

# Successes and Challenges of SMS Implementation at Miami Air International



# Background

- Miami Air:
  - US Part 121 Air Carrier (Charter)
  - 7 Aircraft
    - Two (2) 737-400
    - Five (5) 737-800
  - 400 Employees
  - SMS Level 4 carrier according to FAA SMS Pilot Program



# Background

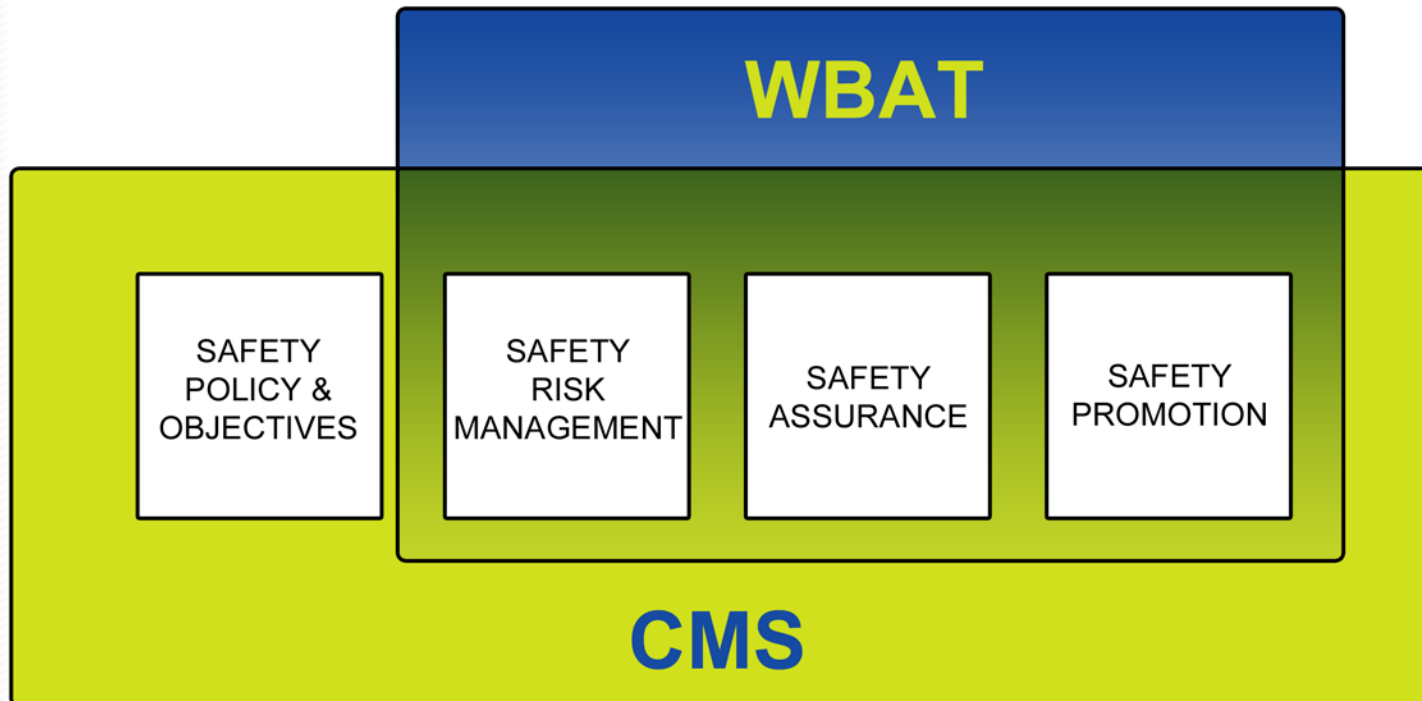
- In 2008, then President and CEO of Miami Air, Ross Fischer made the conscious decision that Miami Air would implement SMS.
- In early 2012, new Miami Air President Jim Proia decided that he would continue supporting SMS, as his predecessor did.
- **Bottom line:**  
It takes firm support from the top to implement and continuously maintain an SMS

# SMS Challenges

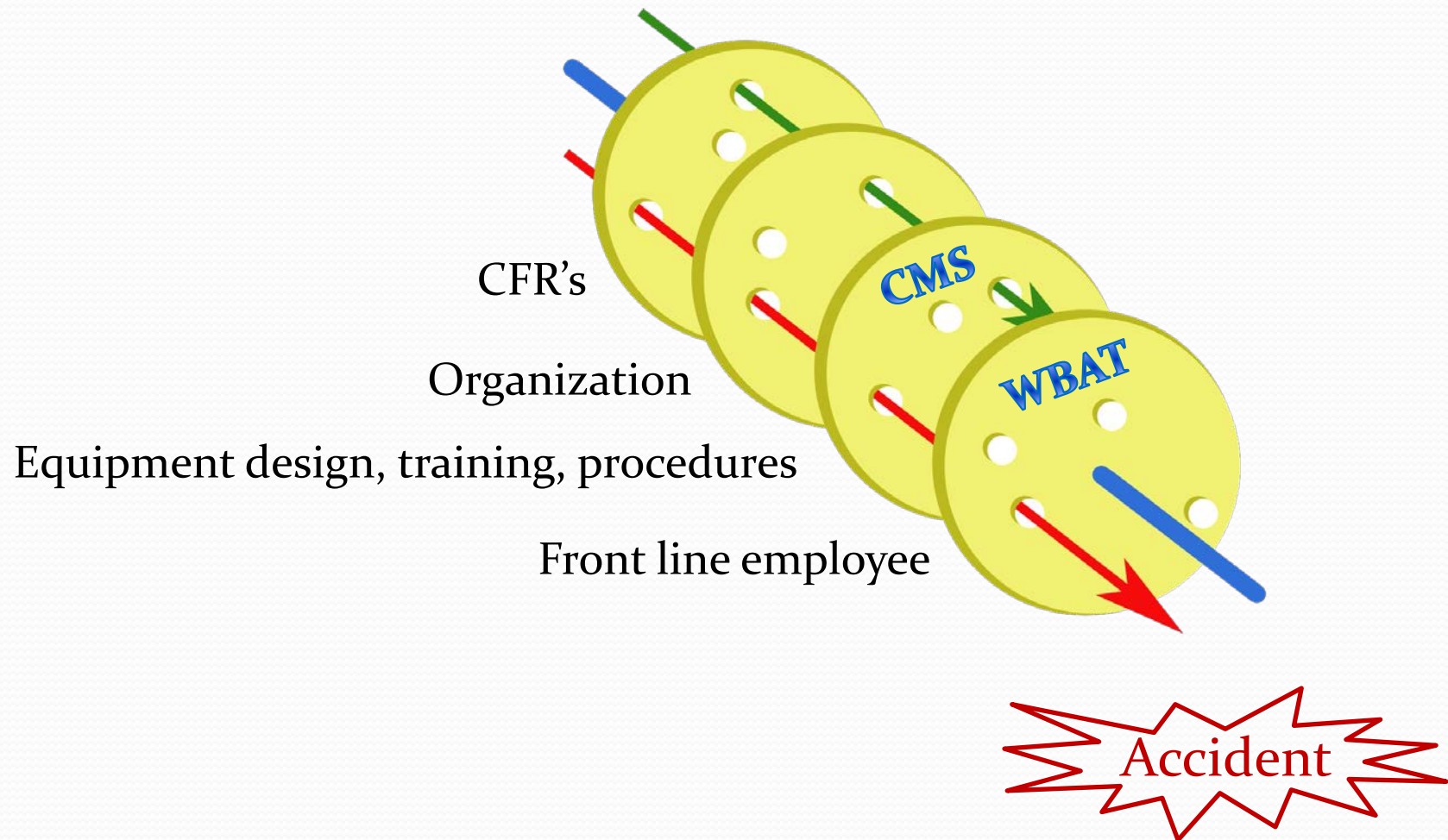
- “We’re too busy, don’t have the time”
- “We don’t have money, how much will this cost?”
- Fear of Punishment
- Tribal Knowledge
- Silo Mentality
- Fear of Change

# Building Miami Air's SMS

**SMS INTERFACE BETWEEN  
WBAT AND CONTENT MANAGEMENT SYSTEM**



# Swiss Cheese Model



# Successes

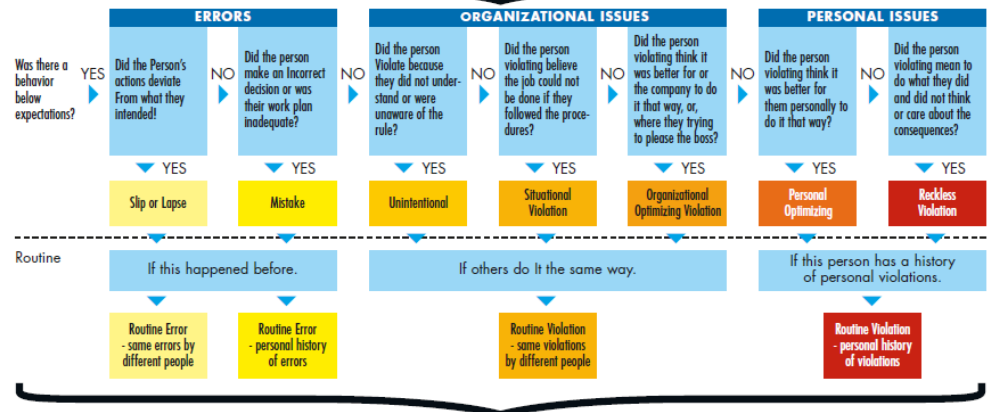
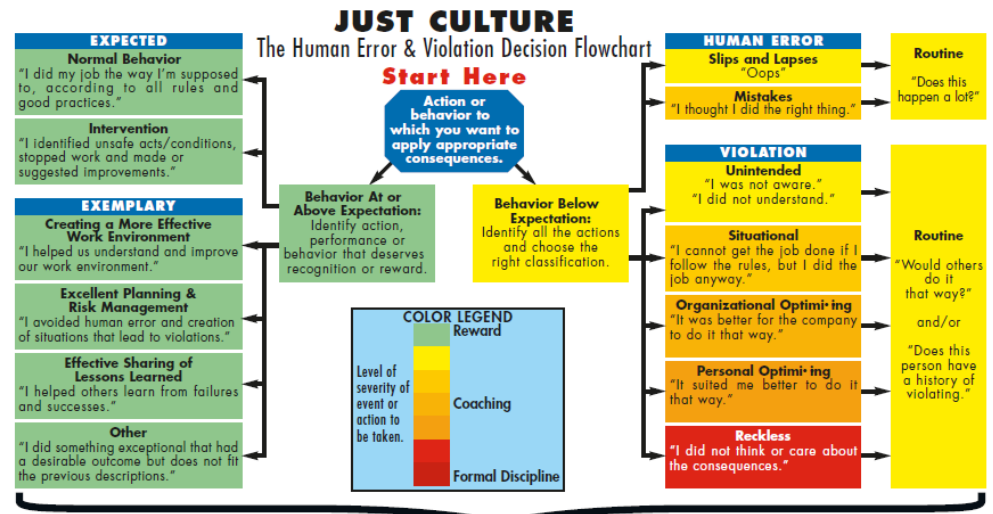
- **Fear of Punishment**

- WBAT Reporting System—from puddles in parking lot to reckless conduct (flag incident)
- FAA Voluntary Self Disclosure Programs

- **Tribal Knowledge**

- Used xml-based Content Management System to:
  - Document Tribal Knowledge
  - Manage Change
  - Content Consistency

# Just Culture Chart



	CONSEQUENCES FOR THE INDIVIDUAL/TEAM	CONSEQUENCES FOR THEIR MANAGERS IF SUPERVISION WAS "INEFFECTIVE"
<b>OUTSTANDING BEHAVIOR</b>	Reward	Reward
<b>NORMAL BEHAVIOR</b>	Should receive encouragement and recognition for good working practices from supervisors and higher management. With contractors, also praise contractor management.	Should provide praise to team and receive recognition from own supervisor if whole team is working this way.
<b>UNINTENDED VIOLATION</b>	None, the action was an error - should receive training to raise awareness of correct practice/procedure or to develop skill.	Should be an investigation to establish why the poor quality of procedures and training was not recognized as an issue before. Coaching to ensure that correct procedures are provided and understood in the future.
<b>SITUATIONAL VIOLATION</b>	Should receive coaching on the need to speak-up when rules cannot be followed. Investigation to understand how this situation was created and why work had continued.	Should receive coaching on how to use the Managing Rule Breaking tool with team to identify other situational problems that will lead to violations. Minor discipline should be received for allowing this situation to exist.
<b>ROUTINE VIOLATION</b>	Whole team shall receive coaching on not allowing rules to be broken and learning how to intervene. Team should use the Managing Rule Breaking process to assess the hazards, redefine procedures and ensure future compliance.	Manager's performance appraisal should be affected for not demonstrating commitment to rule compliance and making the effort to establish if the rule is necessary and where appropriate removing or altering the rule. Shall receive coaching on how to establish compliance for Managing Rule Breaking.
<b>OPTIMIZING VIOLATION</b>	If the violation was to improve performance or please the supervisor then they shall receive coaching or minor formal discipline. Should also receive coaching in how to challenge management about poor procedures.	Manager's performance appraisal shall be affected and formal discipline considered for allowing team to believe rule breaking is desirable.
<b>PERSONAL OPTIMIZING VIOLATION</b>	If the violation was for personal gain there shall be formal discipline. There should be anonymous publication of the violation and its consequences for workers and managers.	Coaching shall be provided for managers on how to set standards of acceptable behavior.
<b>RECKLESS VIOLATION</b>	Should be final warning or immediate removal for willful and reckless violations.	One-on-one coaching of manager should be provided in how to recognize and deal with such behavior earlier. Review of selection and training processes to see why this was not identified before.

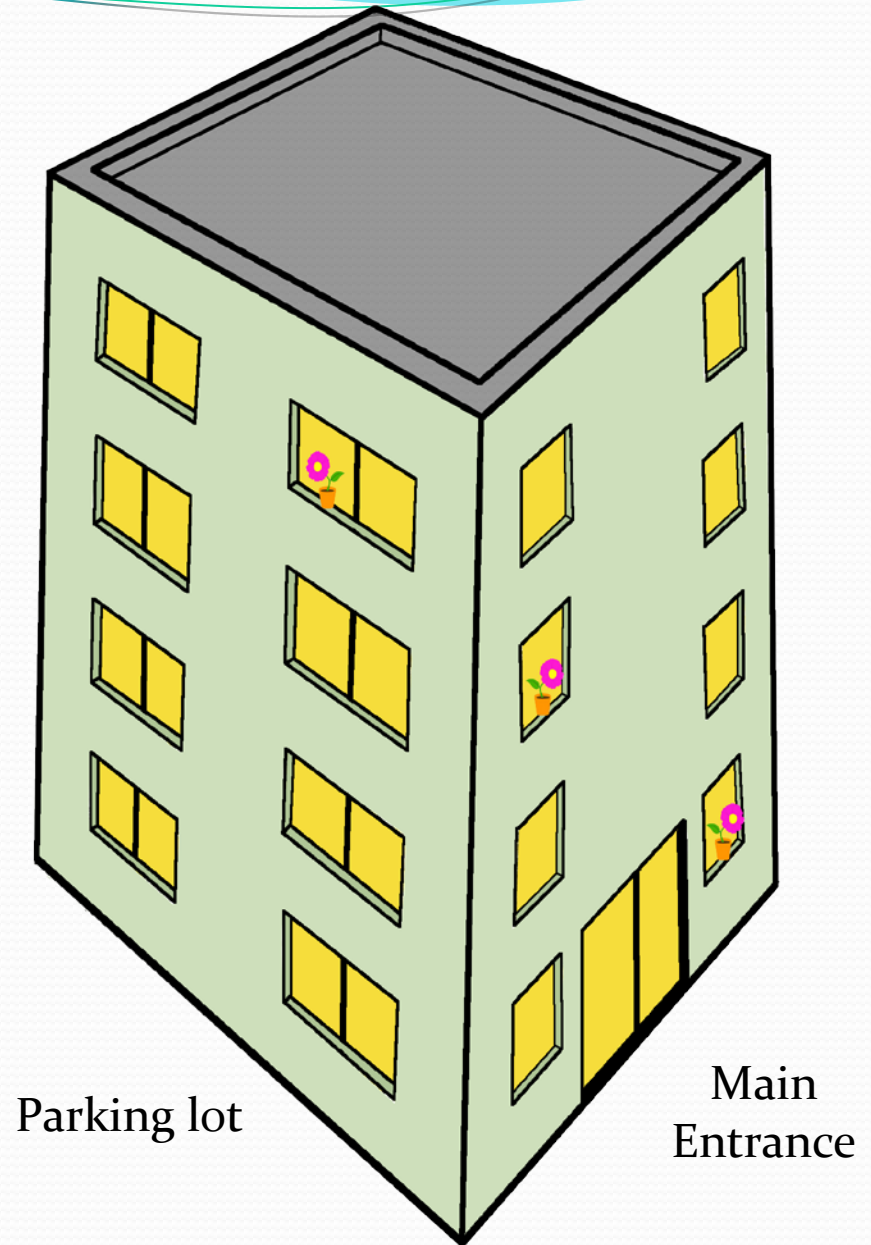


# Successes

- **Silo Mentality**
  - Tech Pubs Reorganization
  - Management of Change
    1. During initial design of system, organizations and/or products
    2. When developing new operational Procedures
    3. When a Hazard has been identified
    4. When considering change to an operational Process
  - Safety Action Groups
- **Fear of Change**
  - Education
  - Training/Promotion
- **Insurance benefits**
  - Significant discounts
  - Insurance credits

# Managing Risk

Which of these flowerpots may end up causing the greatest damage?



# Managing Risk

- Miami Air's Risk Management Matrix

SEVERITY LEVEL						LIKELIHOOD LEVEL				
RATING	PHYSICAL INJURY	DAMAGE TO THE ENVIRONMENT	DAMAGE TO ASSETS	POTENTIAL INCREASED COST OR REVENUE LOSS	DAMAGE TO CORPORATE REPUTATION	A	B	C	D	E
						IMPROBABLE	UNLIKELY	REMOTE	PROBABLE	FREQUENT
0	NO INJURY	NO EFFECT	NO DAMAGE	NO INCREASED COST OR LOST REVENUE	NO IMPLICATION	ACCEPTABLE				
1	MINOR INJURY	MINOR EFFECT	MINOR DAMAGE (< \$50K)	MINOR DAMAGE (< \$50K)	LIMITED LOCALIZED IMPLICATION					
2	SERIOUS INJURY	CONTAINED EFFECT	SUBSTANTIAL DAMAGE (< \$250K)	SUBSTANTIAL DAMAGE (< \$250K)	REGIONAL IMPLICATION	ACCEPTABLE WITH MITIGATION			UNACCEPTABLE	
3	SINGLE FATALITY	MAJOR EFFECT	MAJOR DAMAGE (< \$750K)	MAJOR DAMAGE (< \$750K)	NATIONAL IMPLICATION					
4	MULTIPLE FATALITIES	CATASTROPHIC EFFECT	CATASTROPHIC (> \$1 M)	CATASTROPHIC (> \$1 M)	INTERNATIONAL IMPLICATION					

# Managing Risk

- **Internal Evaluation Program Audit Findings**
  - 2012: 91 (2 high risk, 7 medium, 29 low)
  - 2013: 76 ( 2 high risk, 12 medium, 29 low)
- **Incident Reports**
  - 2012: 76
  - 2013: 54

# Safety Perception vs. Reality




**PERCEPTION**



**REALITY**

# Safety Payoff

- **Letters of Investigation (LOI)**
  - 2012: 18 (5 resulted in \$\$ penalties—\$11,800 )
  - 2013: 4 (3 resulted in \$\$ penalties—\$7,500 )
- **Workman's Comp**
  - 2012: 28 injuries (\$205,000)
  - 2013: 24 injuries (\$160,000)
- **Insurance reductions**
  - 2012: est. 10% premium reduction + \$30k safety credit
  - 2013: est. 10% premium reduction + \$50k safety credit

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- “Successful SMS implementation starts with upper management and FAA involvement and support, requires a few tools and a lot of hard work, but in the end, it’s all worth it.”

# Questions?



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