



**TETERBORO AIRPORT – CHIEF PILOT MEETING**  
**October 29, 2018 at 13:00 EST**  
Audio call 888-446-7584 code 7064524

# Teterboro Airport – Chief Pilots Meeting

- Please mute your phone.
- During the presentations please submit any questions through the 'chat' feature on the WebEx.

# TETERBORO AIRPORT CHIEF PILOTS MEETING FALL 2018 AGENDA

- 1. Airport Activity – Scott Marsh**
- 2. Winter Operations Report – John Kastens**
- 3. TALPA / RCAM Update – John Kastens**
- 4. Runway Safety Action Brief – TEB 2018 – Gary Palm**
- 5. TEB Airport Construction – Scott Marsh**
- 6. Upcoming Construction – EWR, JFK, LGA – Ralph Tamburro**
- 7. Northeast Corridor Initiatives – Ralph Tamburro**



# Teterboro Airport – Flight Operations

- Teterboro Airport 2018 through September, down 1.74% as compared to 2017
- Recommended to notify the FBO of your choice of your flight schedule
- RUNWAY 19 - DALTON TWO Departure
- TWY B between runways removed
- PBI Screening Operations
- New ARFF and Snow Removal Vehicles





# **Teterboro Airport Snow & Ice Control 2018-2019 Season**

October 29, 2018



# Snow & Ice Control Equipment

## Equipment

- Multifunction Equipment (plow/broom/blower)
- Heavy duty & Light duty plows
- Rotary blowers

## Chemicals & Abrasive Materials

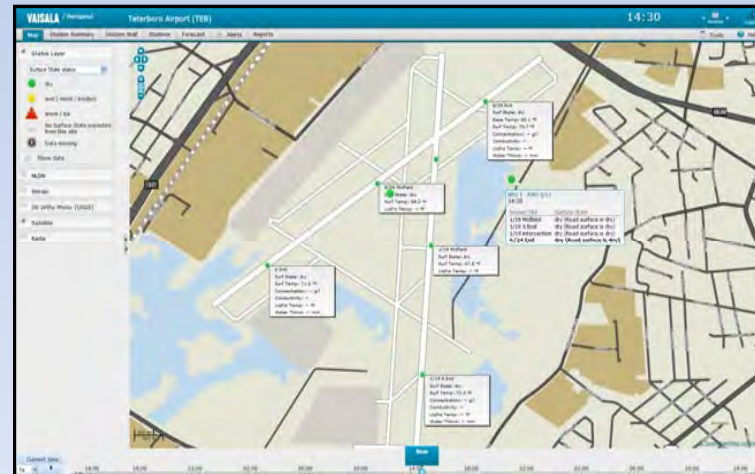
- Potassium Acetate (Liquid)
  - Primary applicator used to prevent ice bonding to pavement
- Sodium Acetate (Solid)
  - Secondary applicator used to melt ice on runway and taxiways
- Sand

*\*All 3 meet FAA-approved specifications.*

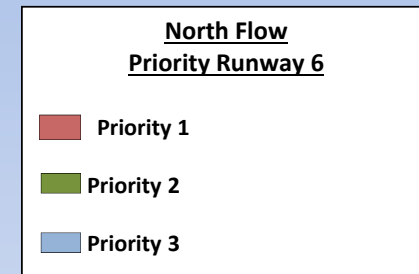
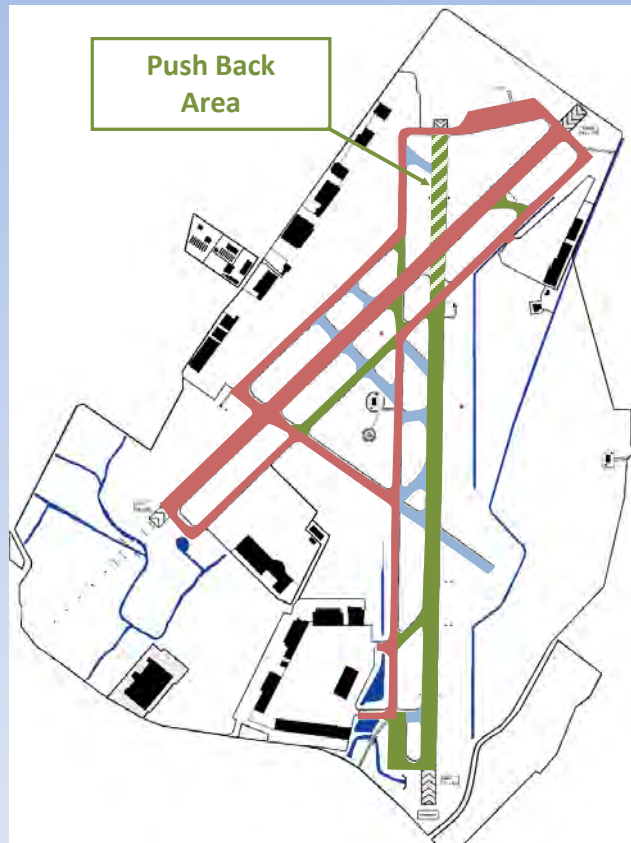
# Snow & Ice Control Equipment

## Runway Weather Information System (RWIS)

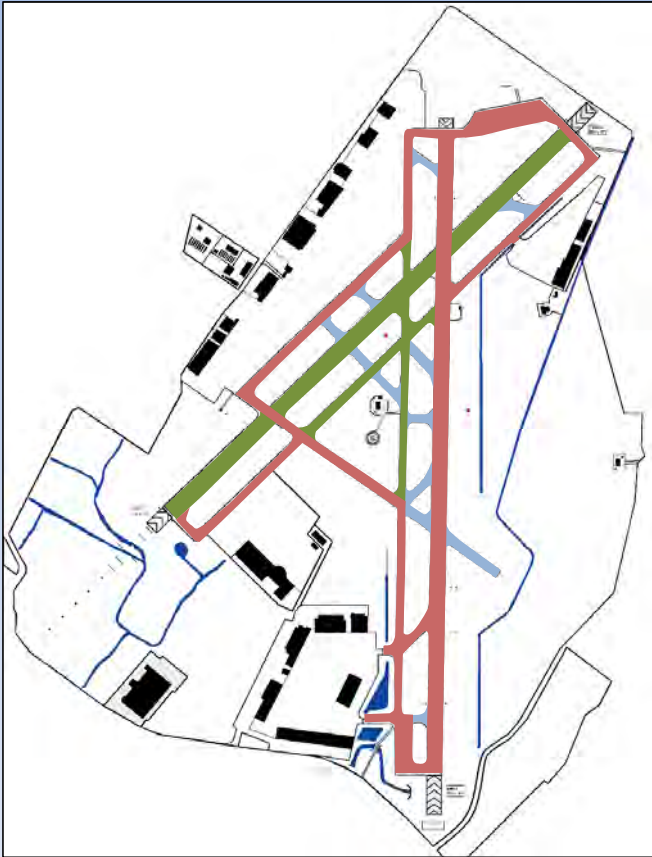
- In-Pavement Surface Sensors that provide:
  - Pavement Temperature
  - Air Temperature
  - Dew Point
  - Chemical Strength
  - Trend Info



# North Flow Priority - RWY 6



# South Flow Priority - RWY 19



**South Flow  
Priority Runway 19**

- Priority 1
- Priority 2
- Priority 3

# Snow Removal Criteria

## Braking Action Reporting

LOA between TEB ATCT and PANYNJ:

- Any time braking action of **NIL** is reported to ATCT, regardless of aircraft type, that the runway shall be immediately considered **CLOSED** and ATCT shall not permit any further operations on that runway until notified by Airport Operations
- Airport Operations will immediately inspect runway and make determination on runway status

# Communication & Safety

## **AOA Ops Supervisor (TEB 99)**

- Single POC between Airport Ops, Airport Mx & ATCT
- Continuously monitor & assess runway conditions
- Issue all Field Condition Reports via NOTAM system

## **Airport Ops Snow Desk (TEB 98)**

- Coordinate runway closures with ATCT and TRACON
- Coordinate De-Icing Program between ATCT & FBOs
- Monitor PIREPs to identify deteriorating runway conditions

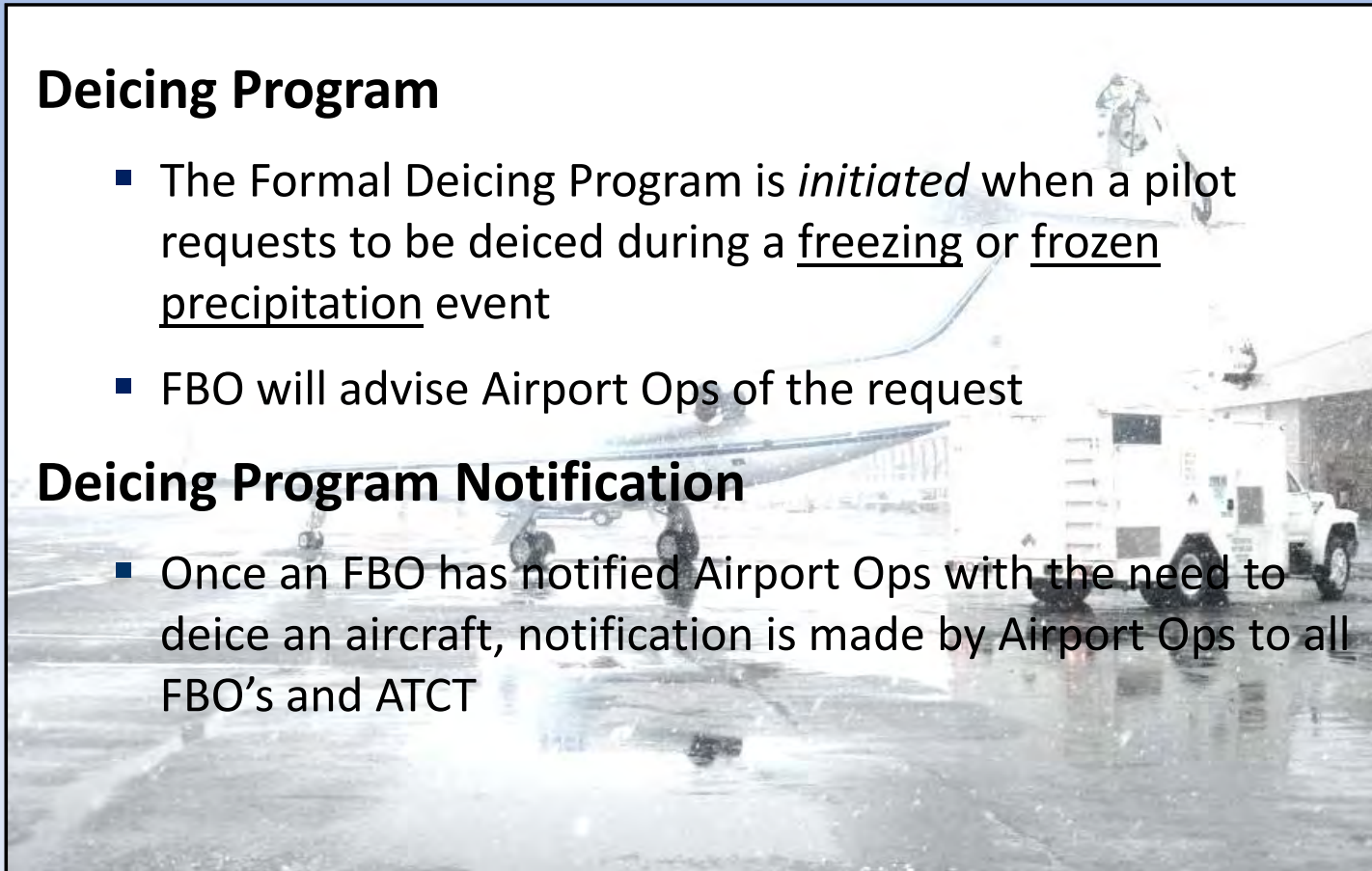
# Aircraft Deicing Program

## Deicing Program

- The Formal Deicing Program is *initiated* when a pilot requests to be deiced during a freezing or frozen precipitation event
- FBO will advise Airport Ops of the request

## Deicing Program Notification

- Once an FBO has notified Airport Ops with the need to deice an aircraft, notification is made by Airport Ops to all FBO's and ATCT



# Snow Removal Summary

- Reviews conducted after each event
- Goal is to measure the snow removal efforts from the customer's perspective
- Specifics from each event are presented at the monthly Manager's meetings from November through April



**Thank You**


# TALPA

## Takeoff & Landing Performance Assessment


### Impact to Airport Snow & Ice Control

Teterboro Airport  
October 29, 2018


# Background

- ▶ FAA chartered an Aviation Rulemaking Committee (ARC) to address Take-Off & Landing Performance Assessment (TALPA)
  - ▶ Goal was to reduce the risk of runway overrun accidents & incidents due to runway contamination
  - ▶ US airports began using the new TALPA guidelines beginning 2016–2017 season
- 

# Key Changes

- ▶ Standardized terms for contaminants; the decommissioning of terms such as 'patchy', 'trace', and 'thin'
  - ▶ Airport operators may continue to conduct runway friction surveys (as part of runway condition assessment), the dissemination of friction Mu values via the NOTAM system are **no longer acceptable**
  - ▶ Airports are now strongly encouraged to report a 'Wet Runway' when more than 25% of the runway surface is covered by visible dampness or water (1 / 8" or less in depth)
- 


# Runway Condition Assessment Matrix (RCAM)

- ▶ Replaces subjective judgements of runway conditions with objective measurements and assessments based on:
    - Runway Contaminant Coverage
    - Type of Contaminant
    - Depth of Contaminant
    - Outside Air Temperature (OAT)
- 

# Runway Condition Assessment Matrix (RCAM)

Assessment Criteria	Code	Friction Coefficient (FC)	Drainage Assessment Criteria	Required Braking Action
Runway Condition Description			Various observations or Directional Control Observations	
<ul style="list-style-type: none"> <li>Dry</li> </ul>	6	0.75	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
<ul style="list-style-type: none"> <li>Frost</li> <li>Wet (Includes Damp and 1/8 inch depth or less of water)</li> </ul> 1/8 inch (2mm) depth or less of: <ul style="list-style-type: none"> <li>Slush</li> <li>Dry Snow</li> <li>Wet Snow</li> </ul>	5	0.60	Braking deceleration OK directional control is between Good and Medium.	Good to Medium
(°F (-10°C) and colder outside air temperature: <ul style="list-style-type: none"> <li>Compacted Snow</li> </ul>	4	0.45	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
<ul style="list-style-type: none"> <li>Slippery When Wet (wet runway)</li> <li>Dry Snow or Wet Snow (Any depth) over Compacted Snow</li> </ul> Greater than 1/8 inch (2mm) depth of: <ul style="list-style-type: none"> <li>Dry Snow</li> <li>Wet Snow</li> </ul>	3	0.30	Braking deceleration OK directional control is between Medium and Poor	Medium to Poor
(Warmer than 32°F (-10°C) outside air temperature: <ul style="list-style-type: none"> <li>Compacted Snow</li> </ul> Greater than 1/8 (2mm) inch depth of: <ul style="list-style-type: none"> <li>Water</li> <li>Slush</li> </ul>	2	0.15	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
<ul style="list-style-type: none"> <li>Ice<sup>1</sup></li> </ul>	1	0.05	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is unacceptably.	Nil
<ul style="list-style-type: none"> <li>Wet Ice<sup>2</sup></li> <li>Slush over ice</li> <li>Water over Compacted Snow<sup>2</sup></li> <li>Dry Snow or Wet Snow over Ice<sup>2</sup></li> </ul>	0	0.00		

# Runway Condition Assessment Matrix (RCAM)


- ▶ Flight crews can better correlate reported runway surface conditions to contaminated landing performance data supplied by aircraft manufacturer
  - ▶ Flight crews will receive runway surface condition reports in a consistent and standardized format from all airports
  - ▶ Flight crews will have more detailed info to make operational decisions
- 

# Runway Condition Codes (RwyCC)

Assessment Criteria		Downgrade Assessment Criteria		
Runway Condition Description	Code	$\mu$ (g)	Vehicle Deceleration or Directional Control Observation	Pilot Reported Braking Action
<ul style="list-style-type: none"> <li>Dry</li> </ul>	6	0.70	—	—
<ul style="list-style-type: none"> <li>Frost</li> <li>Wet (includes Damp and 1/8 inch depth or less of water)</li> </ul> 1/8 inch (3mm) depth or less of: <ul style="list-style-type: none"> <li>Slush</li> <li>Dry Snow</li> <li>Wet Snow</li> </ul>	5	0.50	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
3° F (-15°C) and colder outside air temperature: <ul style="list-style-type: none"> <li>Compacted Snow</li> </ul>	4	0.30	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
<ul style="list-style-type: none"> <li>Slippery When Wet (wet runway)</li> <li>Dry Snow or Wet Snow (Any depth) over Compacted Snow</li> </ul> Greater than 1/8 inch (3mm) depth of: <ul style="list-style-type: none"> <li>Dry Snow</li> <li>Wet Snow</li> </ul> Warmer than 3° F (-15°C) outside air temperature: <ul style="list-style-type: none"> <li>Compacted Snow</li> </ul>	3	0.20	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
Greater than 1/8 (3mm) inch depth of: <ul style="list-style-type: none"> <li>Water</li> <li>Slush</li> </ul>	2	0.10	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
<ul style="list-style-type: none"> <li>Ice<sup>a</sup></li> </ul>	1	0.05	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
<ul style="list-style-type: none"> <li>Wet Ice<sup>a</sup></li> <li>Slush over ice</li> <li>Water over Compacted Snow<sup>a</sup></li> <li>Dry Snow or Wet Snow over ice<sup>a</sup></li> </ul>	0	0.00	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Nil




# Runway Condition Codes (RwyCC)

- ▶ RwyCC are codes generated for each runway third and allow pilots to interpret the runway condition in a standardized format based on aircraft performance data
  - ▶ RwyCC is only generated when contaminants are present on greater than 25% of the maintained portion of the runway surface
  - ▶ When runway contaminants exists, but overall coverage is 25% or less, the contaminants will still be reported, but a RwyCC will not be generated
- 

# Outside Air Temperature (OAT)

- ▶ Used to determine the correct RwyCC for Compacted Snow when:
  - OAT is above 5°F (−15°C)
  - OAT is 5°F (−15°C) or colder
- ▶ Airport Operators should exercise a heightened frequency of runway assessments if temperatures are near freezing and warmer 26.6°F (−3°C)

# Other Prescribed Actions

- ▶ A NIL PIREP, or NIL runway assessment by the airport operator, requires that the runway be closed before the next flight operation
    - The runway must remain closed until the airport operator is satisfied the NIL condition no longer exists
  - ▶ When previous PIREPs have indicated GOOD or MEDIUM braking action, two consecutive POOR PIREPs should be taken as evidence that surface conditions may be deteriorating and require the airport operator to conduct a runway assessment
- 


# FICON NOTAMS

!TEB XX/XXX TEB RWY 6 FICON 5/5/5 100 PRCT 1/8IN DRY SN  
OBSERVED AT 1610101916. 1610101856-1610111856

- Dry snow is falling
- Rwy 6 is 100% covered with up to 1/8 inch dry snow
- OAT 18°F

# FICON NOTAMS

!TEB XX/XXX TEB RWY 19 FICON 3/3/3 75 PRCT 1/4IN WET SN  
DEICED LIQUID 100FT WID OBSERVED AT 1610121752.  
1610121751-1610131751

- Rwy 19 is 75% covered with wet snow
  - Rwy 19 was de-iced 100 FT wide (liquid) full length at 1752Z
  - OAT 29°F
- 

# FICON NOTAMS

!TEB XX/XXX TEB RWY 06 FICON 5/5/5 100 PRCT 1/8IN SLUSH  
OBSERVED AT 1610101842. 1610101843-1610111843

- Wet snow falling
- Rwy 6 is 100% covered with up to 1/8 inch of slush
- OAT 32°F



# FICON NOTAMS

!TEB XX/XXX TEB RWY 19 FICON 2/2/2 100 PRCT 1/4IN SLUSH  
OBSERVED AT 1610101904. 1610101856-1610111856

- Wet snow is falling
- Rwy 19 is 100% covered with up to ¼ inch slush
- OAT 32°F



# FICON NOTAMS

!TEB XX/XXX TEB RWY 24 FICON 5/5/5 50 PRCT WET OBSERVED  
AT 1610101922. 1610101922-1610111922

- Light rain is falling
- Rwy 24 is 50% covered wet
- OAT 56°F



THANK YOU



# FY2018 Runway Safety Action Team (RSAT)

TEB ATCT



Federal Aviation  
Administration

DRAFT



# Introduction

- Welcome to the Runway Safety Action Team (RSAT)
  - Air Traffic Manager: Gary A. Palm
  - Airport Manager: Renee Spann
  - Airport Safety: Scott Marsh
  - TEB NATCA: Joseph Biancospino
  - Operations Manager: John Kastens
  - Airport Services Manager: John Panarello





# Agenda

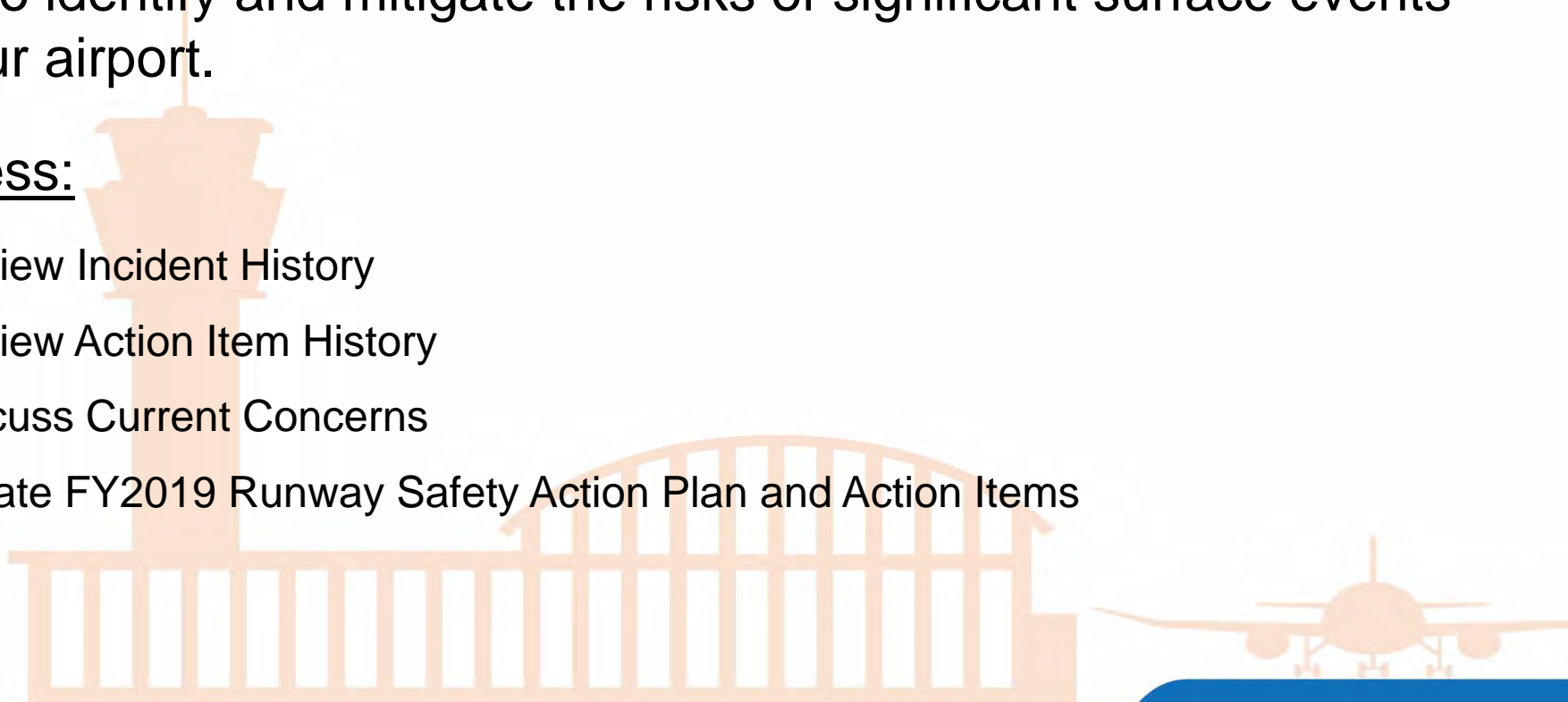
- Runway Safety Briefing
  - Overview of the RSAT Process
  - Definitions and National Statistics
  - National Trends and Topics
- RSAT Open Discussion
  - Local Incident History
  - Local Action Item Review
  - Identify local risk factors and/or current initiatives
  - Stakeholder / User Perspectives
- Outcome: Develop RSAP and Action Items





# RSAT Process Overview

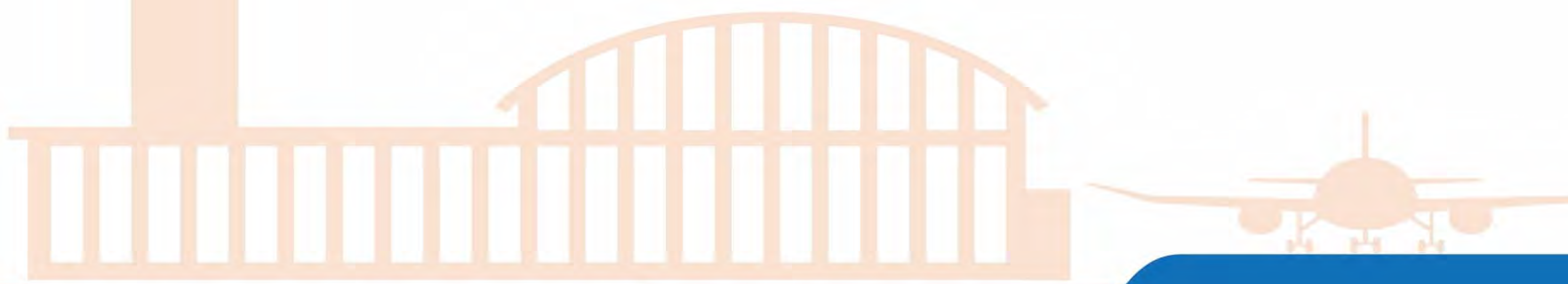
- Purpose: To bring local stakeholders together at least once per year to identify and mitigate the risks of significant surface events at your airport.
- Process:
  - Review Incident History
  - Review Action Item History
  - Discuss Current Concerns
  - Create FY2019 Runway Safety Action Plan and Action Items





# Definitions

- **Runway Incursion:** The incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft. (This includes the Runway Safety Area (RSA).)
- **Runway Excursion:** A veer off or overrun off the runway surface.
- **Surface Incident:** Unauthorized or unapproved movement within the designated movement area (excluding runway incursions) or an occurrence in that same area associated with the operation of an aircraft that affects or could affect the safety of flight.





# Definitions

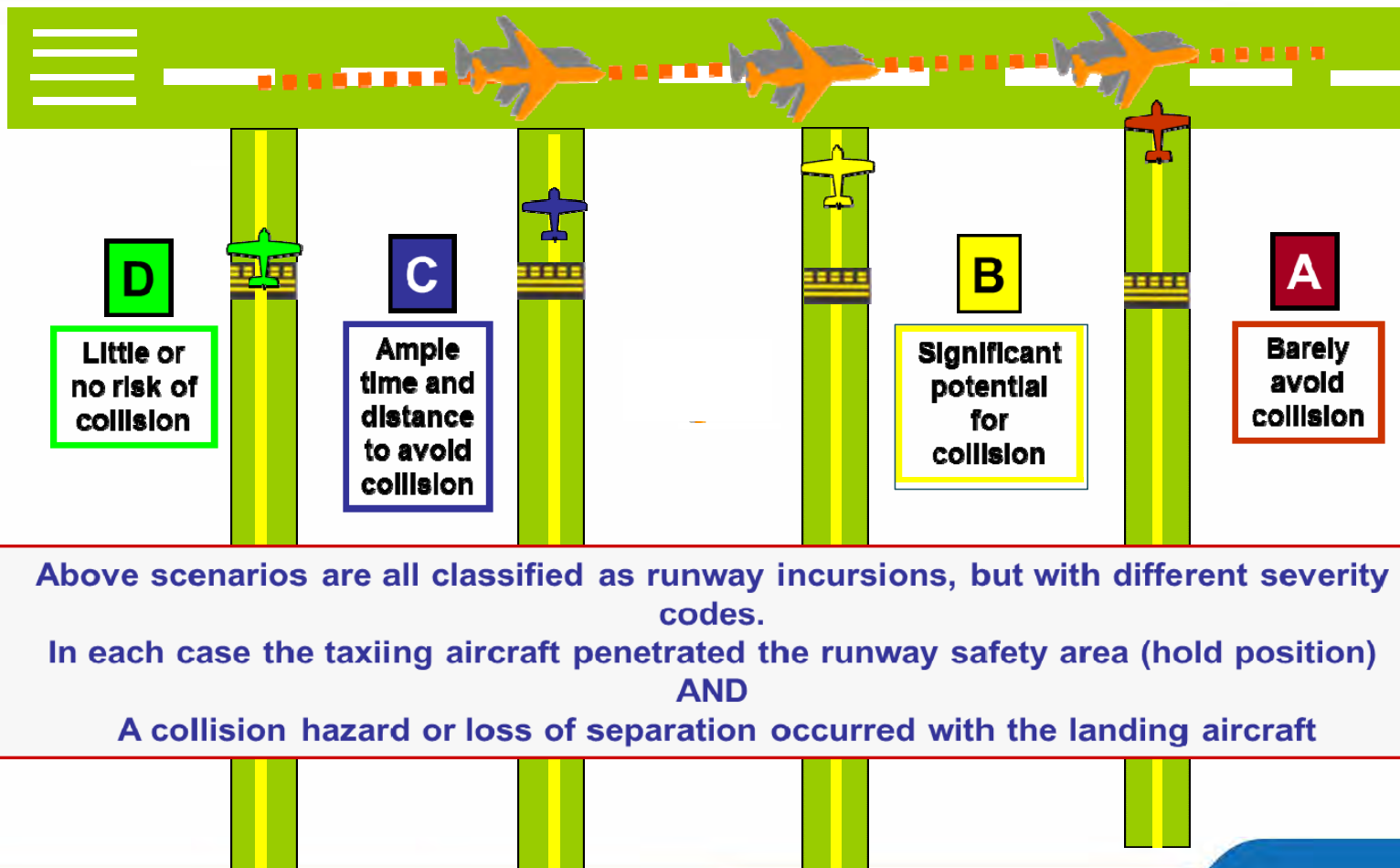
## Types of Surface Events:

- **Operational Incident (OI)** – A surface event attributed to ATCT action or inaction.
- **Pilot Deviation (PD)** – A surface event caused by a pilot or other person operating an aircraft under its own power.
- **Vehicle or Pedestrian Deviation (VPD)** – A surface event caused by a vehicle driver or pedestrian
- **Other** – Surface events which cannot clearly be attributed to a mistake or incorrect action by an air traffic controller, pilot, driver, or pedestrian will be classified as “other.” These events would include incursions caused by equipment failure or other factors.





# Definitions - Severity Category

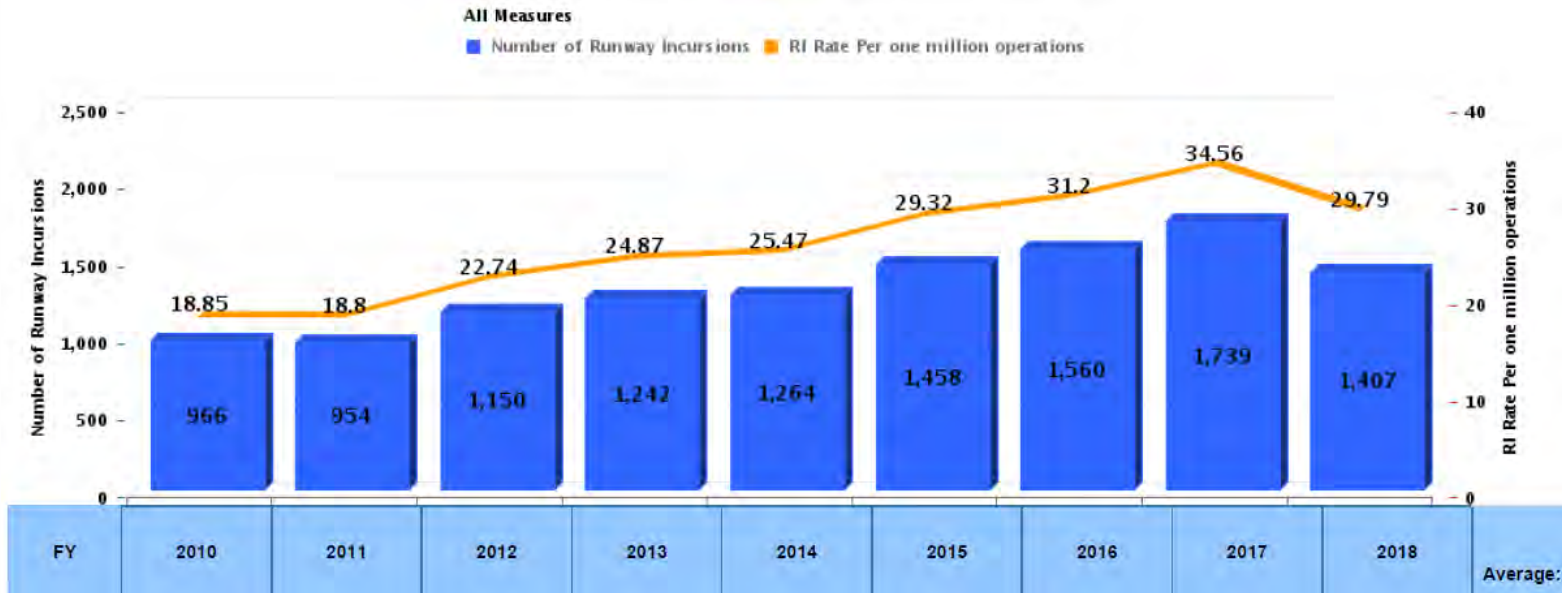






# National Statistics

## Total Runway Incursions by Fiscal Year



Data current as of 9/1/2018



# National Statistics

## Category A and B Runway Incursions by Fiscal Year



Data current as of 9/1/2018



# Communications

- Communication continues to be a contributing factor in many runway incursions.





# Communications

- An example scenario:
  - Pilot taxies out to Runway 19.
  - Pilot calls ready for takeoff Runway 19.
  - Controller instructs the pilot to cross Runway 19 and expedite for landing traffic, intending for the aircraft to cross Runway 19 to the east side for departure.
  - Pilot responds “Runway 19, cleared for takeoff.”
  - Controller does not catch the incorrect read back.
  - Pilot taxies onto Runway 19 for departure.
  - Traffic on short final for Runway 19 is instructed to go around.





# Close the Loop





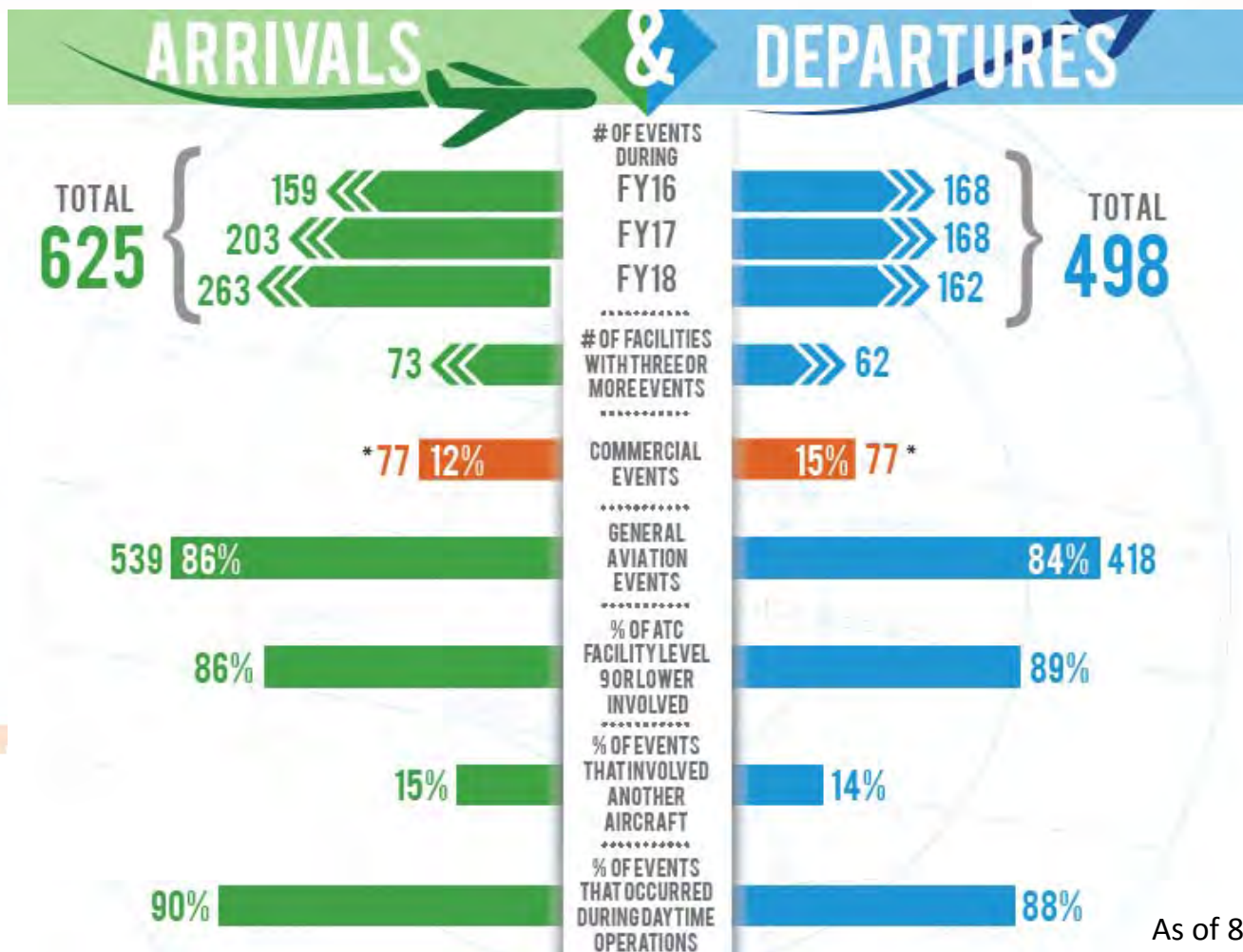
# Communication Best Practices

- Complete Read back / Hear back loop
- Use Prescribed Phraseology and Standard Format
- Maintain Situational Awareness – pay attention to transmissions to other aircraft/vehicles on frequency
- Employ appropriate Speech Rate
- Ask for clarification when unsure of instructions





# Wrong Surface Operations



As of 8/16/2018





# Wrong Surface Landings

- Wrong Surface Landings include wrong runway, taxiway, and wrong airport landings.
- Common geometric factors include:
  - Parallel runways
  - Closely aligned runway ends
  - Parallel taxiways confused for runways

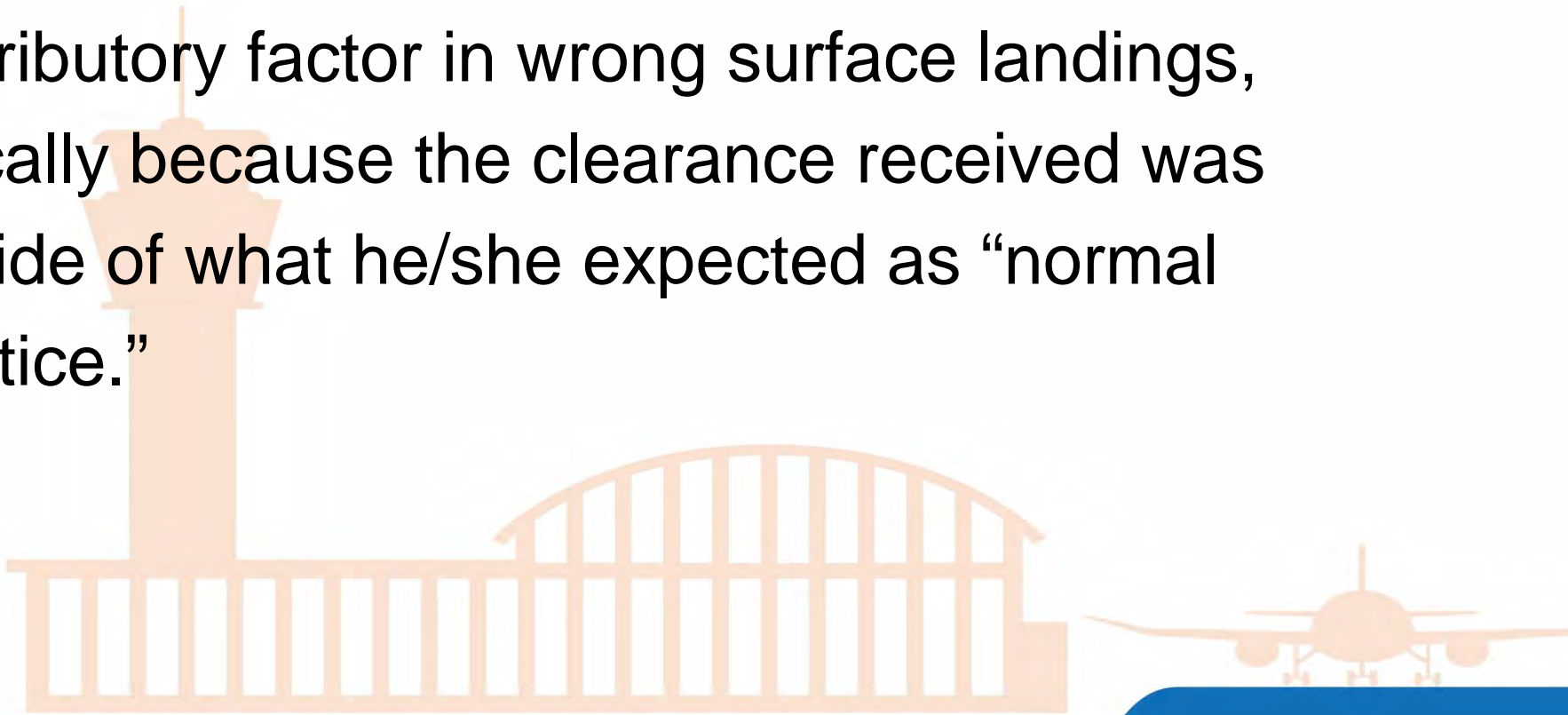






# Pilot Expectation Bias

- Pilot expectation bias is the most common contributory factor in wrong surface landings, typically because the clearance received was outside of what he/she expected as “normal practice.”





# Wrong Surface Mitigations

To mitigate the risk of wrong surface operations, every user of the airfield can:

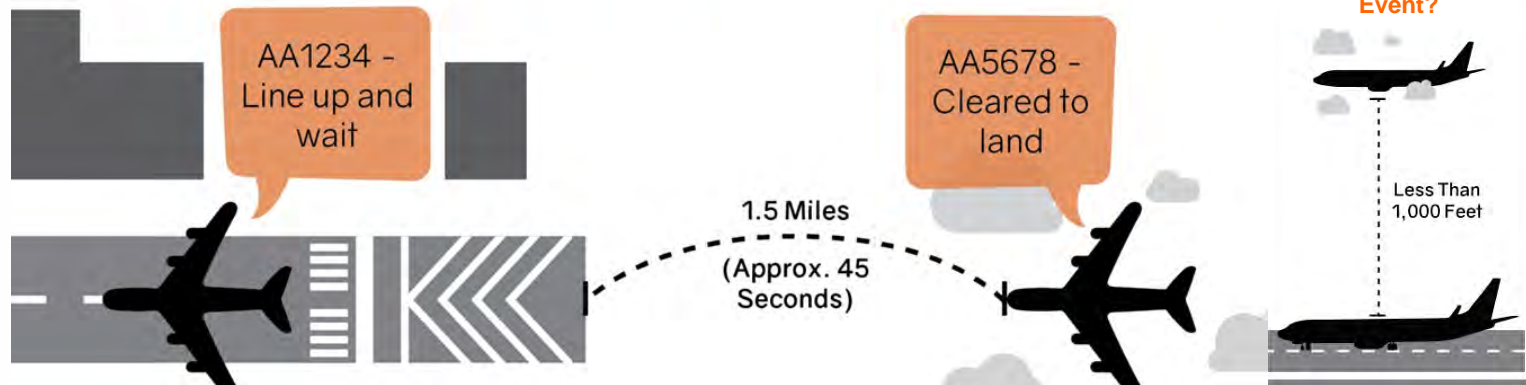
- Review the Airport Diagram prior to operation
- Review Visual Cues – Runway versus Taxiway
  - Paint: White or Yellow
  - Lights: White or Blue/Green
- Use common Verbal Cues – Use of “Active Runway”
- Be familiar with Runway Holding Position Markings
- “Close the Loop” with Read back / Hear back



# Flyover Events

## SAFETY IN SECONDS

YOU HAVE LESS THAN A MINUTE TO DO THE RIGHT THING





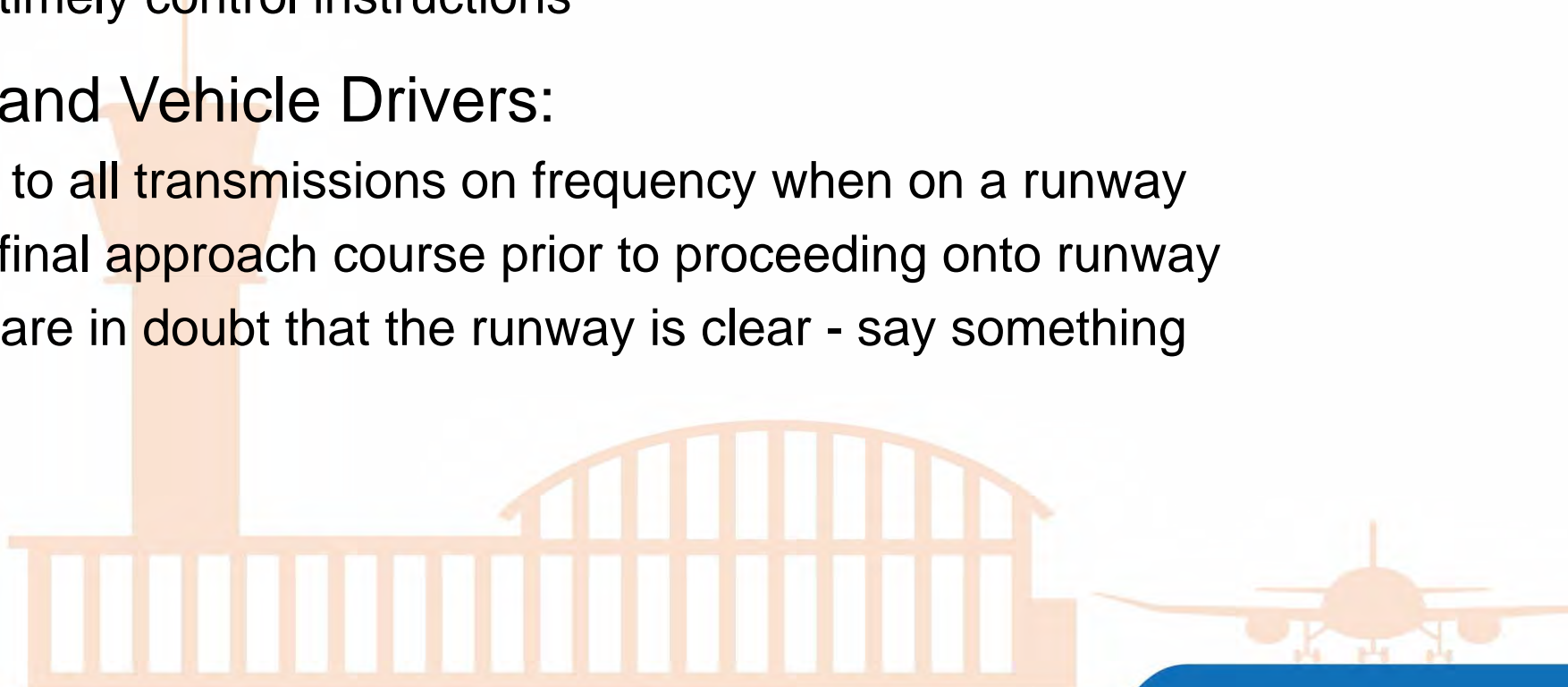
# Flyover Risk Mitigations

## Air Traffic Control:

- Issue timely control instructions

## Pilots and Vehicle Drivers:

- Listen to all transmissions on frequency when on a runway
- Clear final approach course prior to proceeding onto runway
- If you are in doubt that the runway is clear - say something





# Runway Excursions

- Lead to more runway accidents than all other causes combined.\*
- Estimated annual cost: \$900 Million
- Causes
  - Unstable Approaches
  - Runway Contamination
  - Adverse Weather / Wind Conditions
  - Mechanical Failure
  - Pilot Error





# Runway Excursions

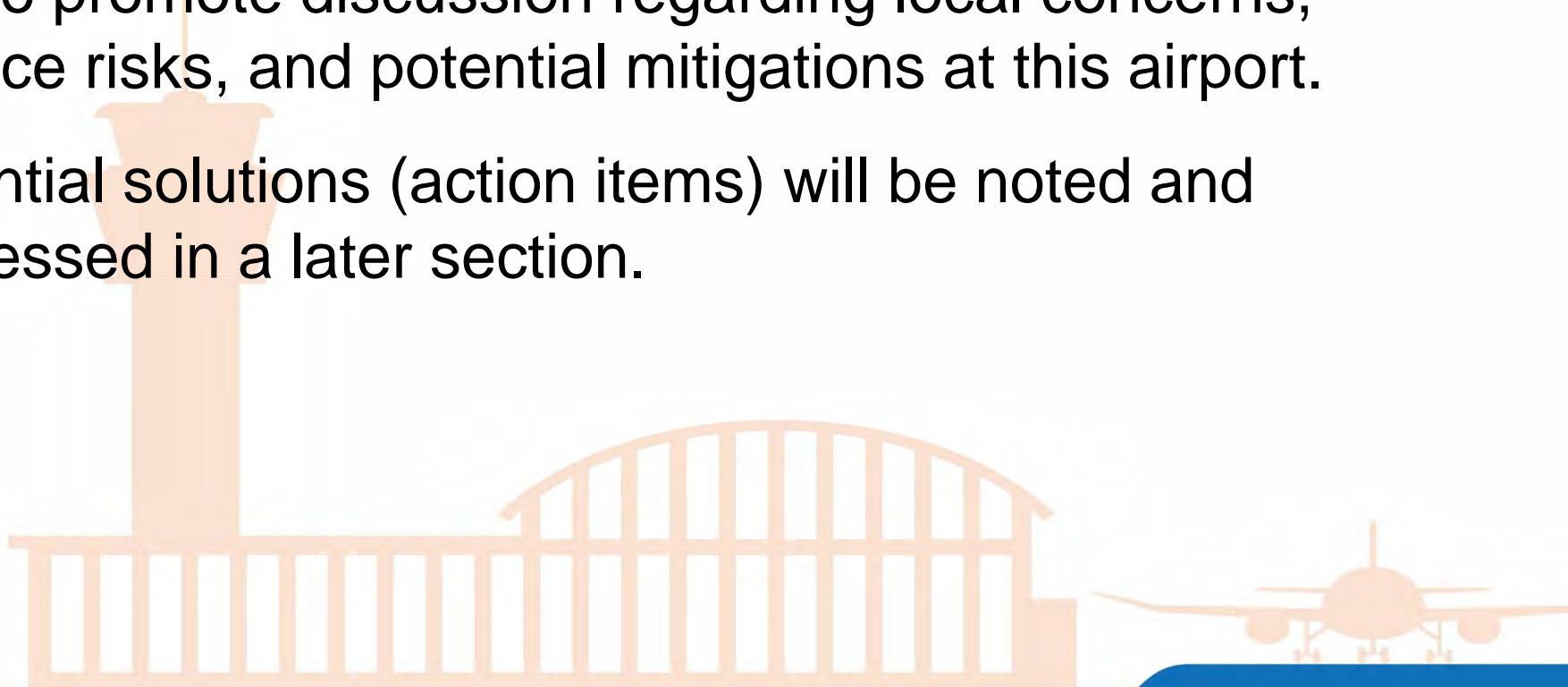
- Possible Mitigations:
  - Stabilized approach below 500' in VMC and 1000' in IMC
  - Minimize late runway changes and short approaches
  - Ensure timely and accurate weather and surface condition reports
  - Ensure proper runway selection given the conditions: runway length, contamination, wind speed and direction





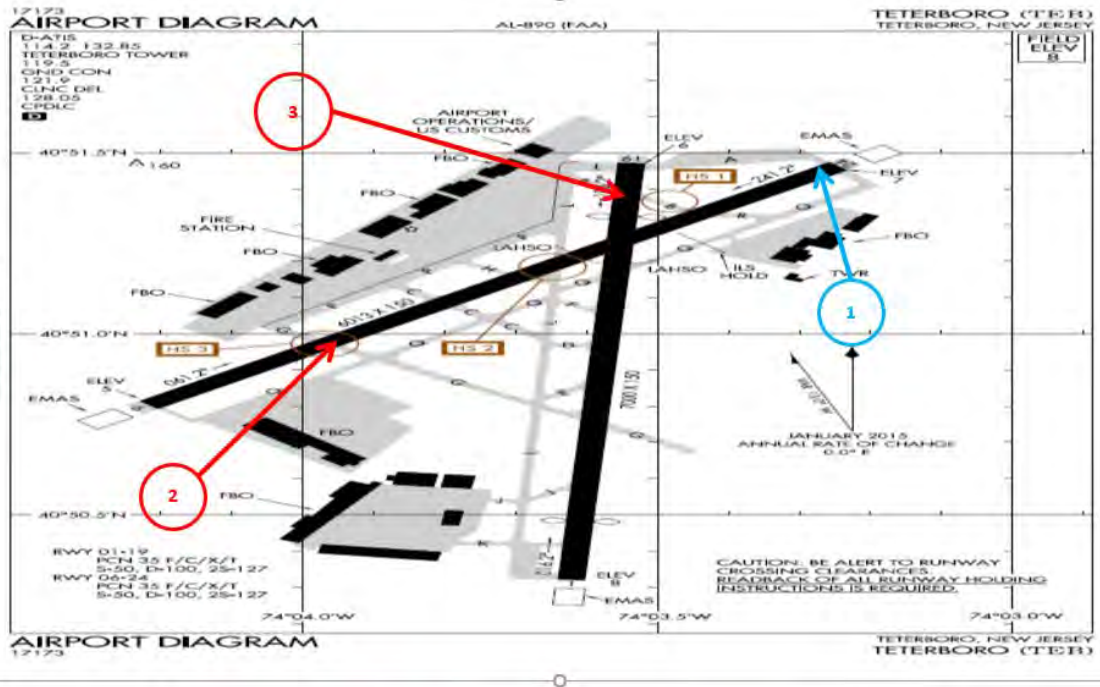
## Local Discussion Topics

- The following slides are provided to review local events and to promote discussion regarding local concerns, surface risks, and potential mitigations at this airport.
- Potential solutions (action items) will be noted and addressed in a later section.





# Local Incidents



● PD   ● V/PD   ● OI   ● Other

**TEB Surface Incident Record FY 2017- FY 2018 Map**  
**For official use only**





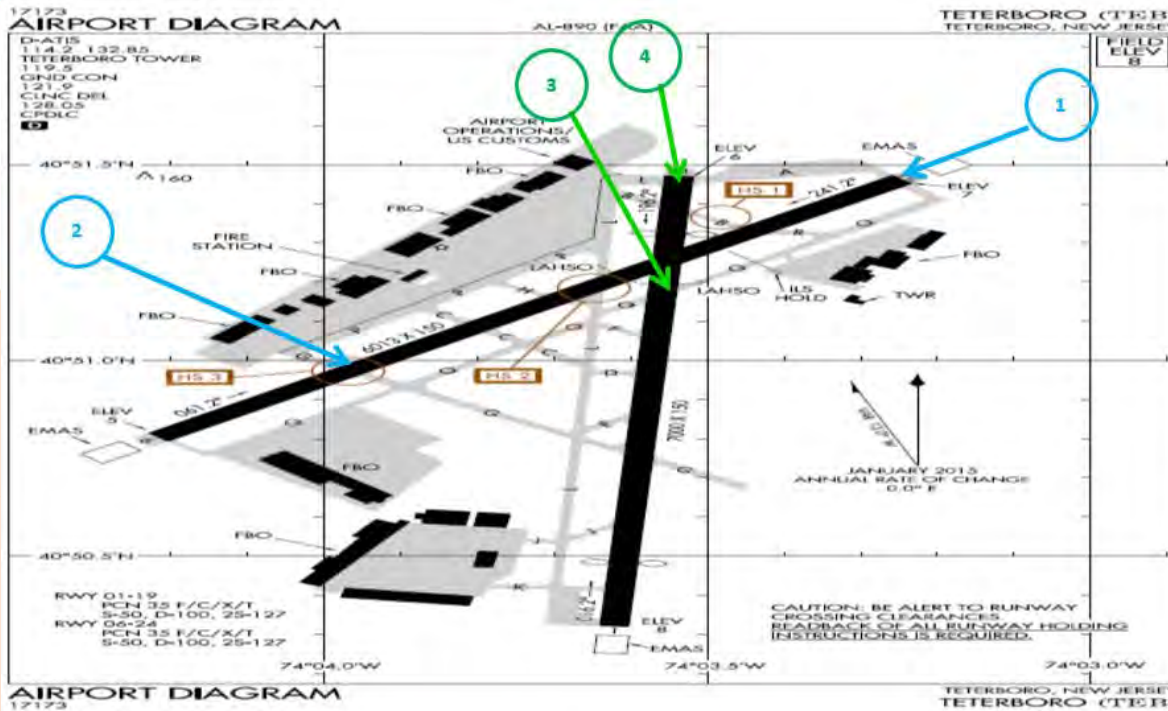
# Local Incidents

Event Number	FY	Event Description
1	18	C-A/C 1/C25B was holding in position on Runway 24 as A/C 2/C421 was also holding in position on Runway 19 at Taxiway Bravo. Local Control issued takeoff clearance for A/C 2 and the read back was correct although there was a garbled comment received during the read back. A/C 1 was observed beginning takeoff roll on Runway 24 near Taxiway Romeo and was instructed to stop. A/C 2 proceeded through the Runway 19/Runway 24 intersection first and A/C 1 taxied through the same intersection second. Closest proximity was approximately 1,200 feet.- <b>20171206</b>
2	18	D-Tug vehicle crossed the RWY 24 hold line without authorization or clearance. A/C 1 was cleared for takeoff on RWY 24 but the tug was back behind the hold short marking before take-off roll began: Tug requested to reposition from the south side ramp area to the Meridian FBO on the north side of the airport. Ground Control instructed the tug to proceed via Taxiways Juliet, Lima and Golf to hold short of Runway 24. The instructions were repeated correctly. Ground Control observed the tug come to a stop over the hold short marking at Taxiway Golf and Runway 24. Ground Control instructed the tug to hold short of Runway 24 and they reversed course to exit the Runway Safety Area. No conflicts.- <b>20180206</b>
3	18	D-A snowplow crossed the RWY 1 hold line at TWY B without authorization or clearance while A/C 1 C525 was LUAW RWY 1: A snowplow was operating near the departure end of Runway 01 on Taxiways Lima and Bravo. A/C 1 was in a Line Up and Wait (LUAW) status on Runway 01 awaiting takeoff clearance. At approximately 1947z the snowplow crossed the Runway Hold Position marking at the intersection of Taxiway Bravo and Runway 01 without TEB ATCT authorization. As Local Control was attempting to clear A/C 1 for takeoff, the Local Control observed the snowplow in the runway protected area and informed A/C 1 to continue holding. Airport Operations was contacted to remove the vehicle. At approximately 1951z, Airport Operations reported the vehicle out of the Runway 01 protected area.- <b>20180207</b>





# Local Incidents



● PD   
 ● V/PD   
 ● OI   
 ● Other

**TEB Surface Incident Record FY 2018 Map**  
**For official use only**



# Local Incidents

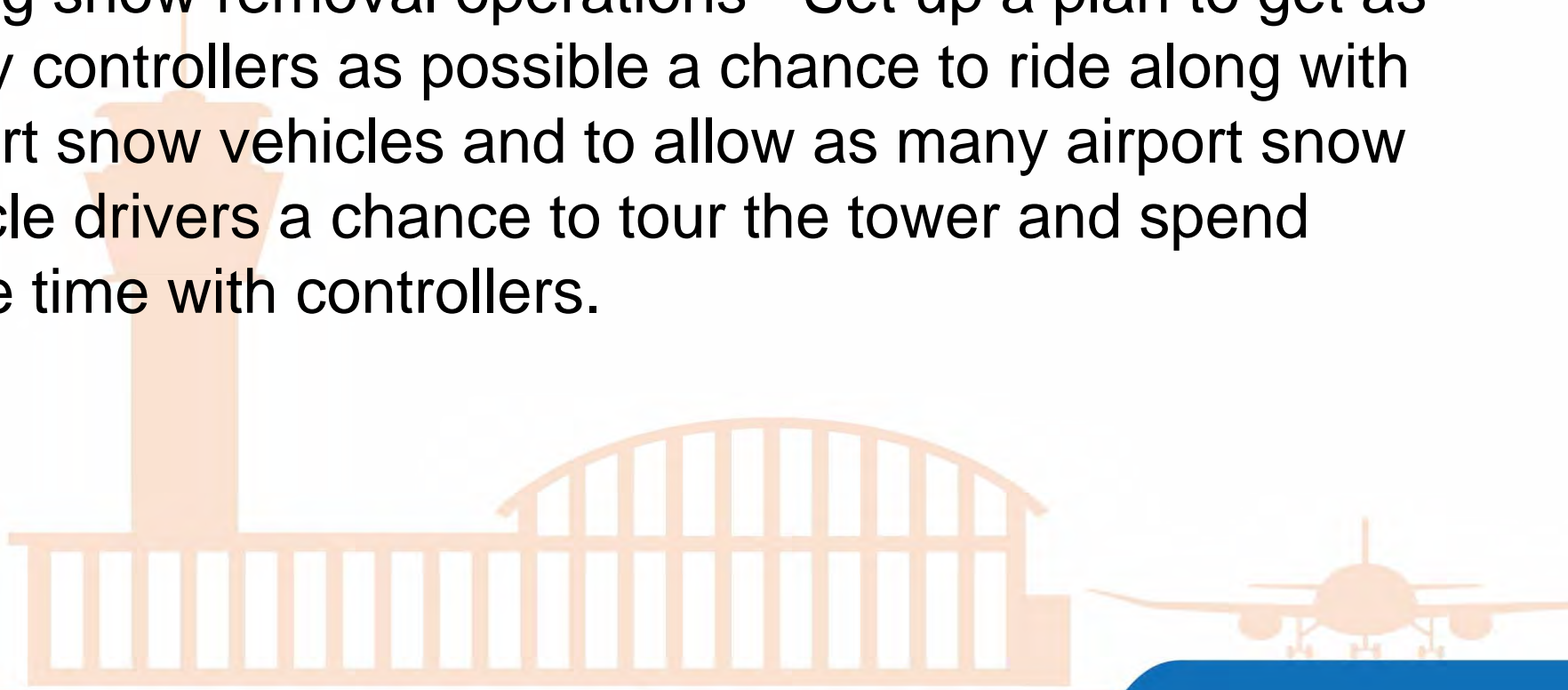
Event Number	FY	Event Description
1	18	C-A/C 1 BE40 DEPARTED RWY 24 WITHOUT AUTHORIZATION CONFLICTING WITH A/C 2 LANDING RWY 19. A/C 1 LUAW RWY 24 as A/C 2 GLF4 was on approach to RWY 19. A/C 1 then departed Runway 24 without authorization as A/C 2 was landing Runway 19. When A/C 2 passed through the intersection of Runway 19/Runway 24, A/C 1 was on departure roll Runway 24 approximately 660 feet from the intersection and A/C 2. Brasher.-20180515
2	18	D-PD RI NO CONFLICT. A/C 1 AC90 CROSSED THE RWY 6 HOLD POSITION WITHOUT AUTHORIZATION WITH HELICOPTER TRAFFIC 1.5 NM FINAL. A/C 1 WAS INSTRUCTED TO TAXI TO RWY 1 VIA TWY G AND TO HOLD SHORT OF RWY 6 W/ GOOD READBACK. A/C 1 THEN CROSSED RWY 6 ON TWY G WITH A/C 2 HELO 1.5 MILE FINAL WITHOUT APPROVAL. NO LOSS. NO OVERFLIGHT. BRASHER. -20180517
3	18	C-OI RI WITH CONFLICT. Ground Control received approval from Local Control to conduct an aircraft crossing at Runway 01 and Taxiway Quebec. Ground Control instructed A/C 1 to cross Runway 01. Local Control failed to recall the crossing approval of Runway 01 at Taxiway Quebec and issued takeoff clearance for Runway 01 to A/C 2. As A/C 1 was crossing Runway 01, A/C 2 was on departure roll. Local Control attempted to cancel the takeoff clearance for A/C 2 but the speed was too great and A/C 2 flew over A/C 1 by approximately 300 feet on Runway 01.-20180606
4	18	C-OI RI WITH CONFLICT. A/C 2 was instructed to cross Runway 01 at Taxiway Quebec by Ground Control and A/C 1 was LUAW for the same runway. Local Control issued takeoff clearance to A/C 1 and began departure roll. Ground Control observed A/C 1 rolling and instructed A/C 2 to hold short of Runway 01. A/C 2 acknowledged and came to rest past the hold short marking but short of the runway <u>edgeline</u> . Local Control instructed A/C 1, on departure roll, to cancel takeoff clearance and the aircraft exited the runway at Taxiway Juliette. Closest proximity between the aircraft was 3,450 feet.-20180621





# Action Item Review

- Issue: Communication between Tower and Snow vehicles during snow removal operations - Set up a plan to get as many controllers as possible a chance to ride along with airport snow vehicles and to allow as many airport snow vehicle drivers a chance to tour the tower and spend some time with controllers.

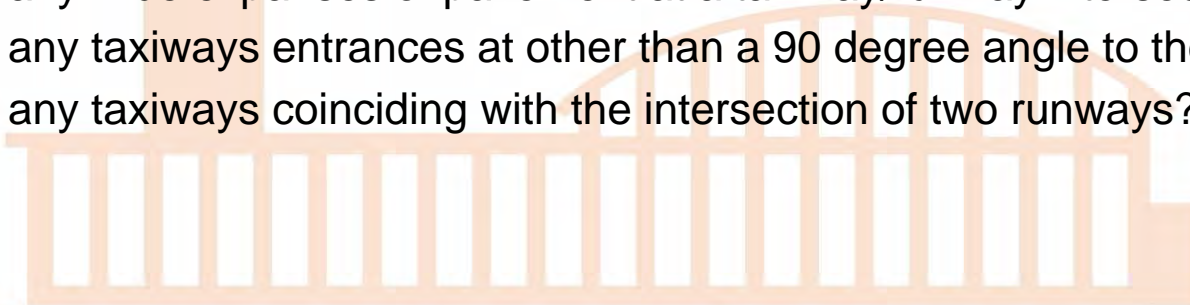




# Geometry

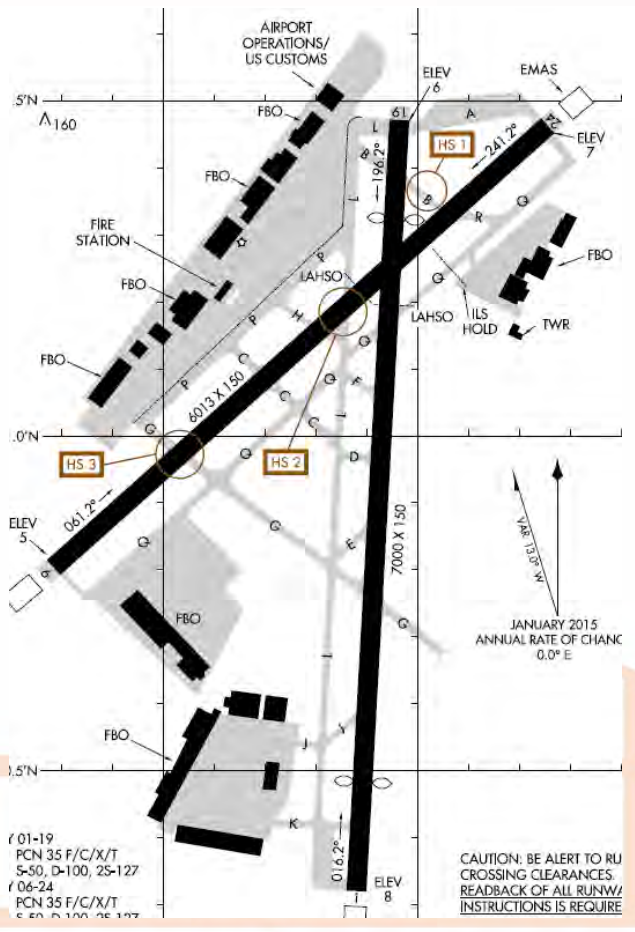
## Does your airport geometry:

- Have any collocated runway thresholds?
- Have parallel runways with offset thresholds?
- Lead to crossings in the middle third of runway (high-energy area)?
- Have unusual marking and/or signage placement?
- Lack a full length parallel taxiway?
- Have direct/short ramp to runway taxi routes?
- Have taxiways in-line with the runway?
- Have intersections with more than three directional choices?
- Have any wide expanses of pavement at a taxiway/runway intersection?
- Have any taxiways entrances at other than a 90 degree angle to the runway?
- Have any taxiways coinciding with the intersection of two runways?





# Hot Spots



DRAFT

JANUARY 2015  
ANNUAL RATE OF CHANGE  
0.0° E

CAUTION: BE ALERT TO RU  
CROSSING CLEARANCES.  
READBCK OF ALL RUNW/  
INSTRUCTIONS IS REQUIRE





# Construction

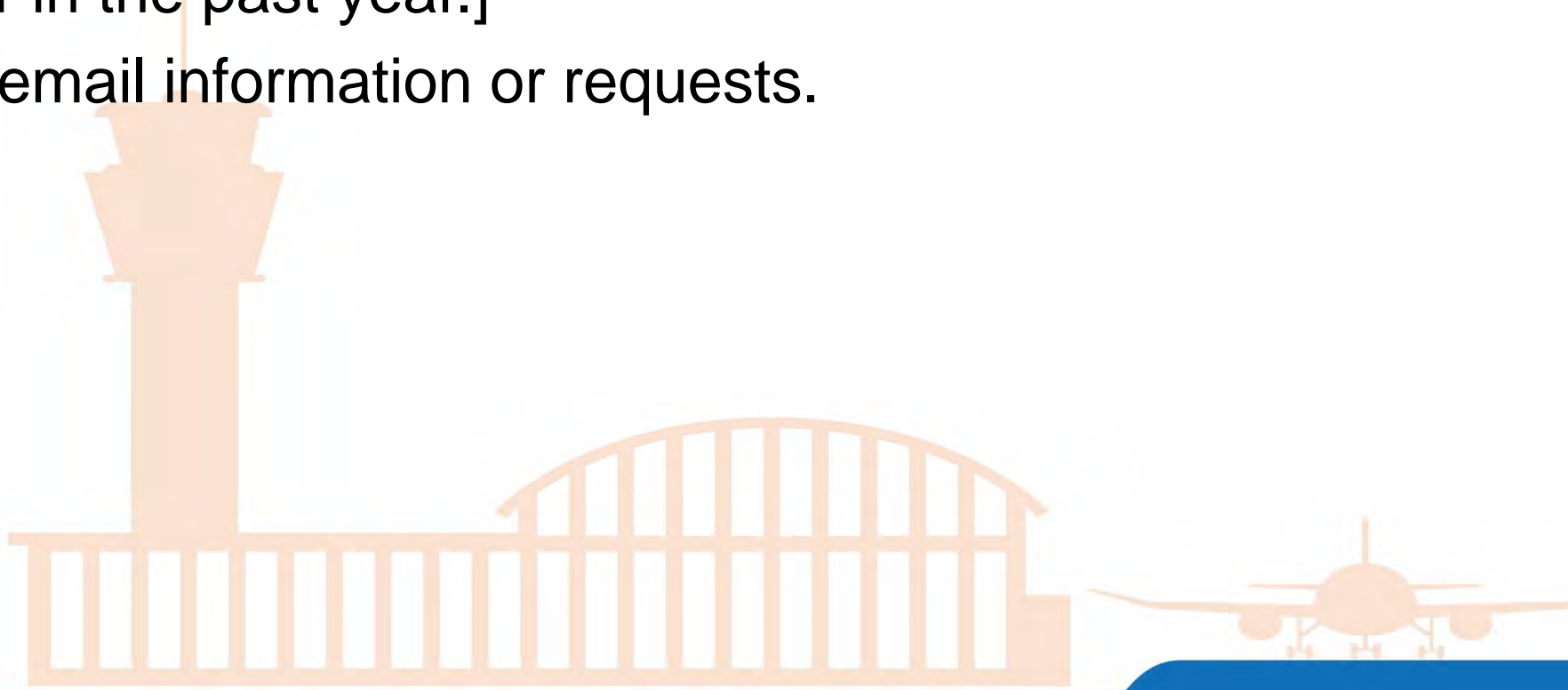
- Current and/or future plans:
- 1. Removal of Taxiway 'Bravo' & Runway exiting procedures.
- 2. Install Twy 'Victor' Est. November 2019
- 3. Resurface Taxiways: L, P and G.
- 4. Continuous Maintenance: Painting, Grass Cutting, Inspections etc.





# Surface Safety Issues

- [Discuss any surface safety concerns reported to the tower in the past year.]
- May email information or requests.

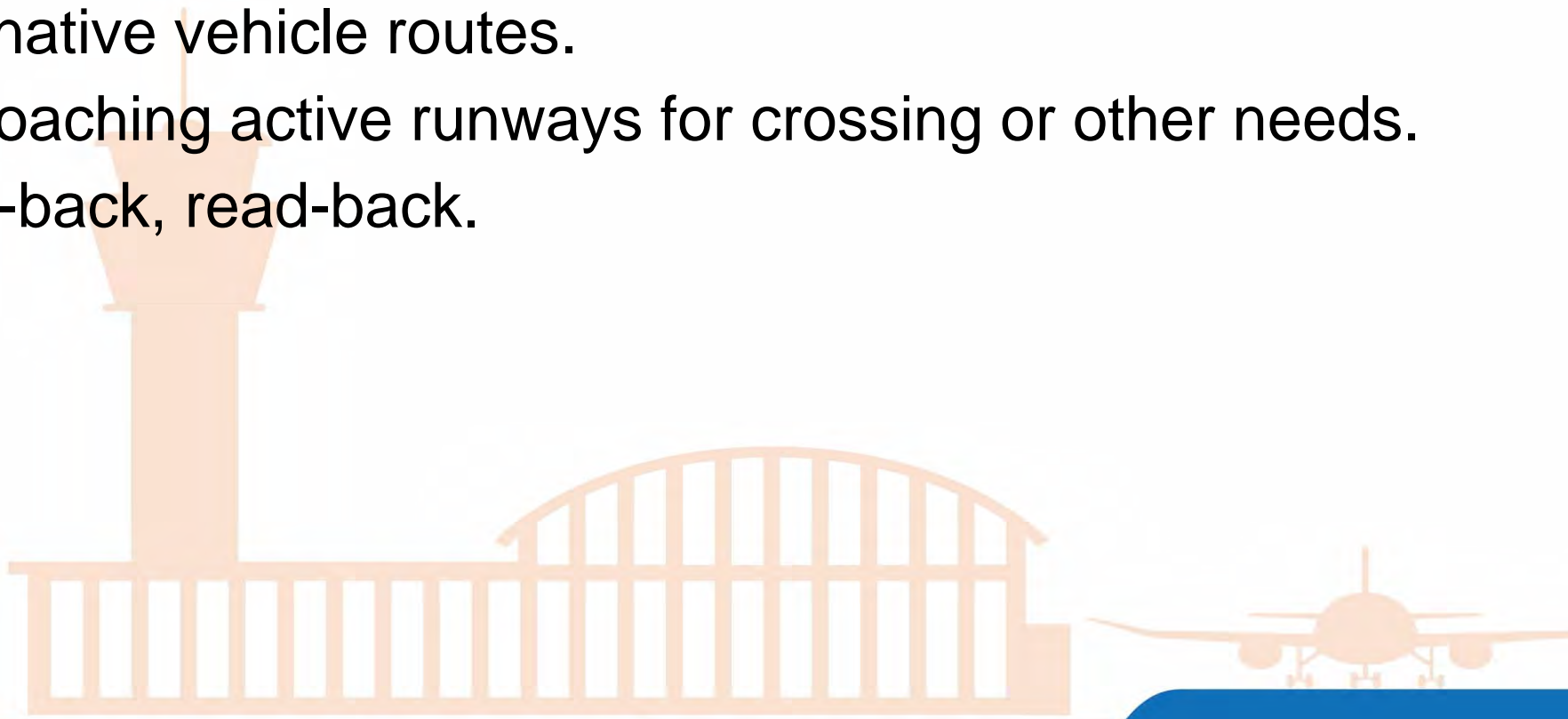






# Vehicle Operations

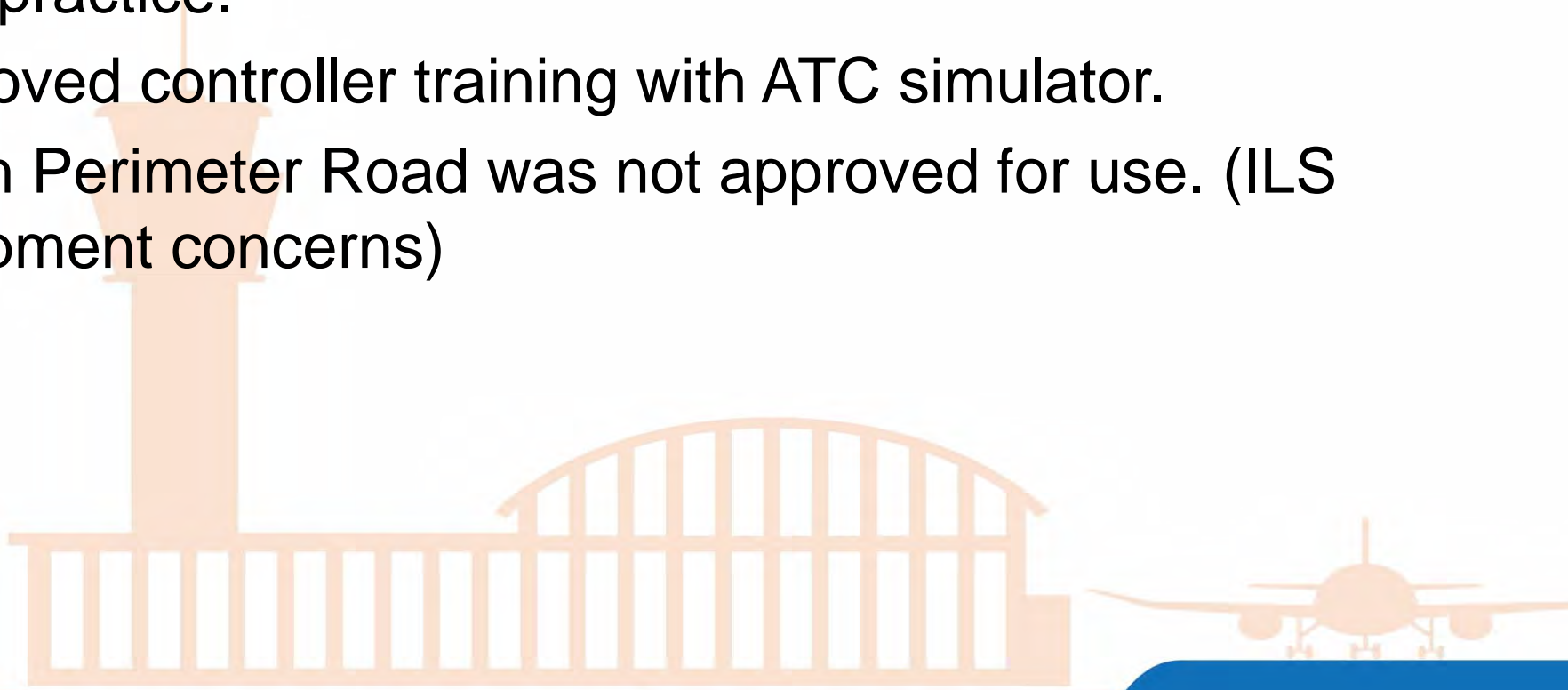
- Discuss use of vehicle access roads at your airport.
- Alternative vehicle routes.
- Approaching active runways for crossing or other needs.
- Hear-back, read-back.





# Best Practices

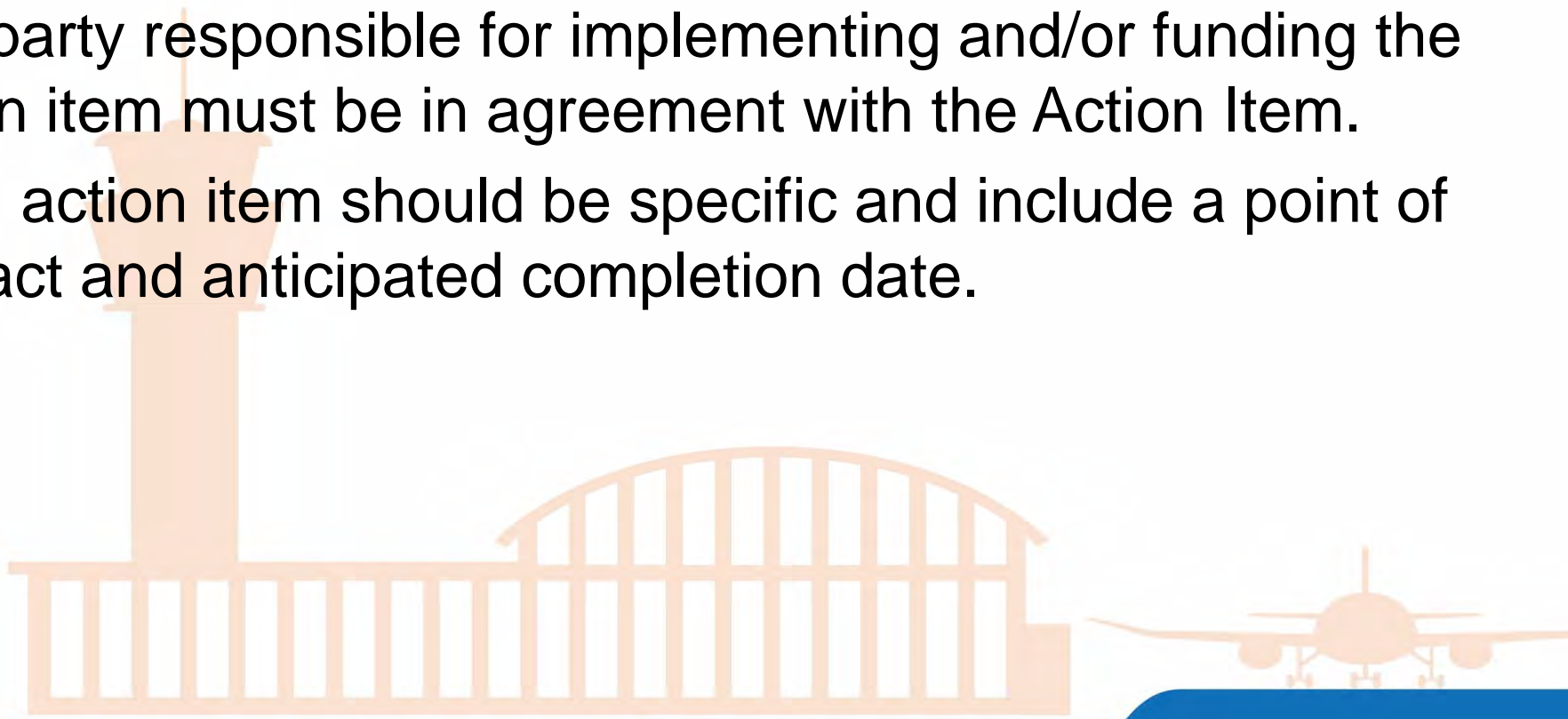
- Removal of Taxiway 'Bravo' eliminates need for previous best practice.
- Improved controller training with ATC simulator.
- North Perimeter Road was not approved for use. (ILS equipment concerns)





# New Action Items

- Action Items are non-regulatory, voluntary, and flexible.
- The party responsible for implementing and/or funding the action item must be in agreement with the Action Item.
- Each action item should be specific and include a point of contact and anticipated completion date.





## Helpful web site and email address

### Construction status Web Site:

- <https://nfdc.faa.gov/xwiki/bin/view/NFDC/Construction+Notices>
- Use the Chrome browser for better viewing

### FAA's Airport Construction Advisory Council email address:

- [Constructioncouncil@faa.gov](mailto:Constructioncouncil@faa.gov)





# Runway Safety Action Team Meeting

<https://ksn2.faa.gov/atos/Home/ajs4/agl/Shared Documents/RSAT Resources/Runway Safety Action Team Meeting Feedback Form.pdf>

The screenshot shows a fillable PDF form titled "Runway Safety Action Team Meeting Feedback". The form includes the following sections:

- Header:** "Runway Safety Action Team Meeting Feedback"
- Attendance:** "I attended at:  Local RSAT  Regional RSAT"
- Location:** "Airport: \_\_\_\_\_"
- Date:** "Date: \_\_\_\_\_"
- Role:** "I am a: (check all that apply)"
  - Pilot
  - Driver
  - Controller
  - Mechanic (taxi)
  - Mechanic (baggage)
  - Airport operations employee
  - Line / FBO employee
  - Wildlife control worker
  - Other
- Rating Legend:** "Rating: 5-Strongly Agree 4-Agree 3-Neutral 2-Disagree 1-Strongly Disagree"
- Table:** A table with 3 columns: "Performance Item", "Rating (1-5)", and "Comments".

Performance Item	Rating (1-5)	Comments
I (or my organization) received adequate notification of the RSAT meeting.		
I (or my organization) was provided adequate opportunity to express concerns and provide input on runway safety issues.		
I (or my organization) felt that the RSAT meeting was well organized and that relevant information was shared with all attendees.		
Overall impression of the RSAT meeting / general comments.		
What is the ONE thing that would have made this meeting better?		
- Footer:** "If you would like to be contacted by the Runway Safety office, please send your feedback / questions in an email to [2\\_agl\\_runway\\_safety@faa.gov](mailto:2_agl_runway_safety@faa.gov). When you have completed the form, please click the submit button to email it to our office. Alternatively, you may print the completed form and mail it to: Federal Aviation Administration, Office of Runway Safety, 450 L'Enfant Plaza, Suite 7225, Washington, DC 20024 or FAX to 202-385-4772."

This file includes fillable form fields. You can print the completed form and save it to your device or Acrobat.com

Use the button in the upper right to Submit the form



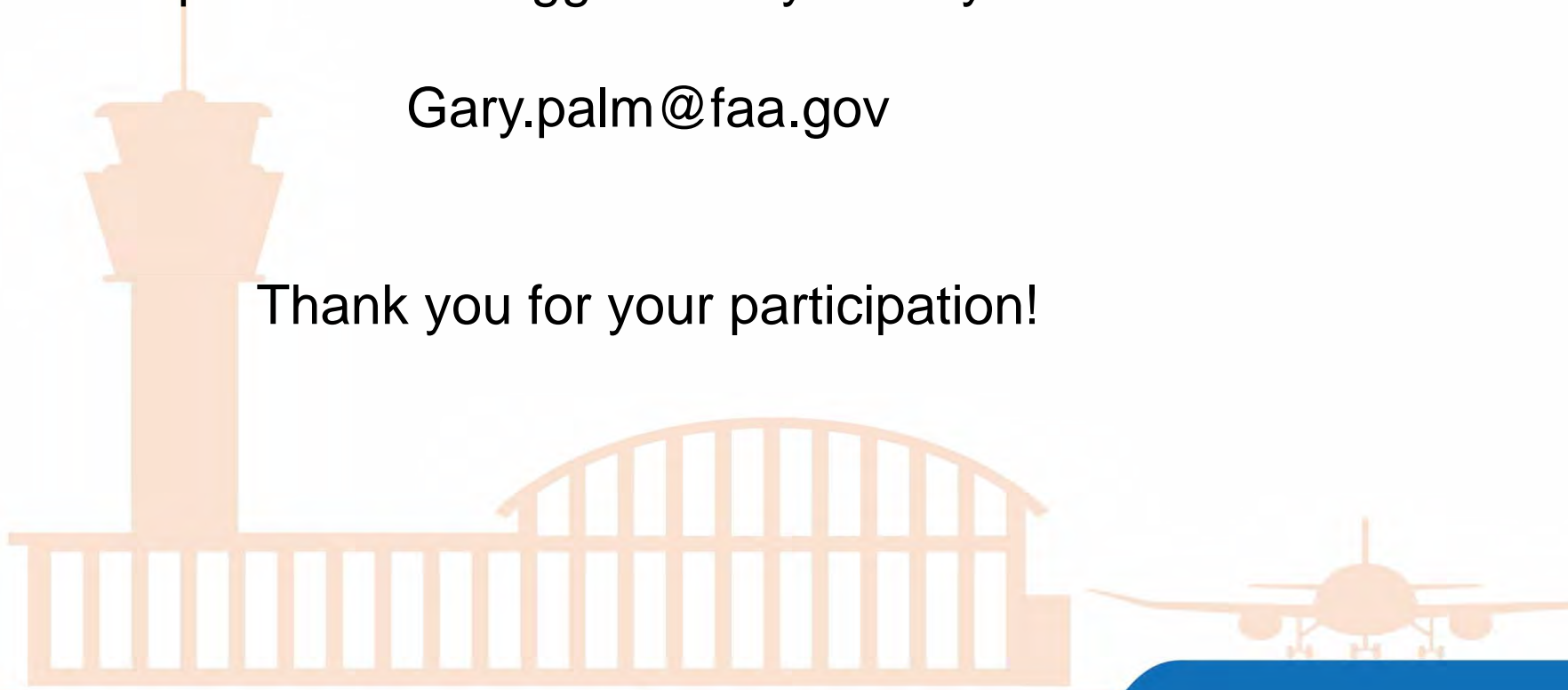


# Adjourn

Please ensure you contact us at the below email address with any questions or suggestions you may have.

[Gary.palm@faa.gov](mailto:Gary.palm@faa.gov)

Thank you for your participation!






# Teterboro Airport

REHAB OF RWY 6/24  
(2020 Construction)

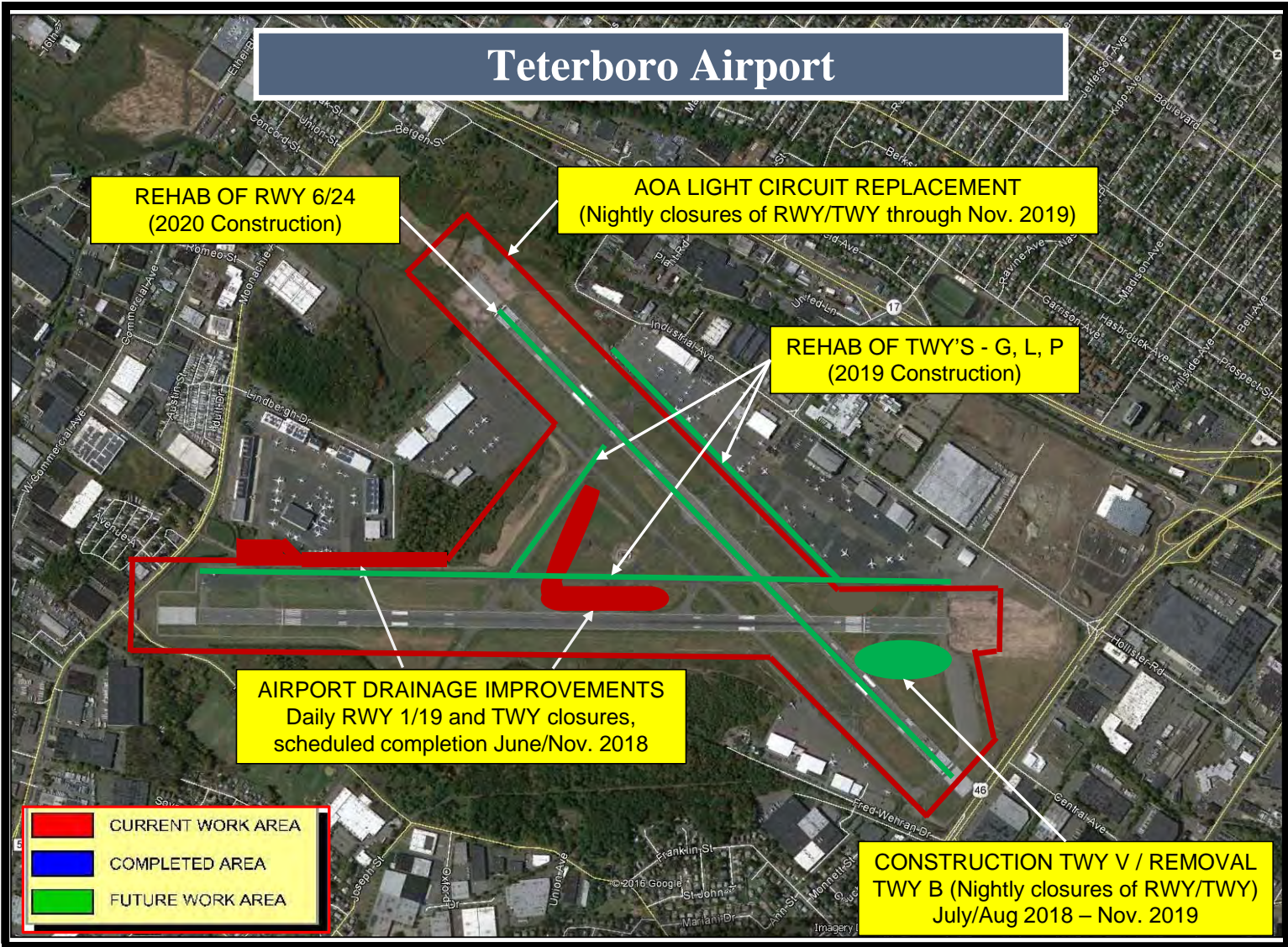
AOA LIGHT CIRCUIT REPLACEMENT  
(Nightly closures of RWY/TWY through Nov. 2019)

REHAB OF TWY'S - G, L, P  
(2019 Construction)

AIRPORT DRAINAGE IMPROVEMENTS  
Daily RWY 1/19 and TWY closures,  
scheduled completion June/Nov. 2018

	CURRENT WORK AREA
	COMPLETED AREA
	FUTURE WORK AREA

CONSTRUCTION TWY V / REMOVAL  
TWY B (Nightly closures of RWY/TWY)  
July/Aug 2018 – Nov. 2019



# NY AIRPORT Construction 2019

Ralph Tamburro



# Planned closures for 2019

## JFK

Runway 13L/31R closed  
April 1st through Nov 15th

Runway in concrete  
200' wide

high speed exit on 31R

Allow A380 to utilize 31R for  
arrivals

## Rehabilitation of Runway 13L-31R & Associated Taxiways Location and Scope

Runway 13L-31R  
Length = 10,000 feet  
Width = 150 feet



THE PORT AUTHORITY OF NY & NJ

THE PORT AUTHORITY OF NY & NJ

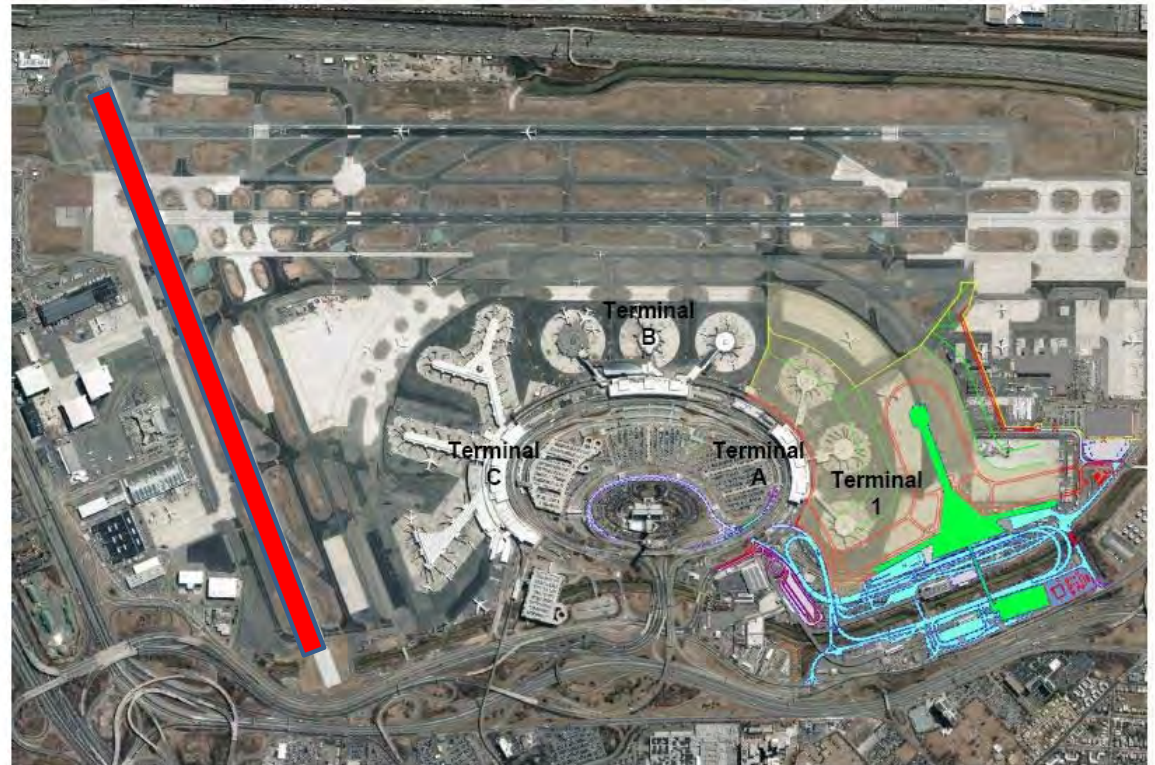
# Planned runway closures for 2019

## EWR

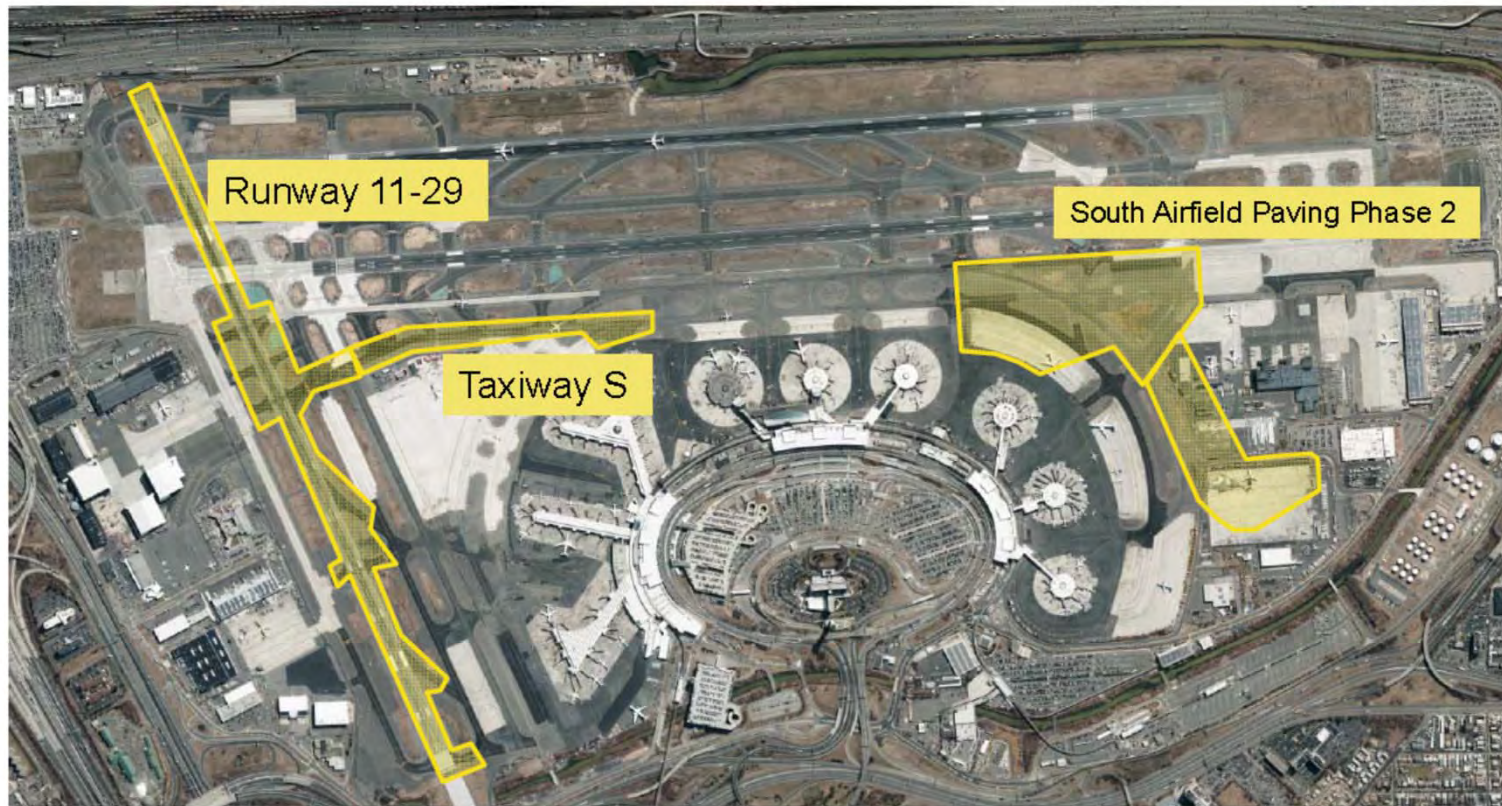
Runway 11/29 rehab

Schedule is not finalized but we will look to minimize impact of the closure

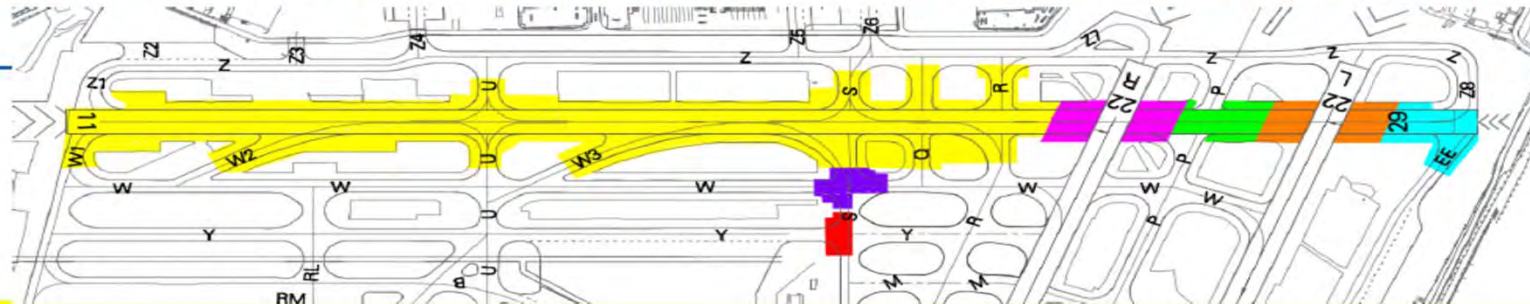
Terminal A project underway



## 2019 EWR Airside Construction



## Rehabilitation of Runway 11-29: Construction Staging



→ Stage 1:	12 hour Nightly Closures <sup>1</sup> Continuous Paving Closure 16 hour Nightly Closures <sup>1</sup>	77 Days 12 Days 46 Days	March 1 – May 31, 2019 August 15 – August 27, 2019 August 28 – October 23, 2019
→ Stage 2:	2 Extended Weekend Closures	(38 Hrs)	Friday 11pm – Sunday 1pm
→ Stage 3:	12 hour Nightly Closures <sup>2</sup>	14 Days	July 1 – July 22, 2019
→ Stage 4:	2 Extended Weekend Closures	(38 Hrs)	Friday 11pm – Sunday 1pm
→ Stage 5:	12 hour Nightly Closures <sup>2</sup>	19 Days	June 3 – June 28, 2019
→ Stage 6:	Taxiway S Continuous Closure	6 Days	July 23 – July 29, 2019
→ Stage 7:	Taxiway S Continuous Closure	6 Days	July 30 – August 5, 2019

# Planned runway closures for 2019

## LGA

Runway 4/22 closed for rehab

Nightly and a minimum of 5 extended weekend closures (weather dependent)

Terminal construction through 2024

Taxiway A project



# RWY 4/22 REHABILITATION

TENTATIVE Start Date: April 2019

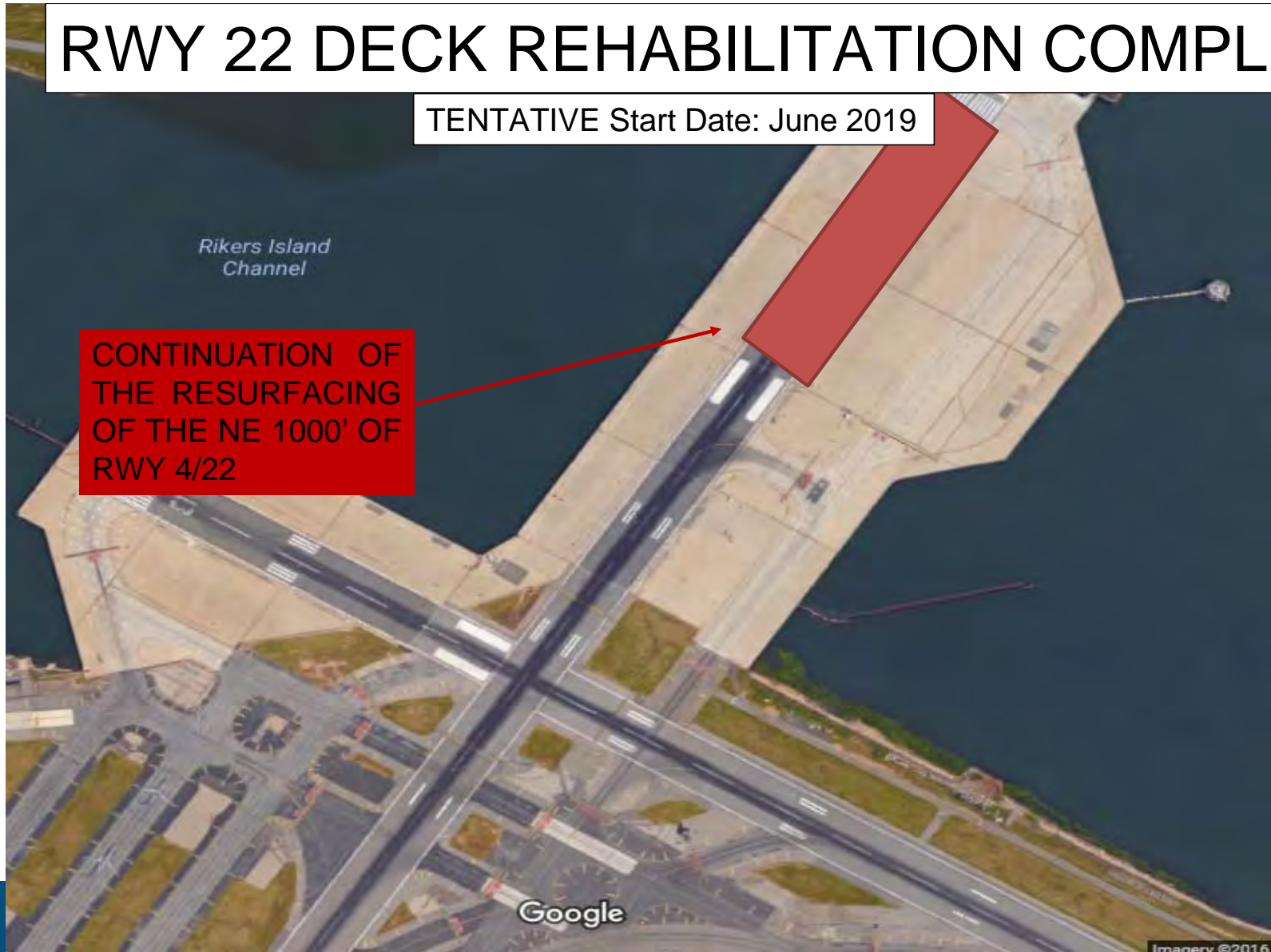


RESURFACE RWY 4/22  
FROM THE APPROACH  
OF RWY 4 TO THE RWY  
INTERSECTION  
\*\*INCLUDES ALL RWY  
CROSSINGS & EXITS

# RWY 22 DECK REHABILITATION COMPLETION

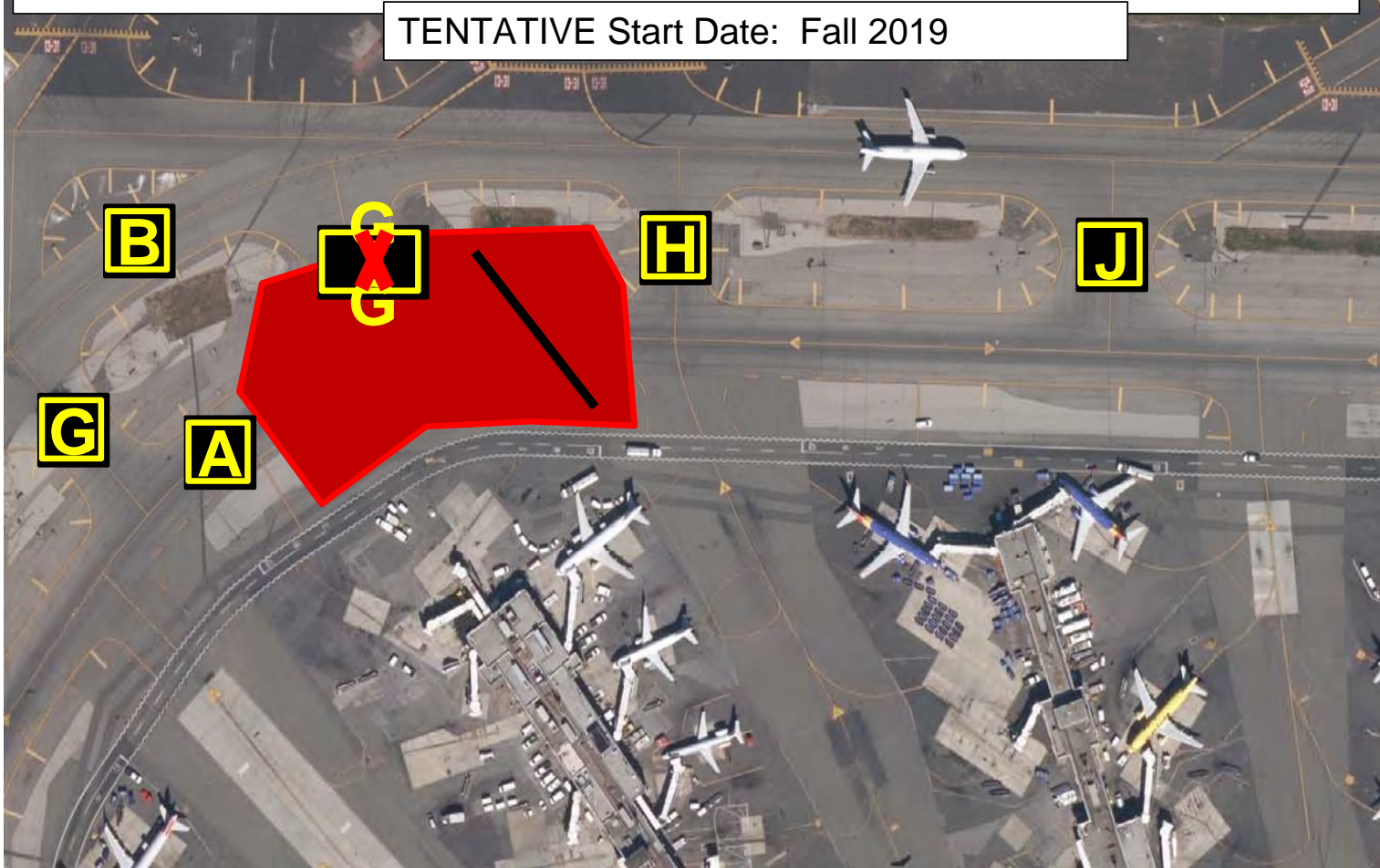
TENTATIVE Start Date: June 2019

CONTINUATION OF  
THE RESURFACING  
OF THE NE 1000' OF  
RWY 4/22



# TWY A DRAINAGE CROSSING - WEST

TENTATIVE Start Date: Fall 2019





# Procedure Overview

## No Changes

- TEB RNAV (GPS) RWY 19 Offset
- TEB RNAV Transition to ILS RWY 19
- TEB RNAV (GPS) RWY 19
- TEB RNAV (GPS) RWY 24



# TEB RNAV (GPS) RWY 19 Offset

## Description and Benefits:

- Avoids overflying Hackensack Hospital
- Waypoints will be coded
- Can be used in VFR and IFR conditions

## Environmental Review:

- Environmental Review ongoing

## Scheduled Publication Date:

- August 15, 2019



# TEB RNAV Transition to ILS RWY 19

## Description and Benefits:

- RNAV procedure designed to avoid impacts from increased MVAs due to assumed adverse obstructions; decouples TEB/CDW/MMU

## Environmental Review:

- Environmental Review ongoing

## Scheduled Publication Date:

- August 15, 2019



# TEB RNAV (GPS) RWY 19

## Description and Benefits:

- Designed to Decouple TEB/CDW/MMU
- Mirrors ILS RWY

## Environmental Review:

- Environmental Review ongoing

## Scheduled Publication Date:

- August 15, 2019



# NEC Status Update

Presented to: DIM

By: Wendy O'Connor & Phil Hargarten

Date: September 27, 2018



# Northeast Corridor Update

## Phase 2 Milestones Count

### **Interim phase 2 report** (Q4 CY17 to Q1 CY19)

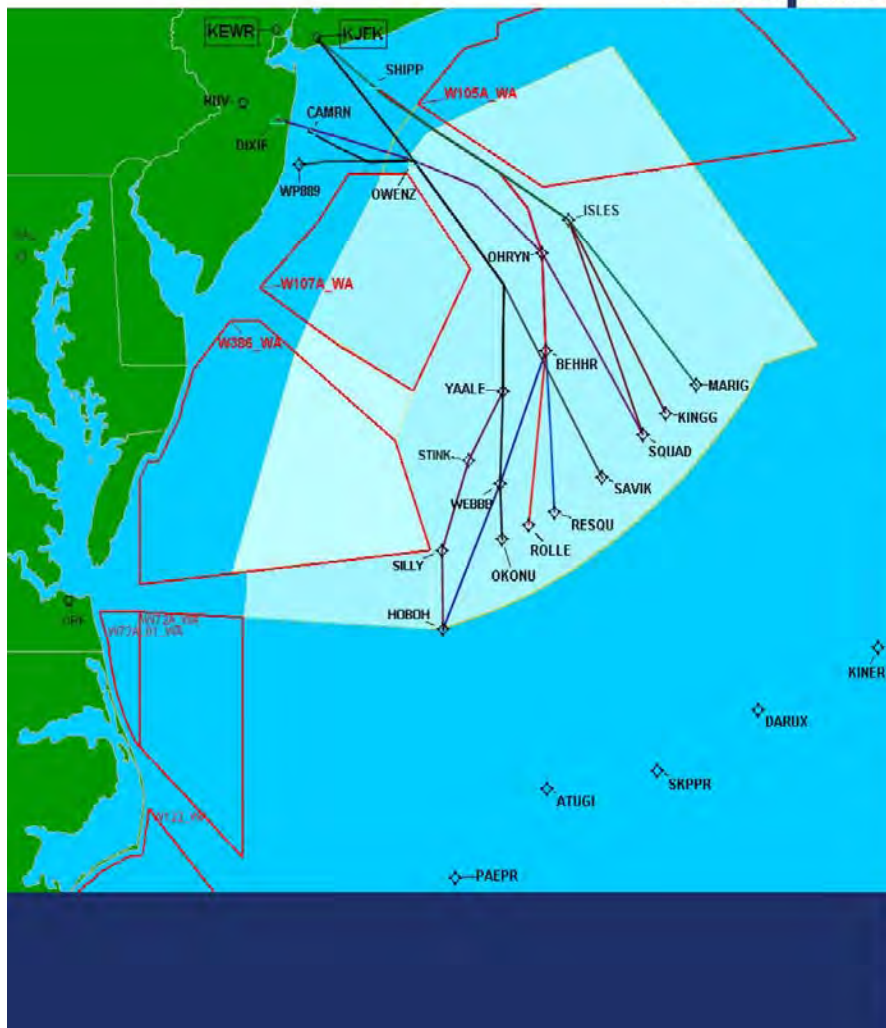
- 45 Milestones (in support of 24 initiatives)
- 14 FAA and 6 Industry Milestones completed to date
- 1 FAA Milestone scheduled for Q3 CY18

### **Final phase 2 report** (thru Q4 CY21)

- 83 milestones (in support of 49 initiatives)
  - 14 Implementation
  - 32 pre-implementation
  - 37 industry



# Implement PBN Route Structure in ZNY Offshore Airspace



## Operational Objectives:

- Redesign airspace and route structure to enhance efficiency and capacity in NY offshore airspace
- Enhance route options during SWAP
- Segregate NY Metro arrival and departure flows
- Segregate overflight traffic from NY Metro arrivals and departures

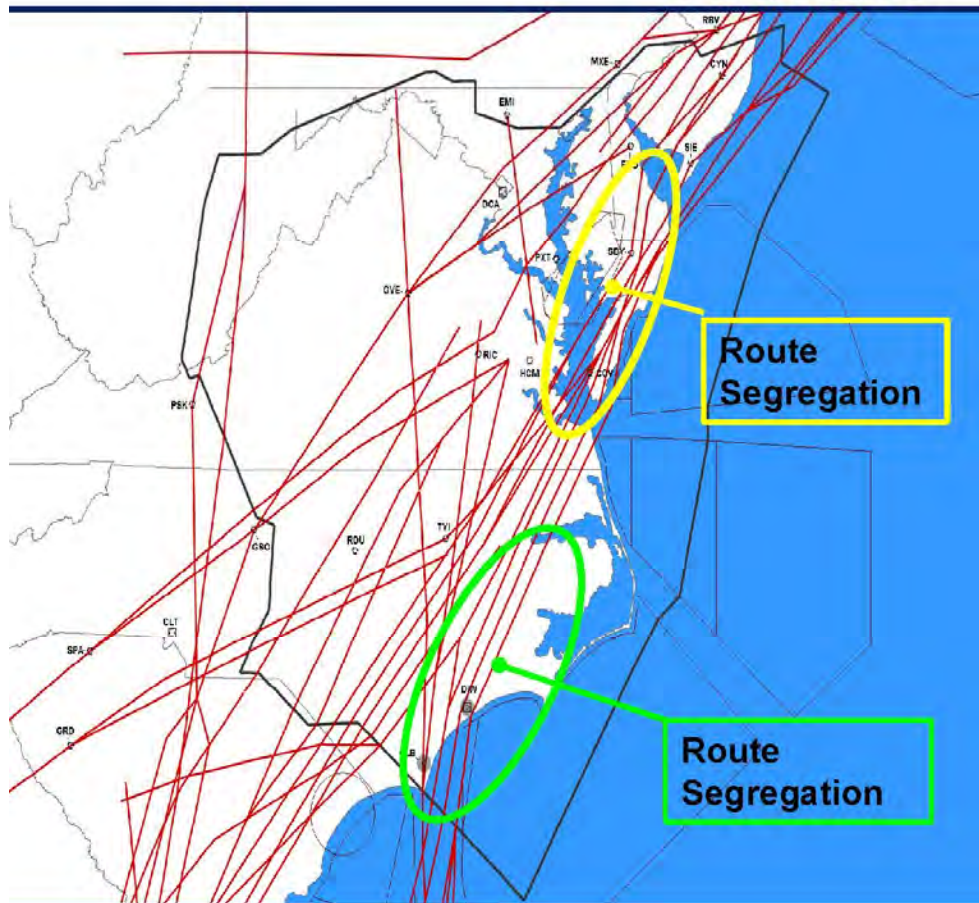
## Expected Outcomes:

- Increased use of offshore airspace capacity (**throughput**) via additional sector and segregation of flows in tight airspace between Warning Areas.
- Enables greater use of offshore route options during SWAP
- Less vectoring/holding offshore
- Reduced use of MIT restrictions & ground delays for EWR/JFK depts

**Facilities:** ZNY Domestic & Oceanic

**Target Date:** Q4 CY19

# Implement East Coast High Altitude PBN Route Structure



## Operational Objectives:

- Establish segregated routes in constricted east coast airspace to achieve higher throughput, optimal altitudes and increased routing options.
- Alleviate east coast airspace constraints
- Integrate and align recent Metroplex work (DC, CLT, ATL, and FL) into the high altitude enroute structure in NEC

## Expected Outcomes:

- Improve airspace throughput for high altitude traffic to/from NEC airports
- Reduce traffic management restrictions due to east coast airspace constraints for NEC airports
- Reduce airspace complexity
- Reduce radar vectors and reroutes
- Improved accommodation of requested altitudes

**Facilities:** ZBW, ZNY & ZDC

**Target Date:** Q3 CY20



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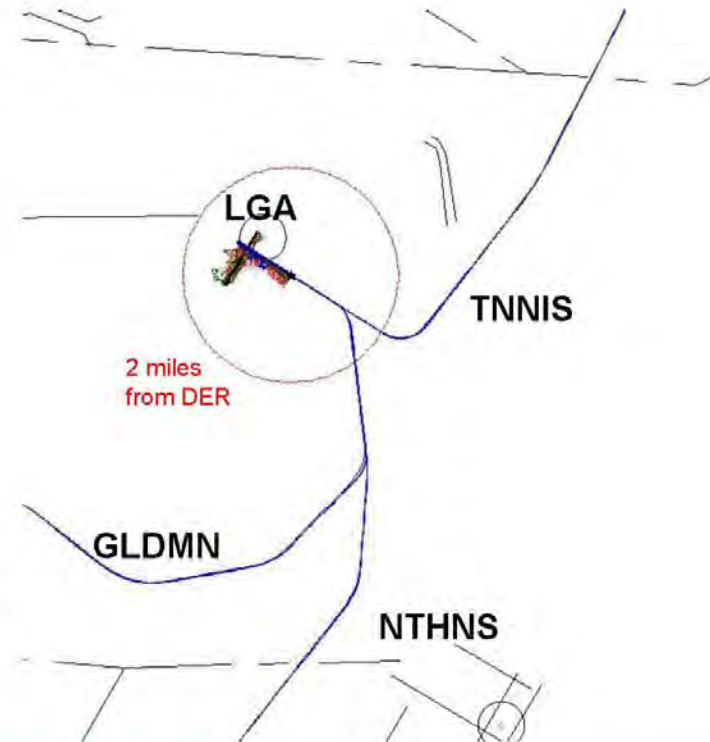


## Use of dispersal headings for LGA13 departures using TNNIS, GLDMN, & NTHNS (Q2-4 CY18) **“Complete”**

**Use of this initiative is limited to certain operational configurations**

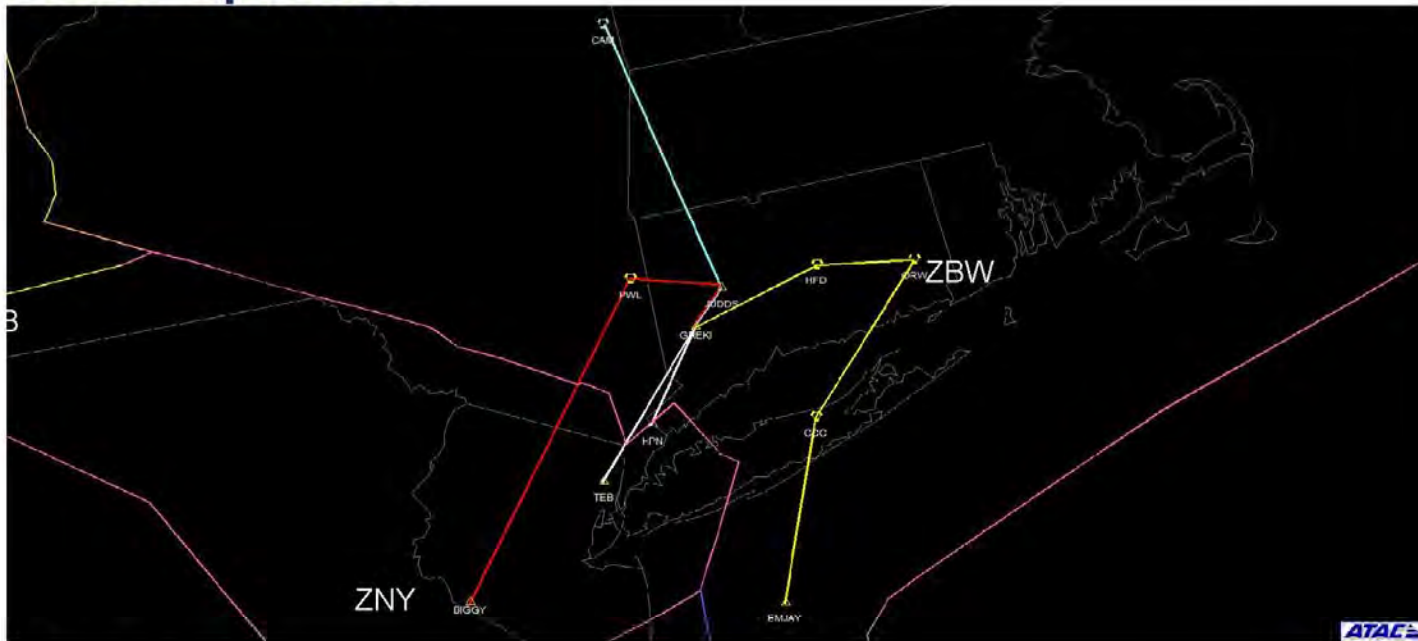
### **Benefits considerations**

- **Supports dispersion of Runway 13 departures**
- **Uses already published procedures**
- **Reduces average departure delay, reducing emissions and providing benefit to the traveling public**



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# TEB/HPN High Performance Escape Route Route Options...



## Status Update

Test flight conducted in June

Feedback from ATC: Pilot not content with flying additional miles, several transmissions for short cut.

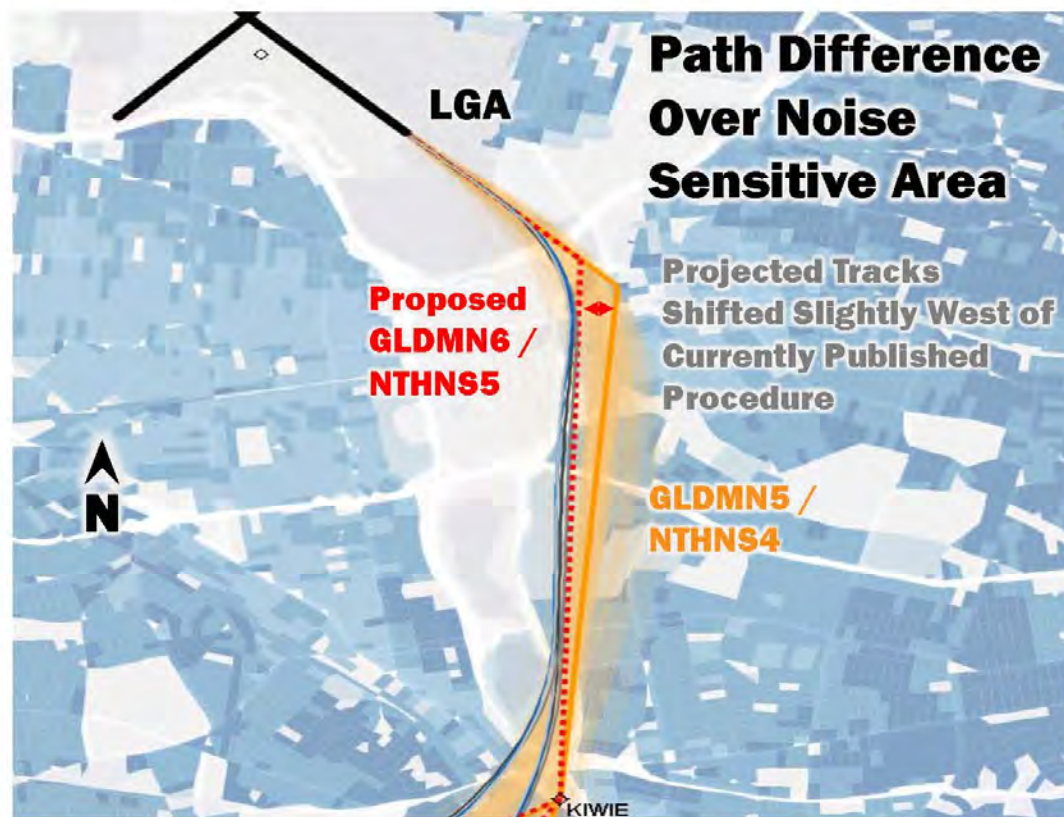
Route modification needed to make turns FMS and criteria compliant



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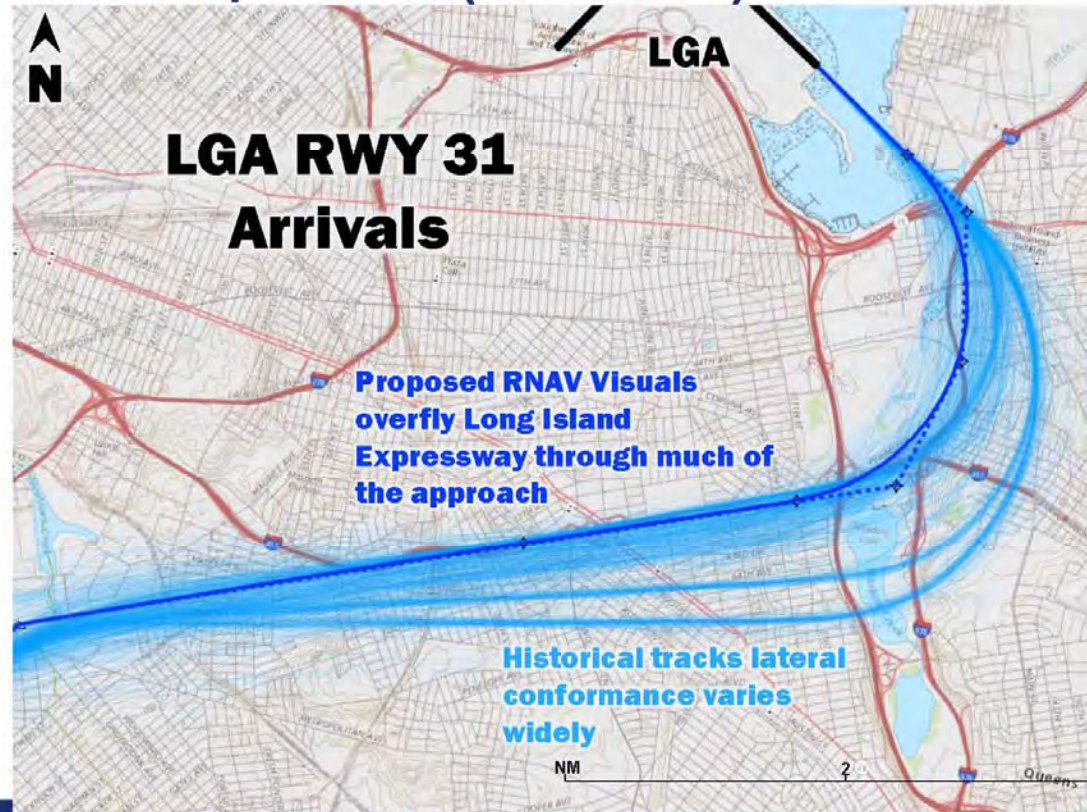
## Evaluate design alternatives to the GLDMN/NTHNS RNAV SIDs to address noise concerns (Q2 CY19)

Goal is to amend procedure to pull tracks closer to park, which is preferred from the noise perspective



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Administration

Evaluate LGA31 RNAV approach design alternatives that approximate the LGA 31 EXPWY VIS approach and is usable for most operators (Q3 CY19)



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Administration

# Questions



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Administration

# Teterboro Airport – Chief Pilot Meeting

Next meeting:

May 2019

Questions email me at

[smarsh@panynj.gov](mailto:smarsh@panynj.gov)

**THANK YOU FOR PARTICIPATING!!!!**