Federal Aviation Administration

Creating a Safety Culture at the FAA

Office of Safety

Joan Devine

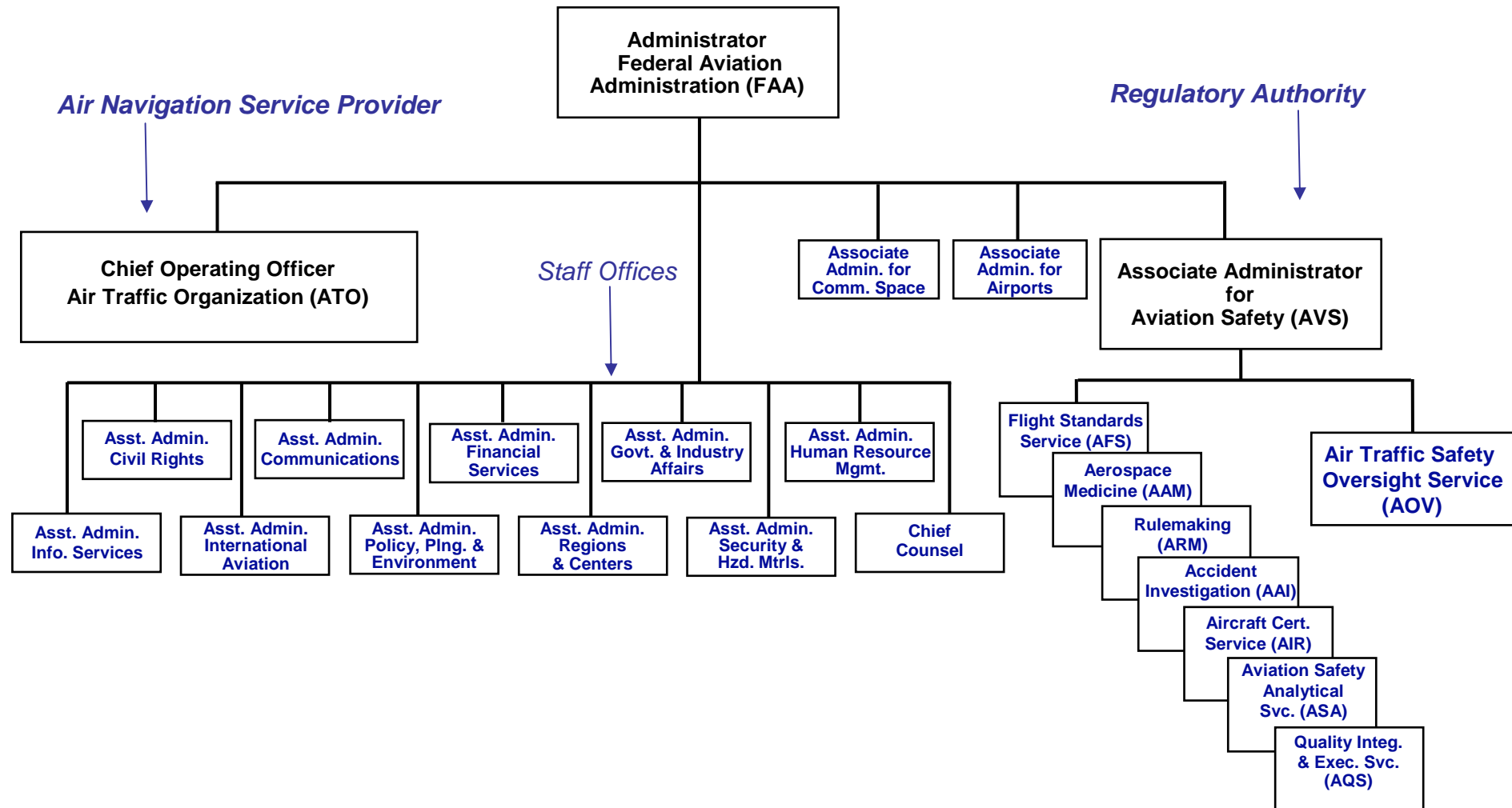FAA's Air Traffic Organization

December 18, 2008

Federal Aviation Administration

- **Operates and maintains an Air Traffic System managing 50,000 flights a day**

- **FAA responsible for both Regulation and Services**

- **Safety is focused in two areas**

  – Regulatory (standards, certificates)

  – Operational (services)

Unique Organizational Structure

Administrator Federal Aviation Administration (FAA)

Air Navigation Service Provider

Regulatory Authority

Chief Operating Officer Air Traffic Organization (ATO)

Staff Offices

Associate Admin. for Comm. Space

Associate Admin. for Airports

Associate Administrator for Aviation Safety (AVS)

- Asst. Admin. Civil Rights
- Asst. Admin. Communications
- Asst. Admin. Financial Services
- Asst. Admin. Govt. & Industry Affairs
- Asst. Admin. Human Resource Mgmt.

- Asst. Admin. Info. Services
- Asst. Admin. International Aviation
- Asst. Admin. Policy, Plng. & Environment
- Asst. Admin. Regions & Centers
- Asst. Admin. Security & Hzd. Mtrls.
- Chief Counsel

- Flight Standards Service (AFS)
- Aerospace Medicine (AAM)
- Rulemaking (ARM)
- Accident Investigation (AAI)
- Aircraft Cert. Service (AIR)
- Aviation Safety Analytical Svc. (ASA)
- Quality Integ. & Exec. Svc. (AQS)

Air Traffic Safety Oversight Service (AOV)

Our Safety Record

- **3 year rolling accident rate is low – 1 in 16 million**

- **57% reduction in commercial fatal accident rate since '98**

- **No major accidents for U.S. airline industry in last two fiscal years**

Success comes with Challenges

- **Accident rate at an all time low**

  – Can cause complacency

- **Accountability for Safety Metrics**

  – Often drives information underground

- **Strong Management**

  – Lessened employee involvement

Multi-Layered Approach to Change

- **Structural Changes**

- **Policy Changes - Implement SMS**

- **Training and Promotion**

- **International Partnerships**

- **Baseline Current State**
  - Safety Culture Surveys

- **Transition to Safety Culture**
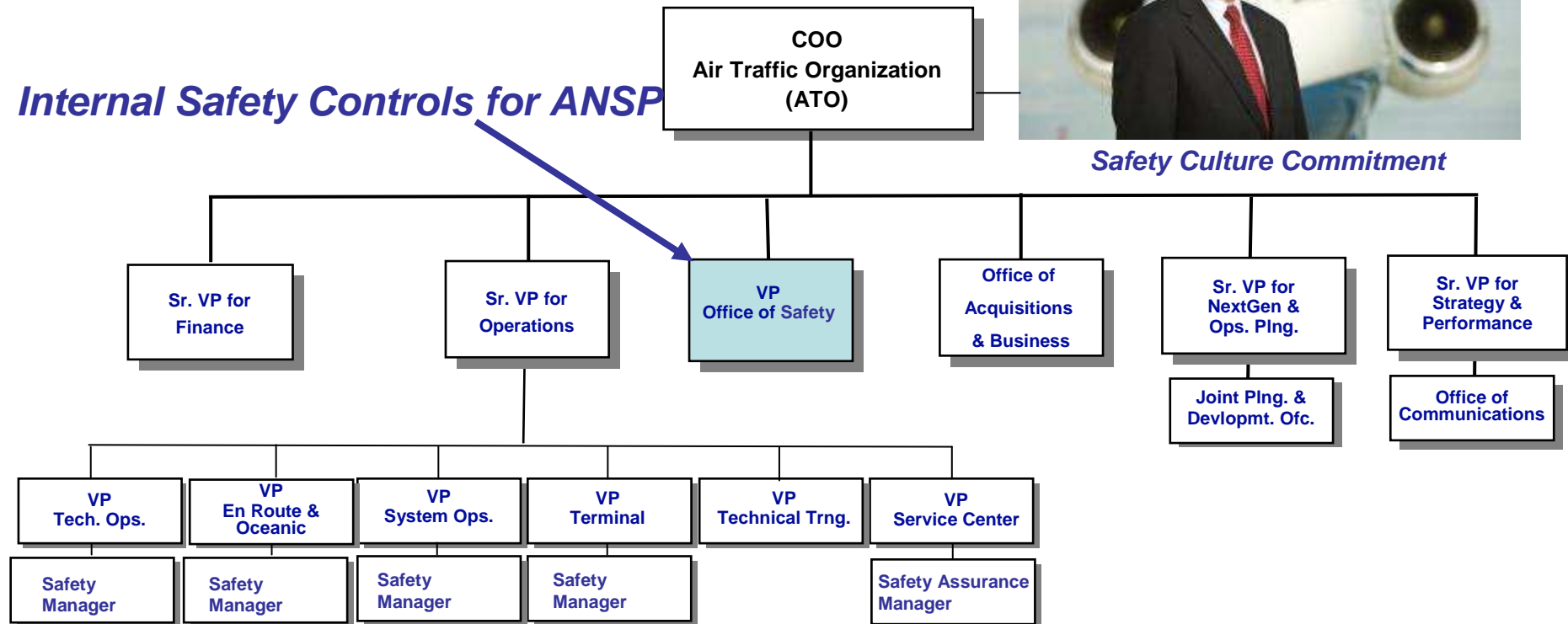 - Crew Resource Management
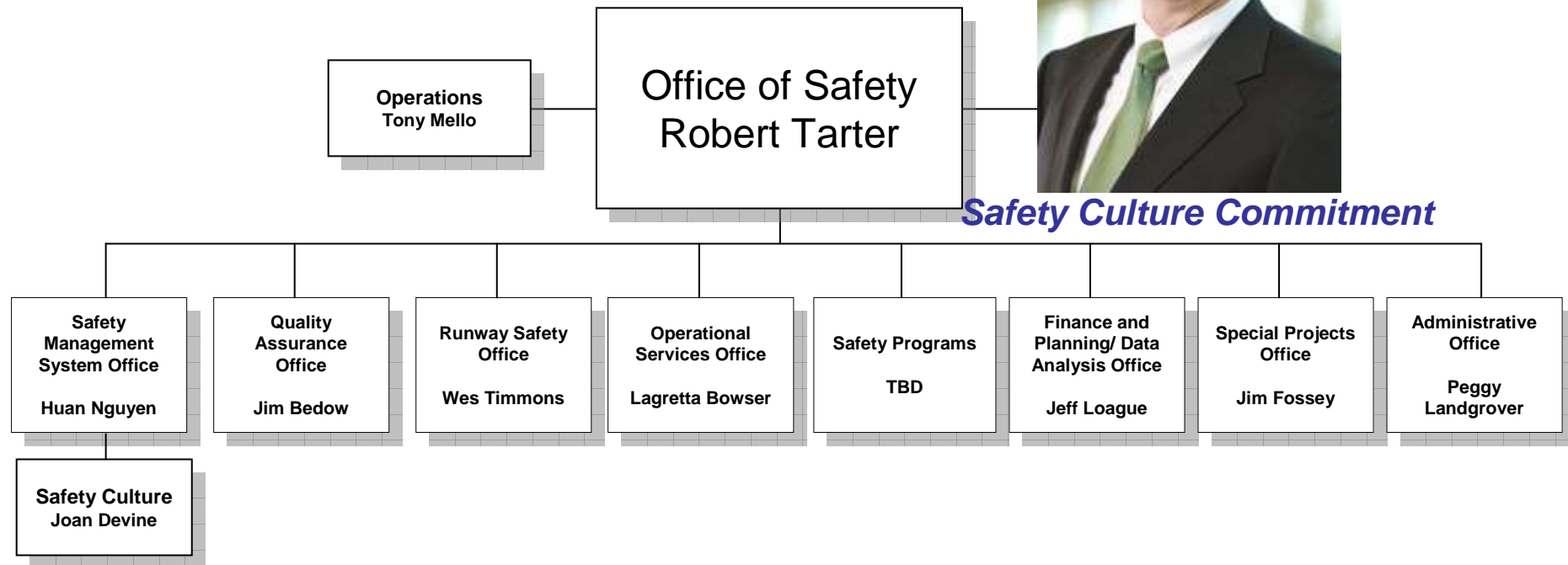 - Non-punitive Reporting Programs

Structural Changes

Internal Safety Controls for ANSP

Safety Culture Commitment

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                                    COO
                            Air Traffic Organization
                                   (ATO)

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Sr. VP for    Sr. VP for    VP           Office of      Sr. VP for     Sr. VP for
Finance       Operations    Office of     Acquisitions   NextGen &      Strategy &
                            Safety        & Business     Ops. Plng.     Performance
                                                              │               │
                                                         Joint Plng. &    Office of
                                                         Devlopmt. Ofc.   Communications
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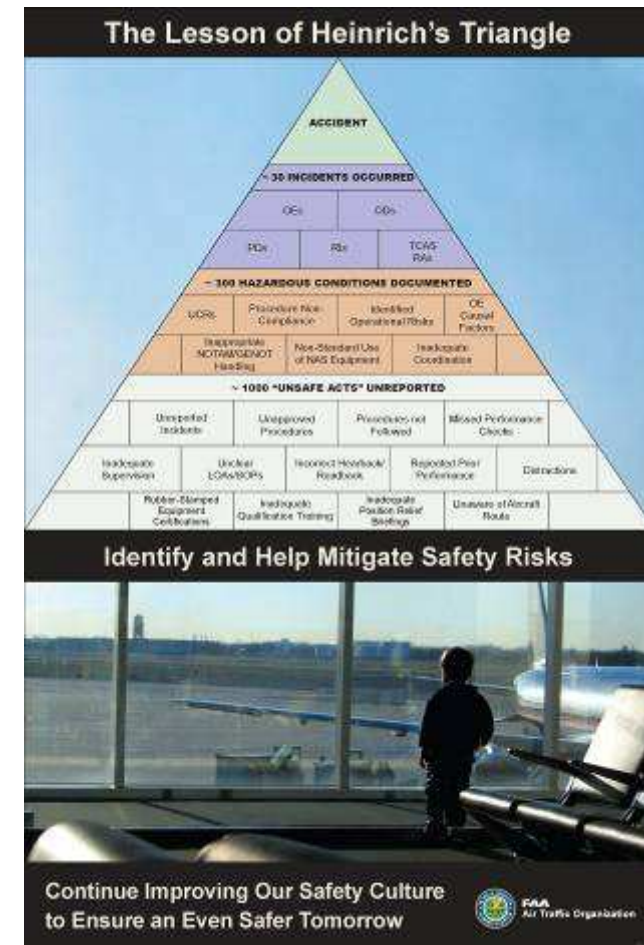
VP Tech. Ops.	VP En Route & Oceanic	VP System Ops.	VP Terminal	VP Technical Trng.	VP Service Center
Safety Manager	Safety Manager	Safety Manager	Safety Manager		Safety Assurance Manager

Office of Safety

Safety Culture Commitment

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┌──────────────┐                    │   Office of Safety  │
│  Operations  │────────────────────│   Robert Tarter     │
│  Tony Mello  │                    │                     │
└──────────────┘                    └─────────────────────┘
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Safety Management System Office	Quality Assurance Office	Runway Safety Office	Operational Services Office	Safety Programs	Finance and Planning/ Data Analysis Office	Special Projects Office	Administrative Office
Huan Nguyen	Jim Bedow	Wes Timmons	Lagretta Bowser	TBD	Jeff Loague	Jim Fossey	Peggy Landgrover

Safety Culture
Joan Devine

Policy Changes – Implement SMS

- **2004: Safety Management System (SMS) initiated**
  - 4 Tenets: Policy, Risk Management, Assurance and Promotion
  - Describes processes and training programs

- **2007: SMS Policy Adopted**
  - COO commits to creating safety culture
  - Performance and Rewards are aligned with safety metrics
  - Baseline of the Safety Culture begun

- **2008: SMS tied to Performance**
  - SMS implementation added to FAA Flight Plan

Training and Promotion

- **Safety Culture DVDs**
- **Lesson of Heinrich's Triangle**
- **Control Tower "BASICs"**
- **ATC Local Safety Seminars**
- **Runway Safety Action Teams**
- **Crew Resource Management**

The Lesson of Heinrich's Triangle

Identify and Help Mitigate Safety Risks

Continue Improving Our Safety Culture to Ensure an Even Safer Tomorrow

International Partnerships

- **FAA/EUROCONTROL Memorandum of Cooperation**
  - Safety Action Plan (AP-15)
    - Safety Culture White Paper
- **Civil Air Navigation Services Organization (CANSO) Safety Standing Committee Work Groups**
  - Safety Culture
    - Safety Culture Assessment Model
    - Barriers and Enablers Research
  - Global Standard for SMS
  - Safety Data Sharing
  - Safety Metrics
  - Operational Safety

Baseline the Current State

- **Interviews with senior leadership (15 persons)**
- **Survey of approximately 600 leadership level managers in the ATO, results showed:**
  - Safety roles and responsibilities need more clarity
  - Reluctance to report safety issues
  - Need more effective way to measure safety issues
- **Survey of frontline employees at 12 air traffic control facilities for baseline**
  - Recently completed follow-up survey at same facilities
  - Analyzing for best practices and lessons learned

Safety Culture Survey Required Effort

- **Issues**
  - Availability of researcher at times delayed schedule
  - Getting contracts/grants in place delayed schedule
- **New tools for online surveys make it easier**
- **Benefits?**
  - provides management with valuable data on culture issues
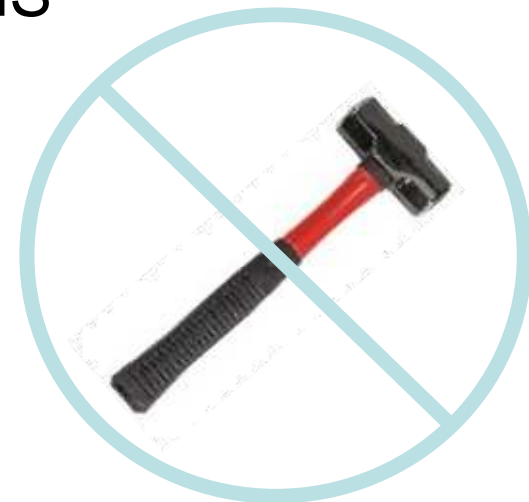 - provides data to support voluntary reporting programs

atsap Air Traffic Safety Action Program

Programs

- **Existing Programs**

  – Aviation Safety Reporting System (NASA)

- **New Programs to enhance Safety Culture**

  – Air Traffic demonstration "ASAP" program (ATSAP)

  – Technical Operations demonstration ASAP program

  – Annual ATO Safety Summit

  – FAA Fatigue Summit in July 2008

  – Crew Resource Management training

Hank Krakowski at Safety Summit

Safety Culture Change: Next Steps

- Rollout non-punitive reporting system nationwide

- Integrate safety culture training for new controllers

- Embed safety thinking throughout the training lifecycle

- Increase safety communications

- Complete implementation of the SMS

- Remove barriers to a Just Culture

Summary

- **Safety is good business**