Subject: Airport Diagram Symbol for Non-Standard Runway Holding Position Marking in Conjunction with a Hot Spot

Background/Discussion:

Runway Incursions have been attributed to pilots crossing runway holding position markings because the markings were placed in an unexpected or non-typical location. Such is the case in SEA. Several Runway Incursions (RI) took place in SEA at Taxiway Foxtrot and Runway 34R, one of which involved an air carrier aircraft missed the markings and crossed under a departing air carrier aircraft. In this case, Taxiway Foxtrot is a taxiway that meets the runway entrance at an angle and the holding position marking is unexpectedly encountered prior to the entrance. (See graphic at the end of this document.) Actions taken to mitigate this threat included the then Director of Runway Safety, Wes Timmons, coordinated with charting to chart the runway holding position marking location and published a hot spot. The following is the hot spot description that was published as a result of the RIs that took place at this location on SEA airport.

HS 3 Acft exiting Rwy 34C at Twy F sometimes enter Rwy 34R without authorization, taxi distance is very short and pilots should use caution to stop at hold line unless authorized to cross the rwy.

Please see image of Hot Spot 3 and SEA airport diagram at the end of this document.

Another example of pilots involved in RIs due to encountering the holding position marking at an unexpected location is North Las Vegas Airport (VGT). VGT was the nation’s leading airport for runway incursion in 2011/2012. Over 90% of the PDs that occurred during this time period were attributed to itinerant pilots that completed the run up checks and then crossed the hold bar without authorization. Of those pilot interviews Runway Safety Program was able to capture, the common theme was pilots encountering the hold position marking unexpectedly. The rate of RIs were so high that the condition caused the FAA and Clark County to redesign the run up area and runway entrances.

Runway Incursion remains a high priority for the FAA. Providing Pilots and other stakeholders timely, accurate, and meaningful information is key to mitigating Runway Incursion.

Recommendation:

Remove the prohibition against showing non-standard hold lines in conjunction with a Hot Spot that already exists for this purpose. In short, publish both the hot spot AND the hold line.
**IACC 4 Reference:** “Non-standard runway holding position lines with “RWY HOLD” label. (Depicted only by special request and only when a Hot Spot has not been previously established at the site for this purpose.)”

Recommended wording: “Non-typical locations of runway holding position markings with “RWY HOLD” label when requested by appropriate authority. Non-typical runway hold lines may be depicted in conjunction with a Hot Spot if established at the same location.

Please note that the use of phrase “non-standard hold lines” for the purpose of this document, is defined as holding position markings located in non-typical or unexpected locations, and should be referred to as such in the change.

**Comments:** The following graphics are provided for references to the above background para.
Figure 1 - Seattle-Tacoma International (SEA 9/24/2014)

Figure 2 - SEA HOT SPOT 3

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Date: 9/24/2014

MEETING 14-02

Valerie Watson, AJV-344 presented the issue on behalf of the Chris Diggons, AJI-144, the Runway Safety Group proponent. Valerie stated that currently there is a prohibition against depiction of non-standard runway hold lines on airport diagrams where a Hot Spot has been established for that purpose. The submitter requests that non-typical locations of the runway
hold line be shown in conjunction with the Hot Spot. It is Runway Safety’s contention that a number of specific incidents at Seattle-Tacoma International (KSEA) airport could have been avoided had the hold line been depicted on the airport diagram.

John Moore, Jeppesen, commented that runway safety information tends to get buried in the lengthy Hot Spot descriptions. He suggested that the length of the Hot Spot descriptions should be addressed as well. Valerie commented that Runway Safety is the authoritative source for Hot Spot description, so after standardization, they are published as submitted. She agreed that some of the descriptions are fairly lengthy and committed to sharing this input with Runway Safety.

Lev Prichard, ASA, stated that in his experience pilots essentially ignore hot spots on charts and do not even read the textual descriptions. He voiced that the pilot is focused on the taxi clearance given by ATC and noting the clearance on an airport diagram. Lev added this is especially the case at complex airports like KBOS, KORD, KSFO, etc.

Ted Thompson, Jeppesen, commented that it appeared to him that this is a unique problem associated with just KSEA. If that is the case, it needs to be handled as unique problem. Ted advised that the FAA not devise a charting specification for just one airport, but a universal specification that can be applied to other airports.

Valerie asked the audience if there was general support for collocating non-typical locations of runway hold lines with a Hot Spot when requested by Runway Safety. There was general support for the idea. Valerie also reiterated her commitment to reach out to the proponent of this RD, Chris Diggons, regarding the lengthiness of Hot Spot descriptions and the comments regarding the fact that pilots are not reading them.

**STATUS: OPEN**

**ACTION:** Valerie Watson, AVJ-344, to draft an IACC Recommendation Document to remove the prohibition against the charting of non-typical runway hold lines, charted by special request, in conjunction with a Hot Spot on airport diagrams.

**ACTION:** Valerie Watson, AJV-344, to reach out to Chris Diggons, AJI-144, regarding the negative feedback received at the ACF regarding the lengthiness of the Hot Spot descriptions.

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**MEETING 15-01:**

Valerie Watson, AJV-553, reviewed the history of the issue and provided an update of actions taken since last ACF. Valerie stated that the charting specifications have been updated to allow a non-typical runway hold location in conjunction with a hot spot to be depicted on airport diagrams.

**STATUS: CLOSED**