GIM-S Outreach Meeting

Presented to: CSA Users By: David Gray/Curt Rademaker Date: September 10th, 2014



Topics

- Overview
- GIM-S Concept
- ZAB Changes
- Post IOC



Overview

- Ground spacing tool that was baselined & funded as part of the 2007 SBS JRC decision
- Ground Interval Management Spacing (GIM-S) comprises a set of ground functions to:
 - Improve metering by reducing long freeze horizons to shorter distances
 - Minimize the use of vectoring for problem resolutions
 - Increase fuel efficiency by absorbing delay at higher altitudes than in the TRACON
 - Provide speed advisories to assist in the delivery of aircraft to a Meter Point/Meter Fix
 - Improve ETA/STA performance as the NAS equips with ADS-B avionics
- Functionality allocated across multiple platforms, creating this NextGen capability
- ZAB selected as the <u>GIM-S Key Site</u>, for the arrival metering into PHX on the EAGUL5/6
 - EAGUL5 will become the EAGUL6 on Sept 18, 2014
 - GIM-S IOC on Sept 22, 2014



Ground Interval Management – Spacing Concept





PHX Arrival Traffic





Traditional Metering





GIM-S Metering





GIM-S Metering





Speed Advisory Details

• Mach speed instructions will be issued at-or-above FL240

- It is understood that currently, pilots expect Mach/IAS transition to occur ~FL290-FL300,
- Improves the GIM-S performance and accuracy
- At FL280, difference in M0.01 = 4 knots vs. FAA required IAS increments of 10 knots
- Speeds issued in Mach may be as low as M0.68
- Winter months in ZAB adverse rides in mid 30s flight levels result in greater number of aircraft in mid 20s flight levels



Speed Advisory Details

- Speed instructions provided only when aircraft are in level flight
- GIM-S speed instructions will not be issued after SLIDR on EAGUL5



Summary

- ZAB will begin metering 500NM from PHX on EAGUL 5/6 vs. traditional metering of 160NM on the EAGUL5
- Delays to be absorbed in ZAB are now segregated between sectors and flows further upstream than today,
- Speed instructions can be provided to absorb these delays



Post IOC



FY15 Planned Sites





Federal Aviation Administration

Notional Program Plan

- SIG Development and Testing
- PR Verification
- WJHTC Risk Reduction
- SRMD
- Site Adaptation
- Site Checkout
- Pair 1 Operational
- Pair 2 Operational
- Deploy GIM-S at PHX, LAX, SLC, DEN

- **Oct14 Dec14**
- **Oct14 Nov14**
- Nov14 Jan15
- **Jan15 Feb15**
- **Oct14 Mar15**
- **Mar15 Apr15**
- Apr15
- May15
- May15 Sept30

