

# Introduction

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# Topics

- Runway Incursion Investigations
- Data Sources
- Threat Management
- Mitigation Strategies

San Francisco  
International  
Airport

RWY 28L

HOLD LINE

Actual taxi route

Intended taxi route

RWY  
1L

RWY  
1R

A

B

E

J

A

B

F

F

GMT in 1 second intervals  
Airspeed in knots  
RA=Radio Altitude in feet  
Liftoff=all struts extended

15:07:33z, 191 kts, RA 24'

15:07:32z, 188 kts, RA 14'

15:07:31z, 186 kts, RA 8'

15:07:30z, 178 kts, RA 5'

15:07:29z, Liftoff, 173 kts

15:07:28z, 172 kts

15:07:27z, 166 kts

6L

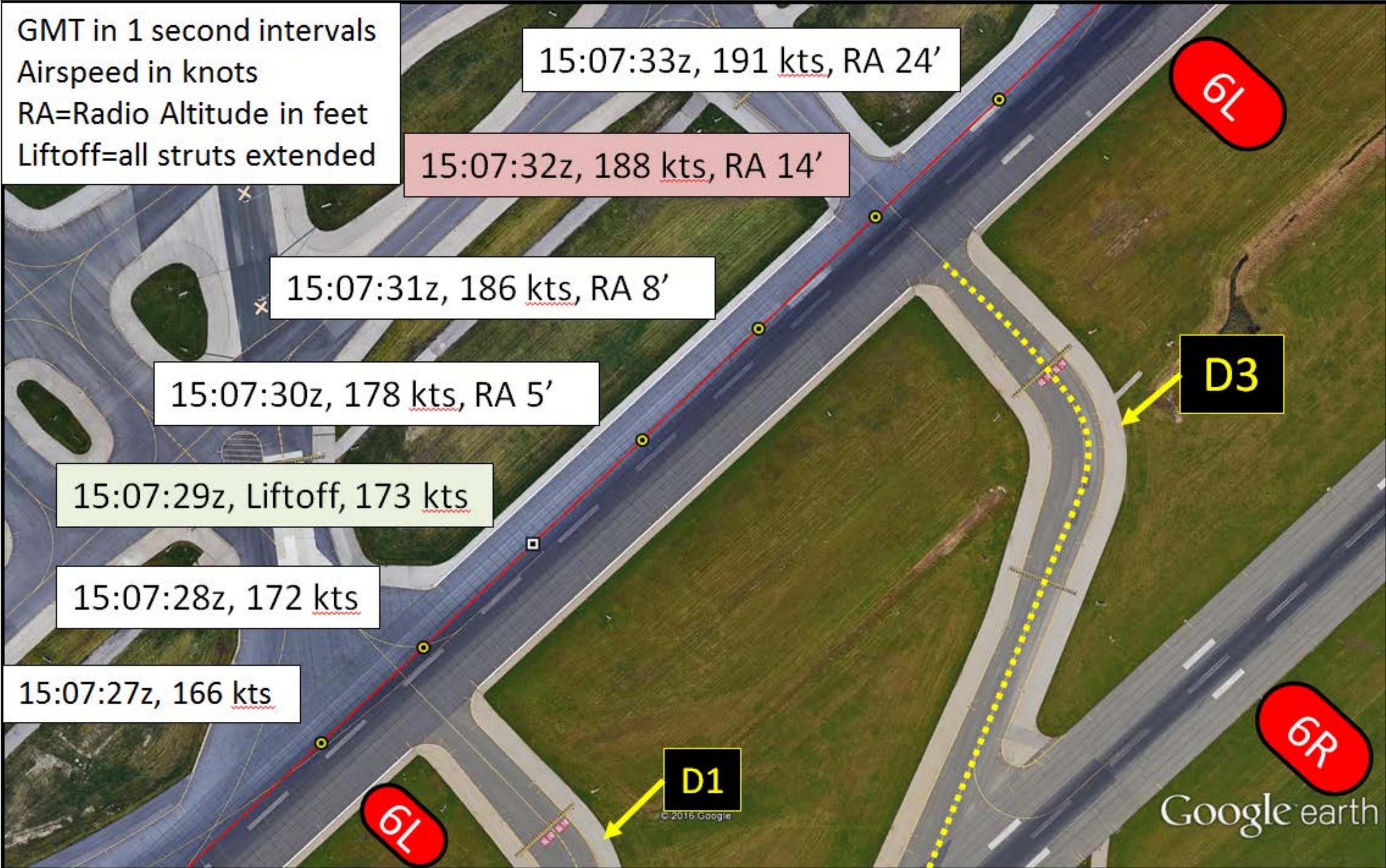
D3

6R

D1

Google earth

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# Data Sources

- Irregular Operations Report
- Aviation Safety Action Programs (ASAP)
- Flight Safety Investigations
- Line Operations Safety Audits (LOSA)

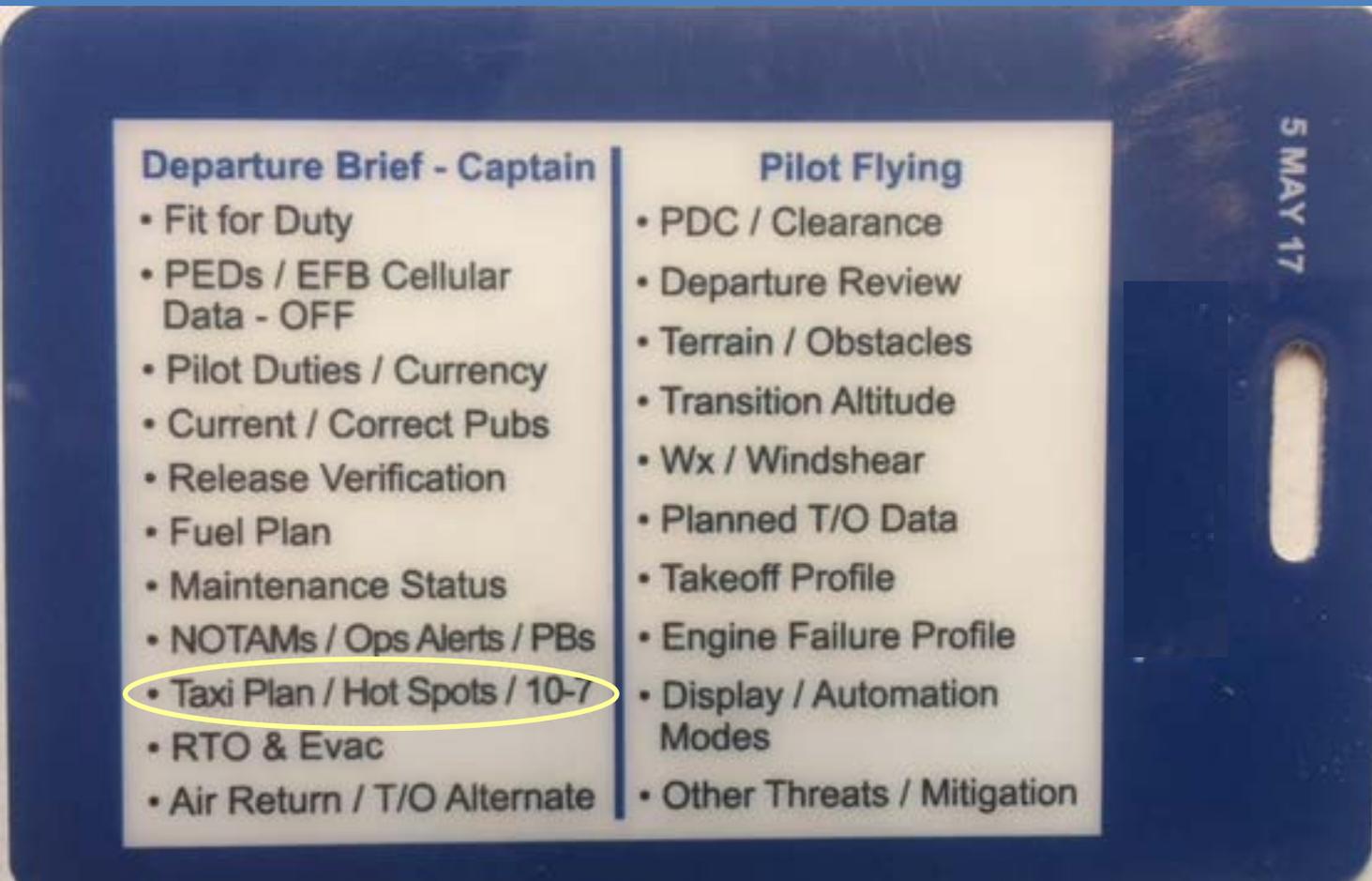
# Threat Management

Incursion Contributor	Incursion Recipient
Situational Awareness	Situational Awareness
Communications	Communications

# Mitigation Strategies

- Training
- Situational Awareness
- Communications
- Future Strategies

# Mitigation Strategies

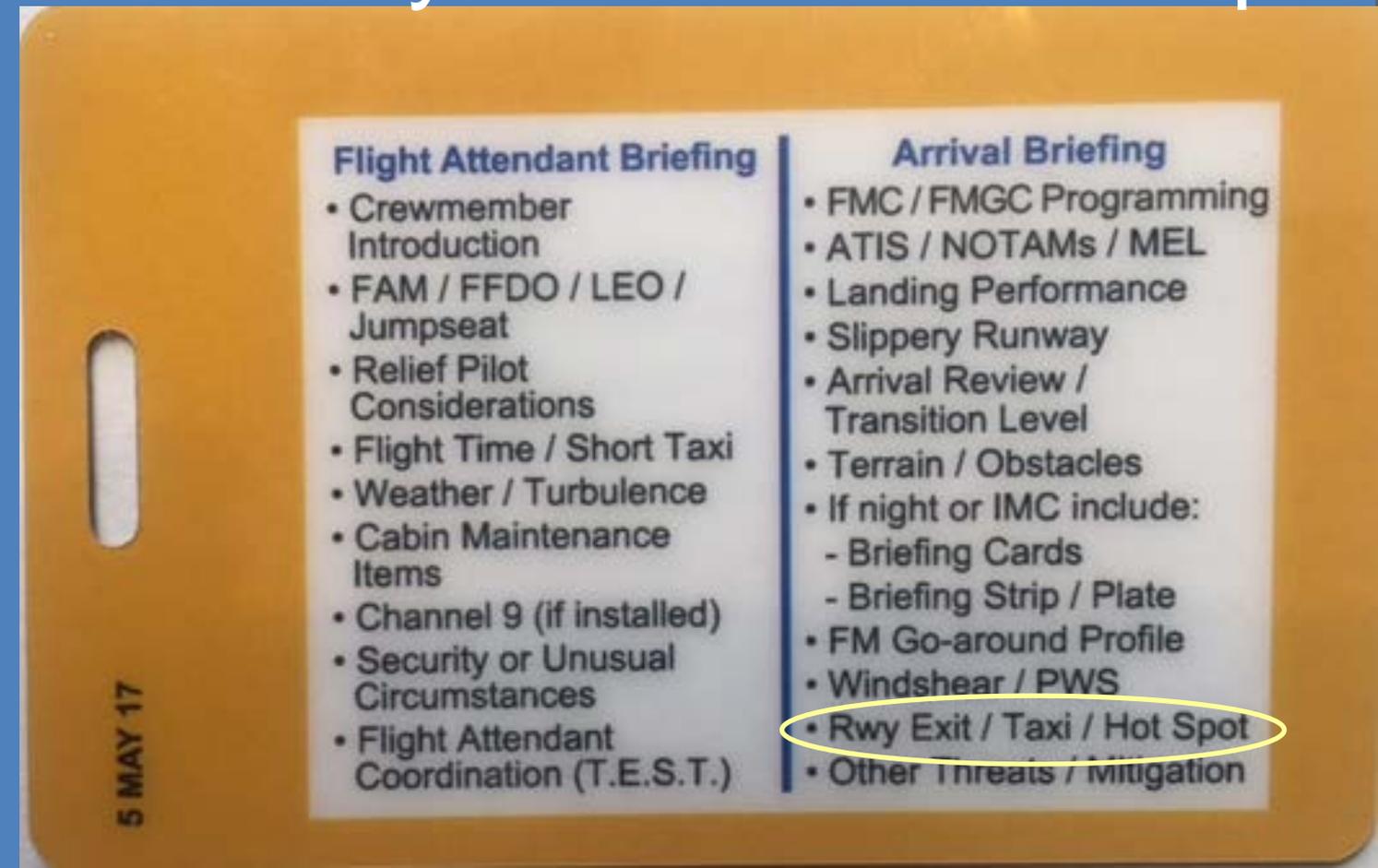


## Departure Briefing

- Taxi Plan / Hot Spots / 10-7

## Arrival Briefing

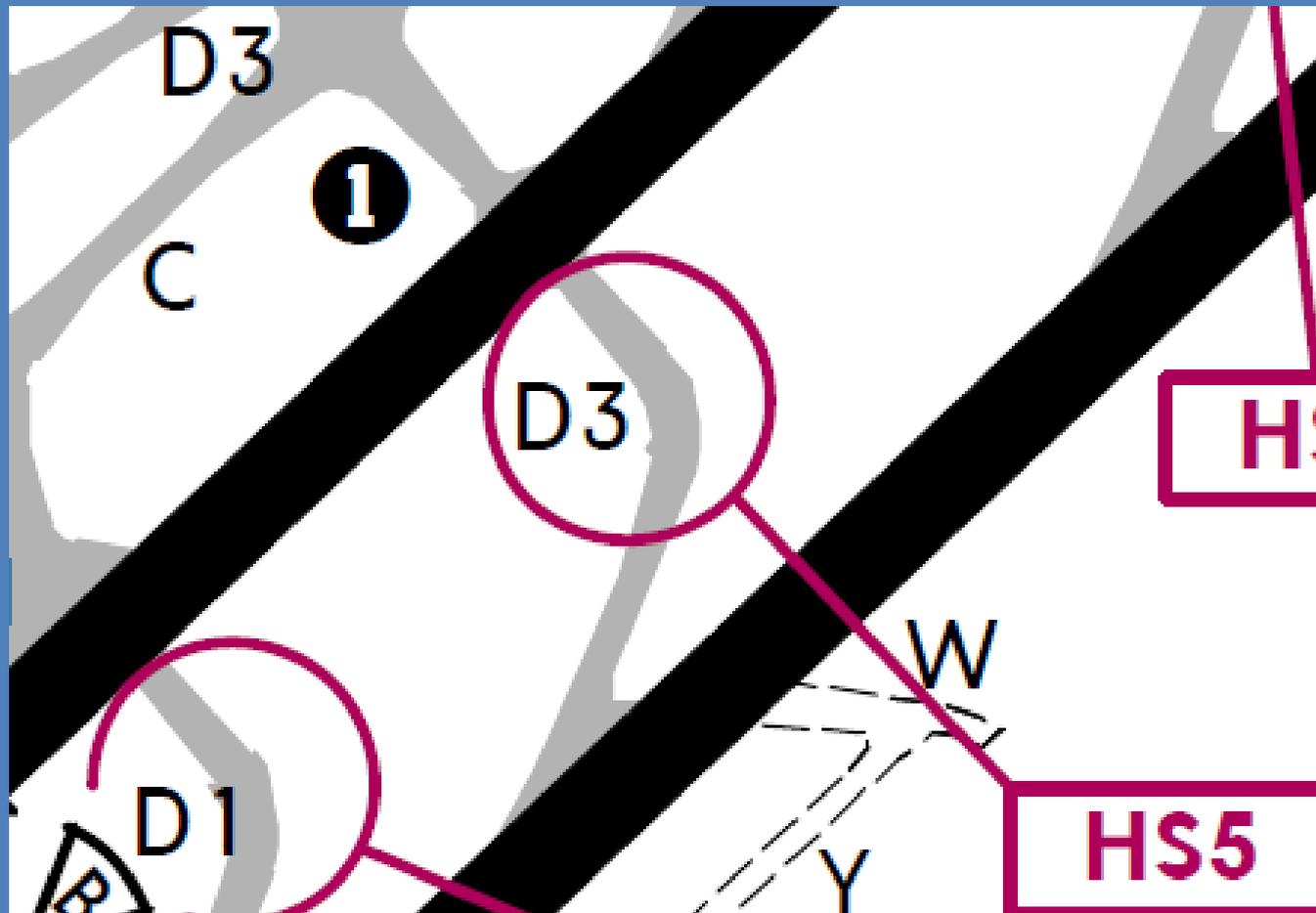
- Runway Exit / Taxi / Hot Spot



# Mitigation Strategies

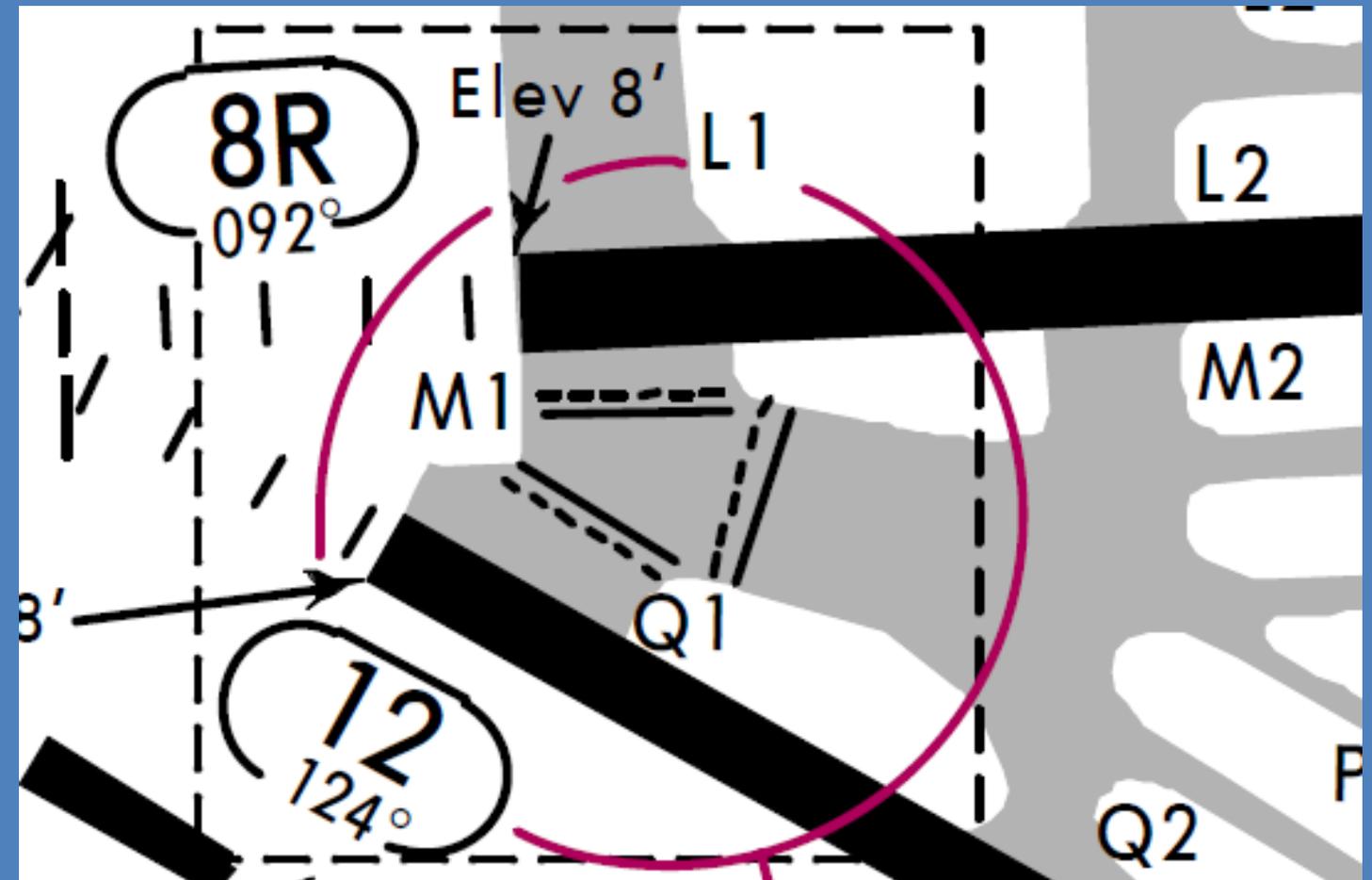
## Hot Spots

YYZ



**HS 5** Exiting Rwy 06R onto Twy D3 aircraft fail to hold short of and incur on Rwy 06L/24R.

MIA



**HS 5** Two runway ends close together with multiple hold lines that are dependent upon runway(s) in use.

# Mitigation Strategies

EWR/KEWR

8 SEP 17

10-7

NEWARK, NJ  
NEWARK LIBERTY INTL

<b>POSITION</b> <b>Elevation</b> 17 feet  <b>Gate Coords</b> See 10-9C page	See 10-9B page	<b>UTC</b> LST = UTC - 5 LDT = UTC - 4
<b>PUSHBACK</b> Contact UAL Ramp prior to Pushback. See 'Parking/Gate Considerations' chart on next page.		<b>SPECIAL ITEMS</b>  <b>Noise Abatement</b>  <b>LAHSO</b>  <b>Engine Failure Procedure (Rwys 4R, 11, 22L, 29)</b>
<b>FREQUENCIES</b> <b>Operations</b> Concourse C-1 & Terminal B . . . . . 130.975 Concourses C-2 & C-3. . . . . 130.250 Flight Operations Station Operations Control (FOSOC): . . . . . Hours 0530-2400 (Daily) / Phone: (973) 681-2689  <b>UAL Ramp Control</b> Terminal C. . . . . 123.850 Terminal B/C . . . . . 129.575 Gates B40/41/41B. . . . . DL Ops 131.850  <b>Intl Ramp Control (Port Authority)</b> Terminal B. . . . . 122.850		<b>ARINC (Above FL200) . . . . . 129.400, 129.900</b> <b>Hub MX Control . . . . . 131.225</b> <b>Gate Hold . . . . . 132.450</b> <b>Supertug . . . . . 130.525</b> <b>Thunder/IROPS . . . . . 129.550</b>  <b>Deice (see more below)</b> Ball Park . . . . . 130.525 Terminal C Gate Deice . . . . . 131.500 Amelia Pad . . . . . 130.400 4L Pad & Snowflake . . . . . 129.375 22R/Secondary location . . . . . 129.375

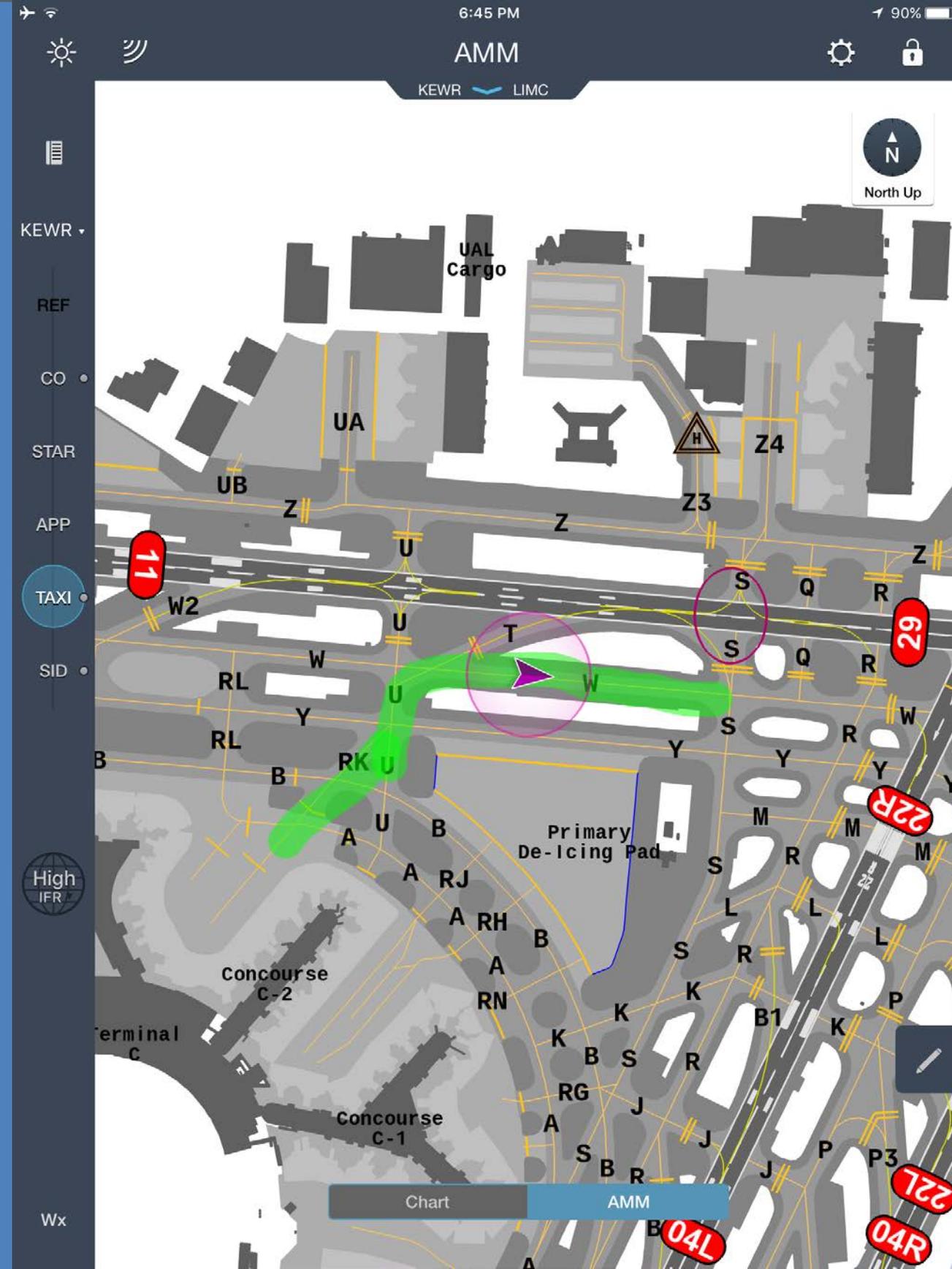
**SAFETY ALERT**

Reports indicate a high occurrence of aircraft entering/exiting the ramp boundary without contacting Ramp/Ground. Query Ramp/Ground if unsure of ramp boundary locations.

GATE, RAMP, AND TAXI

1. Terminal C/GATE 40-41-41B - Ramp 1 (UAL/RFP)

# Future Strategies



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