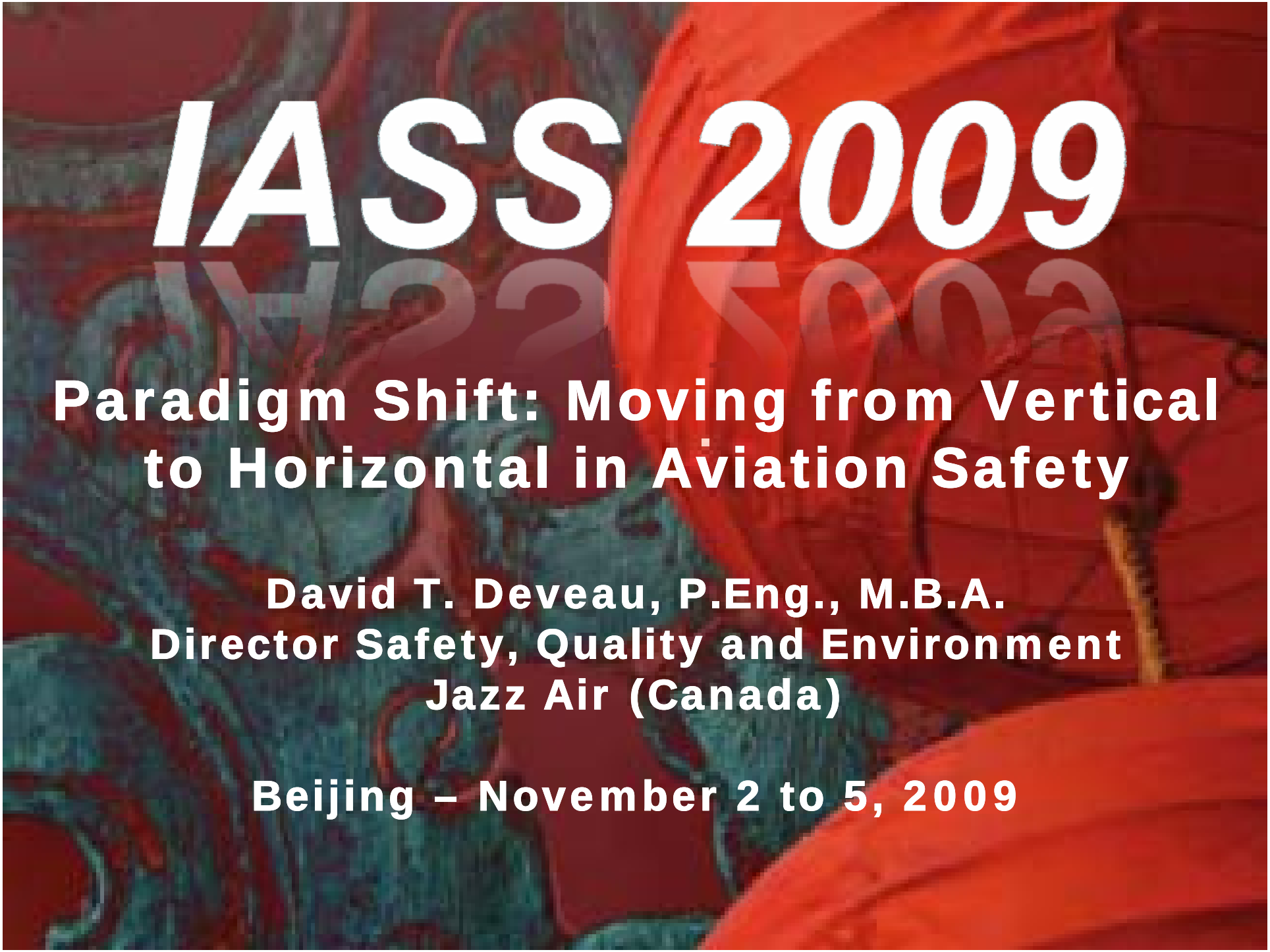

Paradigm Shift: Moving from Vertical to Horizontal in Aviation Safety

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PRESENTATION OBJECTIVES

- Consider how aviation safety programs have evolved within vertical silos over time
- Illustrate the justification and benefits of managing safety horizontally across an organization
- Offer strategies to overcome predictable challenges to making the horizontal shift
- Explore what horizontal safety management can look like through use of a case study

Aviation safety has been under continuous change and has seen vast improvement since its earliest days

…but how has this evolution occurred?

SAMPLE DEVELOPMENTS IN SAFETY PROGRAMS

- ✈ Crew Resource Management
- ✈ Threat and Error Management
- ✈ PEAT
- ✈ ASAP
- ✈ Line Oriented Safety Audits

Flight Safety

- ✈ Human Factors in Maintenance
- ✈ Maintenance Resource Management
- ✈ Maintenance Error Decision Aid

MTC Safety

- ✈ Join OSH Committees
- ✈ Fatigue Management Systems

Others

VERTICAL EVOLUTION OF SAFETY

NEW ON THE SCENE: SMS

Safety Management Systems (SMS) require:

- A relative understanding of safety hazards and risks across all operations and functions
- Safety to be integrated into all operations
- Safety to be an inherent part of financial and business decisions
- Proactive identification of organizational factors and systemic trends that are shared across operations
- Enhanced two-way safety communication at all levels of the organization

With operationally-based safety programs, how can organizations try and address the need to integrate safety programs to achieve the objectives of SMS?

VERTICAL EVOLUTION OF SAFETY

Flight Safety

Maintenance Safety

Other Safety Programs

Shared High Level Policies

Joint Safety Committees

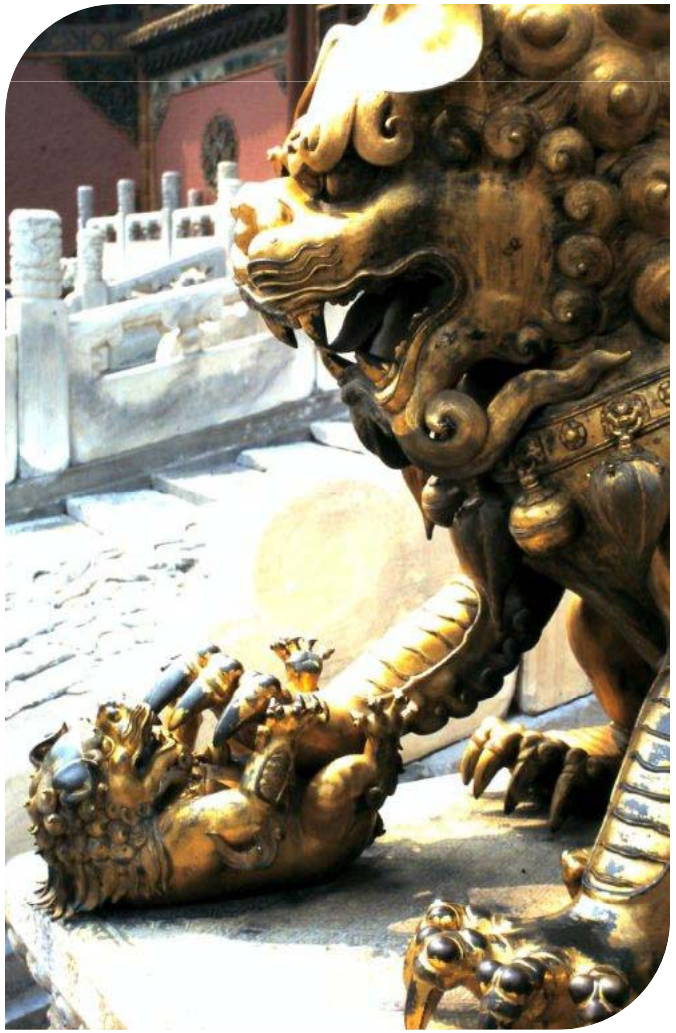
VERTICAL SAFETY PROGRAM CHALLENGES

- Safety programs optimize at different rates
- Complexity increases, resource needs grow
- Programs lack diversity (perspective, etc.)
- Inconsistency and customization grows
- Programs difficult to compare and measure
- Program coordination increasingly difficult

As SMS complexity grows, are joint safety committees and shared safety policies enough to address the challenges that vertically-oriented safety programs create?

THE THESIS

To maximize safety, it must be integrated throughout an organization as a system of interlocking, compatible processes *designed* to work together.



However, true integration of safety is most likely only if common functions are moved out of vertical silos and deployed as a shared, horizontal activities.

WHAT MAKES A FUNCTION HORIZONTAL?

- **Horizontal functions**
  - **Finance**
  - **Human Resources**
  - **Information Technology/Information Management**
  - **Safety**
- **Vertical Functions**
  - **Flight Operations**
  - **Maintenance**
  - **Sales and Marketing**

THE HORIZONTAL DIFFERENCE

- Imagine if Finance was managed vertically…
  - Accounts payable, accounts receivable, and budgeting all report to different departments
  - Every function in the company uses a different format for tracking budgets and expenditures
  - Every function has different financial key indicators
- How would the president determine the overall financial health of the company
- How would financial strategies be developed

Our Finance scenario is silly, of course. Who would ever do something like that? It would never work!

…But, this is exactly how safety is managed when safety programs remain vertically embedded within operational silos.

MOVING TO THE HORIZONTAL

- **Create company-wide capabilities for the shared elements of all safety programs:**

  - **Safety policies (including non-punitive reporting)**
  - **Reactive and proactive safety reporting processes**
  - **Safety investigation function**
  - **Safety communication vehicles**
  - **Quality assurance processes (including auditing)**
  - **Risk management processes**
  - **Corrective and preventative action management**
  - **Safety performance goals and measures**

MOVING TO THE HORIZONTAL

- Create a central safety organization that has the independent mandate and authority to deliver these capabilities across the organization (with head reporting to CEO)
- Implement cross-functional processes and forums to keep business units deeply involved in these safety activities
- Ensure that ownership of safety performance and outcomes remains with applicable business units…not the safety department

HORIZONTAL SAFETY MODEL

BENEFITS: HORIZONTAL SAFETY MANAGEMENT

- **Standardization of policies, processes, procedures, metrics and systems**

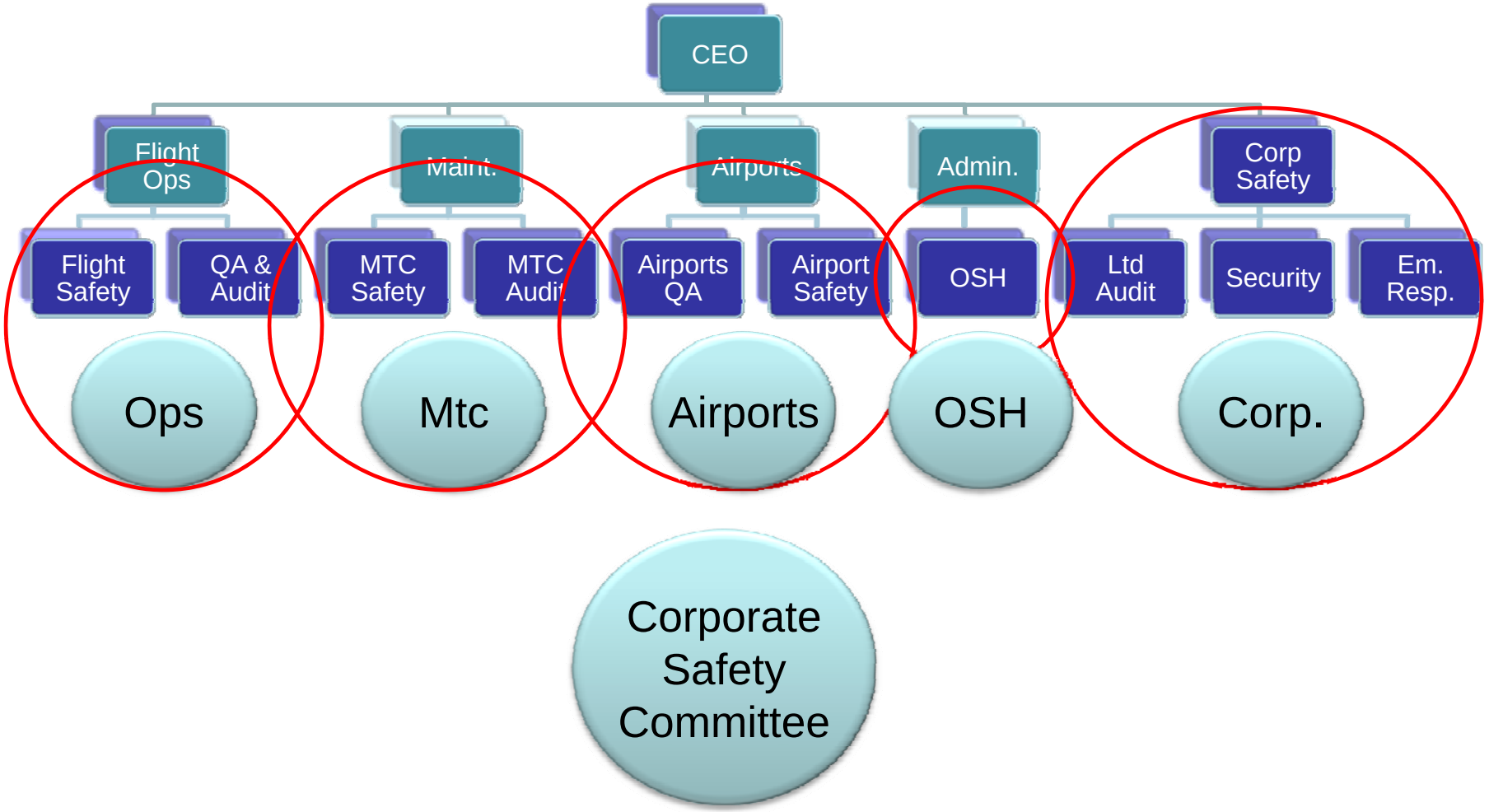
- **Reduced complexity**
- **Easier and cheaper to maintain**
- **Reduced training for safety staff and employees**
- **More flexible use of safety staff**
- **Leverage best practices across all operations**
- **More safety data, better root cause trending**
- **Greater transparency (and accountability)**
- **Easier to promote consistent safety culture**

CHALLENGES

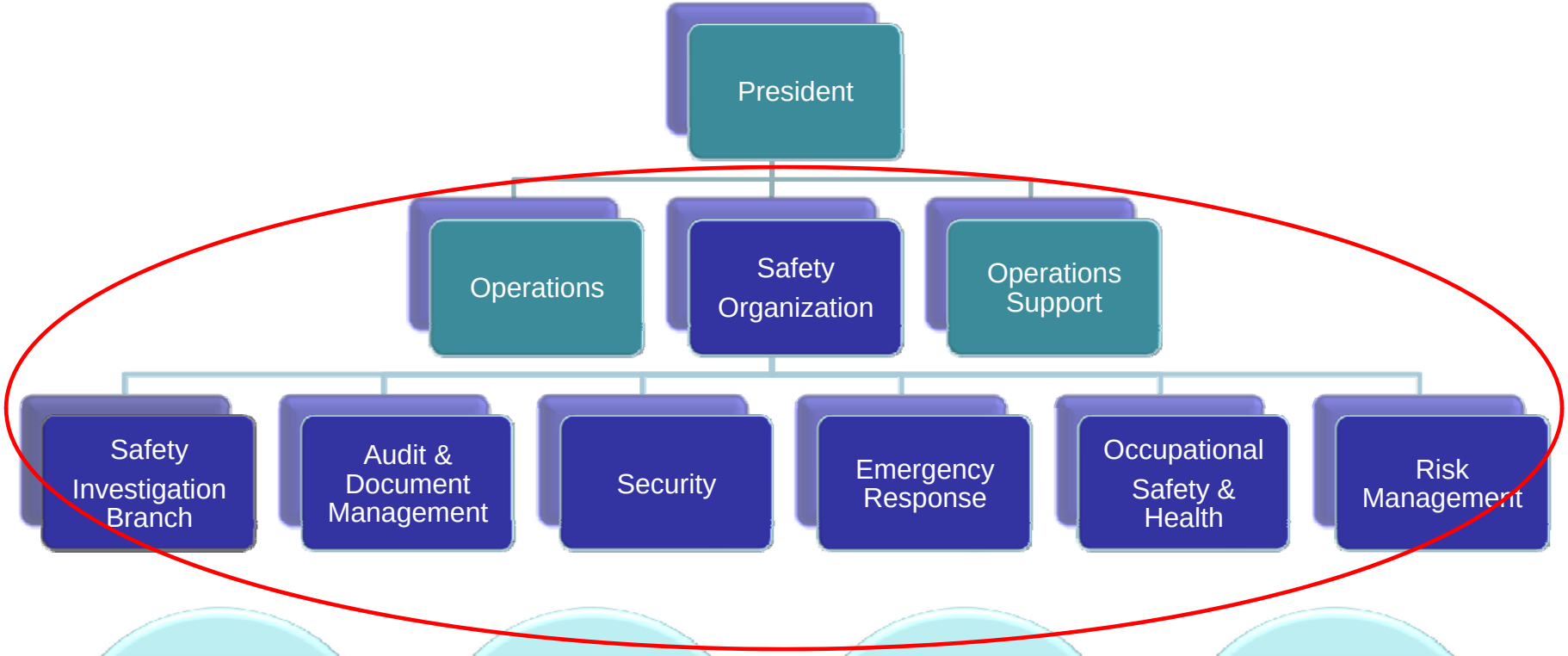
- **Centralizing without loosing specialization**
  - **Use subject experts / allow for operation differences**
- **Operational turf and fear of loosing control**
  - **Allow processes for Ops direction and influence**
- **Executive Support**
  - **Demonstrate staff, cost and process efficiencies**
- **Loss of Safety Ownership**
  - **Clearly define roles and responsibilities**

CASE STUDY: Jazz Air LP

VERTICAL JAZZ SAFETY (Before Reorganization)



JAZZ GOES HORIZONTAL



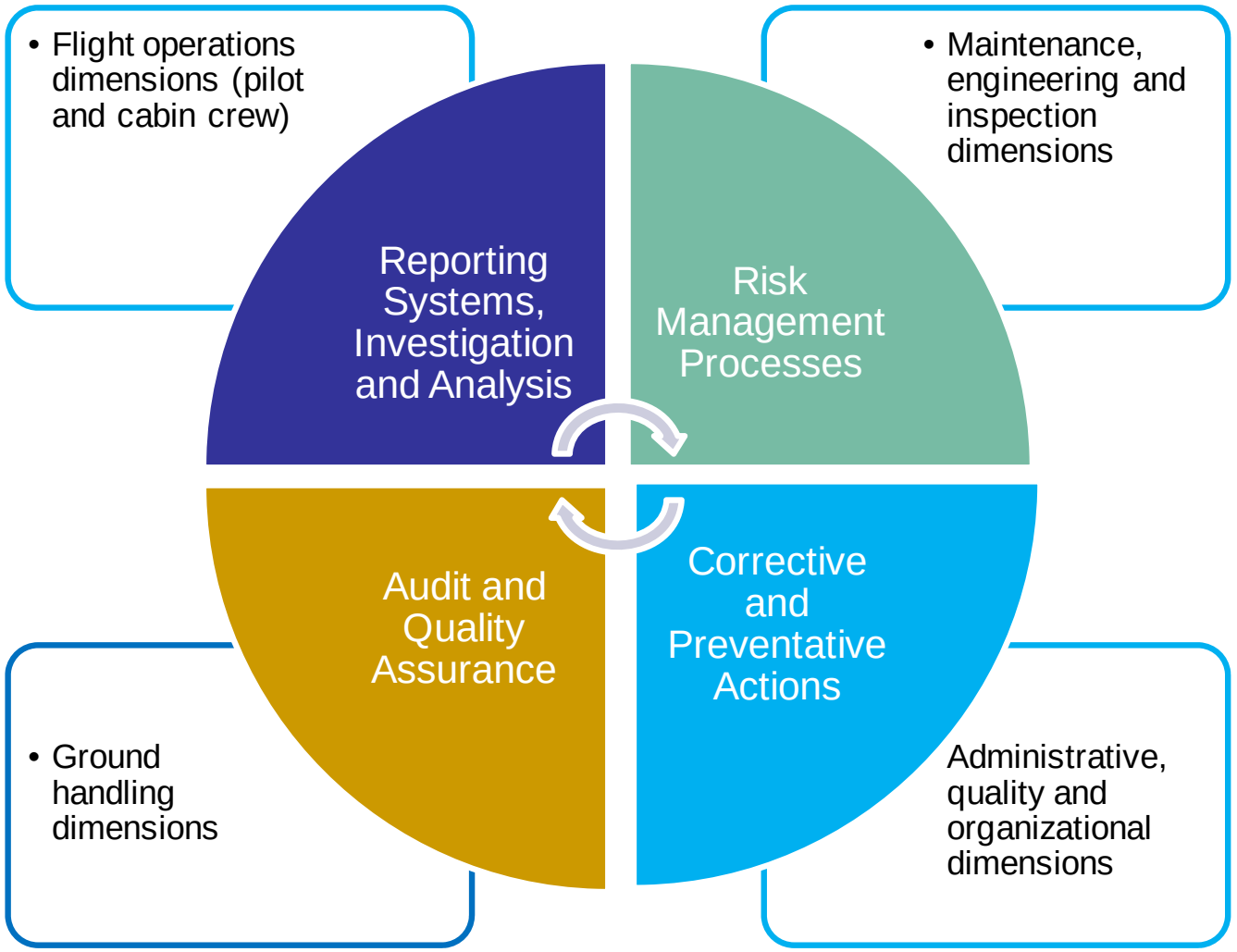
Operational Safety Review

Corporate Safety Committee

Safety Stakeholders (Union)

Corporate Quality Council

JAZZ MODEL FOR SAFETY INTEGRATION



BENEFITS BEING REALIZED AT JAZZ

- Reduced safety reporting systems from 5 to 1
- "Professionalized" investigation standards
- Consolidated safety data, improved measures (for planning and setting targets/objectives)
- Simplified training, improved communication
- Facilitated trust and growth of safety culture
- Leveraged expertise and best practices

CONCLUSIONS

- Safety programs share common objectives
- These safety functions and services can be stronger and more efficient if standardized
- Standardized safety services are best delivered from a centralized organization with strong links to operational groups
- Without a horizontal approach to managing safety, the challenges of a vertical model can prevent continued progress under SMS

謝謝您

THANK YOU

Jazz Air and Your Presenter

Jazz Air LP

- Based in Halifax, Nova Scotia, Canada
- 137 aircraft (Bombardier CRJ and Dash-8)
- 5,000 employees
- 820+ flights per day
- 7th largest regional airline worldwide

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