



# LESSONS from the FLIGHT DECK™

Applying Aviation Safety Principles to  
High-Risk Industries

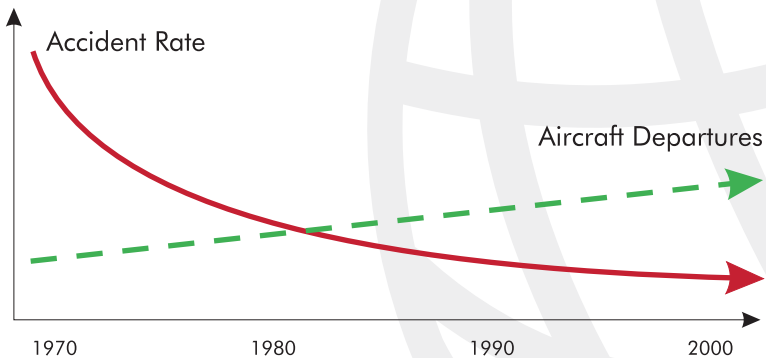
Defining a Higher Standard of Safety  
[www.Indeltainternational.com](http://www.Indeltainternational.com)

# LESSONS from the FLIGHT DECK™

“Out of this nettle, danger, we pluck this flower, safety.”  
William Shakespeare

•• **LESSONS from the FLIGHT DECK™:** Decades ago, the aviation industry faced a safety crisis. A series of preventable accidents motivated researchers in the field of Human Factors to identify the real root causes of poor safety outcomes. After analyzing dozens of incidents, experts determined that human factors such as fatigue, stress, poor communication, preventable error chains, and cultures of blame, were responsible for 70-80% of accidents. To deal with this problem, the aviation industry developed Crew Resource Management (CRM), an innovative approach to improving safety that trains team members from multiple disciplines to work together in a coordinated, safety-conscious environment. The result? CRM helped make commercial aviation the safest form of transportation today.

•• **LESSONS for HIGH-RISK INDUSTRIES:** The success of CRM in commercial aviation has caught the attention of other high-risk industries. Drawing upon the similarities between aviation and these industries, Indelta International has designed a comprehensive Safety Learning System called **LESSONS from the FLIGHT DECK™**. This multi-disciplinary learning system addresses the real root causes of safety outcomes. **LESSONS from the FLIGHT DECK™** equips clients with a full suite of services that help prevent errors, create seamless communication among team members, improve staff morale and create more effective work processes.



Aviation Accident Trends

# WHO Benefits from CRM?

## Aviation Errors

### CRM

## LESSONS from the FLIGHT DECK™



Indelta International helps clients successfully deploy the **CRM approach to safety** in a wide range of industries including: healthcare, petrochemical refining, transportation, aviation, manufacturing, logistics, and power generation. Indelta consultants are CRM experts who help clients improve safety outcomes using a unique, inter-disciplinary, interindustry approach. Indelta International brings together safety best practices from a variety of industries to help clients get better results, in less time. Clients benefit from Indelta's broad and deep experience applying CRM in tough, real-world environments.



# Benefits



## ❖ BENEFITS of the LESSONS from the FLIGHT DECK Learning System™

- **Improved Communication.** Practical communication and leadership skills training helps team members prevent misunderstandings, work more effectively, and improve team morale.
- **Fewer Errors.** Specialized error management strategies, integrated into daily work, reduce the risk of incidents.
- **Better Situational Awareness.** Indelta's proprietary Checklist System tools for briefing and debriefing, combined with specialized skills to apply these tools to real-world situations, improve team situational awareness.
- **Improved Processes.** Practical process improvement tools help managers redesign workflow for improved safety outcomes, cost reduction, and better cycle time.
- **Fewer Conflicts.** High-respect communication approaches help performers deal skillfully with difficult conversations, workplace conflicts, and high-stakes situations.
- **Employee Retention.** Studies show that work environments characterized by respect, appreciation, and professional development, create higher employee performance and retention.
- **A Safety Culture.** When leaders embrace safety as a business imperative, and take positive action to create a safer workplace, safety becomes an integral part of how people do daily work.

# Testimonials



Good Samaritan Hospital

ExxonMobil



Miami Valley Hospital

ROCHESTER  
GENERAL  
HOSPITAL

Charmarac  
Aviation

Premier  
Health  
Partners



"In my experience, one man's passion for a project can ignite the passion of others and accomplish great things. Your passion for CRM and excellent delivery of the concepts has fired me up for new patient safety initiatives."

- Roger Ferland, MD, Brown University

"Our folks left the training thinking it was the best two-day training they have ever had. They are talking Collective Situational Awareness all the time. We can't wait to get more of our folks through the training."

- Glenda Robertson, Refinery Team Leader Shell Oil Products US

"Excellent information delivered with sincerity! We are spreading the word!"

- Kevin Goldsberry, Shell Martinez Refinery

"Lessons from the Flight Deck should be added to the curriculum of all Nursing programs. The presentation is interactive and interesting and opens the student's mind to the important message that CRM has proven effective in both the cockpit and the Operating room. CRM sets the stage for safe practice in any field. I wish I had these skills when I began my nursing career."

- Deborah G Knight, MS, RN, U of RI Strong Memorial Hospital

"I consider your CRM course to be tops on the list of our enrichment training courses."

- Dan Lindsey, Senior Pilot, Emerson Electric

# Error Prevention Checklists

## ❖ BACKGROUND AND OVERVIEW



The use of pre-flight checklists is a key element of airline safety when combined with the other approaches of Crew Resource Management (CRM). **These approaches have contributed to making commercial aviation the safest form of transportation today.**

In aviation, checklists have become an essential part of monitoring activities during complex procedures. They facilitate the routine systematizing of multi-step processes, improve team dynamics and minimize error.

Checklists are used prior to all critical events such as engine start up, takeoff, descent and landing. **During these procedures, teams work together on the checklist and all must agree that it is safe to proceed.** There is a shared responsibility for properly carrying out the procedure.

If a fault is found, it must be corrected before proceeding with the remaining items on the checklist. This minimizes the possibility of misinterpreting or overlooking a critical step.

Checklists provide a backup to human memory during routine and emergency procedures. **They serve as a formal reminder, help prevent errors of omission and contribute to a safer environment.**

## ❖ INDELTA'S ADAPTATION OF CHECKLISTS TO MEDICINE

The success of CRM in commercial aviation has caught the attention of other high-risk industries, particularly healthcare. In fact, the aviation industry is commonly recognized as a safety-related model for healthcare.

## •• OUR UNIQUE DESIGN (SLIDERBOARDS)

Indelta's unique checklist design is a direct result of input from healthcare professionals and practitioners. This design consists of an acrylic board with a panel of sliders and a protective vinyl coating on the back. The slider panel corresponds to a customized process list. Each slider must be physically moved from red to green to complete the checklist and must be verified by at least two team members. In addition, there is a section on the board for additional notes. The board comes ready to mount on a flat wall or door.

## •• CUSTOMIZED TO YOUR NEEDS

Customization is available by specific location and/or by application. Indelta works closely with the end user to assure that the content addresses site specific needs to help mitigate preventable errors.

## •• NUMEROUS APPLICATIONS

Originally designed for perioperative application, the use of the checklist has expanded significantly. Some examples include a Central Line Checklist, Dialysis Access Checklist, Kidney Transplant Checklist and a Patient Room Checklist.

## •• DOCUMENTED IMPROVEMENT IN ERROR PREVENTION

Examples of "trapped" items caught through perioperative checklist use include: wrong pre-op meds, no consent, wrong consent, outdated H&P, missing EKG, heparin given when it should have been stopped, antibiotics not given, allergies not noted, no beta blocker when indicated and no prophylaxis. These trapped items would have resulted in medical errors had they not been caught by a checklist.

## •• HOW TO ORDER

For additional information on Indelta's Error Prevention Checklist boards please contact us.

UNITED STATES | UNITED KINGDOM | AUSTRALIA | HONG KONG



**INDELTA International** is a global provider of custom safety, healthcare and corporate training with offices in the US, UK, Australia and Hong Kong. Our training programs focus on performance improvement through **teamwork, communications, safety, leadership, compliance, marketing and sales**. These programs are delivered to healthcare organizations, high-risk industries, academic institutions and corporations ranging from regional to multi-national.

Our broad capabilities include: program design, administration, marketing and delivery. We also offer curriculum development, competency building and assessment, language instruction and translation. In addition, we provide customized team building and individual coaching. Our flexible approach to learning includes instructor-led modules, self-paced resources, on-the-job learning and online delivery through Indelta's proprietary **learning management platform**.

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