



ato

AIR TRAFFIC ORGANIZATION

# How ACAST Can Help

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# Why Change?

- Transformation is necessary
  - Safe travel
  - Industry uncertainties
  - New Technologies
- Challenges
  - Financial difficulties
  - Fiscal priorities

# ATO: “Back to the Basics”

## CUSTOMERS

Commercial Aviation

- Airlines
- Cargo

Business Aviation

Private Aviation

DHS (and other Govt. agencies)

Military (DOD)\*

\* *Partner with ATO*



## OWNERS

U.S. citizens \*

Traveling public \*

Taxpayers \*

\* *As represented by Congress*

Office of Management and Budget

Secretary of Department of Transportation

Inspector General

## EMPLOYEES

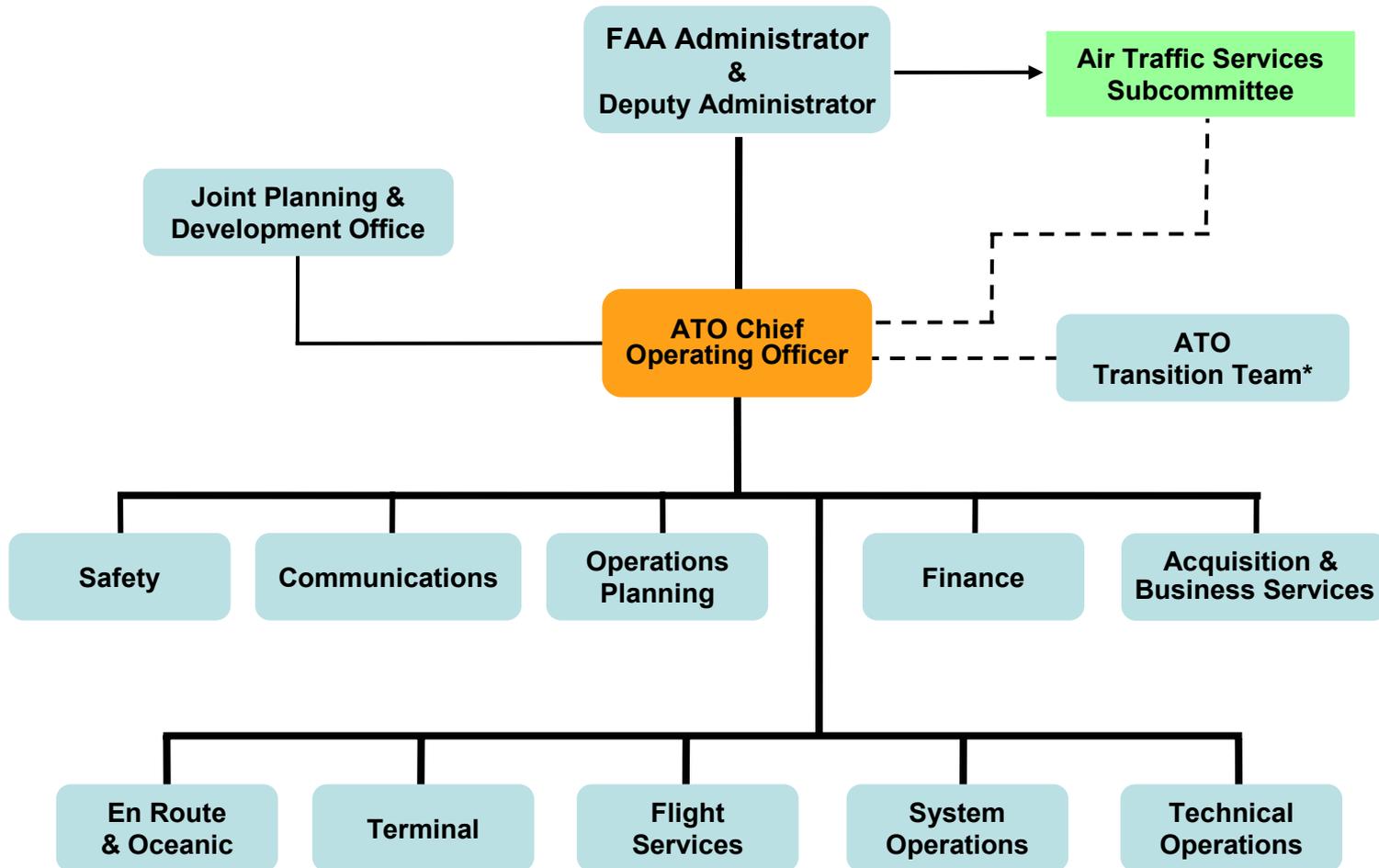
ATO Individual Federal Employees

Labor Unions

# Using Metrics to Manage in the ATO

<b>TODAY</b>	<b>TOMORROW</b>
<b>Focus on inputs (\$\$, staffing)</b>	<b>Focus on outcomes/results</b>
<b>Manage budgets</b>	<b>Manage costs</b>
<b>Measure system level performance ONLY</b>	<b>Measure performance at all levels</b>
<b>Access to data is restricted</b>	<b>Access to data is transparent</b>
<b>Plans and budgets are disconnected</b>	<b>Plans and budgets are integrated</b>
<b>Financial decisions are centralized</b>	<b>Financial decisions are decentralized</b>
<b>No process to ensure effective execution of strategy</b>	<b>Create and implement process to effectively execute strategy</b>

# Air Traffic Organization



# Operations Planning Organization

Steve Brown, Vice President

- John Scardina, Director of Systems Engineering
- Norm Fujisaki, Director of Business Planning & Development
- Paula Lewis, Director of Performance Analysis
- Jack Howell, Director of International
- Wilson Felder Director of Technology Development
- Joan Bauerlein, Director of Aviation Research
- Anne Harlan, Director of WJH Technical Center
- Lisa Bee, Manager of Policy & Administration
- TBA, Manager of Operations Planning Finance
- Gisele Mohler, Operational Evolution Plan Manager

# Implementation Strategy

- FY04—Realignment and Resource Management
  - Realignment
  - Activity Value Analysis
  - Financial and Resource Management
  - Safety Management System
- FY05—Control Unit Costs & Cost Accounting
  - Managing Costs and Cost Accounting
  - Completing Realignments and Improving Services
  - Safety Initiatives
- FY06—Improve Service Value & Innovation
  - Improve Service Value & Innovation
  - Planning and Flexibility
  - Safety Continues as a Top Priority

# Target System Description

- What we learned
  - We can't afford it
  - High cost for maintaining services
    - Maintaining infrastructure is high cost
  - FY05 CIP down 15% (2.5M)
    - Need to revisit TSD assumptions in light of budget realities
- New organization (ATO) looking at F&E and Ops together more closely
  - Any new FAA investment must be offset by cost reductions to FAA directly (and not by user benefits alone), or we can't afford it

# What's Required to Insert a CNS Initiative into the NAS

- Need/Requirement
- Equipment Standards
- Spectrum Availability
- Interoperable Equipment
- Affordable Business Case (both users and service providers)
- Motivation (both users and service providers)
- Solution/Technology

# ACAST Initiatives—1

- Future Aviation Network Technologies
  - Why change?
  - What's the benefit?
  - What's the cost?
  - Don't forget security
- Aviation Spectrum Needs and Challenges
  - Let's keep the spectrum we have
  - Find more efficient use of spectrum we control
  - Maintain global harmonization
- Multi-Function Multi-Mode Avionics
  - Does this allow more efficiency?
  - As safe? Safer?
  - Interoperable equipment

# ACAST Initiatives—2

- Integrated CNS Network for the Airport Surface
  - ?
- Oceanic Communications and Surveillance
  - Is there a technology to allow more capacity, flexibility?
  - Interoperability required
- Advancing VHF Systems Efficiencies
  - Future Communications Study w/ Eurocontrol
    - Improve Frequency Management of Current Systems
    - Assess New Communications Technologies
    - Investigate Flexible Airborne Architectures
    - Create an ATC Communications Roadmap for the NAS
      - **Session tomorrow at noon**

# NAS Architecture 5: NAS View

<http://www.nas-architecture.faa.gov/>

The Federal Aviation Administration  
National Airspace System Architecture 5

Home - Other Tools - NAS View [D] < PDF > < login > < comment > < help >

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IEWS  
NAS  
Financial  
Location  
FAA Services  
Requirements

FAQ



**History:**

**Instructions:** Select the domain for which and systems. Select Automation, Commur to view the evolution of syste

If you are interested in a pa timescale at the top of the s

Data Last Updated On:05-Jan-2004 15:33

**Programmatic Information**

- [S01] Airport Surface Movement Detection
- [S01.02.00] Airport Movement Area Safety System (AMASS)
- Airport Movement Area Safety System (AMASS) - FAAFE
- Airport Movement Area Safety System**
- [TOWER] Tower/Surface Primary
- Airport Surface Detection Equipment
- Airport Movement Area Safety System (AMASS) - FAAFE
- Airport Movement Area Safety System**

Legend: Program, Project, Segment, Mechanism

**Mechanism Predecessor/Successor Schedule**

no data found.

no successors above--

Airport Movement Area Safety System (AMASS)

no successors below--

no data found.

Legend: Design Phase, Installation Phase, Daily Operations, Decommission

**Location Schedule**

DALLAS/FORT WORTH INTERNATIONAL (ATCT)	<<<
MEMPHIS INTL (ATCT)	<<<
PHILADELPHIA INTL (ATCT)	<<<
PHOENIX SKY HARBOR INTL (ATCT)	<<<
PITTSBURGH INTERNATIONAL (ATCT)	<<<
PORTLAND INTL (ATCT)	<<<
PROGRAM SUPPORT FACILITY - EAST (TEST CENTER)	<<<
THE WILLIAM B HARTSFIELD ATLANTA INTL (ATCT)	<<<
WASHINGTON DULLES INTERNATIONAL (ATCT)	<<<
FAA ACADEMY (REGIONS)	
CLEVELAND-HOPKINS INTL (ATCT)	
GENERAL EDWARD LAWRENCE LOGAN INTL (ATCT)	
NEWARK INTL (ATCT)	
SEATTLE-TACOMA INTL (ATCT)	
MIAMI INTL (ATCT)	
CINCINNATI/NORTHERN KENTUCKY INTERNATIONAL (ATCT)	
JOHN F KENNEDY INTL (ATCT)	
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN/ (ATCT)	
KANSAS CITY INTL (ATCT)	
DETROIT METROPOLITAN WAYNE COUNTY (ATCT)	
SAN FRANCISCO INTL (ATCT)	
LOS ANGELES INTL (ATCT)	
CHICAGO O'HARE INTL (ATCT)	
SALT LAKE CITY INTL (ATCT)	
LAMBERT-ST LOUIS (ATCT)	

Legend: Delivery Phase, Daily Operations, Data Error

**Operational Improvements**

Current Aircraft To Terrain / Obstacle Separation

Current Surface Separation

# Closing Thoughts

- ATO will focus on providing and maintaining current services
- ATO is preparing for the transformation, not implementing new capabilities or features
- New initiatives cost money that we don't have—therefore, need to consider all aspects of any new technology
- Remember it's not just the technology, the organization, or the user, but also the affordability and interoperability—**it's all of it**



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