Standards for Airport Markings
Draft AC 150/5340-1M
Principal Changes
Primary Principal Changes

- **Topic 1** - Prohibition for *Preformed Thermoplastics Surface Markings* on Runways

- **Topic 2** – Change in *Holding Position Marking* for *Runway Approach-Departure Areas*
  - Pattern B replaces Pattern A
    - Mitigation of taxiing airplanes under landing/departing airplanes
    - Reductions to ATCT and pilot workloads
• **Topic 3** – Criteria for *No-Taxi Island Usage*

  – New Dedicated Paragraph 1.5 with four most common Case Illustrations

  – Focus: Reinforce FAA runway safety initiatives and taxiway design standards per AC 150/5340-1 and AC 150/5300-13
  
  • Taxiway Excursions

  • Runway Incursions
Topic 1 - Prohibition

• Preformed Thermoplastic markings have been limited to taxiway applications. However …
  – Intermittent inquiries persist for runway applications
    • Solution?

• New Safety Alert Box Added
    – “…not to be used on runways because of the significantly lower friction readings recorded as compared to dry pavement”
Paragraph 1.3.2

Safety Alert – Reduced Runway Surface Friction

Prohibition of Preformed Thermoplastic Surface Markings on Runways

Until further notice, preformed thermoplastic surface markings are not to be used on runways because of the significantly lower friction readings recorded on such markings as compared to dry pavement (see FAA Technical Report DOT/FAA/AR-TN08/22, Evaluation of Thermoplastic Marking Materials).
Topic 2 – New Marking Criterion Holding Position Marking for Runway Approach-Departure Areas

- Pattern B replaces Pattern A
  - Mitigate taxiing under landing and departing aircraft
  - Reduce ATCT/Pilot workloads
  - *New signage std accompanies this std AC 150/5340-18*
Topic 3: No-Taxi Island

• New Paragraph 1.5 assembles information into one primary paragraph. Reinforces:
  – Safety enhancements along taxi routes
  – Specified taxiway design standards per AC 150/5300-13A

• Focus - Mitigation of:
  – Taxiway Excursions
  – Runway Incursions, and, to some degree
  – Wrong Runway Takeoffs
• **New Design Criterion - Width of “green areas” for No-Taxi Islands equals the width of the std taxiway shoulder for the Taxiway Design Group (TDG)**

• Paragraph describes **4 cases** - most common taxiing situations - supported by figures for visual clarification:
  – Exiting Aprons
  – Taxiing between aprons and entrance taxiways
  – Entering Runways

• Provides “**sequential practices**” to mitigate excursions from paved taxiways and to mitigate runway incursions
Sequential Process: Apron Case

- First, reconfigure taxiway route(s) located on the apron to create a no-taxi island in front of the exiting taxiway serving the runway. **Objective:** Produce multi-turning operations for pilots.
- Second, after identifying the location of the No-Taxi Island(s), paint dual-continuous taxiway edge markings.
  - If runway incursions continue, then paint yellow taxiway shoulder markings.
  - If runway incursions persist, then apply a “green” border starting from the end of yellow taxiway shoulder markings to create a visually “green” no-taxi island(s).
  - Depth of the green border equals the width of standard taxiway shoulder for the largest taxiway design group using this taxiway.
  - Green borders are per Federal Standard 595, Color Number #34110.
- Third, install vertical taxiway signage in accordance with AC 150/5340-18.
- Lastly, paint any other required or other “deemed necessary” surface markings per the marking advisory circular.
**Case 1**  
**Runway Incursions**

Aprons with Direct Access to Runways  
(with/without Parallel Taxiway)  
Force a turning maneuver

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**Case 2**  
**Taxiway Excursions**

A. ADD DUAL CONTINUOUS TAXIWAY EDGE MARKINGS

B. ADD TAXIWAY SHOULDER MARKINGS

C. ADD GREEN BORDER BEYOND TAXIWAY SHOULDER MARKINGS

Taxi route between an apron and entrance taxiway  
Add surface markings
Case 3
Runway Incursions

Single *Excessive Width* Entrance Taxiways.
Reduce excessive taxi width.
Add required surface markings, signage, lighting.

Case 4
Runway Incursions

Over Paved Multi Entrance Taxiways.
Includes both Extra-Wide and Std-Width Entrances.
Add required surface markings, signage and lighting.
Thank You

Q & A