

Airport Safety Technology R&D

Runway Deviation Study as Impacted by COVID-19

Presented to: **Airports REDAC Subcommittee**

By: **Lauren Vitagliano**

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**Federal Aviation
Administration**



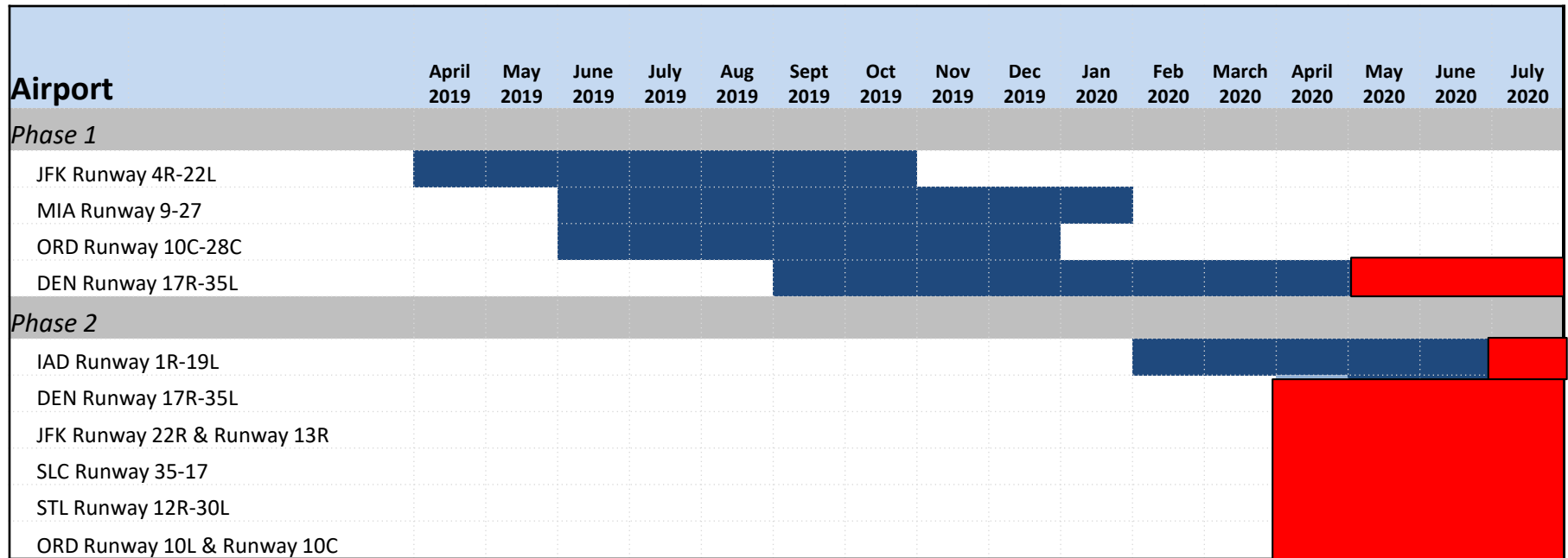
Background

- FAA Office of Airport Safety and Standards, Airport Engineering is evaluating runway widths and other design criteria for ADG-VI aircraft
- Existing ASDE-X data sources not sufficiently accurate for these analyses
 - Analysis requires data with more precision
 - ASDE-X location data not developed for precise measurements

Data Collection Updates

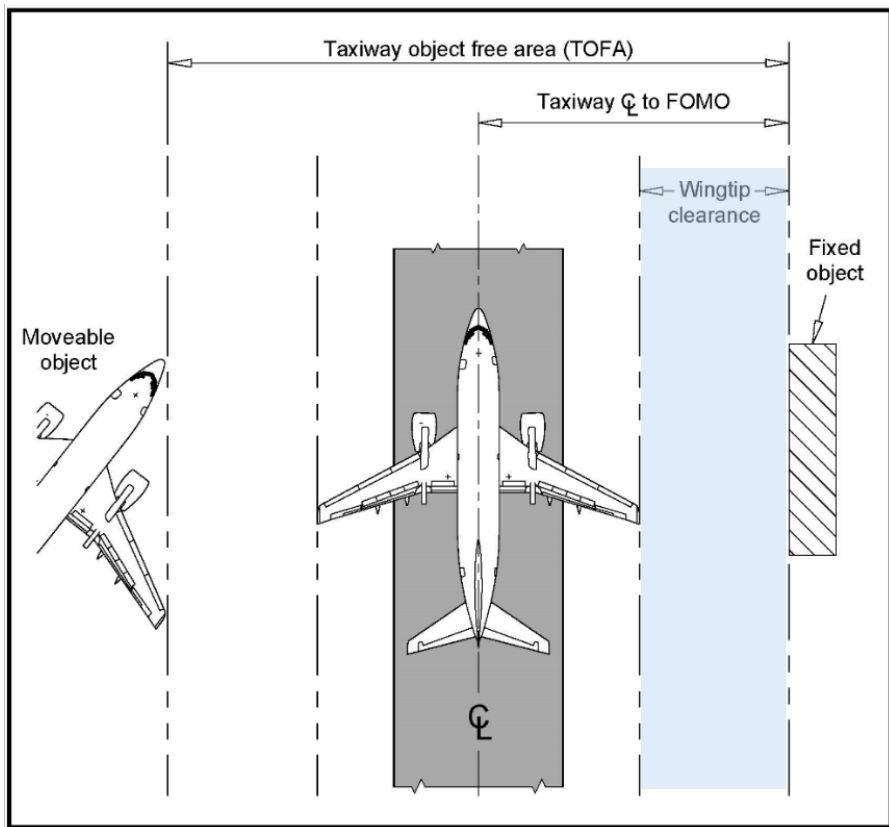
- Phase 1 - Record deviation from runway centerline by landing aircraft with distance measuring equipment
 - DEN system remains in place, but INOP.
- Phase 2 – Record aircraft wander during all phases of flight 0 - 400ft;
 - IAD system remains in place
 - Approvals for DEN/MIA

Installation Delays

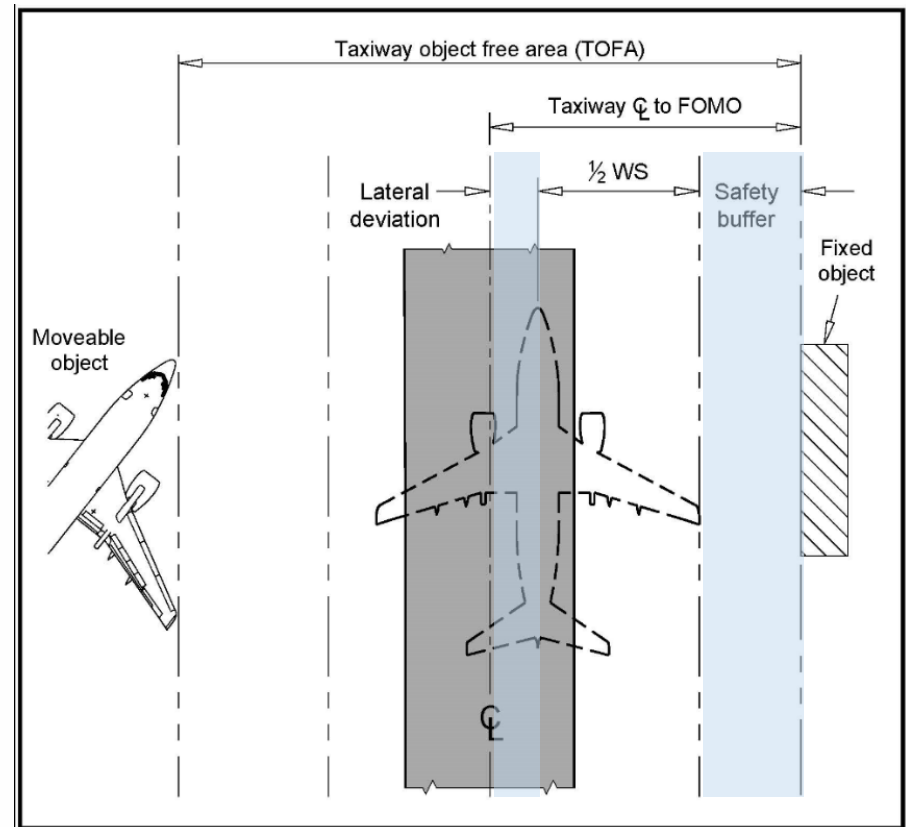


Taxiway OFA and Centerline to FOMO

Current standard: Taxiway OFA and centerline to FOMO distance based solely on ADG wingspan

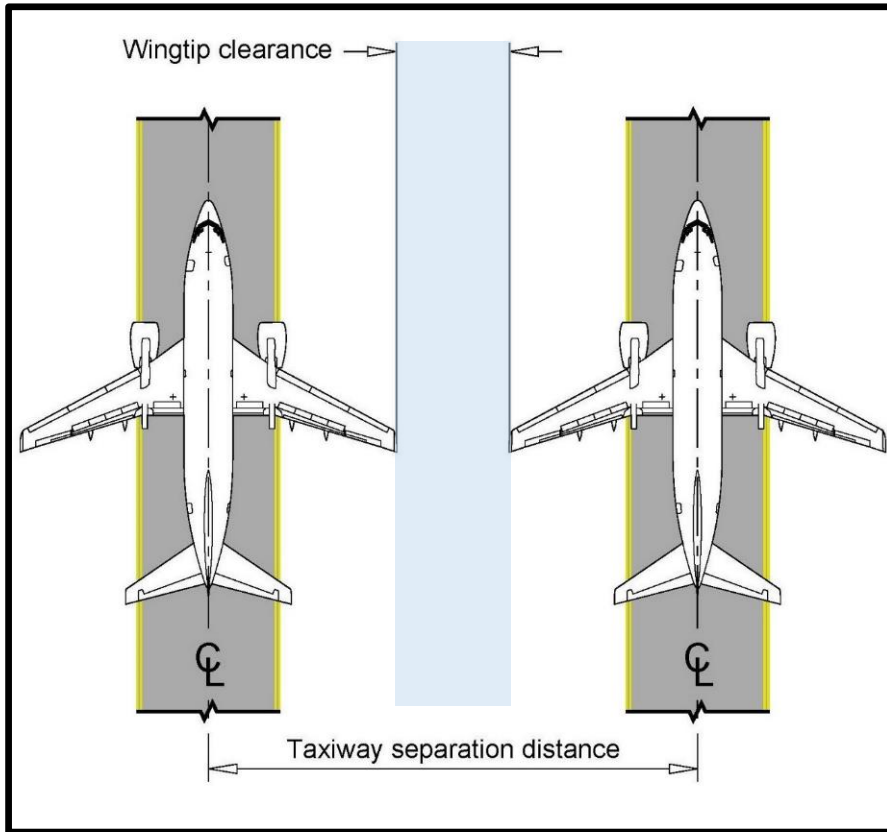


Proposed standard: : Taxiway OFA and centerline to FOMO distance based on lateral deviation and safety buffer for each ADG

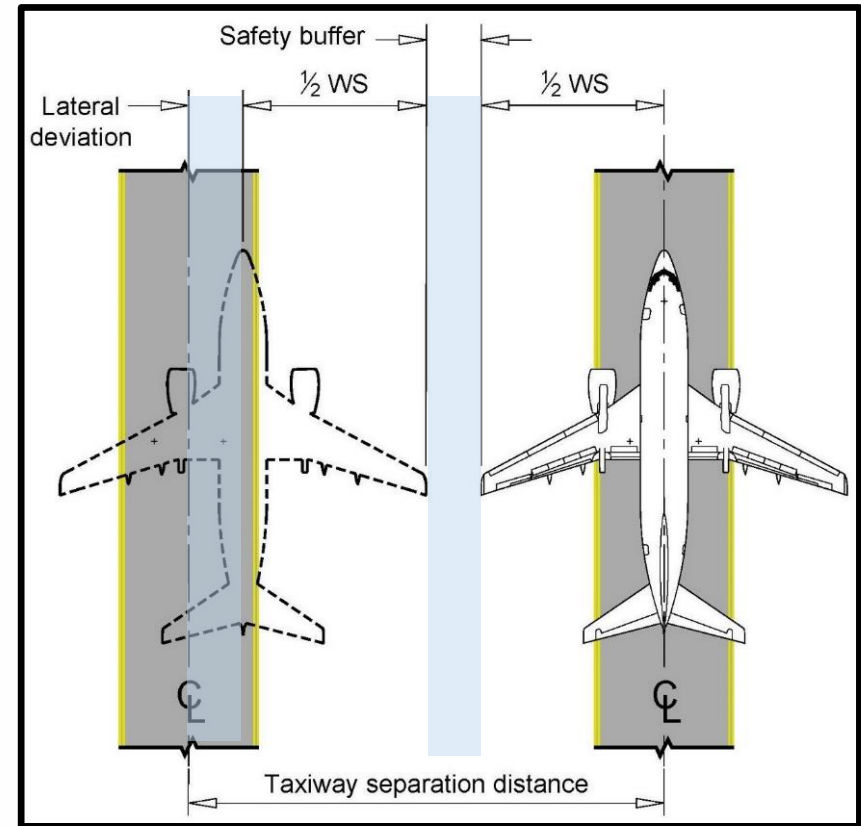


Parallel Taxiway Separation

Current standard: Taxiway separation distance based solely on ADG wingspan (formula)



Proposed standard: Taxiway separation distance based on lateral deviation of one aircraft



Chapter 4 – Taxiway Design Overview – Proposed FAA Changes

FAA ADG	Current FAA OFA width	Proposed FAA OFA width	Current ICAO OFA width	Delta FAA and ICAO
I	89	89	102	- 13
II	131	124	131	- 7
III	186	171	171	0
IV	259	243	243	0
V	320	285	285	0
VI	386	335	335	0

FAA ADG	Current FAA Taxiway Separation	Proposed FAA Taxiway Separation	Current ICAO Taxiway Separation	Delta FAA and ICAO
I	70	70	75	-5
II	105	105	105	0
III	152	144	144	0
IV	215	207	207	0
V	267	249	249	0
VI	324	298	298	0