execution
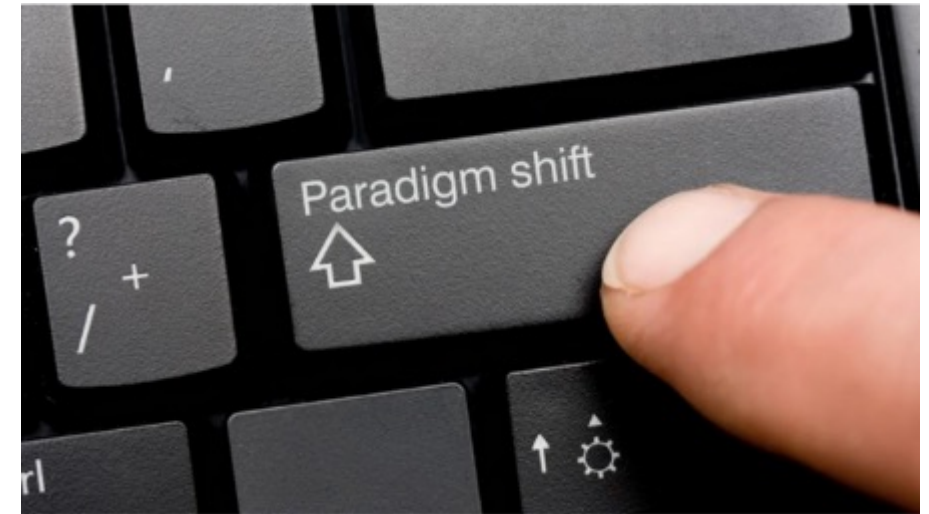
PRINCIPLES OF HUMAN AND ORGANIZATIONAL PERFORMANCE
Dr. Todd Conklin, The 5 Principles of Human Performance: A Contemporary Update of the Building Blocks of Human Performance for the New View of Safety (2019)

- Human Error is Normal

- Blame Fixes Nothing

- Context Drives Behavior

- Learning and Improvement are Vital

- How Leaders Respond to Failure Matters

Principle #1: Human Error is Normal

W. Edwards Deming

A bad system will beat a good person every time.
source: quotes.deming.org/10091

- Human error is part of all operations, good and bad

- Even the best people can make the worst mistakes

- Error is not the opposite of success. Error is a part of being successful.

- Good systems build in error tolerance. Understanding that error will happen is a good thing.

Errors are consequences, not causes
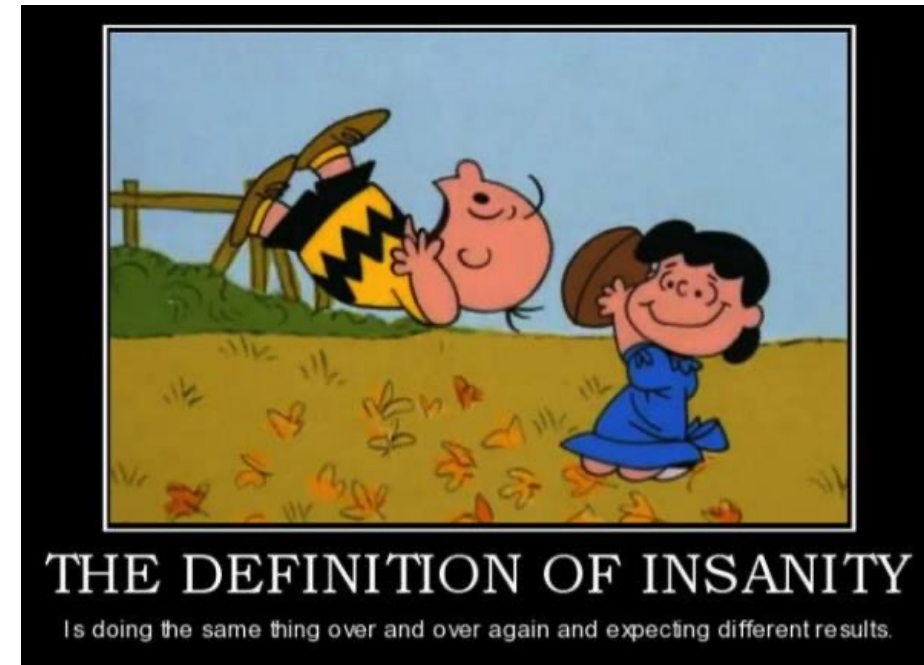
Principle #2: Blame Fixes Nothing

- Blame is cheap and emotionally satisfying, but not operationally important.

- Blame makes error feel like a choice in hindsight.

- Blame takes up emotional and intellectual space with little added value.

- Blame misdirects resources and strategies.

- Deterrence by blaming is not effective.

Principle #2: Blame Fixes Nothing

Have you ever heard any of these comments after an incident? Or made these comments yourself?

- "They got complacent"
- "Employee made a bad decision"
- "He made a poor choice"
- "The worker failed to use his stop work obligation"
- "They should've recognized the hazard"
- "Everyone knows you don't do that!"
- "The problem is the quality of craft workers we hire"
- "The employee didn't follow the procedure"
- "Violation, violation and violation"

THE DEFINITION OF INSANITY
Is doing the same thing over and over again and expecting different results.

Principle #3: Context Drives Behavior

- People do not operate in a vacuum, where they can decide and act all-powerfully and with perfect awareness.

- The work environment, expectations, goals, resources, mindset, culture, etc. in which work occurs primarily determine worker's behavior and actions.

Why is the milk section always in the back of the grocery store?

Principle #3: Context Drives Behavior

People do things that

make sense to them at the time

within the existing context

(work environment, expectations, goals, resources, mindset, culture…)

otherwise, they would not do them!

Principle #3: Context Drives Behavior

- Workers at the sharp end of the stick are expected to "make it happen", despite engineering errors, design flaws, inadequate equipment, out of sequence work, unworkable procedures, and vague or incomplete task instructions.
- People do what they do at the time that the do it for reasons that make sense at the time.
- By understanding the context in which decisions were made, we can build capacity in the system.

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Principle #4. Learning and Improvement is Vital

- We have two choices when responding to failure: Learn and Improve or Blame and Punish. You really cannot do both.

- Learning is a deliberate improvement strategy.

- Knowing how work is done is difficult.

- Workers are the experts, the profound users of the work process.

- Workers always complete the process design.

- **Capacities (Defenses) are placed in systems, tested in systems and strengthened in systems by learning how successful work is done.**
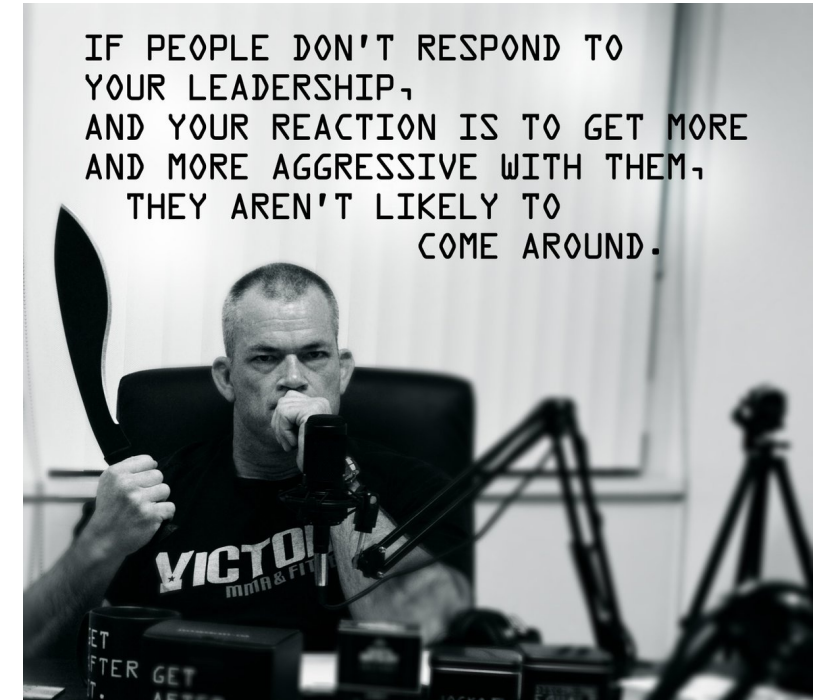
Principle #4. Learning and Improvement is Vital

- Build capacity from what you learn from your workers.

- Much like a cell phone, capacity must be recharged constantly to manage the usage it is expected to handle.

- If you don't manage the inputs to your systems, your capacity battery will go dead.
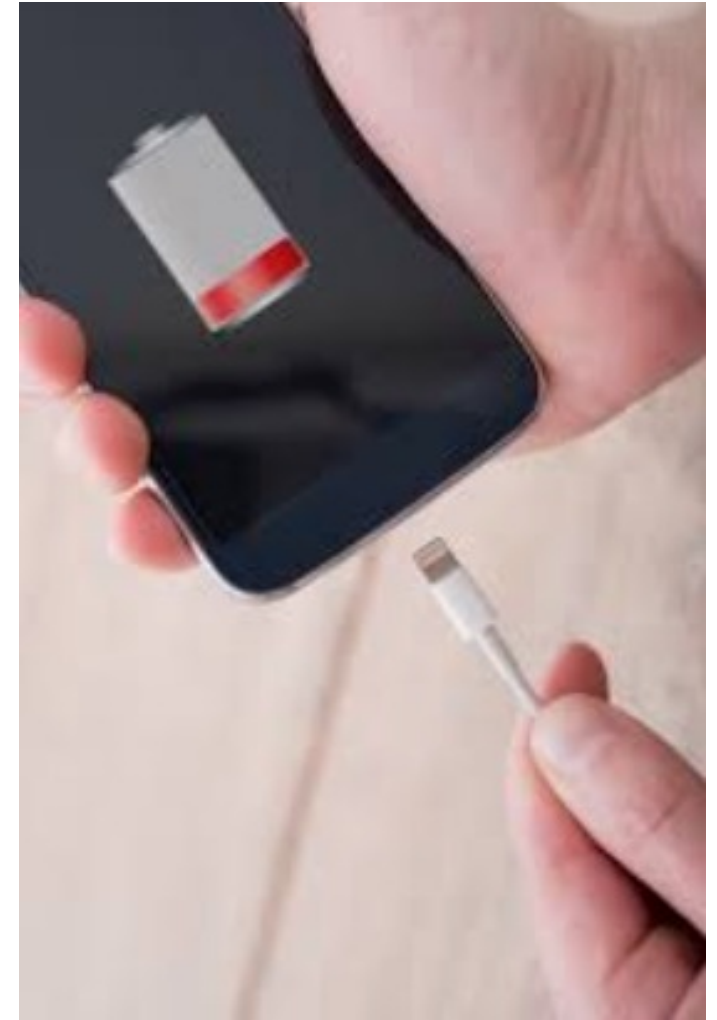
#5. How Leaders Respond to Failure Matters

- Respond means something different than React.

- You have two choices: Getting Better or Getting Even.

- You create the feedback system you have.

- Leaders shape how the organization learns by their reaction to failure.

- Every aspect of improvement is contingent upon leadership's deliberate decision to get better.

IF PEOPLE DON'T RESPOND TO YOUR LEADERSHIP, AND YOUR REACTION IS TO GET MORE AND MORE AGGRESSIVE WITH THEM, THEY AREN'T LIKELY TO COME AROUND.

As Leaders, people are watching you. How you react or respond to an event matters!

Why This Matters

A FATHER'S GRIEF
PRAYERS AND FORGIVENESS AFTER F-18 CRASH

Grace Yoon

Young Mi Yoon

Takeaways

- We all have the same goal, and a moral obligation to create safer workplaces and minimize the potential for human suffering.

- Human Performance is a philosophical shift to accepting human error as inevitable and looking to systems to minimize the effects of that error.

- Get away from the "Bad Apple" theory! Fix the system, not the worker.

- Communicate what is important to you through your language and behaviors

- People are the Solution!

ACCEPT THE CHALLENGE