Developing Excellence thru Training – Automation and NextGen Needs

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The “Base”

• Automation and Future NAS Access will require a solid “Base”
  – Basic Flying Skills and SOPs

• How to get there:
  – Basic Flight Training
  – Consistency, Redundancy, Clear understanding of roles → Flight Standards

• United’s Tool Set:
  – AQP Training (data-driven, 5 point grade scale)
  – Checklists and Briefing Cards for phase of flight
  – C/L/R (CRM) elemental training
  – 9 Month PC/PT (CQ) Training Cycles including Flight Management and basic flying practice
  – Data sets – AQP, FSAP, FOQA
  – Data review processes – SRTs, I-SRT, SMS
  – Distance Learning
Understanding the Distractions

- “What’s it doing now”
- Taxi in/out confusion (Runway Incursion training)
- Tarmac Delay Rules
- PDC’s, other ACARS messaging and changes
- Maintenance status change requirements
- Security issues – FFDO, Threat Levels, General Security Levels
- NOTAMS
- Airspace complexities
- System Failures and aircraft complexity
- System Warnings and False Alarm bias
- Weather – TRW, Icing, Turbulence, AFP’s, Volcanic ash,…
- InFO’s, SaFO’s, Bulletins, other information management…
- “Just one more training item…”
1. **Surface** – Improve traffic management, enhance safety, efficiency and situational awareness providing same data to pilots, controllers, ramp towers and ops centers.

2. **Runway Access** – Increase runway access especially in low viz to converging, intersecting and closely paced parallel runways.

3. **Metroplex** – Relive congestion and tarmac delays at major metro airports and at satellite airports. Focus on de-conflicting of adjacent airports airspace.

4. **Cruise** – Disseminate real-time airspace status and schedules. Use time-based metering and implement data comm between ATC systems and airline capabilities.

5. **Access to NAS** – Implement more precision based approaches and departures and expand surveillance services especially at non-OEP airports.
NextGen Specific Training:

• Navigation
  – RNAV/RNP
  – LAAS/GLS/GPS/WAAS
  – HAR
  – New Flight Planning Routing systems
  – GPS/FMS Accuracy and Displays vs raw data

• Communications
  – CDPLC/FANS
  – AOC Datalinks
  – Tailored Arrivals
  – 3D-Path Arrival Management
  – Enroute Optimization Tools
  – OPD’s/CDA’s
NextGen Specific Training:

• Surveillance
  – ADS-B
  – ITP
  – FANS
  – Surface Management – ADSE-X, TIS-B
  – RAAS
  – EFB – Paperless Cockpit

• NextGen Aircraft
  – B787, A380, A350
  – New RJ’s
Thank you!