FAA SMS for Airports - Industry Day

SMS Industry Panel

Moderator: Bunty Ramakrishna, FAA **(AVP-320)**

Industry Panel:

Hartsfield-Jackson Atlanta Int'l Airport (ATL): Scott Ayers

Delta Air Lines (DAL): Patricia Demasi and Tara Perez

Tyler Pounds Regional Airport (TYR): Stephen Thompson

American Airlines (AA): Melissa Leach

Embry-Riddle Aeronautical University (ERAU): Dan McCune

Scott M. Ayers is the Airport Manager Safety Management at **Hartsfield-Jackson Atlanta International Airport (ATL).** His expertise are in developing and implementing an Airport SMS, emergency management, airport/airline operations, aeronautical science, Part 139 SMS Airport pilot studies, SMS Data Reporting, and airport management. **Email**: Scott.Ayers@atl.com

Melissa Leach is the **Director, Safety Systems and Emergency Response at American Airlines**. Her expertise are in airport operations, Airport and Partner Planning & Analysis, and Reservations, Part 121 SMS, airport management, Customer Care, Customer Ops, Cargo, and Control Center policy & procedure, and Corporate Purchasing. **Email**: Melissa.Leach@aa.com

Steve Thompson leads the team of aviation professionals at the **Tyler Pounds Regional Airport,** a primary, Non-hub gateway to the world for East Texans. His airport team ensures the safe enplanement of over 40,000 passengers a year and provides a home base for 100 General Aviation Aircraft. Steve previously served as the Manager of Airport Safety at the Denver International Airport. **Email**: smthompson@tylertexas.com

Patricia Demasi is the **General Manager for Safety Management System at Delta Air Lines.** Her expertise are in Aviation Safety, managing voluntary employee reporting systems, Just Culture, and providing oversight of the implementation, health, and effectiveness of SMS and seven different ASAP systems across the organization. **Email**: patricia.demasi@delta.com

Tara Perez is the **General Manager, Corporate Safety at Delta Air Lines** in Atlanta, Georgia. Her expertise are in airport and station safety, emergency response, OSHA compliance, environmental safety, Part 121 SMS, and responsible for Delta's employee injuries, aircraft, and ground damages. **Email**: Tara.perez@delta.com

Daniel M. McCune is currently **the Associate Vice President for safety for Embry-Riddle Aeronautical University.** Mr. McCune retired from the United States Army after serving 27 years. At every location, his one major goal has always been accident prevention through Human Factors and Safety Culture enhancement. **Email**: mccun711@erau.edu

ATL SAFETY MANAGEMENT SYSTEM (SMS)

AIRPORT OVERVIEW

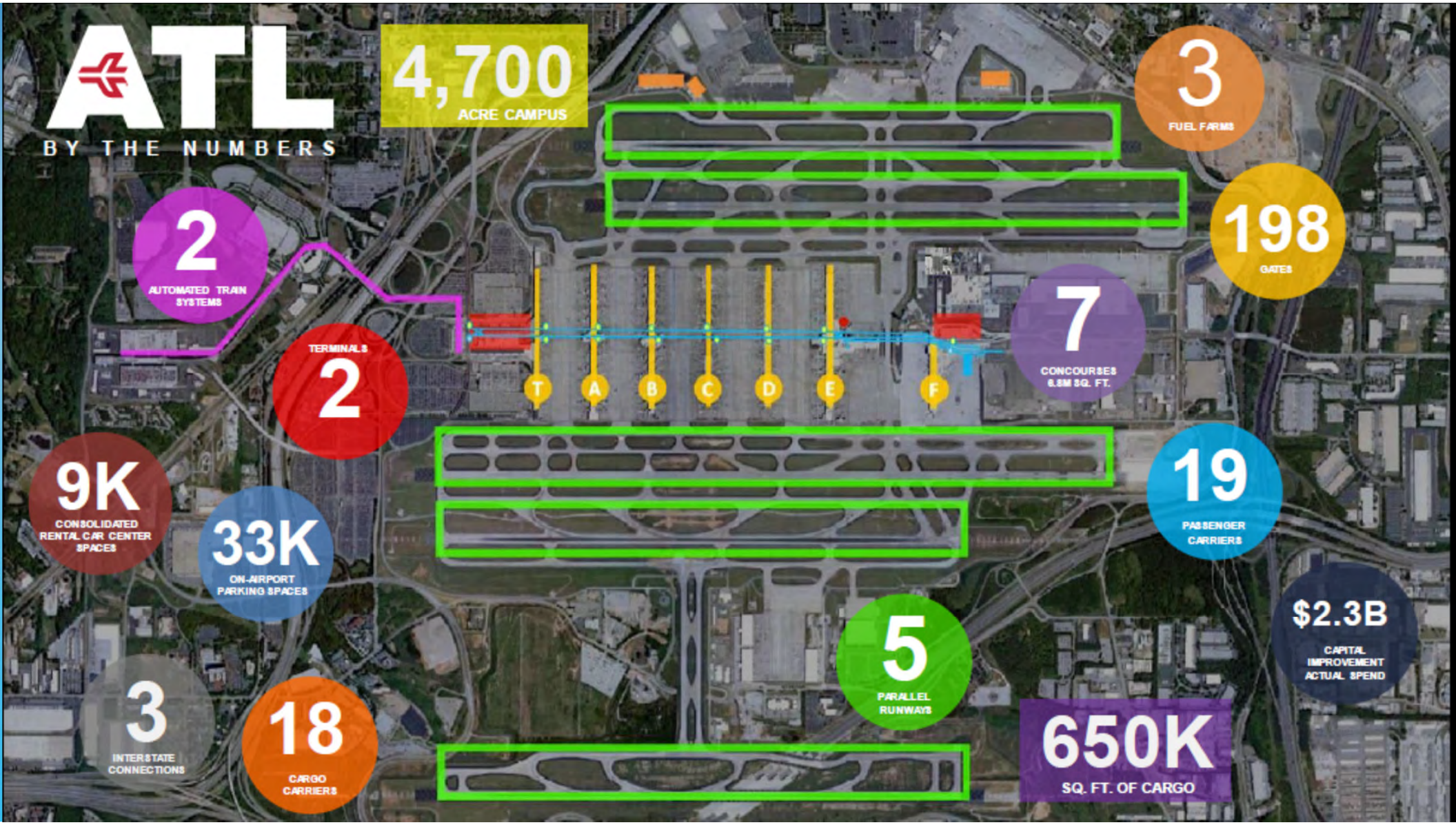
Presented by
Scott Ayers, AAE, IAP, ACE
SMS Manager

MARCH 30, 2023

MAYOR ANDRE DICKENS
CITY OF ATLANTA

Hartsfield-Jackson Atlanta International Airport

BALRAM "B" BHEODARI
AIRPORT GENERAL MANAGER


ATL
BY THE NUMBERS
4,700
ACRE CAMPUS
3
FUEL FARMS
198
GATES
2
AUTOMATED TRAIN SYSTEMS
TERMINALS
2
7
CONCOURSES
6.8M SQ. FT.
T
A
B
C
D
E
F
9K
CONSOLIDATED RENTAL CAR CENTER SPACES
33K
ON-AIRPORT PARKING SPACES
19
PASSENGER CARRIERS
$2.3B
CAPITAL IMPROVEMENT ACTUAL SPEND
5
PARALLEL RUNWAYS
3
INTERSTATE CONNECTIONS
18
CARGO CARRIERS
650K
SQ. FT. OF CARGO

Overview

ATL's SMS Program is robust, driving excellence in safety policy, safety risk management, safety assurance and promotion. ATL's safety posture and culture serves as a model in the aviation industry.

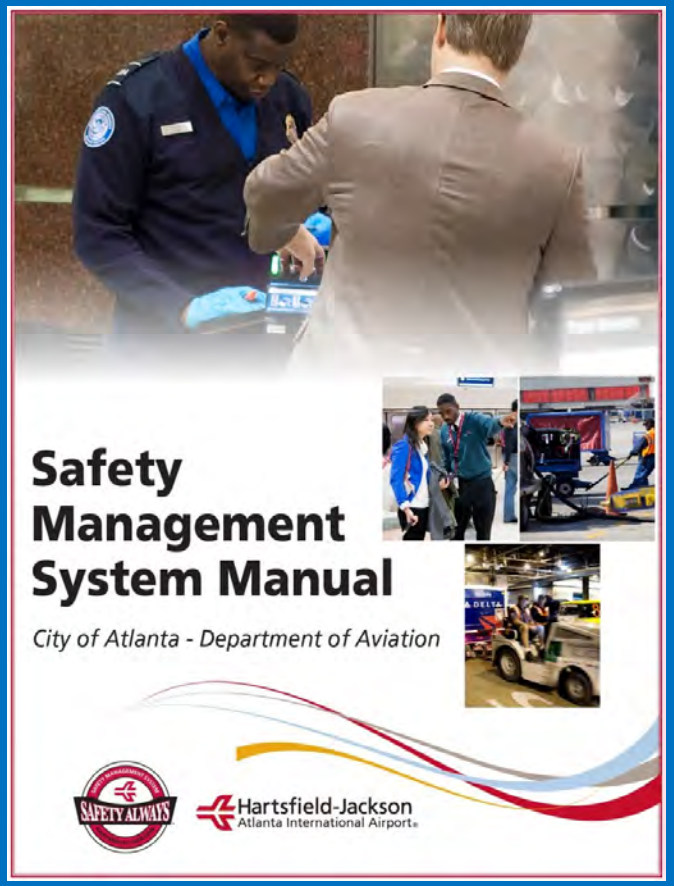
Airport Stakeholders

- Federal Government
- Local Government
- Police
- Fire
- Airlines
- Ground Handlers
- Concessions
- Employees
- Security
- Airline Customers

Safety Policy and Objectives

SMS Manual:

- **Is a key instrument** for communicating the organization-wide approach to safety
- **Documents all aspects of the SMS**, including the safety policy, objectives, procedures and individual safety responsibilities and outlines the safety data processes



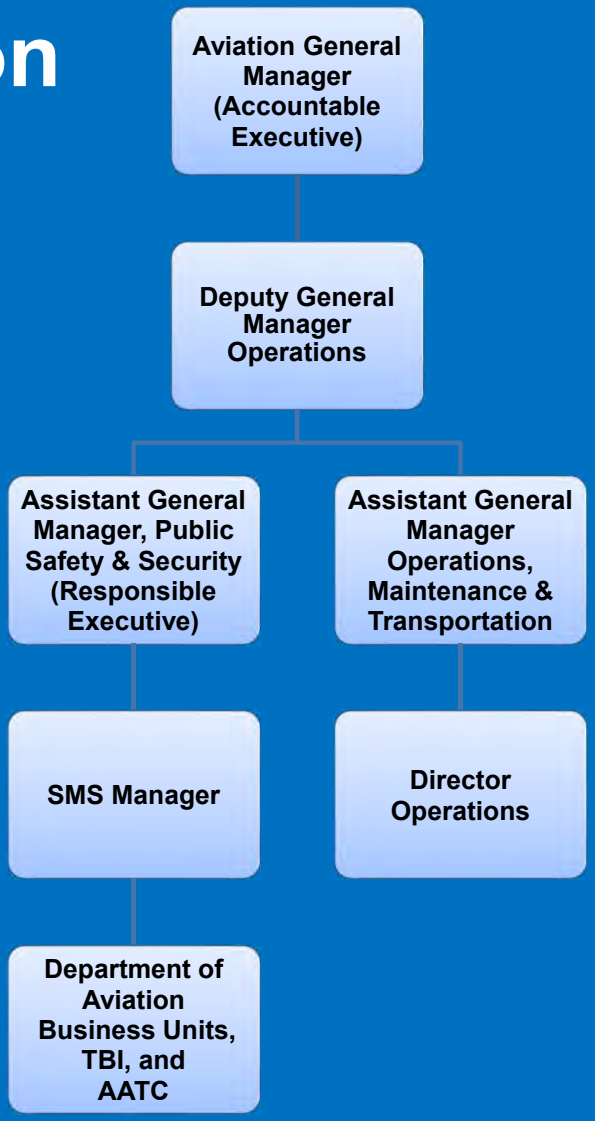
Accountable Executive

The Aviation General Manager is the Accountable Executive for Hartsfield-Jackson Atlanta International Airport's Safety Management System.

The Aviation General Manager is responsible for:

- Developing and implementing a Safety Policy that identifies the City's safety objectives and its commitment to safety.
- Ensuring a Safety Management System is implemented at ATL.
- Assuming a leadership role to ensure commitment throughout the organization, specifically at the senior management level, and to implement the safety management policy and safety management system requirements.
- Ensuring that all Airport executives and staff are aware and held accountable for their safety performance.
- Ensuring that ATL's Safety Management System and operational performance are evaluated for effectiveness on a regular basis.

SMS Organization



Safety Action Group

- Exchanges information among Airport stakeholders
- Raises concerns to Airport officials; resolve through agreed voluntary action
- Offers a structured forum for discussion and common understanding between Airport stakeholders
- Shares information about Airport operations to committee participants

Safety Always Bulletin Examples

Hartsfield-Jackson Atlanta International Airport

SAFETY MANAGEMENT SYSTEM (SMS) AT HARTSFIELD-JACKSON

March 2014

Hartsfield-Jackson Atlanta International Airport (ATL) is implementing a Safety Management System (SMS), which the Federal Aviation Administration defines as a formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety risk controls. It includes systematic procedures, practices, and policies for the management of safety risk.

As part of its SMS, the Airport has posted a confidential safety reporting system at the following *Web address: http://www.atlanta-airport.com/Airport/SafetyManagement/SMS-Form.aspx*

The confidential reporting form should be used to report non-emergency safety concerns at Hartsfield-Jackson Atlanta International Airport. If the safety concern is an emergency, call 911 immediately. Airport employees should always report specific safety concerns related to their employers' operations through those organizations' defined safety reporting processes.

The types of safety reports received this past year includes hazardous conditions such as chipped and faded crosswalk markings; drivers not yielding right-of-way to an aircraft or emergency vehicle; smoking in a no-smoking zone on the ramp; and a driver hitting an airfield sign by the ramp roadway.

When a confidential report is submitted, the Aviation SMS Manager will investigate the situation and, if the report is validated, will forward it to the appropriate company safety representative for corrective action. The Aviation SMS Manager and stakeholders involved will work together to ensure corrective action is taken.

The Hartsfield-Jackson SMS slogan, "Safety Always!" means developing a culture in which every airport employee makes safety a key consideration every day. Every employee is responsible for communicating any information that may affect airport operations and for using the confidential reporting form to ensure that potential safety issues are addressed and corrected.

ONEATL Safety Always | Safety Bulletin

July 2018

Effective Aug. 13 2018, all personnel working in the Airport Operation Areas (AOA) and Security Identification Display Areas (SIDA) areas of Hartsfield-Jackson Atlanta International Airport (ATL) will be required to wear reflective safety wear.

Section 22-192. Reflective Safety Wear Standards

All employees, contractors, vendors, tenants and visitors must wear Reflective Safety Wear at all times in the performance of their assigned duties. This provision applies to the Air Operations Area, Movement Area, Non-Movement Area and Security Identification Display Area of the Airport as referenced in Section 22-191.

Definition.

a) Reflective Safety Wear: Any clothing accepted as appropriate warning vests or other suitable garments marked with or made of reflectorized or high-visibility material that meets the requirement of American National Standards Institute (ANSI) 107 Standard.

Violation and Sanction System.

a) For the purposes of the violation and sanction system, violations of 22-192 shall be a Warning or Class I category.

Please refer to the Ramp Safety Standards Manual or email rampsafety@atl.com for more information.

A PUBLICATION OF THE CITY OF ATLANTA DEPARTMENT OF AVIATION

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Airline SMS Interface

- Participate in airline safety meetings
- Participate in airline SMS meetings
- Data-sharing is limited in scope as de-identified data
- Stakeholders involved in Airport safety risk assessments

Airline SMS Interface

- Data sharing
- Safety risk assessment coordination
- Ramp safety
- Confidential reporting
- Ground incidents and accident investigation coordination
- Safety assurance and promotion
- Safety culture

SMS Data Reporting

Benefits

- See the “big picture”
- Become knowledgeable and proactive
- Understand full scope of risk exposures and safety issues
- De-Identification
- Collaboration

Challenges

- Freedom of Information Act
- Policies
- Consistent language

Airport Safety Standards Manual

Hartsfield-Jackson Atlanta International Airport

- City of Atlanta Code of Ordinances Section 22 Aviation
- FAR Part 139 Regulations
- Inform Airport-wide safety practices and initiatives
- Individual Enforcement
- Company Fines
- Ramp Safety Inspections
- Fire Safety Inspections
- Safety Observations

Hazard Reporting

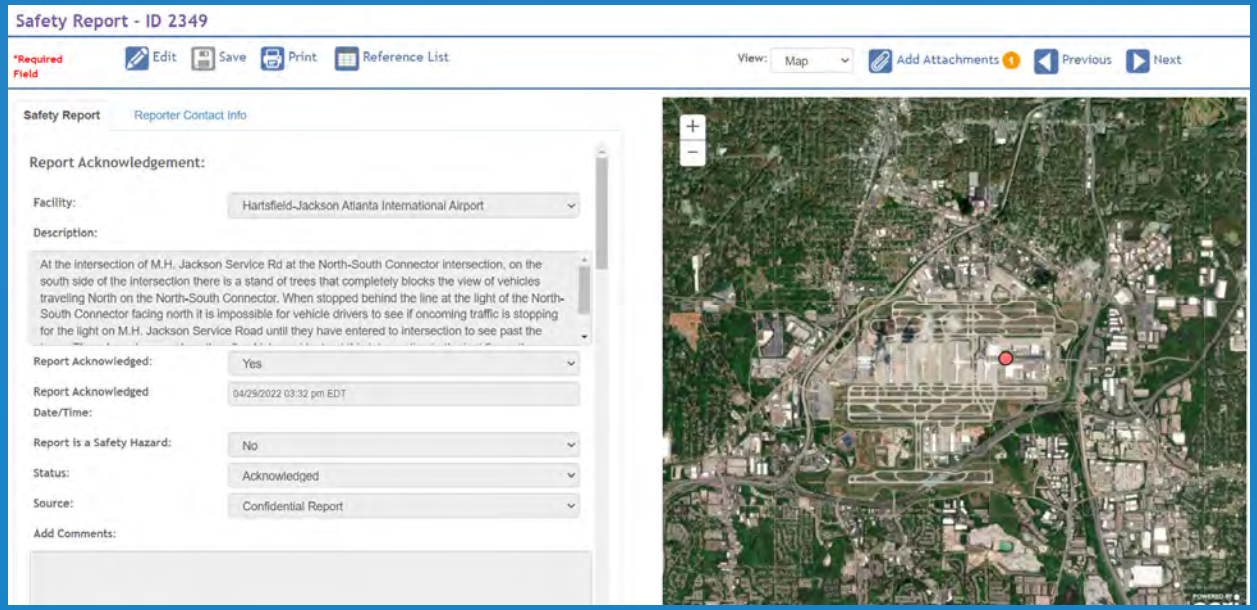
Hartsfield-Jackson Atlanta International Airport

Goal

- To inform all ATL employees of individual responsibilities and contributions toward safety culture

Objectives

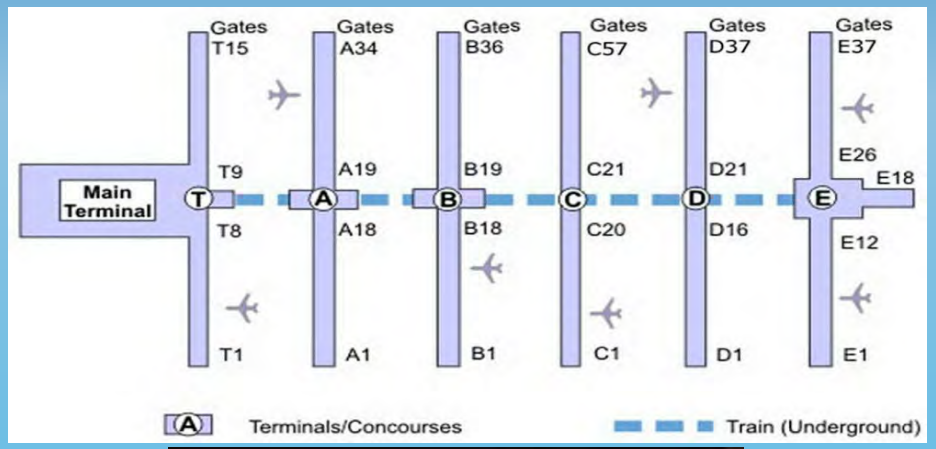
- More robust hazard reporting system
- More functionality for identifying and reporting safety hazards

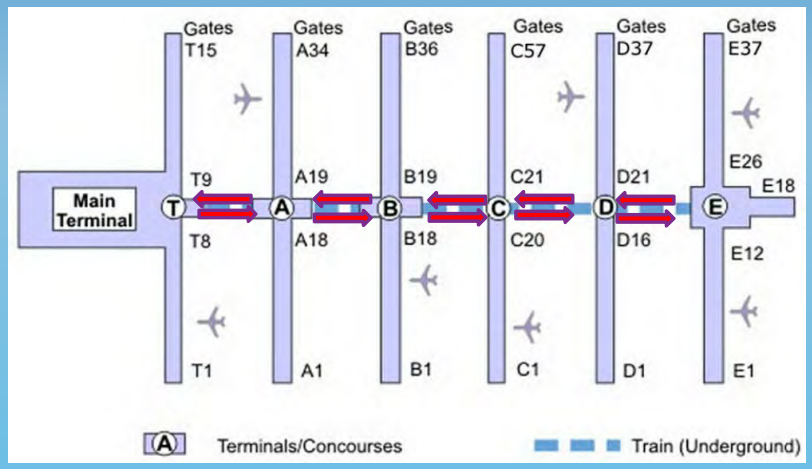


DELIVERY TRUCK PARKING AT ATL

SCOTT AYERS – SMS MANAGER, ATL AIRPORT

Hazard reported: Overnight delivery trucks are parking in medians, creating a physical barrier at intersections





RISK MITIGATIONS

Barriers were put in place to prevent unauthorized parking

Designated parking spots for daytime use by smaller delivery trucks

Trucks larger than 26’ are prohibited from daytime deliveries.

Gate space on each concourse is designated for truck parking from 11p-5a nightly.

STEP 4: MONITOR FOR EFFECTIVENESS

- Mitigation was put in place for 60 days monitoring period
- Even through significant IROPs, there were no reports of inability to provide gate space for parking
- Delta solicited feedback from the affected employees – all positive
- ATL DOA solicited feedback from DOA employees – all positive
- Funding for marshal agents was secured by DOA (place/remove cones; answer questions/gate cleanliness)

DELTA'S SMS

MARCH 30, 2023

DELTA

SMS

SAFETY MANAGEMENT SYSTEM

WELCOME & INTRODUCTION

TRISH DEMASI

GENERAL MANAGER
SMS & ASAP

TARA PEREZ

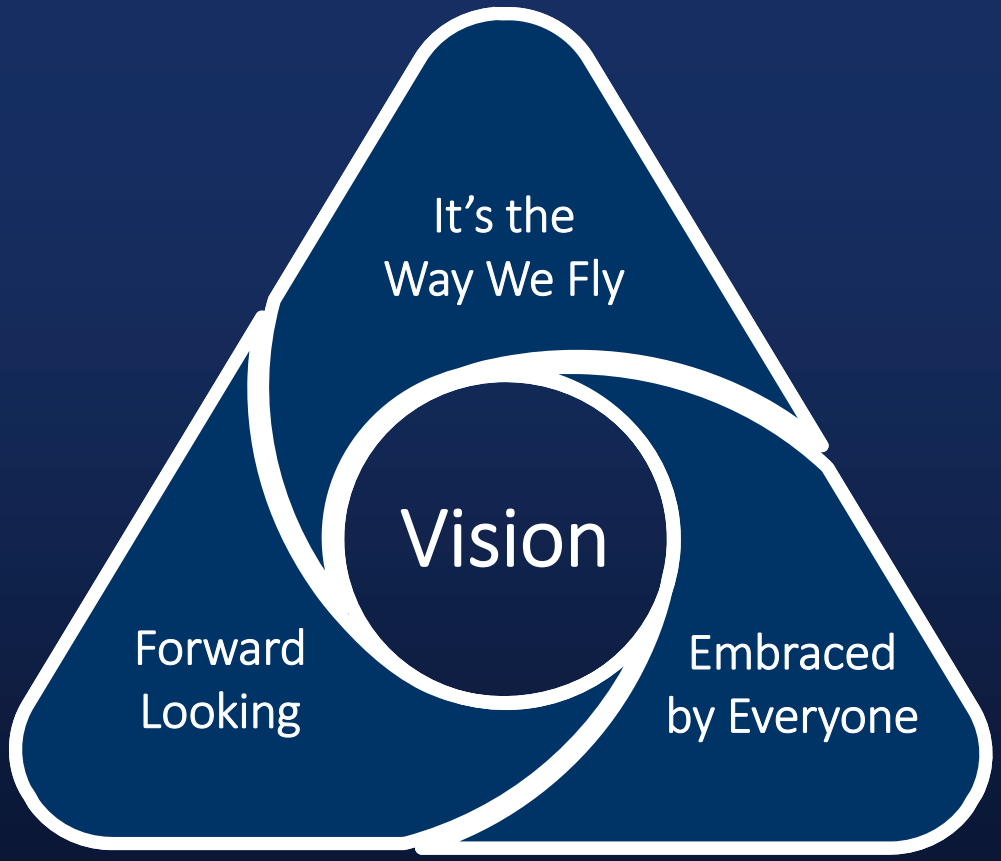
GENERAL MANAGER
CORPORATE SAFETY

DELTA

SAFETY IS AT THE CORE OF OUR VALUED CULTURE

STRATEGY

DELTA

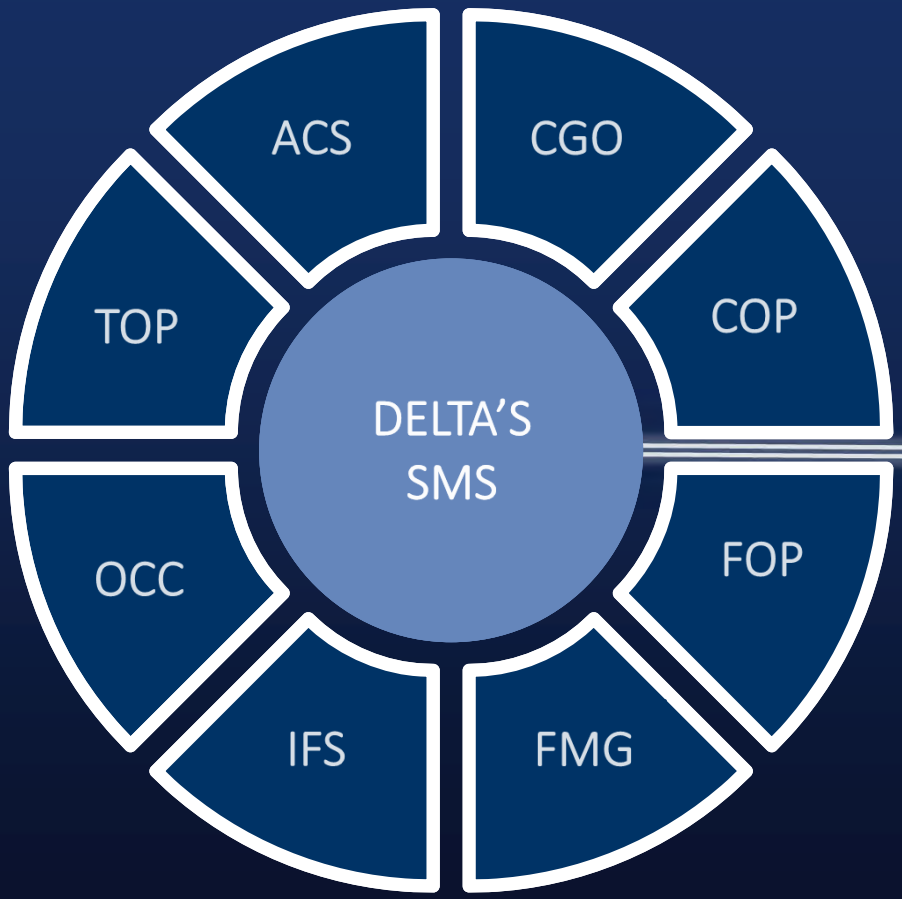

It's the
Way We Fly
Vision
Forward
Looking
Embraced
by Everyone

DELTA

Leadership
Policy
Risk Management
Safety Culture
Assurance
Promotion

DELTA

SMS ACROSS DELTA



CSSC

- Establishes Delta Standards & Expectations
- Ensures Program Compliance and Effectiveness

Divisions

- Establish & Execute Divisional Procedures
- Ensure Procedural Compliance & Effectiveness

DELTA

DELTA SMS STRUCTURE

SAFETY POLICY

DELTA

SMS GOVERNANCE

SAFETY POLICY

DELTA

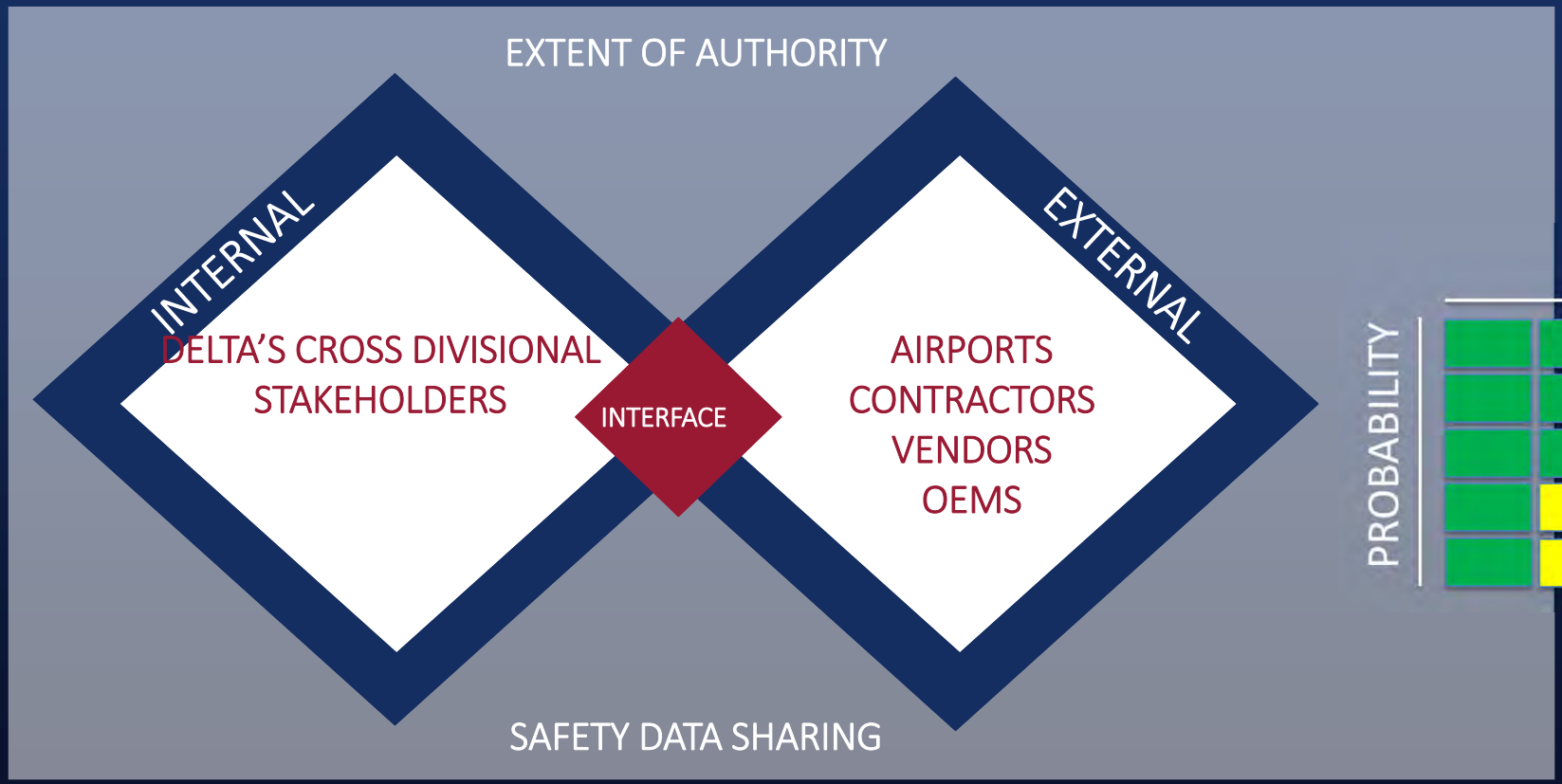
RISK ACCEPTANCE AUTHORITY

SAFETY POLICY | SAFETY RISK MANAGEMENT

DELTA

RISK ACCEPTANCE AUTHORITY

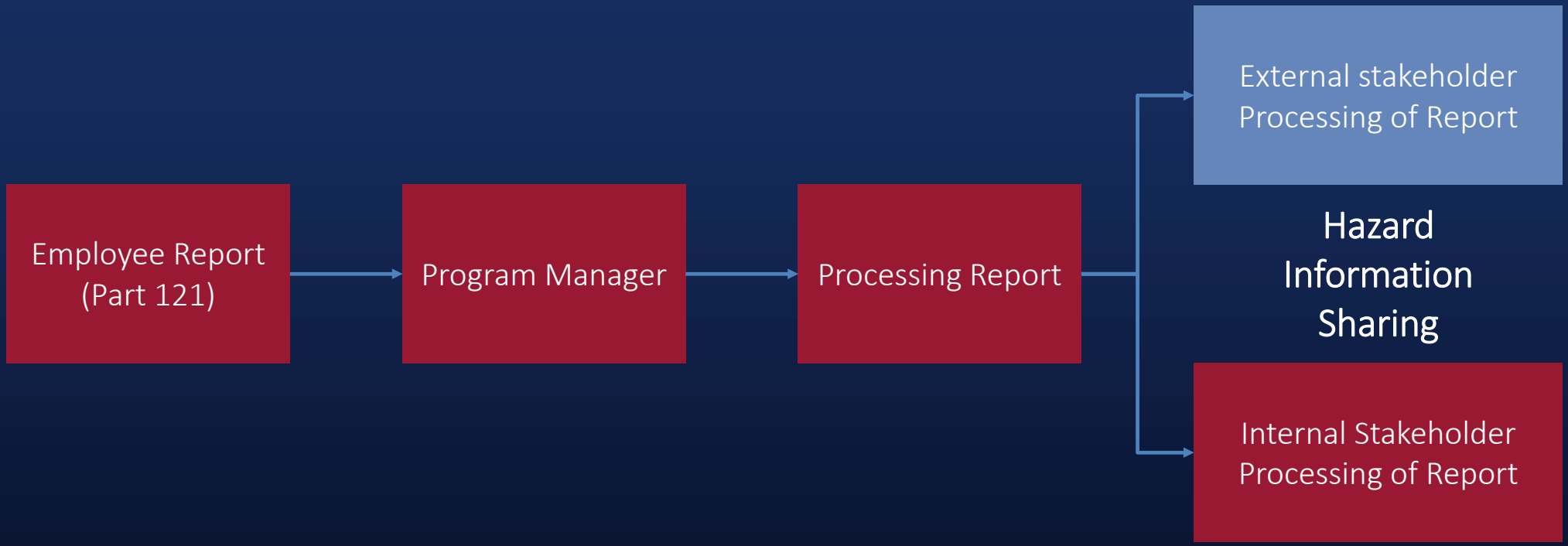
SAFETY POLICY | SAFETY RISK MANAGEMENT



DELTA

SAFETY REPORTING

SAFETY ASSURANCE

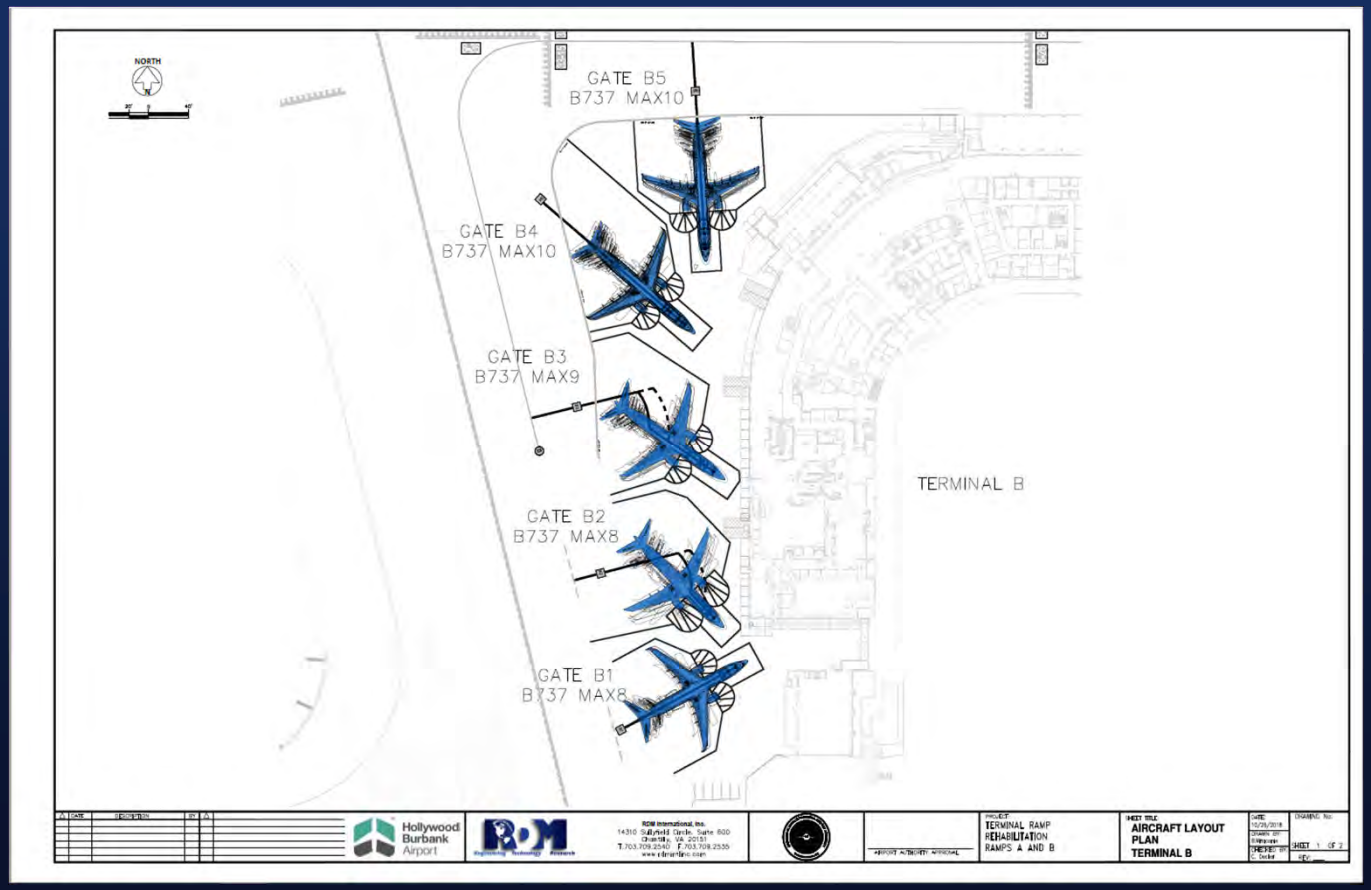


DELTA

TO EXPLAIN THIS INTERFACE LETS LOOK AT AN SRM EXAMPLE

SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT



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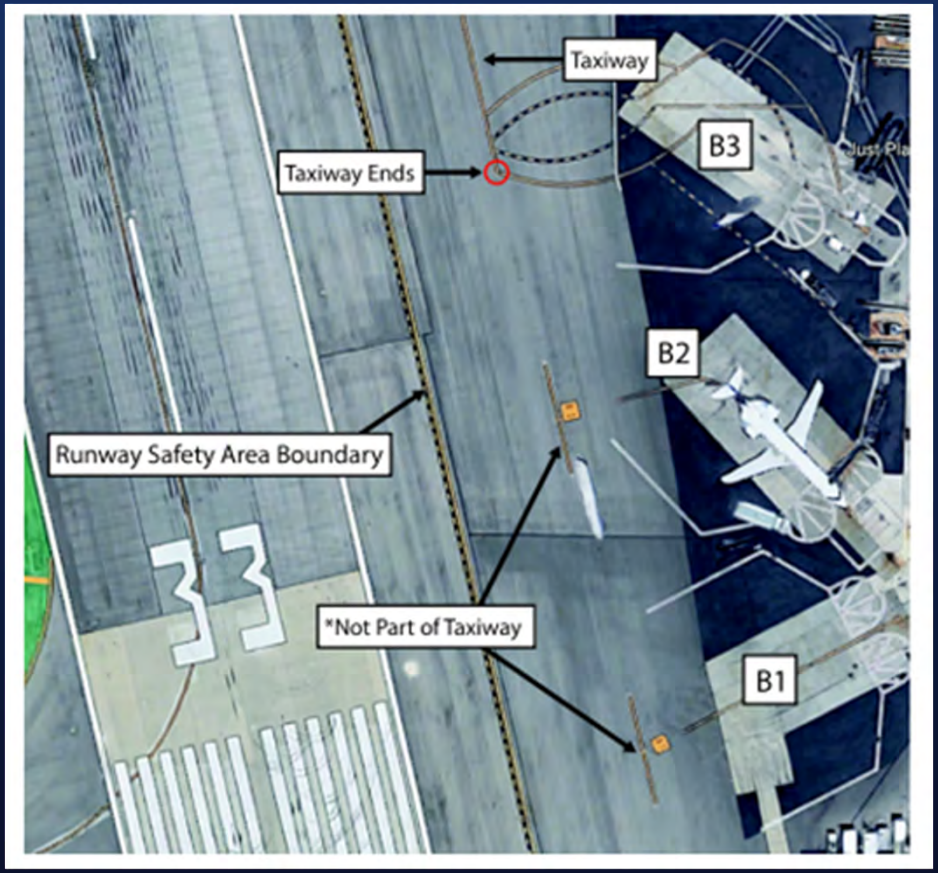
SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT



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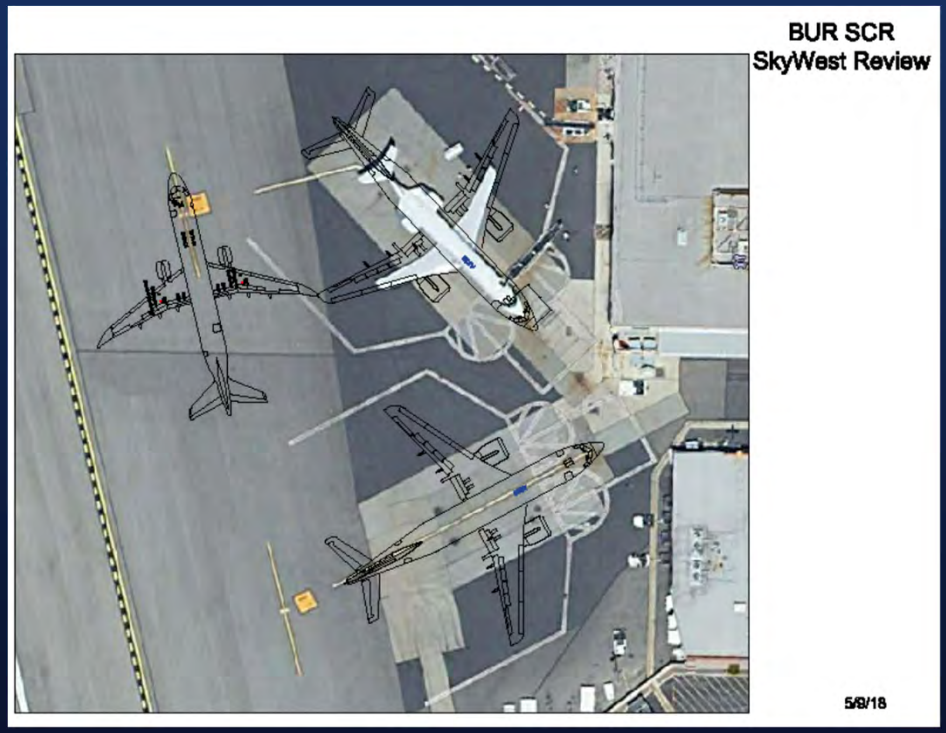
SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT



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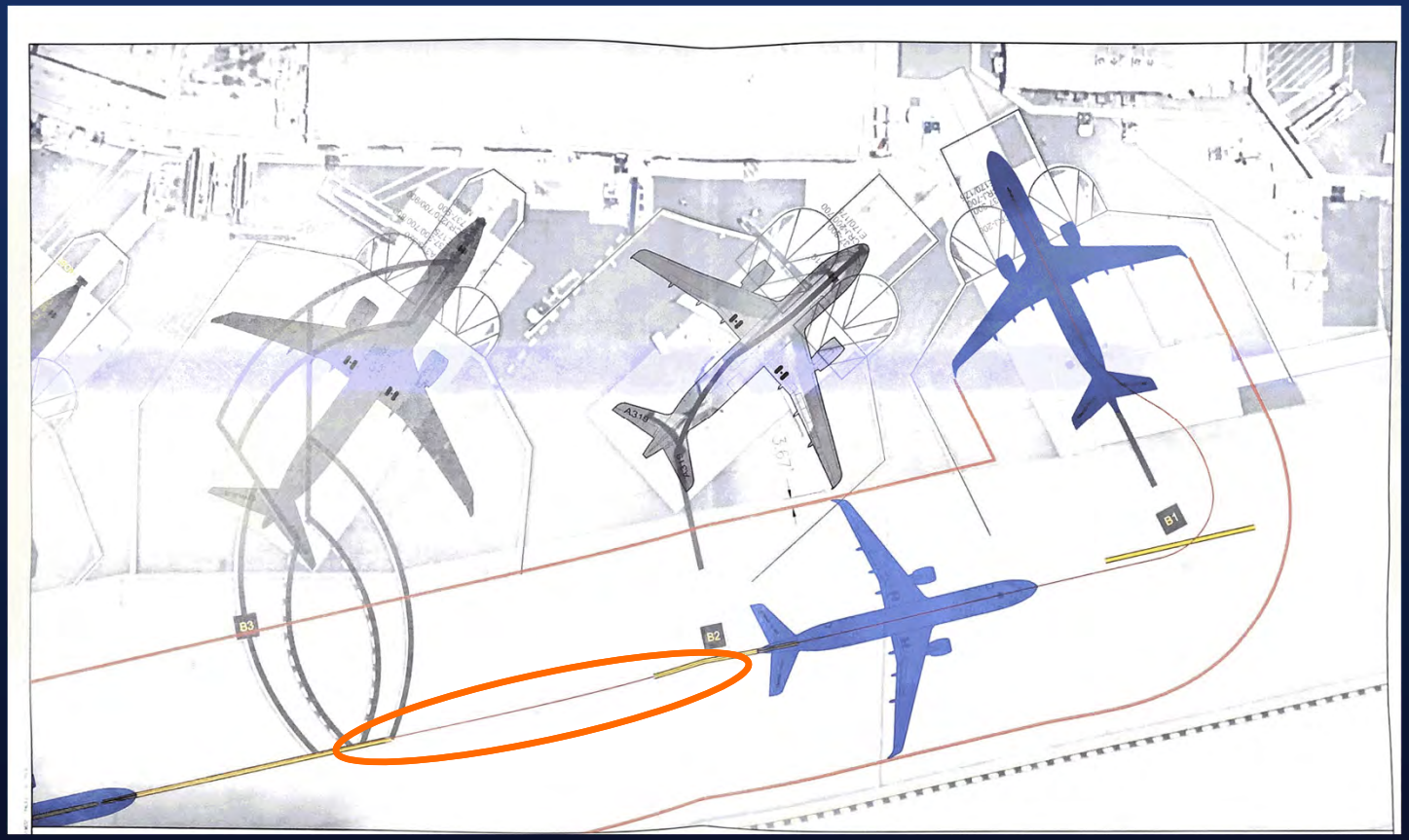
SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT



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SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT

RESULT

Winglet Damage due to collision

ACTIONS

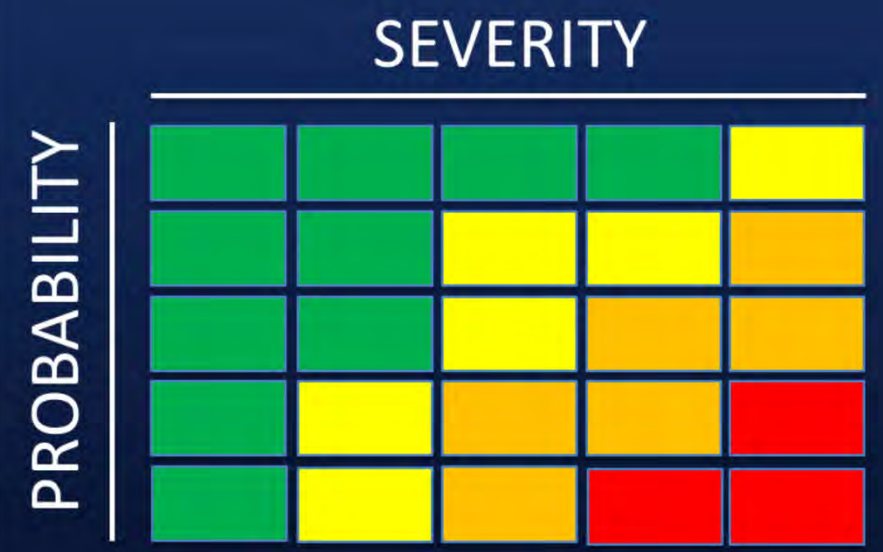
Cross Industry SRM

Actions owned by internal and external stakeholders

DELTA

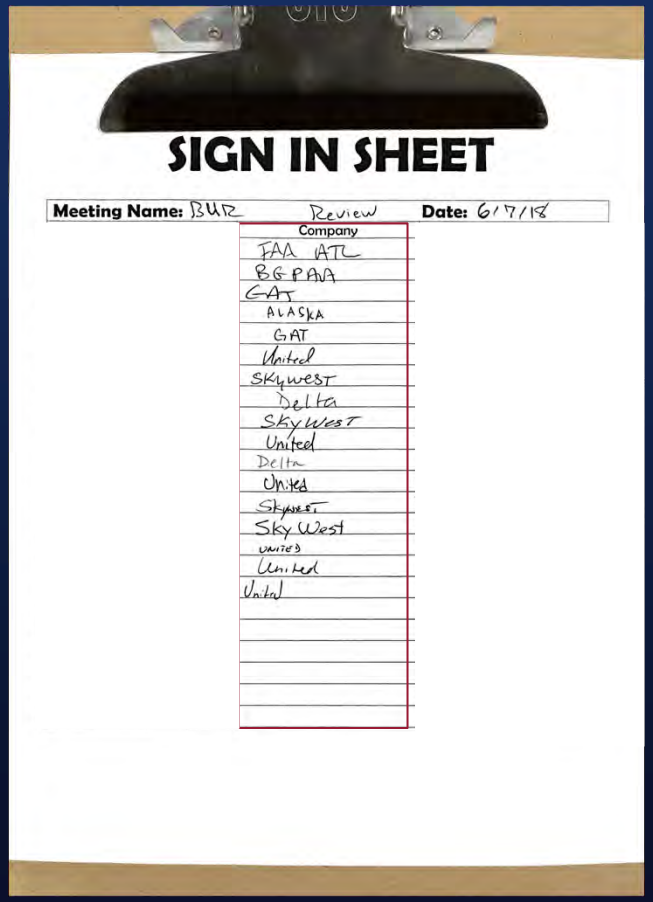
SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT



EXTENT OF AUTHORITY

DATA SHARING



DELTA

SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT

KBUR/BUR SkyWest BURBANK, CA
HOPE
15 JUN 18 10–7C

Airport Notes

B Gates

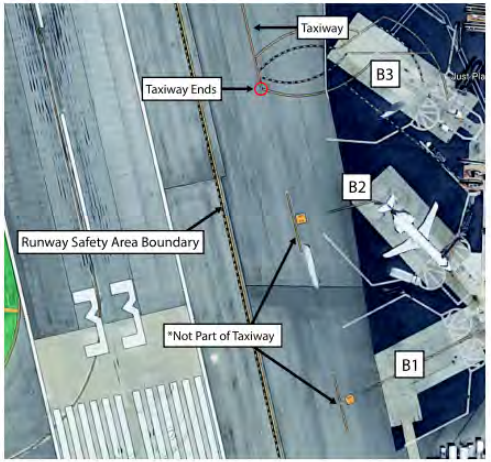
Use caution when taxiing, specifically to/from Gates B1-B3 as the line that ends at Gate B3 may not provide sufficient clearance/guidance for aircraft parked at B3 and B2. In order to reach Gates B1 & B2, aircraft must taxi parallel with, and near the runway safety area boundary.

Per the LOA with BUR Twr, operations on Rwy 15/33 are suspended when larger aircraft (larger than a CRJ200) are taxiing to/from Gates B1–B3.

Anytime an aircraft is parked at Gate B2 or B3 and crews determine they may need to deviate from the taxi line to ensure clearance, contact ATC for permission.

Pushback from all gates requires headset communication with ground crew.

NOTE - The lines located directly behind Gates B1 & B2 are NOT part of the Twy, but are reference lines for the pushback crews. (Reference graphic below.)



NOT FOR TAXI OR NAVIGATION PURPOSES

Comments: pilotinfo107@skywest.com

DELTA

SRM- 2018 – DL | BUR AIRPORT

SAFETY POLICY | SAFETY RISK MANAGEMENT

KBUR/BUR **SkyWest** BURBANK, CA
HOPE

15 JUN 18 10–7C

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DELTA

LOOKING AHEAD

DELTA

SUCCESS FACTORS

Visible & Active Safety Leadership

Collaboration & Connectivity

Data-Driven & Systematic Process

Forward Looking

DELTA

Safety Management Systems

Capitalizing on Resources at Small Airports

CITY OF TYLER

Safety Culture – It Takes a Village

- Start with your people
  - Your best in-place resource
- Bigger is not always better
- Create a paradigm shift

The Internal and Extended Teams

- What is the ideal size population to be ‘manageable’?
- Create the program foundation
- Empower employees
- Leverage airline / corporate / FBO safety programs
- GA community – see something / say something
- SMS is the big fish in a little pond at small airports

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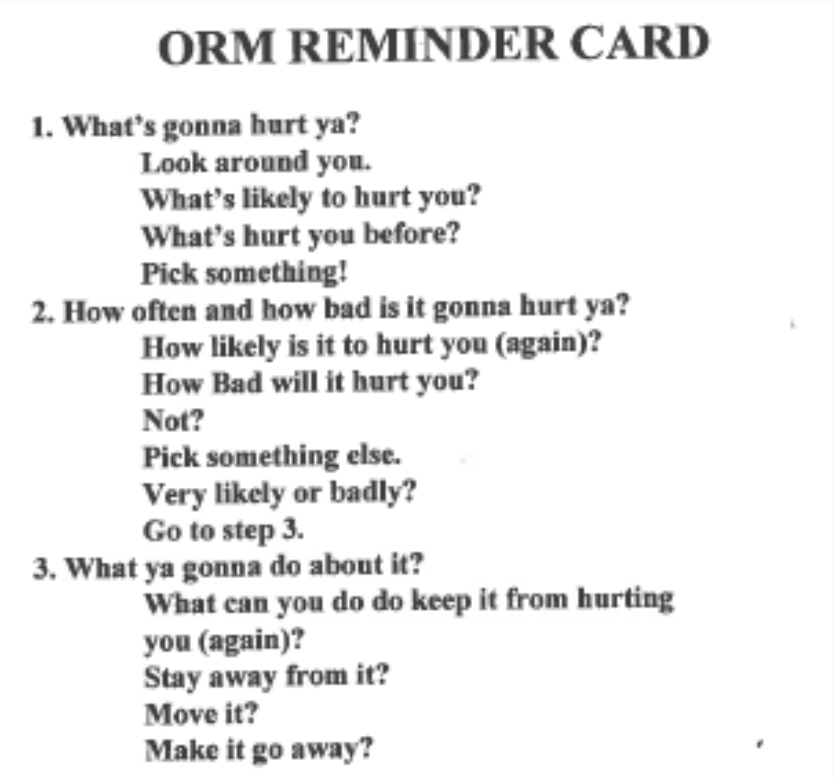
Scalable Safety Risk Management

- An actionable component of SMS
- Manage rather than eliminate
- Becomes the norm / typical way of doing business
- Individual and collaborative mitigation

Scalable Safety Risk Management

- Does not have to be complicated
- Front line mitigates risk
- Scenarios
  - Military unit deployment
  - RON parking
  - Wildlife management
  - Airfield construction - SRMP
- Forms a cadre for SRA panels



ORM REMINDER CARD

1. What's gonna hurt ya?
   - Look around you.
   - What's likely to hurt you?
   - What's hurt you before?
   - Pick something!
2. How often and how bad is it gonna hurt ya?
   - How likely is it to hurt you (again)?
   - How Bad will it hurt you?
   - Not?
   - Pick something else.
   - Very likely or badly?
   - Go to step 3.
3. What ya gonna do about it?
   - What can you do do keep it from hurting you (again)?
   - Stay away from it?
   - Move it?
   - Make it go away?

Drive Accountability

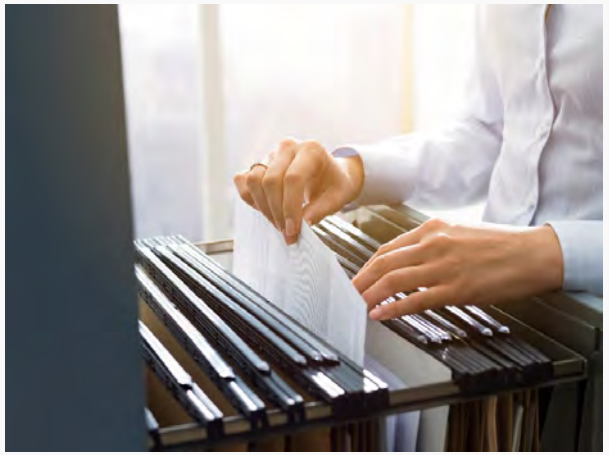
- Component of the paradigm shift
- Doing the right thing…
- It's YOUR airport
- Sweat the small stuff
- Visible source of data
- Safety Assurance
  - Audits, Gemba Walks
- Documentation

From Paradigm to Program

- You are likely partway there
- Leverage existing programs
  - Airfield Inspections
  - Wildlife Inspections
  - Construction CSPP
  - Occupational Safety
- FAA resources
  - Pilot studies, desk references, ACRP/TRB reports
- Peer airports – Working together

Program Components

- Framework / documentation
- Safety Policy
- Methods for identifying hazards and mitigating risk
- Methods for insuring continuous safety improvement
- Organization-wide safety promotion



Safety Culture – It Takes a Village

- People make the difference
- We are all risk managers
- Early buy-in is critical

American Airlines

American Airlines SMS

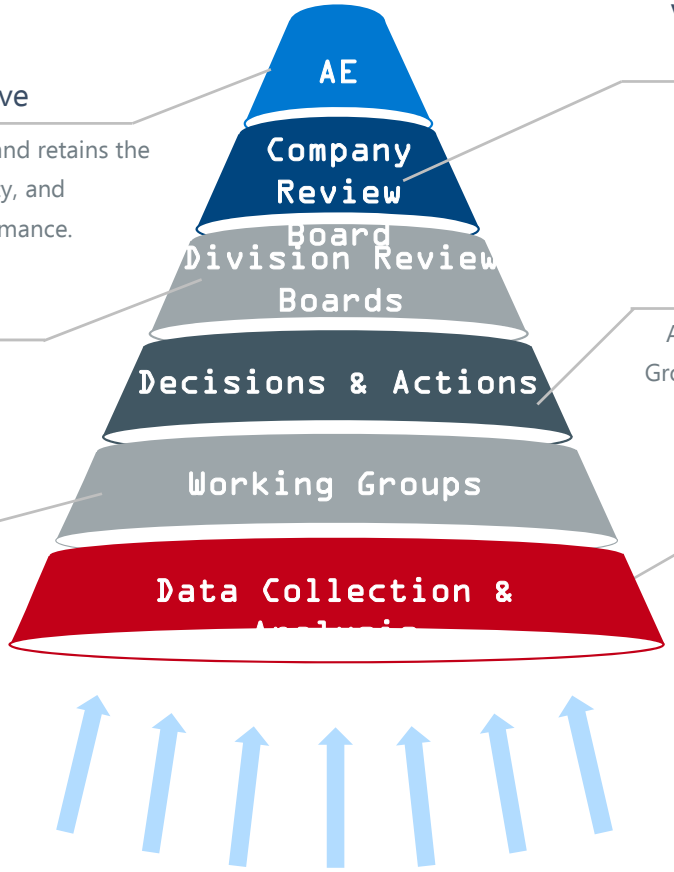
Melissa Leach

Director, Safety Systems and Emergency Response

oneworld

American Airlines SMS Overview

Top-down, organization-wide approach to managing risk and ensuring the effectiveness of risk control.



Accountable Executive

The CEO is the designated AE and retains the ultimate responsibility, authority, and accountability for safety performance.

VP, Safety Systems, Efficiency and Compliance

Designated person responsible for implementation, effectiveness and oversight of the SMS.

Operational Officers

Responsible for SMS processes in their department and accountable for safety performance of their department.

Department Directors

Act on recommendations from Working Groups and provide feedback and insight.

Subject Matter Experts

Analyze data, identify trends, develop initiatives, and make recommendations. Includes a diverse group of airline team members including front line and management.

Multifaceted Data Sources

Data that is automatically and manual collected including but not limited to: aircraft data, safety reporting, event reporting, observations, RMWs, working groups, anecdotal feedback.

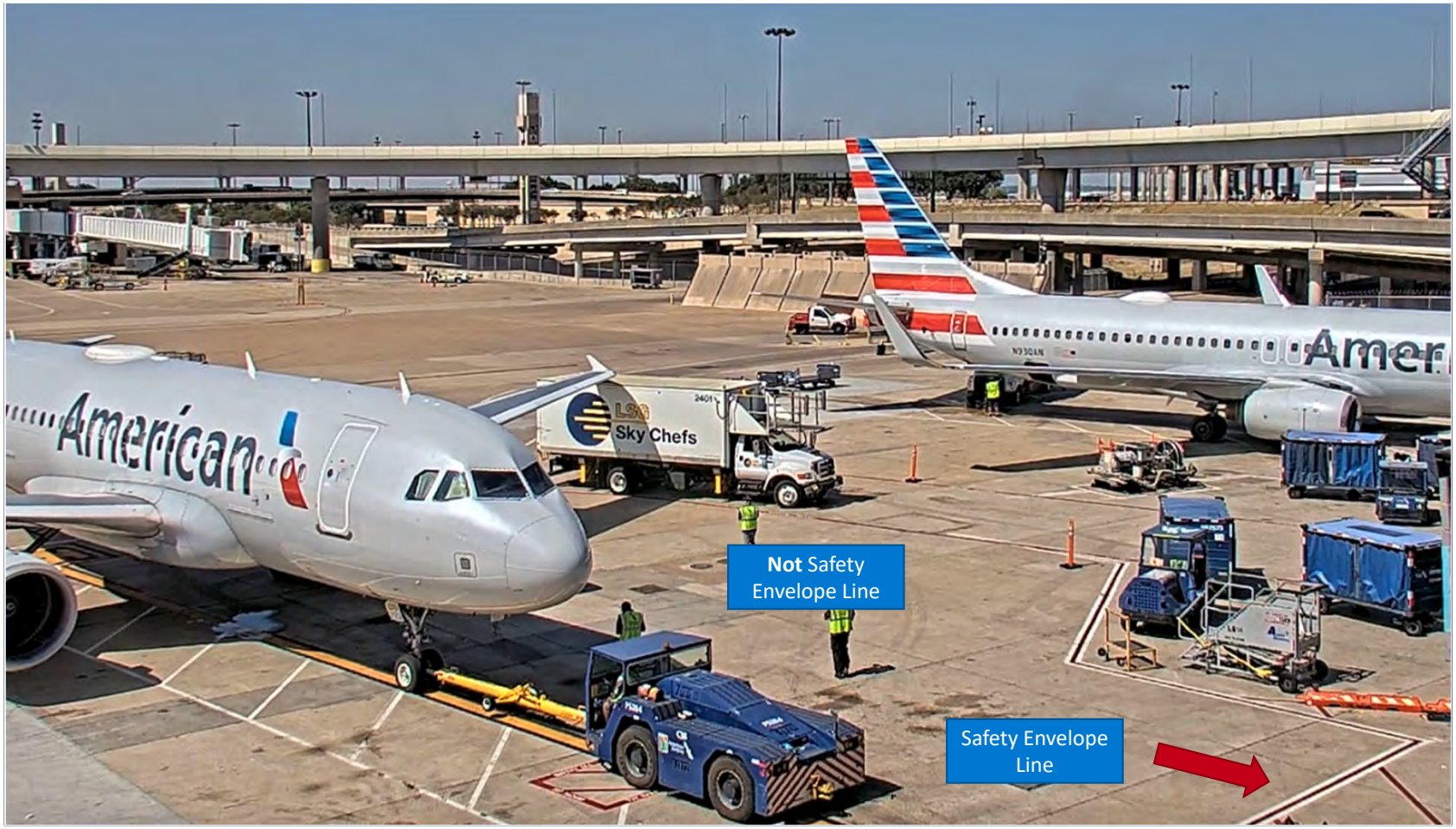
Airline / Airport Collaboration on aircraft damage prevention

01
Damage Reported

02
Investigation Begins

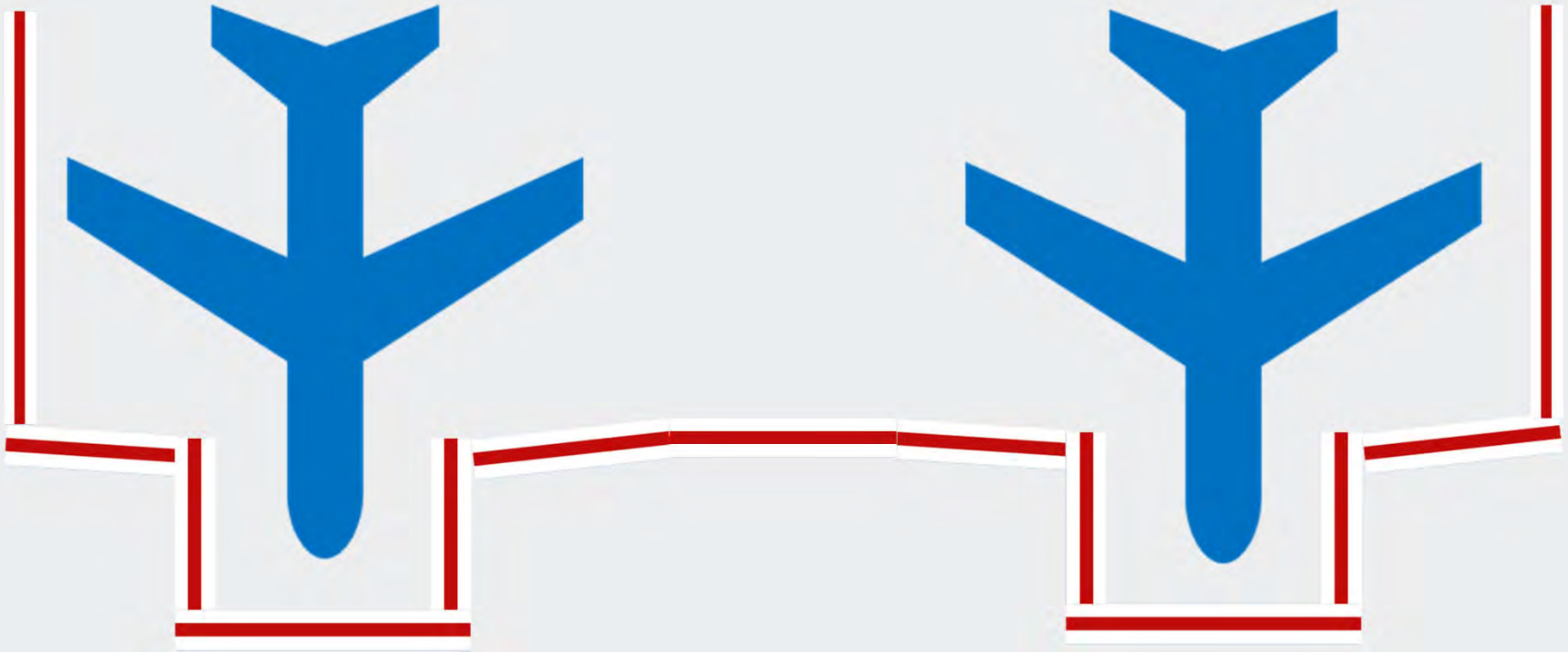
03
Recommendations Developed

04
Airline / Airport Collaboration on implementation


American
Sky Chefs
Not Safety Envelope Line
Safety Envelope Line

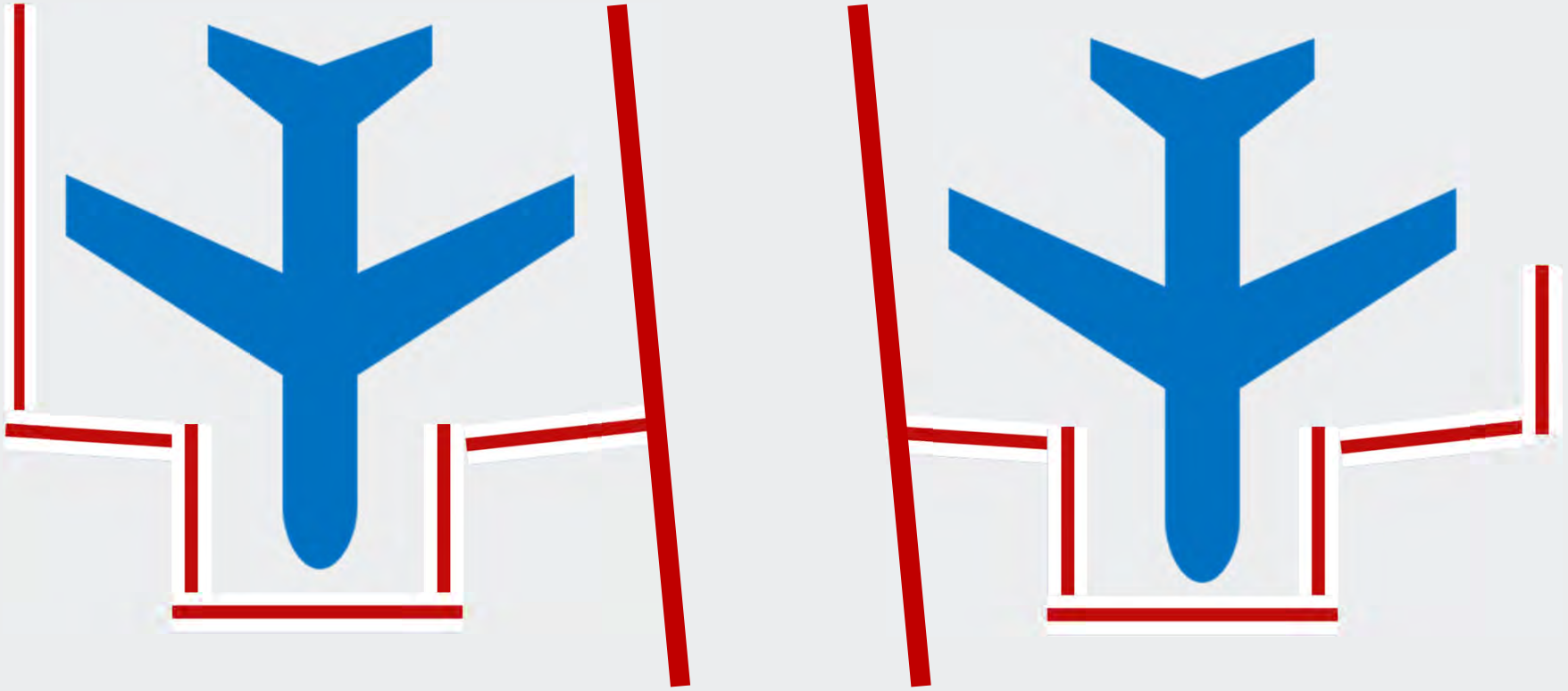
Standard Single Gate Safety Envelope

Standard Dual Gate Safety Envelope



At time of event

Fire Lane
(controlled by DFW fire marshals)



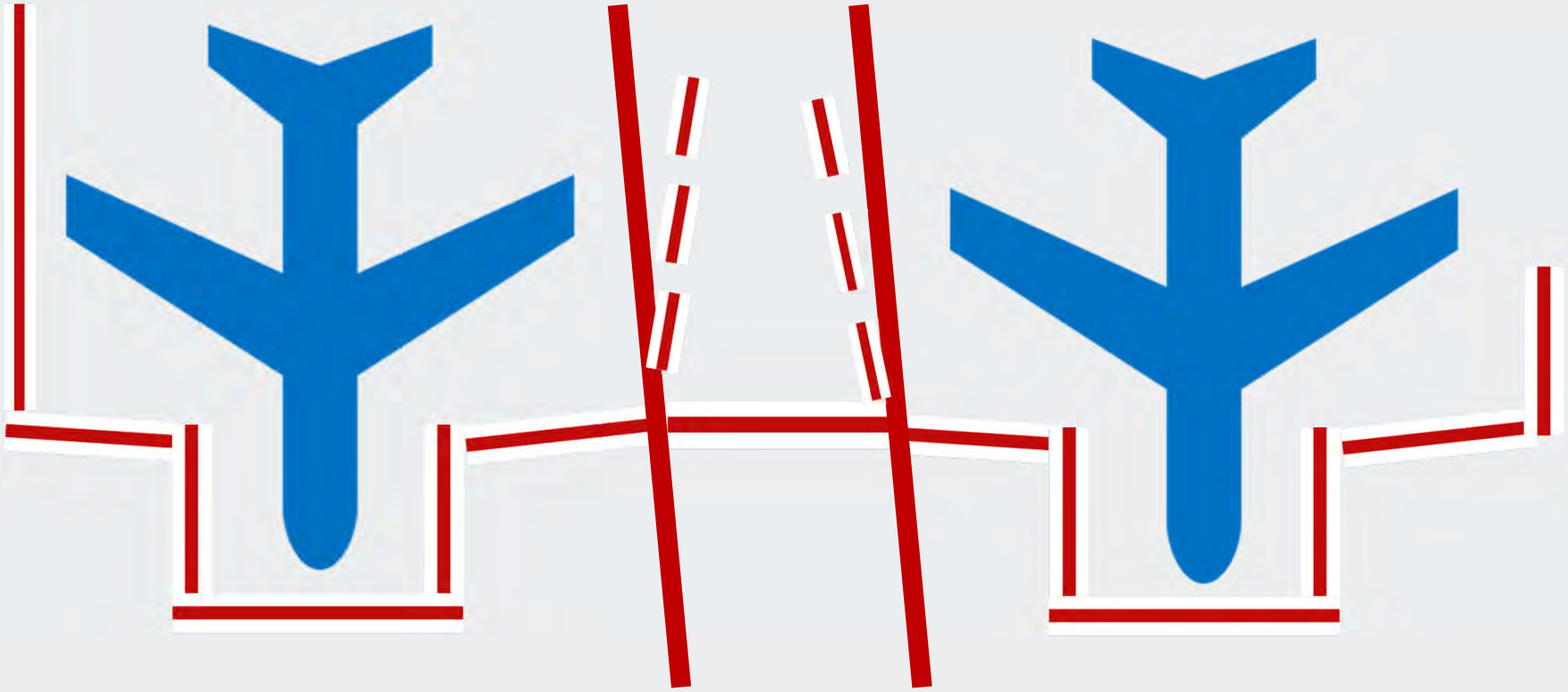
American Airlines

Proposals to Airport / Fire Marshalls

Safety Systems Design & Resilience

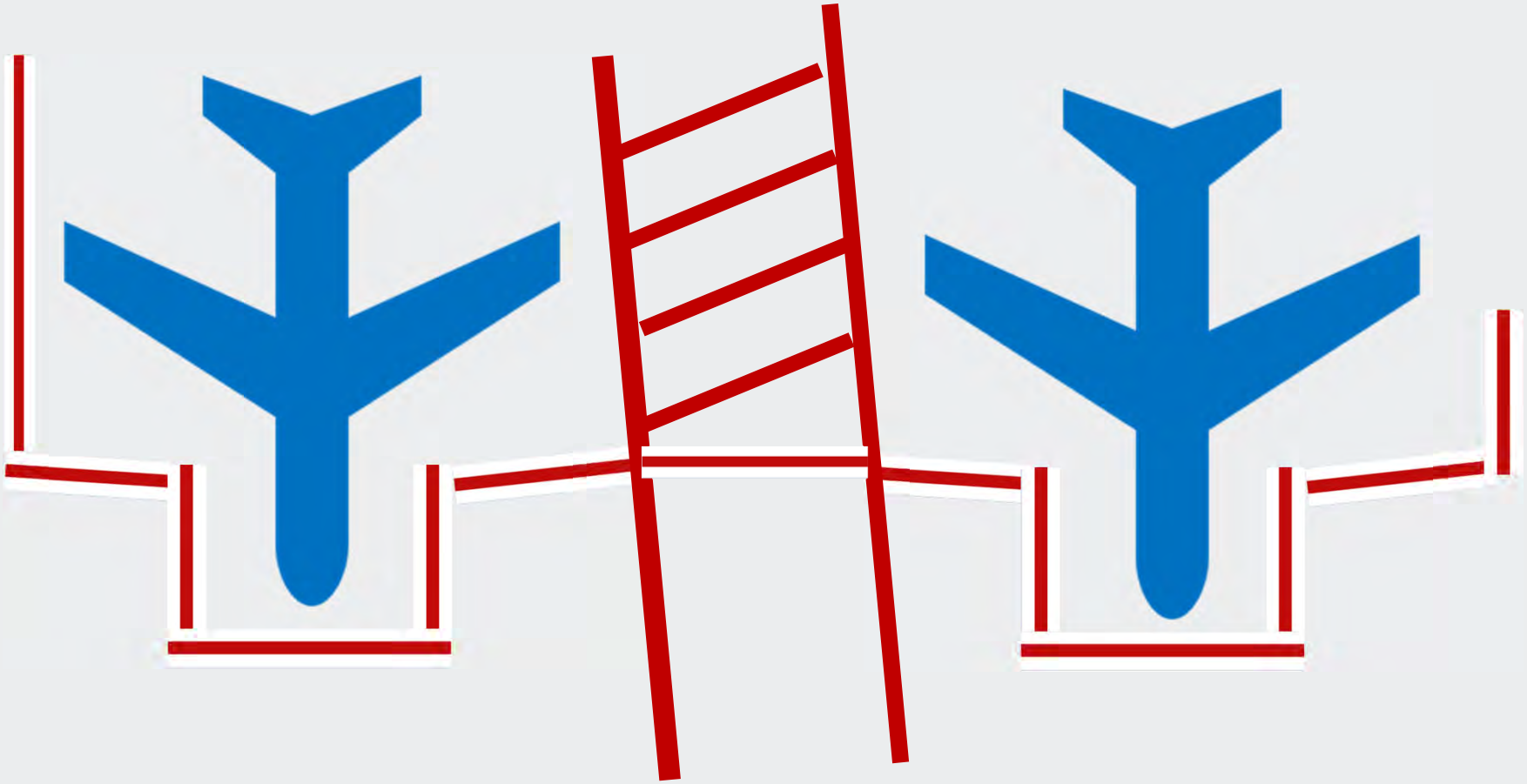
Protecting the human through system design

Proposal 1



*this is not drawn to scale. This is obviously a poorly made PowerPoint, not a CAD drawing

Proposal 2



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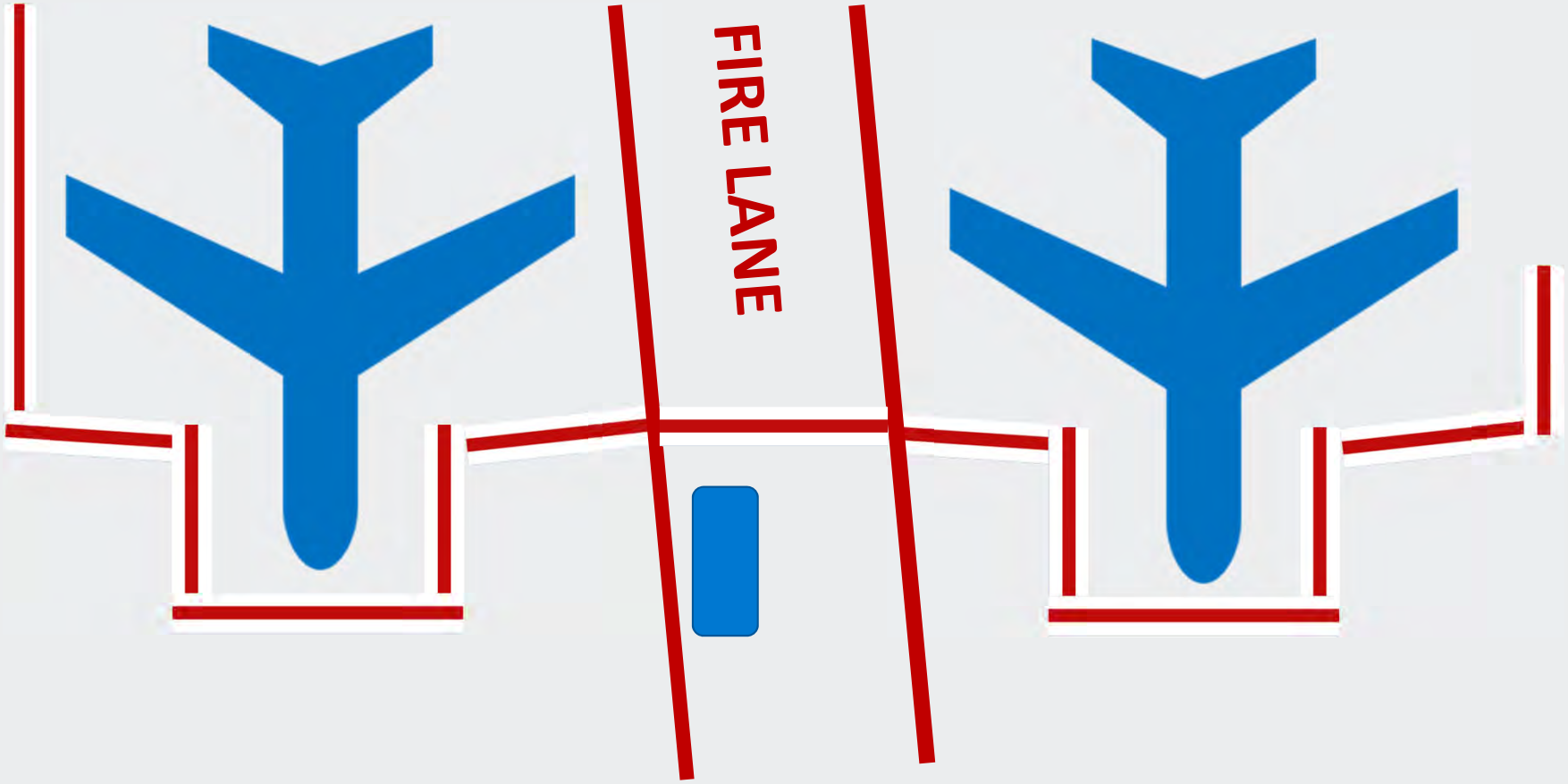
Proposal 3



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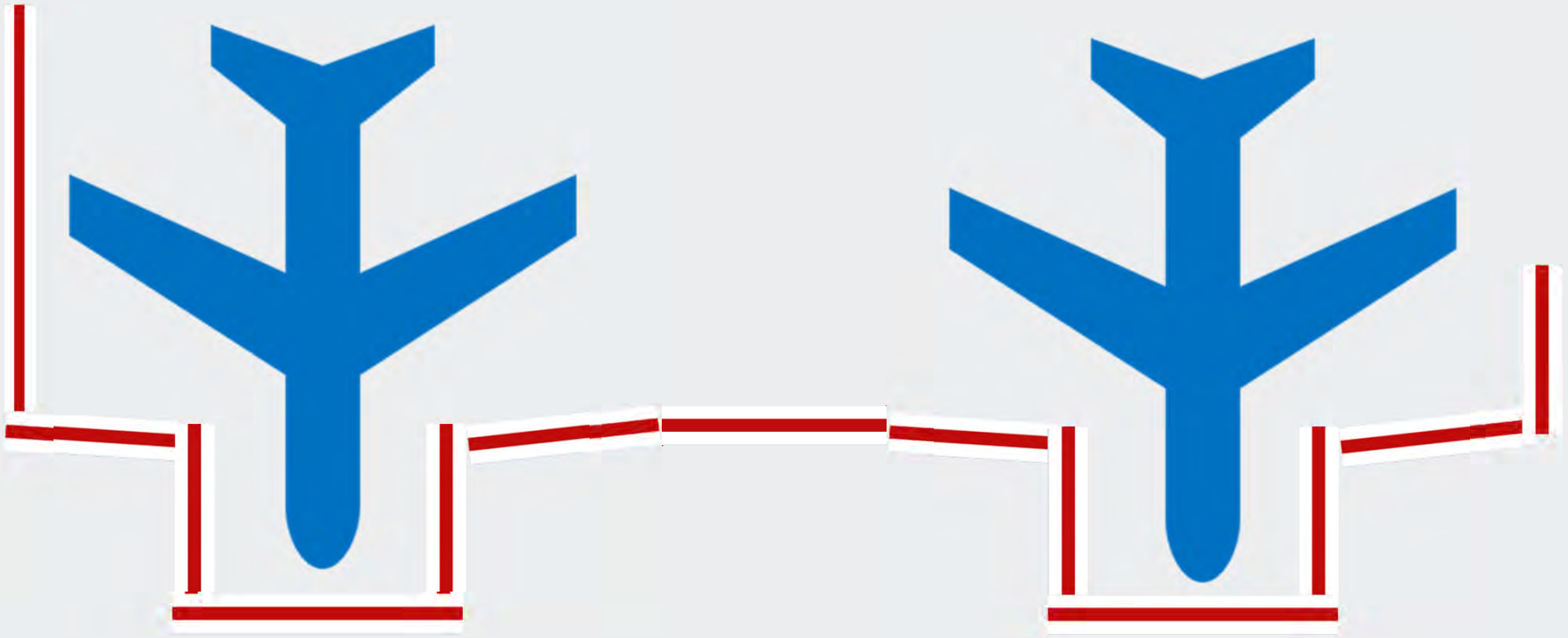
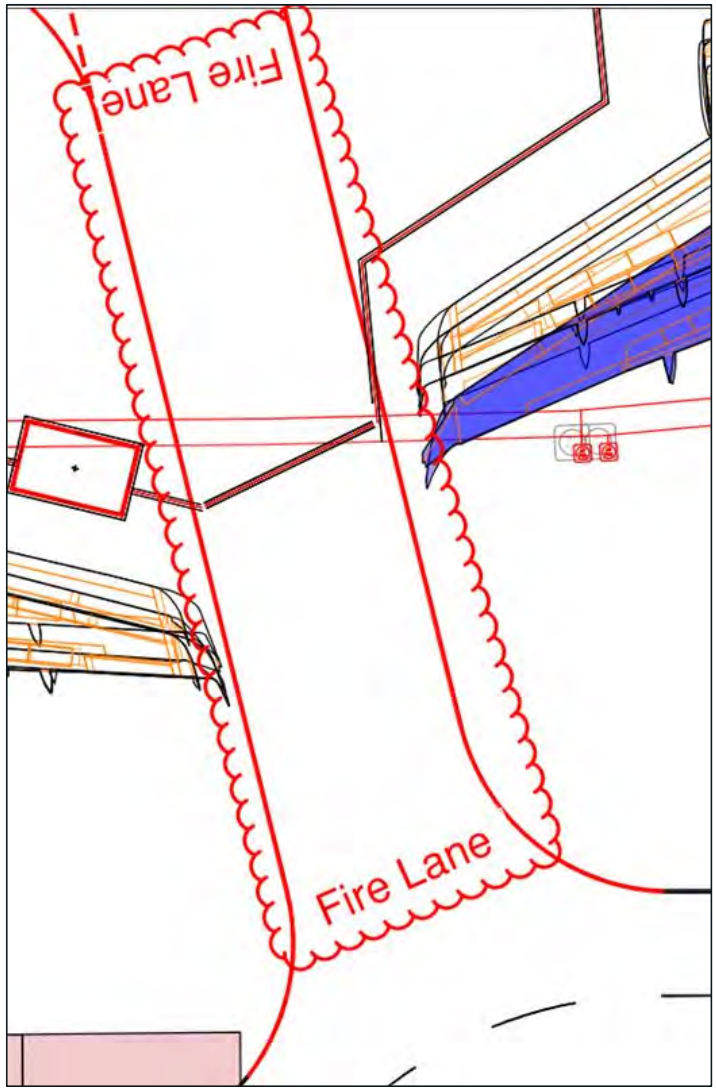
Proposal 4



*this is not drawn to scale. This is obviously a poorly made PowerPoint, not a CAD drawing

Accepted/Approved by American Corporate Real Estate, DFW Airport and DFW Fire Marshalls to update all existing fire lanes and any future fire lanes



SMS for Airports Industry Day

Embry-Riddle Aeronautical University

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

"Live the Safety Culture"

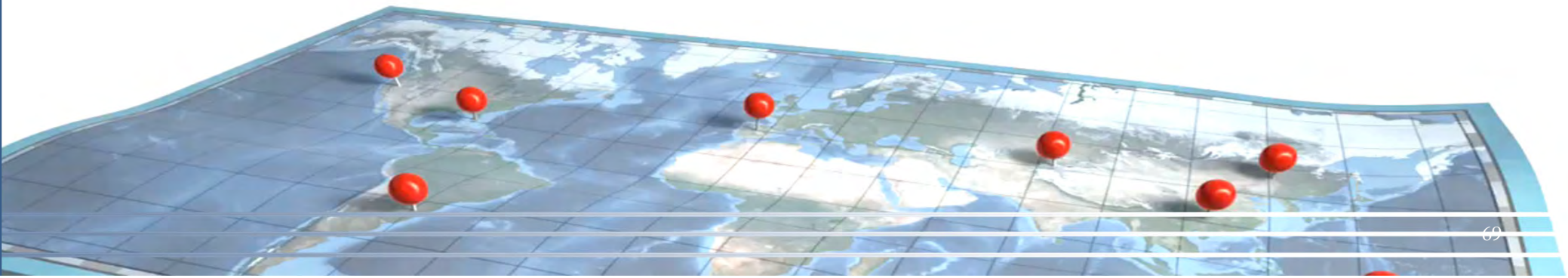
Agenda

Airport/Airline SMS panel

How SMS has change aviation

The most important element of SMS

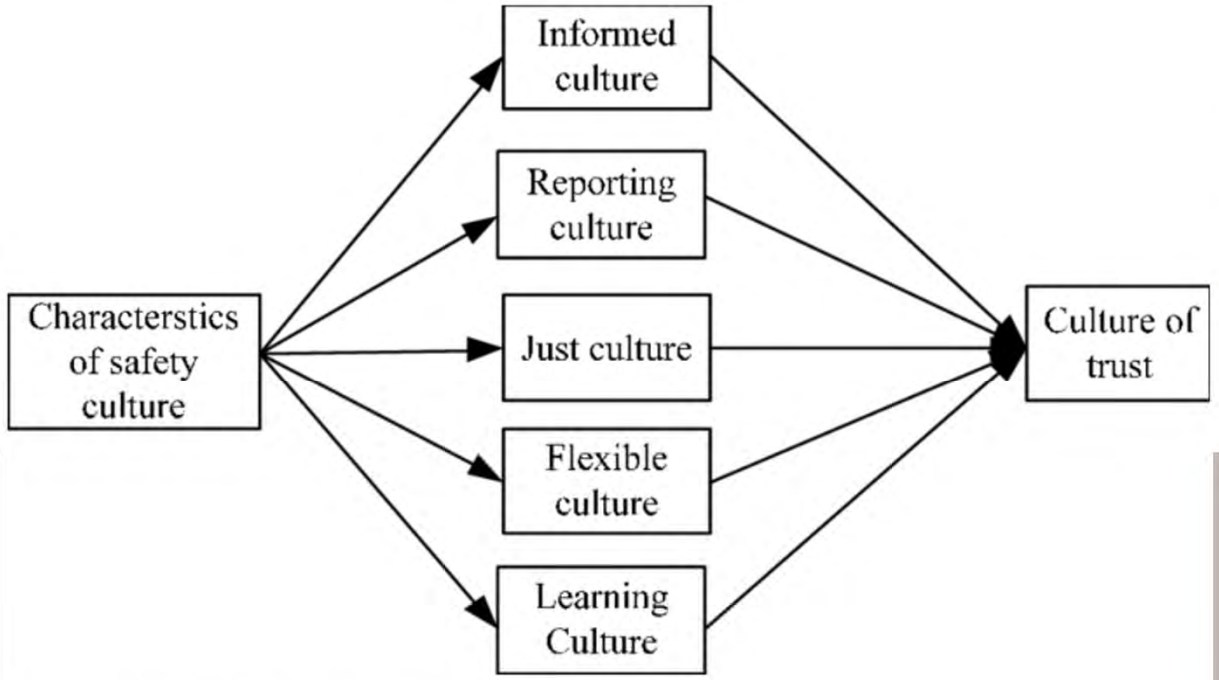
Discuss how SMS enhances Safety Culture



A positive change thanks to SMS

Culture is the key

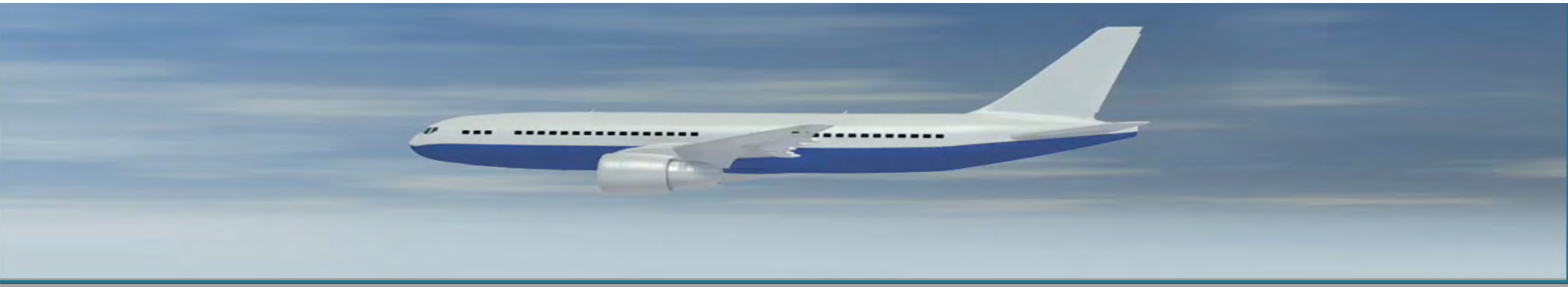
The ERAU SMS was designed around Dr. Reasons 5 components of Safety Culture



Safety culture Model Characteristics (Reason, 1997)

Excerpt from AC 150/5200-37A

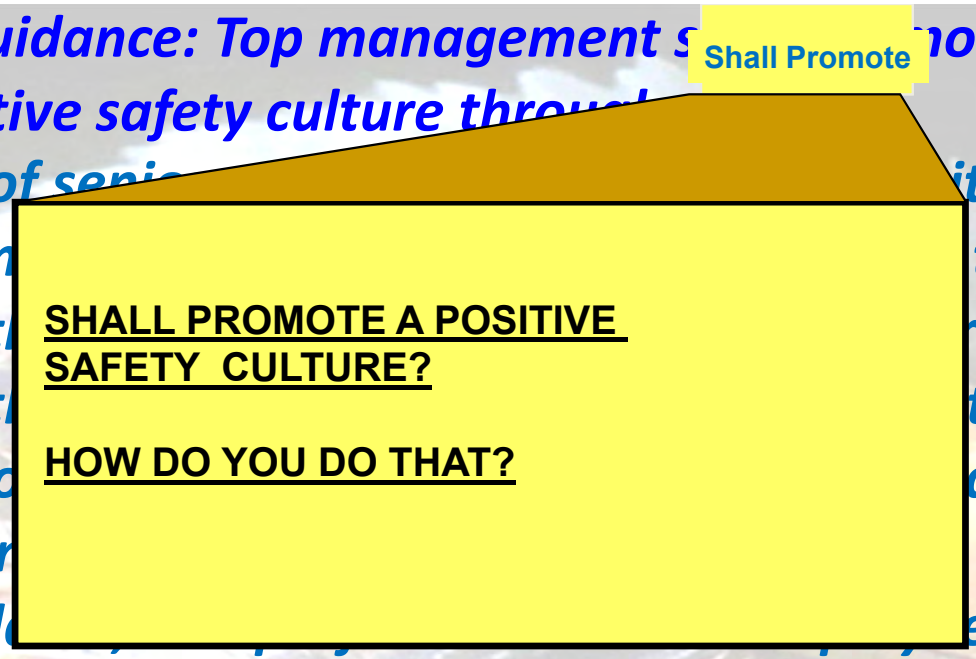
While all SMS components contribute to a strong safety culture, Safety Promotion encourages a positive safety culture and creates an environment that is conducive to the achievement of the service provider's safety objectives.



Communicating safety information is essential to promoting a safety culture

Safety Culture Guidance: Top management s… …note the growth of a positive safety culture throu…

- ***: 1) publication of seni… …itment to safety to all em… …their commitment to th… … commitment to th… …ty responsibilities fo… …ar and regular comm… … objectives, stand… …es of the organization 5) an effective employee safety feedback system that provides confidentiality as is necessary; 6) use of a safety information system that provides an accessible efficient means to retrieve information; and 7) allocation of resources essential to implement and maintain the SMS.***



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Safety Management System

"Live the Safety Culture"

Safety Policy

Safety Risk Management

ERAU Safety Culture

Safety Assurance

Safety Promotion

B501
Dan McCune
Associate Vice
President for Safety
"Live the Safety Culture"

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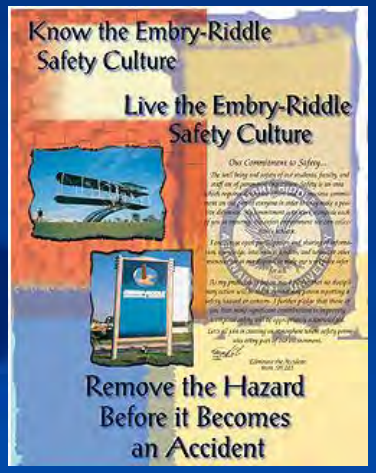
The ERAU Safety Culture evolves to get stronger

The Safety Culture posters show the evoluation

2000 to 2006



2006 to 2017

Daytona Flt 2017 to present

Prescott Flt 2017 to present

Prescott non Flt 2017 to present

Daytona non Flt 2017 to present

"Live the Safety Culture"

The Safety Coin

But that is just a part, here is the glue that proves that our people are our primary concern

- Dr. Butler is very creative in keeping the Safety Culture strong by instituting safety culture enhancement days to keep faculty and staff mindful of the university's value of safety. For example, on a hot August day in Florida, Dr. Johnson will hop in his golf cart and take drinks to all of the employees working outside. He will go to the maintenance hangars, pass out water and cold drinks, and even pat employees on the back in appreciation for their efforts all the while reminding them to be safe. The ERAU safety program is strong because employees know that senior leadership believes in them and cares about their wellbeing.

Safety Culture is mentioned 20 times in the Advisory Circular

SMS is the answer

Questions?

The Embry-Riddle Safety Culture
– our foundation for Accident Prevention
Our Commitment to Safety...
SAFETY CULTURE
"Live the Embry-Riddle Safety Culture"

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY
#1
First in Safety
Daytona Beach, FL ★ Prescott, AZ ★ Extended Campus

Know the Embry-Riddle Safety Culture
Live the Embry-Riddle Safety Culture
Our Commitment to Safety...
Remove the Hazard Before it Becomes an Accident

Questions