“Strengthening Relationships Through Better Communication”

Pilots, Aircraft Dispatchers, and Air Traffic Controllers“

Sean Cassidy, First Vice President
ALPA, International

Air Line Pilots Association Intl.

- Founded in 1931
- "Schedule with Safety"
- Over 53,000 Members in US and Canada
- 39 Airlines represented
- Largest Non-Governmental safety organization in the world

Air Line Pilots Association Intl.

- Industrial Areas
  - Collective Bargaining/Contract Administration
- Pilot Advocacy
  - Legislative/Regulatory Engagement
- Safety & Technical Functions
  - Air Safety Organization: Safety, Security, Pilot Assistance, Cargo, Jumpseat, Environmental
  - Technical/Engineering Assistance
  - Aviation Rulemaking Committees
  - Govt./Industry/Labor Working Groups (RTCA)

Safety and Planning Goals

- Just Culture / One Level of Safety
- SMS
- Voluntary Reporting Programs
- Coordinated approach with all stakeholders

Shared Challenges

- Communication
- Surveillance
- Navigation

Communications

- Dispatcher-Pilot-ATC
  - VOICE, ARINC, ACARS, CPDLC and FANS(x)
  - Safety in communicating
  - Required FAR 121.107
    - "…ensure proper operational control of each flight".
    - A SHARED (Dispatch/Pilot)Responsibility
  - Data-link communications require new internationally harmonized "message sets"(RTCA SC-214 and ERUOCAE WG-78) AOC/ Dispatcher input needed

Communications

- Dispatcher-Pilot-ATC
  - Integration of Controller-Pilot Data Link Communication (CPDLC) and voice
  - Introduces new risks and mitigations versus voice (e.g. loss of SA)
  - CPDLC aircraft equipage mix – legacy versus new aircraft

Surveillance

- Dispatchers, Pilots
  - Using new “ATC services” (Web based) ADS-B and Radar Surveillance
    - Real time: Improved AOC “flight following”-”tracking”
  - Now: Limited
  - NextGen: Better(post 2020)
    - Domestic and International
  - Training Requirements

Surveillance

- Aircraft
  - ADS-B OUT - major structural shift
  - Aircraft equipage - requires new equipment in addition to existing Mode A/C transponder
  - ADS-B early benefits concentrated within FAA

Nav/Airspace Redesign

- Redesign airspace associated with major Metroplexes to allow maximum use of RNAV arrival and departure routes
  - Optimize capacity at all airports in a region
  - More predictable flow rates (AOC)
  - Lower impact from weather (AOC)
  - Dynamic AOC/Dispatch re-routes

Metroplex Airspace Redesign

- Previous airspace studies that have included extensive stakeholder (dispatcher/AOC) involvement from beginning have produced tangible benefits, e.g., the New York Airspace Redesign which is entering Phase 2, is producing significant reductions in fuel burn, delays, and emissions

NextGen Challenges

- Elaborate, complex, expensive plan over long time span
  - Uncertain funding stream – depends on Congressional understanding & priorities
    - New financial realties
    - FAA Funding extensions ~~*21*~~ 22 and counting!
    - Understanding NextGen: The Business Case

NextGen Challenges

- Elaborate and complex "Ecosystem"
  - Involves development of new technologies
  - ADS-B out and In
    - Greater position accuracies for surveillance
    - Opportunities to increase route(s)
  - GNSS, RNAV/RNP (Alaska Experience)
  - Increased Navigational/Routing flexibility
  - Expanding Communications

NextGen Challenges

- Planning over long time span
  - Cannot throw switch on change-over to NextGen
  - AOC (Aircraft Dispatcher's) will need a transitional plan
  - Multiple "roadmaps" - not 100% coordinated within FAA or with industry= LACK OF MOMENTUM, TIMELINE CREEP
  - Do not let the perfect be the enemy of the good!

Shared Benefits

Communication: Working together

+

Surveillance: Improved and Expanding

+

Navigation: Transition to GNSS Operations

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Better Safety and Efficiency

"Building Relationships with Communication"

Captain Sean Cassidy