

SCHOLARLY COMMONS

National Training Aircraft Symposium (NTAS)

2017 - Training Pilots of the Future: Techniques & Technology

Aug 15th, 3:15 PM - 4:45 PM

No Time Like the Present: Introducing the Next Generation of Human Factors

Tony Kern Ed.D. *CEO, Convergent Performance, LLC,* Tkern@convergentperformance.com

Follow this and additional works at: https://commons.erau.edu/ntas

Kern, Tony Ed.D., "No Time Like the Present: Introducing the Next Generation of Human Factors" (2017). *National Training Aircraft Symposium (NTAS)*. 46.

https://commons.erau.edu/ntas/2017/presentations/46

This Presentation is brought to you for free and open access by the Conferences at Scholarly Commons. It has been accepted for inclusion in National Training Aircraft Symposium (NTAS) by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.

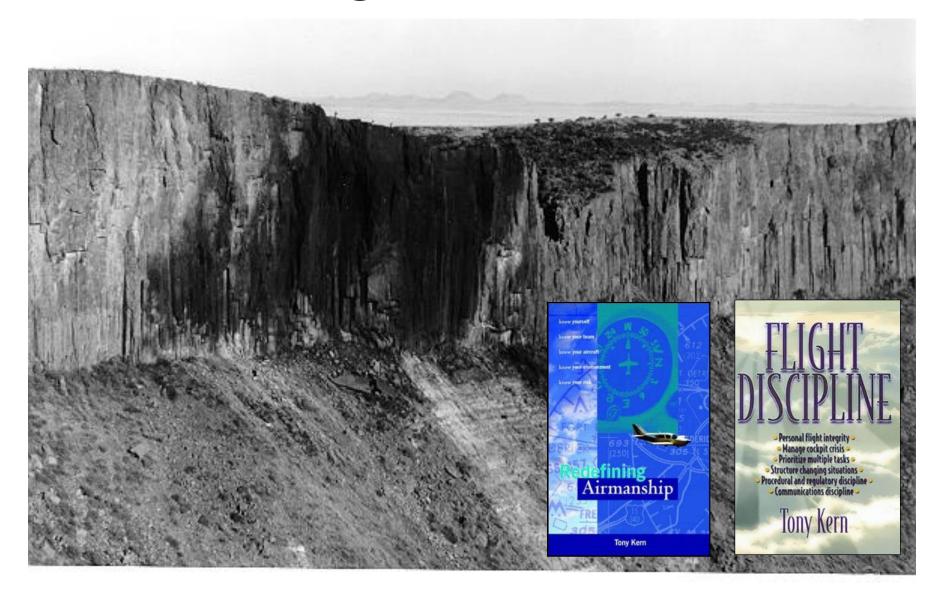
No Time Like the Present Introducing the Next Generation of Human Factors

Dr. Tony Kern, Lt Col USAF (Ret)

CEO, Convergent Performance



Origins 1 - 1992



Origins 2 – 2003

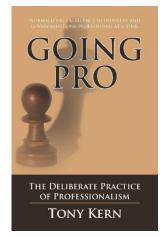
"Tony, why do smart, well trained, experienced professionals with great records, make dumb mistakes and kill themselves or ruin their reputations?

Jon "Dog" Davis, Colonel (now Lt Gen), USMC





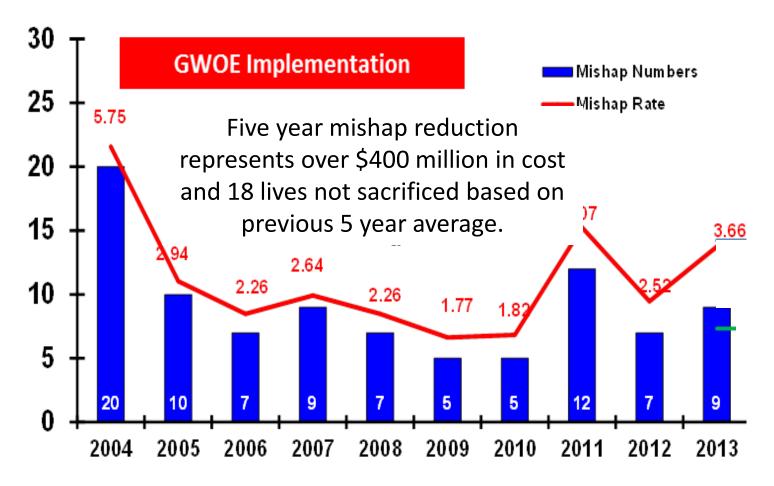




This is personal for me.



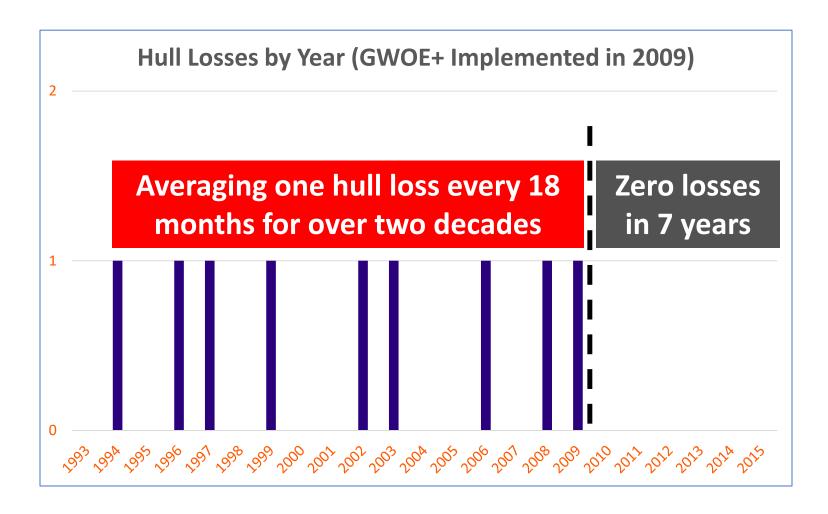
Success Stories (1)



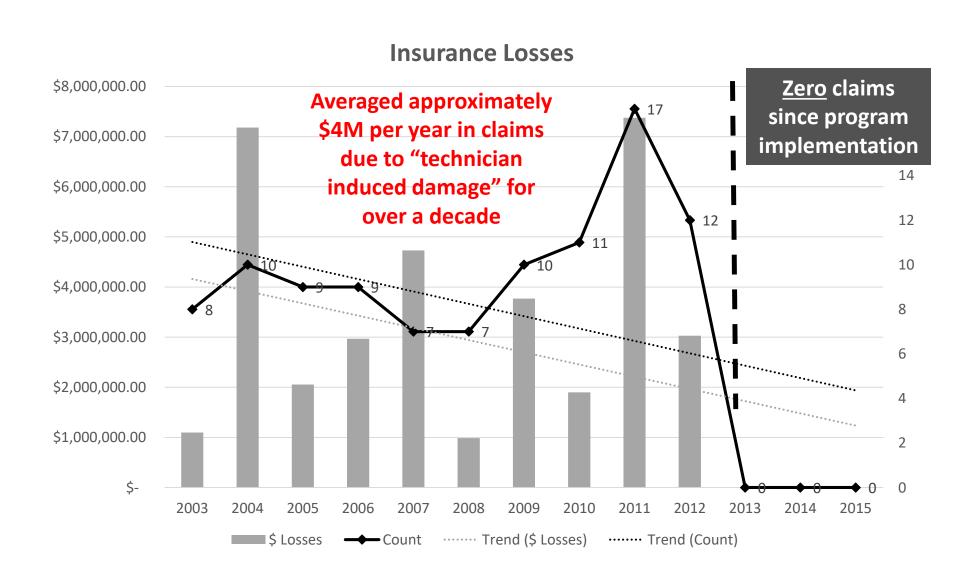
US Marine Corps Aviation Class A Mishap Rate Before and After GWOE Implementation

(Source: US Navy Safety Center)

Success Stories (2): FedEx



Success Stories (3): OEM Maintenance Service Centers



Why Now?

- Massive generational handoff
- New hires, new Captains, influx of new maintenance technicians
- LOSA identified noncompliance issues
- Airline Safety And Federal Aviation Act Of 2010

What's New?

- Personal accountability training to combat noncompliance
- Peer to peer accountability training, shift in "world view"
- Continuous improvement process to combat complacency
- Vaccinate and indoctrinate new hires against negative cultural norms
- Mobile platform delivery systems for microlearning
- Simplified debriefs
- Level IV Professionalism to develop mentors
- ALL sits at the base of 5th Generation CRM/TEM model

Personal Accountability Training

- Deep dive into Error Producing and Violation Producing Conditions
- Personal Error Pattern recognition
- "Life skill first job skill second" decreases resistance



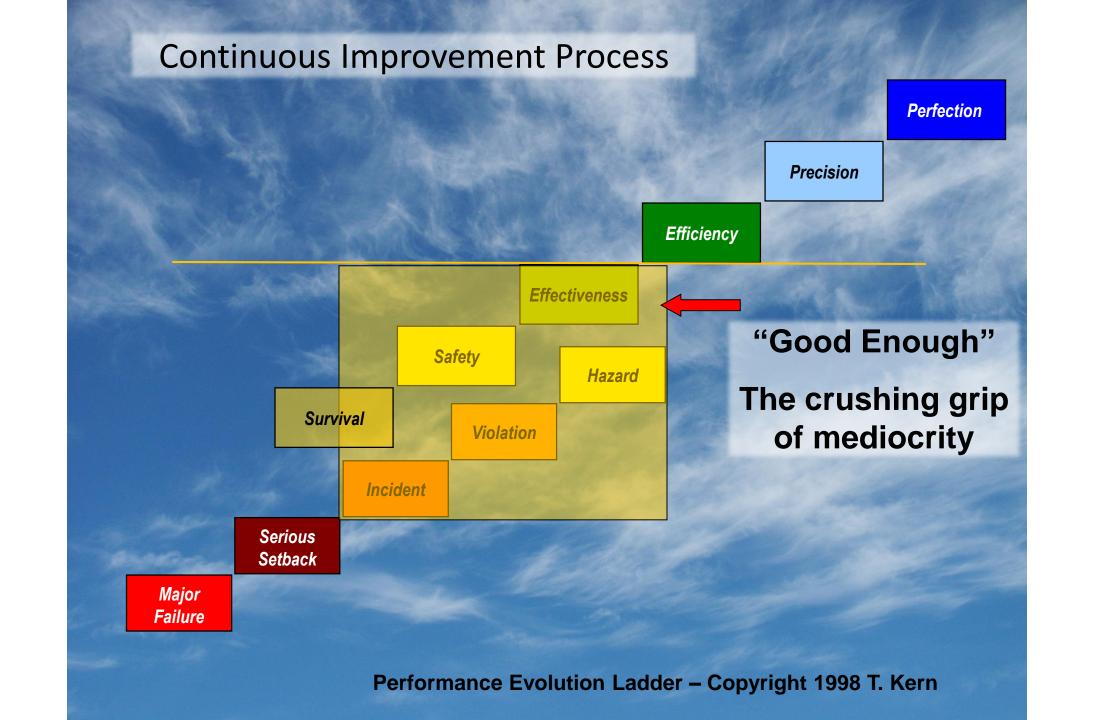
Peer to Peer Accountability - Change the Perspective Multicultural World Views on Compliance

- Power Fear. "If/then" accountability based solely on outcomes. The culture of a war lord or gang leader.
- Guilt Innocence. The typical model of compliance-based organizations. Measures against a minimum standard and determines accountability when things go wrong.
- Honor Shame. Eastern philosophy leveraged by Deming and others to drive the quality leap in 1980s Japan. Do the right thing right, and for the right reasons. We do it for each other and those who count on us. It's not just what we do, it's who we are.

Vaccinate and Indoctrinate New Hires

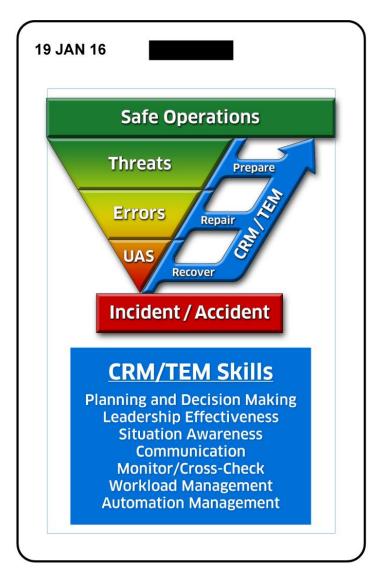
"You have a ton of potential, but you won't ever realize it until you lock down your compliance and start practicing precision across the board. You will be tested on the line, and see examples of sloppiness and noncompliance. How you respond to that will determine your long term success and job satisfaction. That's how we do it here in our airline now. Be a part of it."





Mobile Platform Delivery Systems for Microlearning





19 JAN 16

The Debrief

Address the following topics at the conclusion of a specific phase of flight or post flight (FOM 3.70).

- 1. Safety/UAS Were safety margins eroded?
- 2. Threats and Errors
 Did we prepare? Did we repair?
- **3. Standards**Did we violate SOPs? If so, why?
- 4. Unanswered Questions/ Unresolved Issues What happened that we didn't fully understand?
- 5. Improvement Opportunities
 What can I learn from this flight to be better on the next flight?

It's About Respect Between Peers!

Simplified Debriefs

Level IV Professionalism Seek to Grow into a "Game Changer"

Give back to others

Game Changer

IV

Reaching <u>full</u> potential

Expert

Follow all the rules

Complier

Ш

Earn a living

Member

"My <u>true</u> best effort, <u>every</u> time, in <u>full</u> compliance."

Blue Threat Going Pro

Level IV

Stop the bleeding from self-inflicted avoidable errors

Activate latent potentials to "grow where you are"

Optimum performance and continuous improvement



