KTEB Chief Pilot Webinar

November 5, 2015
1100 EST

Webinar Guidelines

- Please mute your phone, questions will be entertained by email.
- During the presentations please submit any questions to tlee@panynj.gov and we will answer as many as possible at the end of all presentations.
- Any questions not answered during the webinar will be answered over the next several days.

Agenda

- Winter Operations
  - Airport Procedures
  - ATCT Procedures
- Airport Gridlock Procedures
- Approach & Departure Procedures
  - RUUDY 5
  - Charted Visual Procedure for runway 19
  - RNAV Y
  - RNP 24
- FAA Initiatives (Offload routes during Holidays)
- Delay Metrics
- Upcoming Issues & Spring Webinar Items

Presenters

- Pam L. Phillips, Mgr., Operations & Security, Port Authority of NY & NJ, TEB
- John Kastens, Mgr., Airport Operations, AvPORTs, TEB
- Larry Brady, KTEB Air Traffic Control Tower Operations Support Specialist, FAA
- Gary Palm, KTEB Air Traffic Control Tower Manager, FAA
- Ralph Tamburro, Delay Reduction Project Manager, Port Authority of NY & NJ, Aviation Dept.
- Stephan McClain, N90 Support Manager, Airspace & Procedures
- Michael Porcello, N90 Traffic Management Officer
- Gabriel Andino, Noise Abatement & Environmental Compliance Manager, KTEB

Teterboro Airport
Snow & Ice Control

John Kastens
AvPORTS – TEB
Airport Operations
November 5, 2015

Pre-Storm

Snow Team:

- Airport Operations
- Airport Maintenance
- PANYNJ Airport Management
- Teterboro ATCT
- Fixed Base Operators (FBOs)
- Landside Snow Removal Contractor

Pre-Storm Briefing

- Between Airport Ops, Airport Maintenance & PANYNJ Management
- Significant events include all FBOs
- Compare Weather Forecasts to determine Operational need
- Planning of Personnel for event
- Coordinate with landside Snow Removal Contractor

Snow & Ice Control Equipment

Multi-Function Equipment
(plow/broom/blower)

Plow Truck

Snow & Ice Control Equipment

Rotary Snow Blower

Liquid Chemical Truck

Snow & Ice Control Equipment

Chemicals & Abrasive Materials

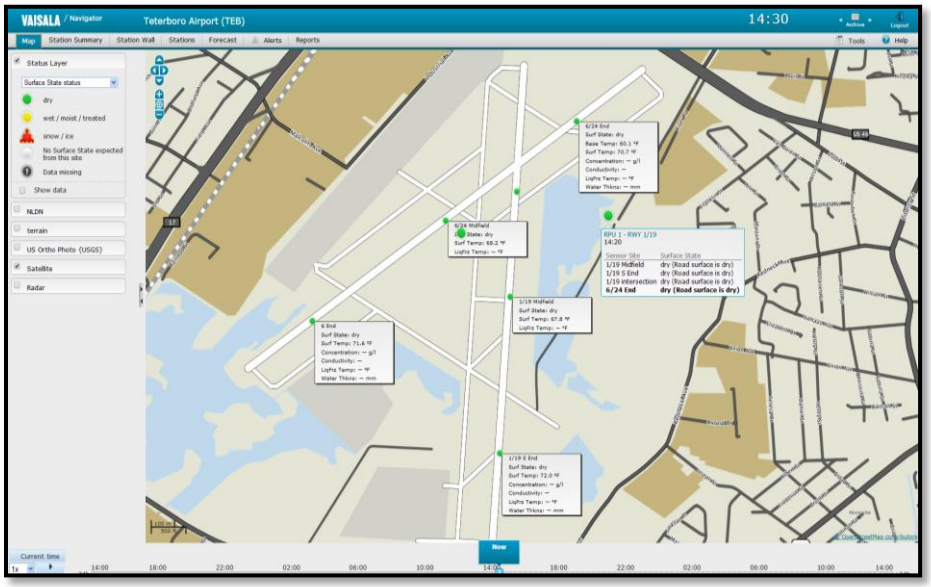
- Potassium Acetate (Liquid)
  - Primary applicator used to prevent ice bonding to pavement
- Sodium Acetate (Solid)
  - Secondary applicator used to melt ice on runway and taxiways
- Sand

**All 3 meet FAA-approved specifications.*

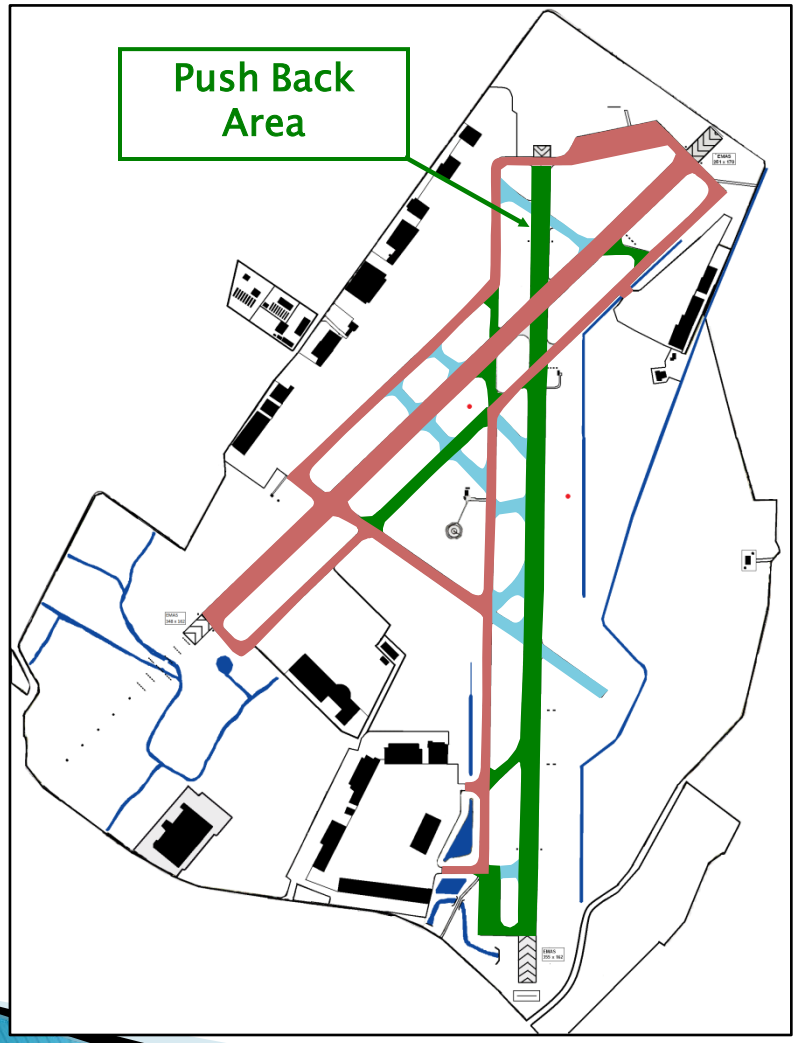
Snow & Ice Control Equipment

Runway Weather Information System (RWIS)

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



North Flow Priority – RWY 6



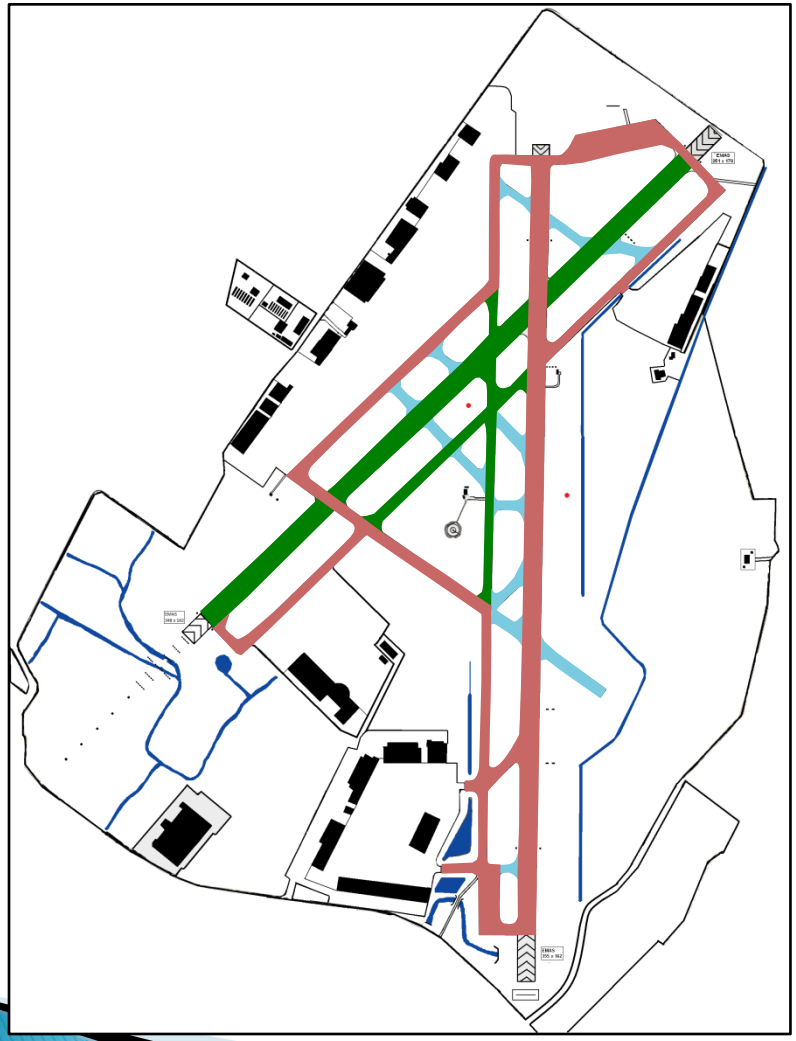
North Flow
Priority Runway 6

Priority 1

Priority 2

Priority 3

South Flow Priority – RWY 19



South Flow
Priority Runway 19

- Priority 1
- Priority 2
- Priority 3

Snow Removal Criteria

Requirements for Runway Closures

As per AC 150/5200-30: *Airport Winter Safety & Operations*, the following circumstances require the prescribed action by the airport operator:

- A single **NIL PIREP** requires that the runway be **CLOSED** before the next operation. The runway must remain closed until the airport operator is satisfied that the NIL condition no longer exists
- When surface conditions are deteriorating and previous PIREPs indicated GOOD or MEDIUM (FAIR) braking action, **two (2)** consecutive **POOR PIREPS** require the airport operator to conduct a runway assessment

Snow Removal Criteria

Braking Action Reporting

LOA between TEB ATCT & PANYNJ:

- Any time a braking action of NIL is reported to ATCT, regardless of aircraft type, that runway shall be immediately considered **closed** and ATCT shall not permit any further operations on that runway until notified by Airport Ops
- Airport Ops 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

Please email any questions to tlee@panynj.gov

Pilots Deicing Responsibilities

Larry Brady,
KTEB FAA ATCT Operations Support Specialist

Pilot's Deicing Responsibilities

- In order for the TEB Formal Deicing Program (FDP) to be in effect, freezing/frozen precipitation must be in progress.
- Fixed Based Operator (FBO) during an Event and prior to deicing notifies Airport Operations of their intentions to deice; unless a FDP is already in effect.
- Airport Operations advises all FBOs: "**A Formal Deicing Program Is Now In Effect".**
- First step for pilots: A Pilot makes a request to FBO for deicing "during an Event".

Pilot's Deicing Responsibilities

- The Rate of Departures will be based on the intensity, type of precipitation, surface conditions and the number of runways in use during the event.
  - 6 minutes between departures = 10 departures per hour
  - 5 minutes between departures = 12 departures per hour
  - 4 minutes between departures = 15 departures per hour
  - 3 minutes between departures = 20 departures per hour
- Arrival rate will be adjusted to manage the above departure rates.
- Prior to Deicing an A/C, the Ramp Boss shall ensure that the Pilot & A/C has:
  1. IFR clearance: After receiving their clearance, Pilots are requested not to contact TEBT until after their deicing has been completed.
  2. All passengers & crew are on board.
  3. All baggage and fuel have been loaded.
  4. And except for deicing, the A/C is in a ready to taxi status.

Pilot's Deicing Responsibilities

- Note: Pilots should obtain their IFR clearance as soon as available. If an Expect Departure Clearance Time (EDCT) is issued, the Pilot will inform the Ramp Boss of this departure restriction. The Ramp Boss shall make every effort to comply with this restriction by adjusting the Deicing lineup so that the A/C can depart at the issued time. EDCT is a wheels up time.
- Prior to deicing, TEBT will verify the departure's destination is accepting traffic and is good to go.

Pilot's Deicing Responsibilities

- The Ramp Boss will inform TEB ATC of any A/C on their ramp who does not require deicing and is ready for departure.
- TEB ATC will make every attempt to accommodate the request without penalizing any FBO or previously sequenced A/C.
- The Ramp Boss will advise/signal the Pilot when deicing is complete.
- After deicing is complete, Pilots will contact Ground Control when ready to taxi.
- The use of type IV fluid, although increasing the time parameter for departures, will not alter the initial prerequisites of this procedure. What type IV fluid does offer is the ability to have A/C safely waiting for departure. By taking advantage of any missed departure or arrival slots, type IV has the potential of increasing the total number of hourly departures.

Pilot's Deicing Responsibilities

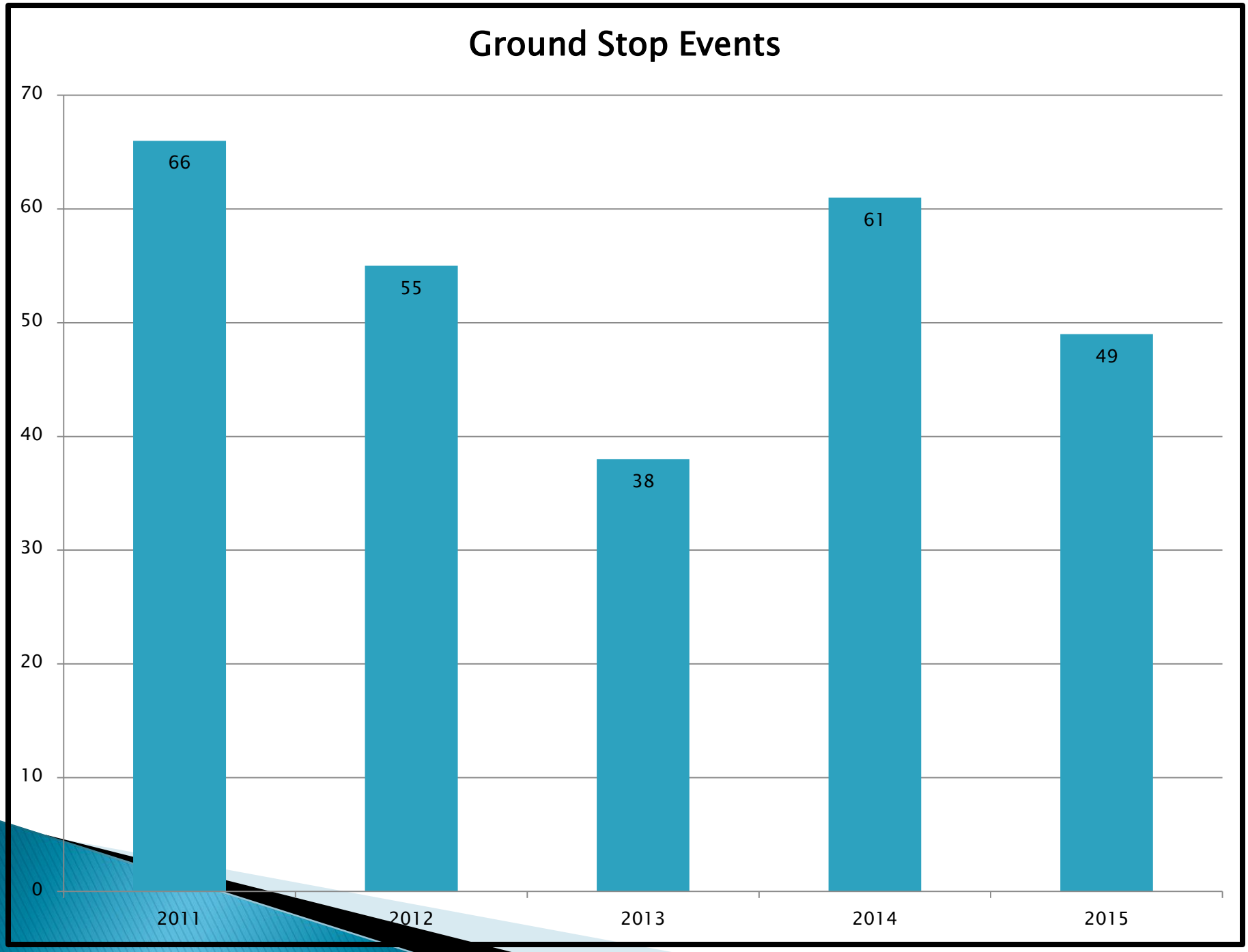
- Should a Runway closure occur stopping departures, a Deicing pause will take effect. Expect a Deicing restart to be initiated prior to the Runway reopening.
- Times will change but the sequence will remain the same.
- Airport Operations, as the official weather observers on the Airport, will coordinate with TEBT when the active freezing/frozen precipitation event has ended thereby canceling the Formal Deicing Program. A/C may continue to be deiced and if the demand warrants, Gate Hold procedures may remain in effect; however, the Formal Program will be terminated.
- Operations will inform the FBOs when the Formal Deicing Program has ended.
- TEBT will also announce on all active frequencies when the FDP has ended

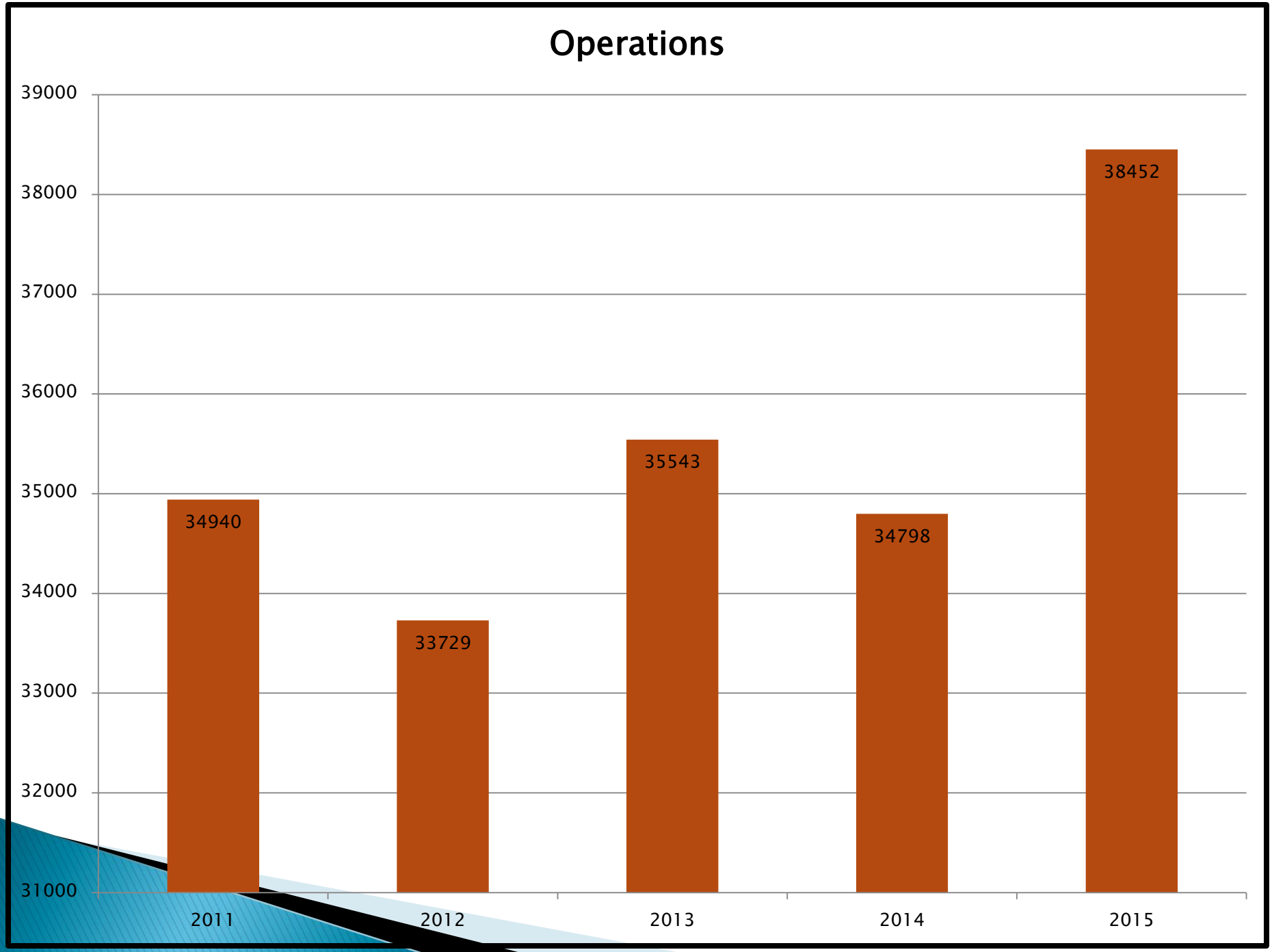
Please email any questions to tlee@panynj.gov

TEB Delay Metrics

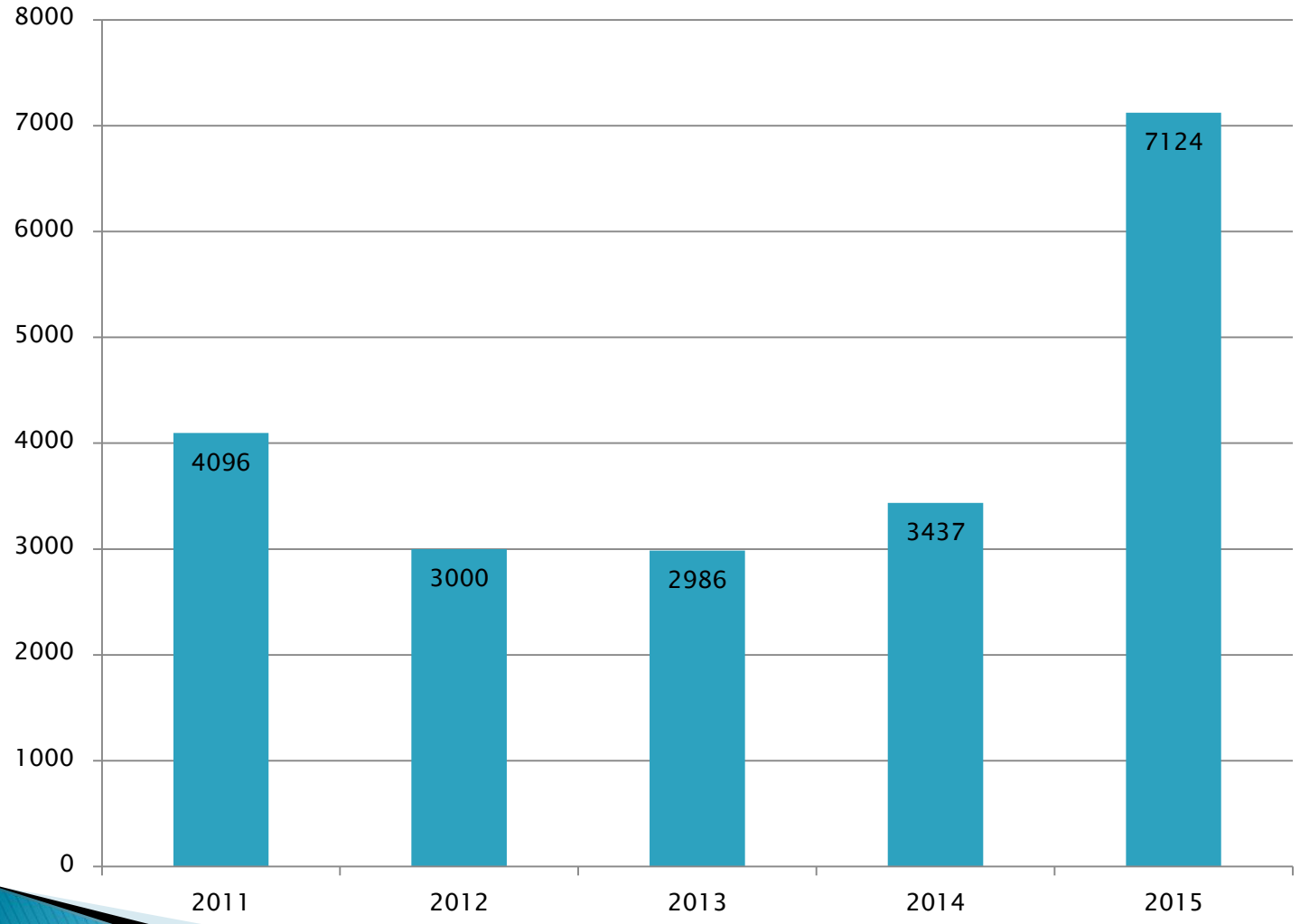
Ralph Tamburro, Delay Reduction Project Manager, Port Authority of NY & NJ, Aviation Dept.

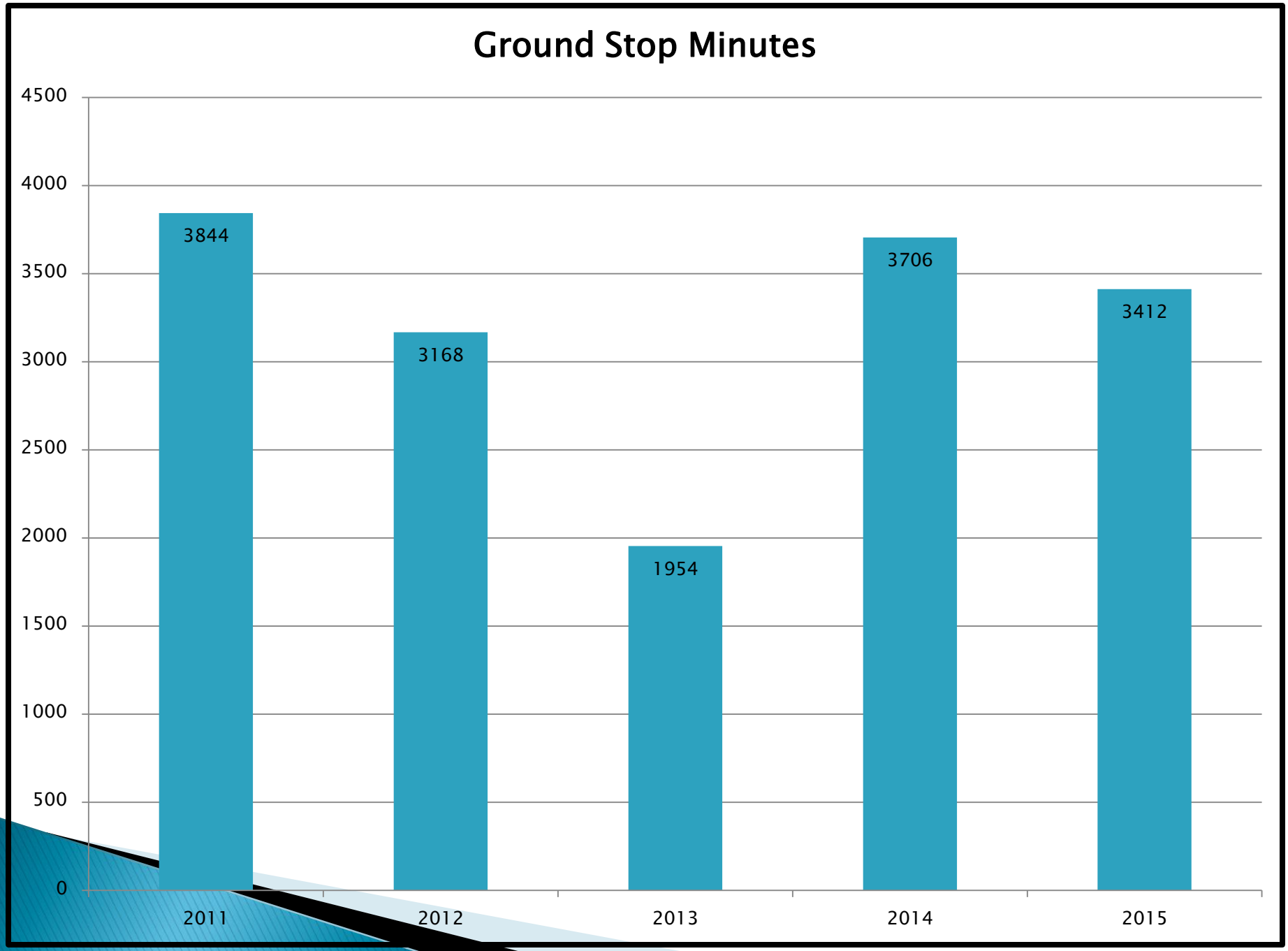
Data is for SWAP days only April 1st through September 15th years 2011 through 2015

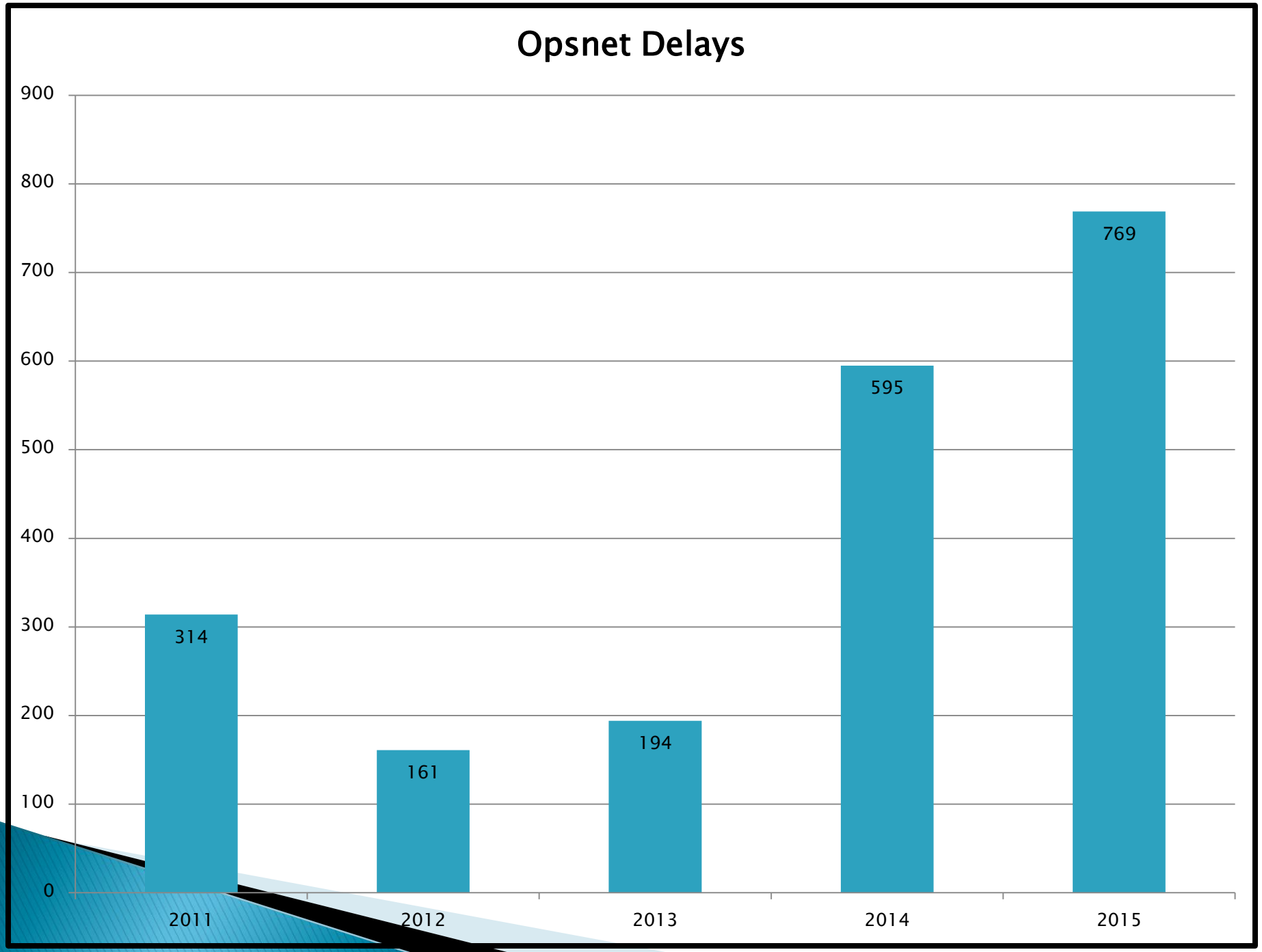

Ground Stop Events
70
60
50
40
30
20
10
0
66
55
38
61
49
2011
2012
2013
2014
2015

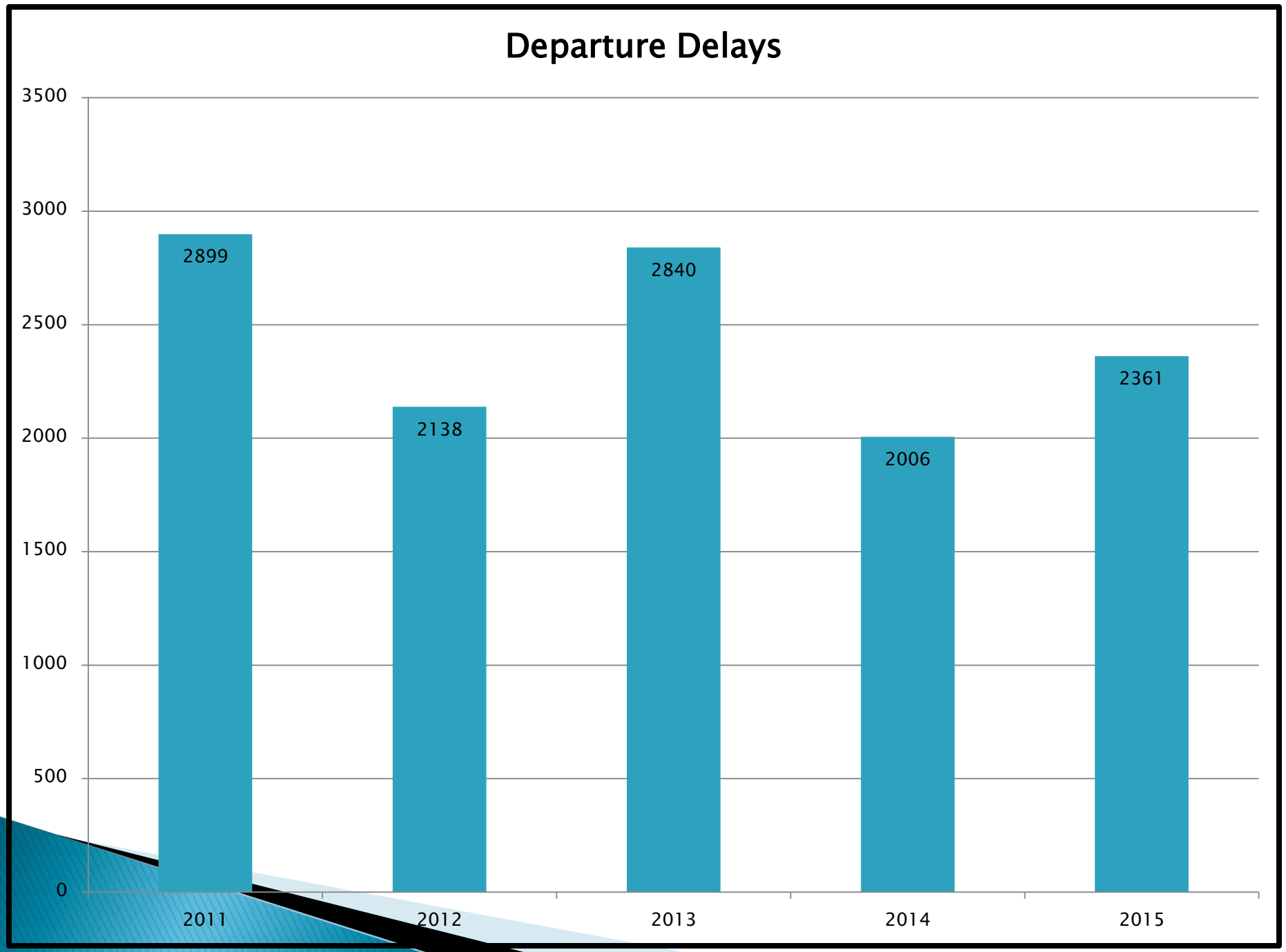

Operations
39000
38000
37000
36000
35000
34000
33000
32000
31000
34940
33729
35543
34798
38452
2011
2012
2013
2014
2015

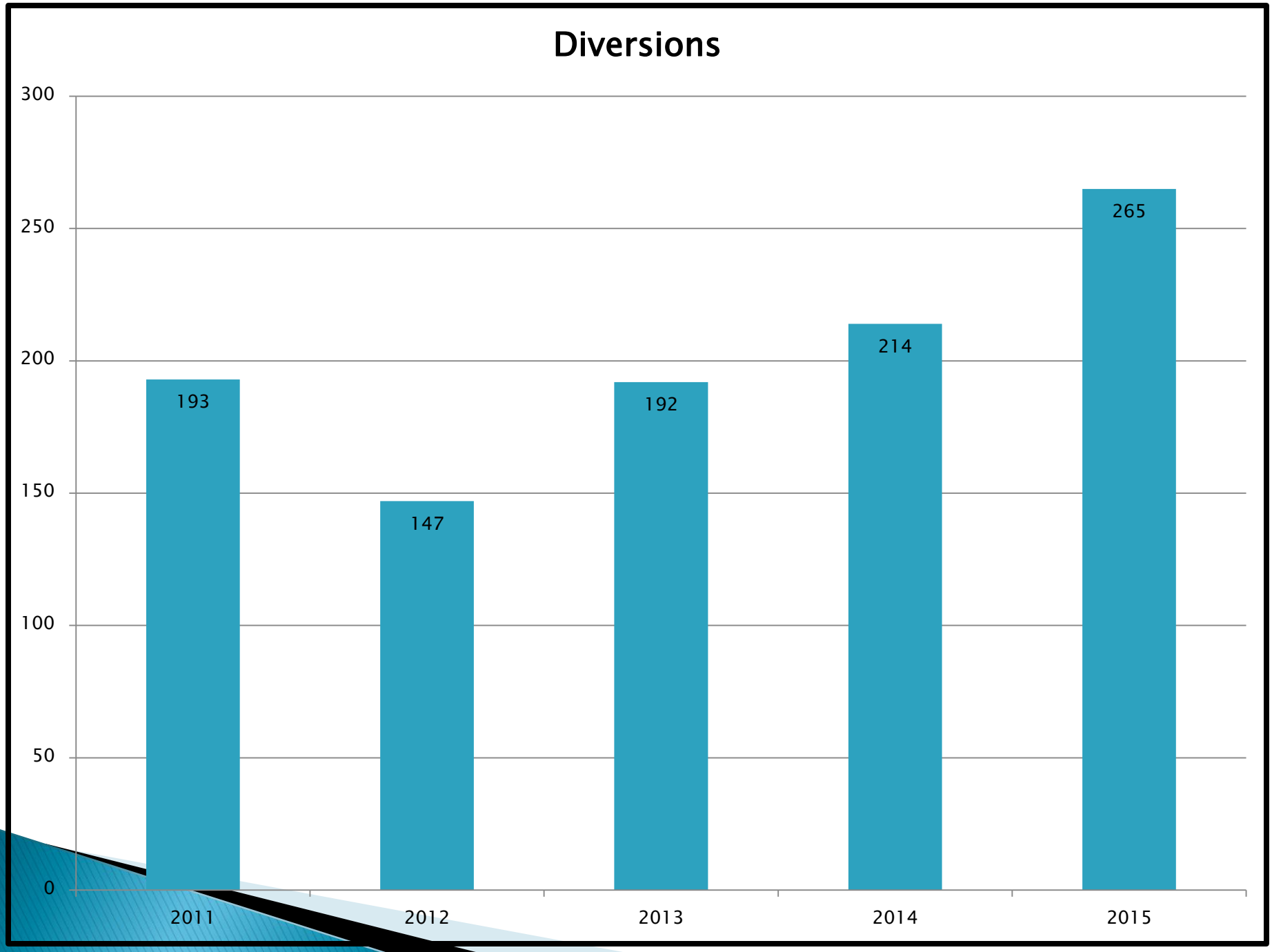
Airborne Holding Minutes



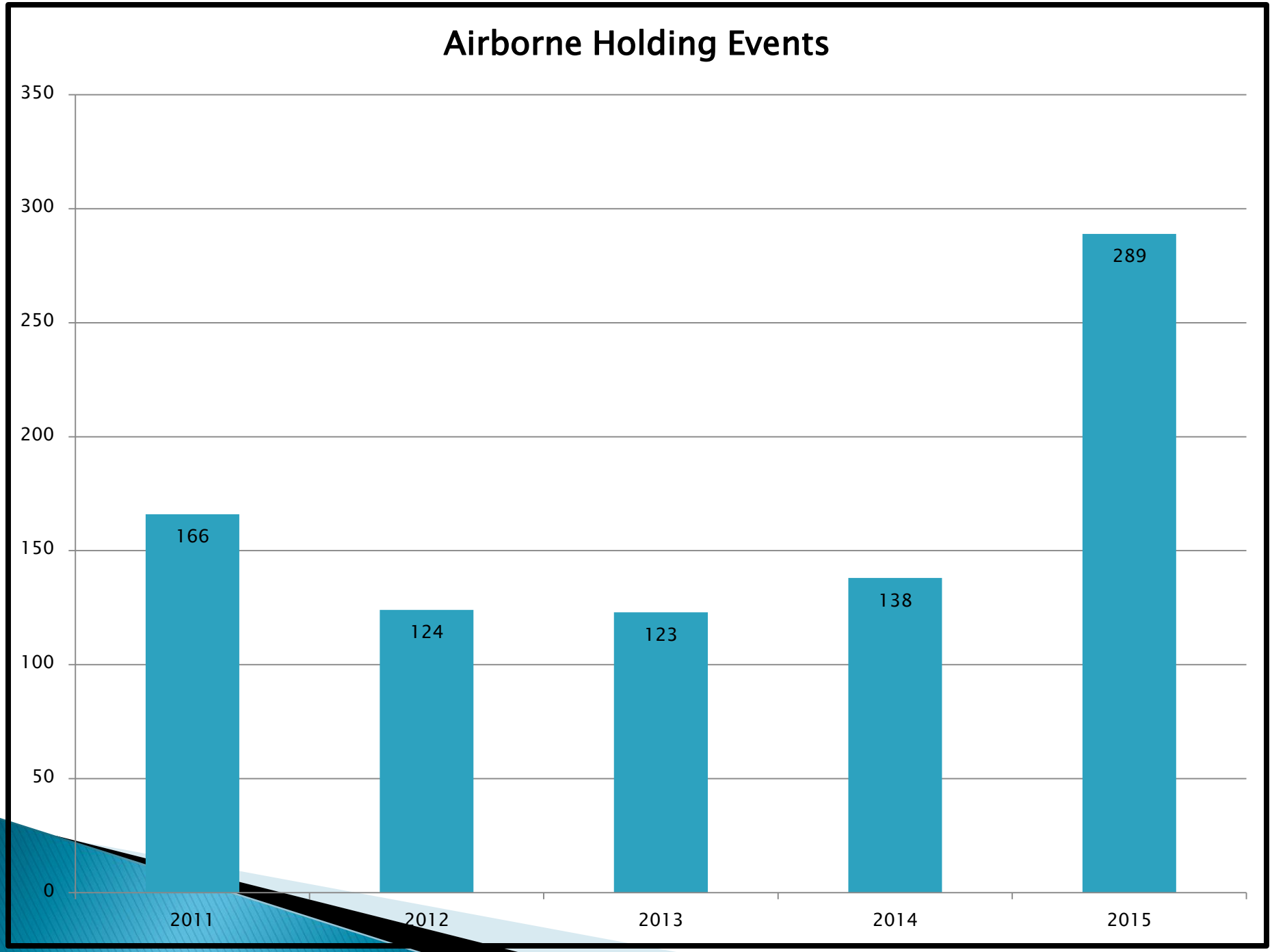

Ground Stop Minutes
4500
4000
3500
3000
2500
2000
1500
1000
500
0
3844
3168
1954
3706
3412
2011
2012
2013
2014
2015

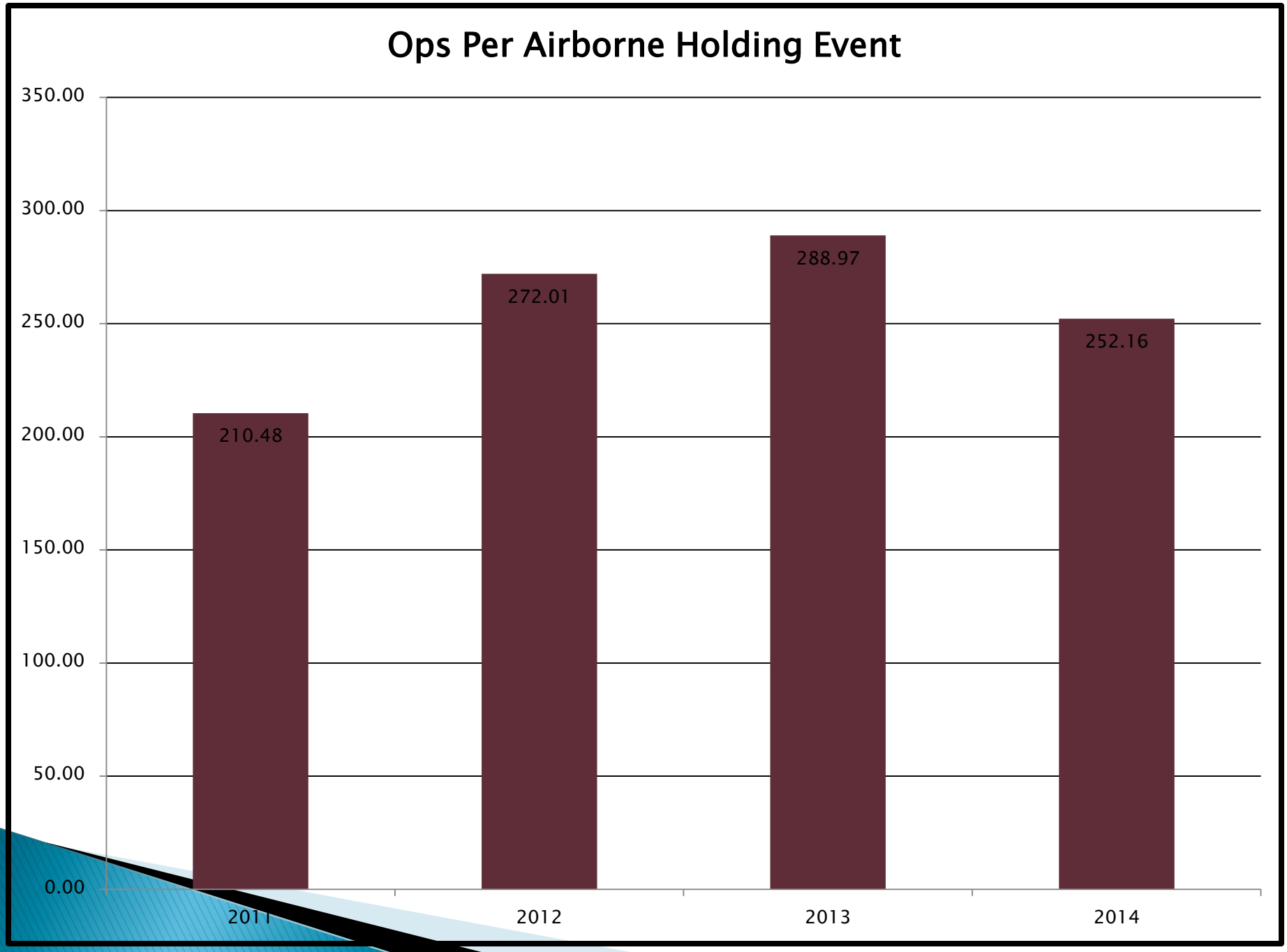

Opsnet Delays
900
800
700
600
500
400
300
200
100
0
314
161
194
595
769
2011
2012
2013
2014
2015


Departure Delays
3500
3000
2500
2000
1500
1000
500
0
2899
2138
2840
2006
2361
2011
2012
2013
2014
2015


Diversions
300
250
200
150
100
50
0
193
147
192
214
265
2011
2012
2013
2014
2015

Airborne Holding Events




Ops Per Airborne Holding Event
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
210.48
272.01
288.97
252.16
2011
2012
2013
2014

Please email any questions to tlee@panynj.gov

FBO RAMP GRIDLOCK PROCEDURE

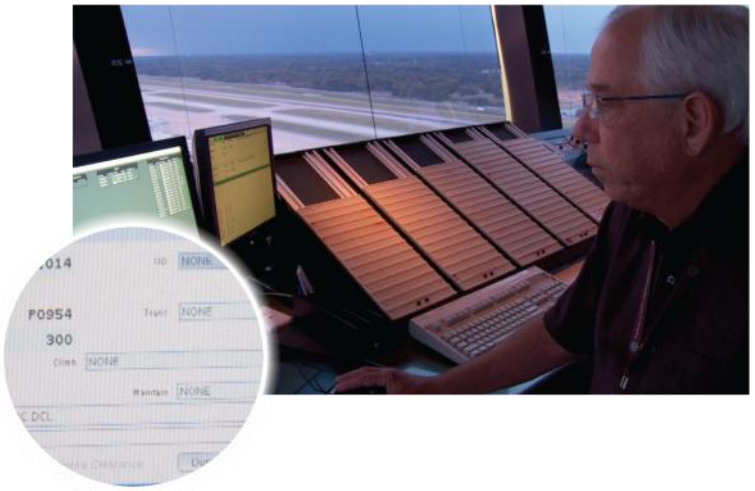
- In an attempt to coordinate limited ramp space during periods of high volume, the airport has implemented a test procedure:
- **Gridlock: space is constrained to only a few parking spaces remaining.**
- When ramp space is severely constrained at a particular FBO(s) all aircraft destined for one of those FBO's will be instructed by ATC to taxi to a holding point on the AOA and contact the FBO prior to arrival acceptance. The FBO will advise the pilot of availability of parking and/or expected delay. If the FBO cannot accept the aircraft, the pilot will be advised to contact Airport Operations (130.575) for alternate FBO options.
- **IT IS MOST HELPFUL IF YOUR FBO OF CHOICE KNOWS IN ADVANCE OF YOUR ARRIVAL!**

Data Comm & Taxiway B Update

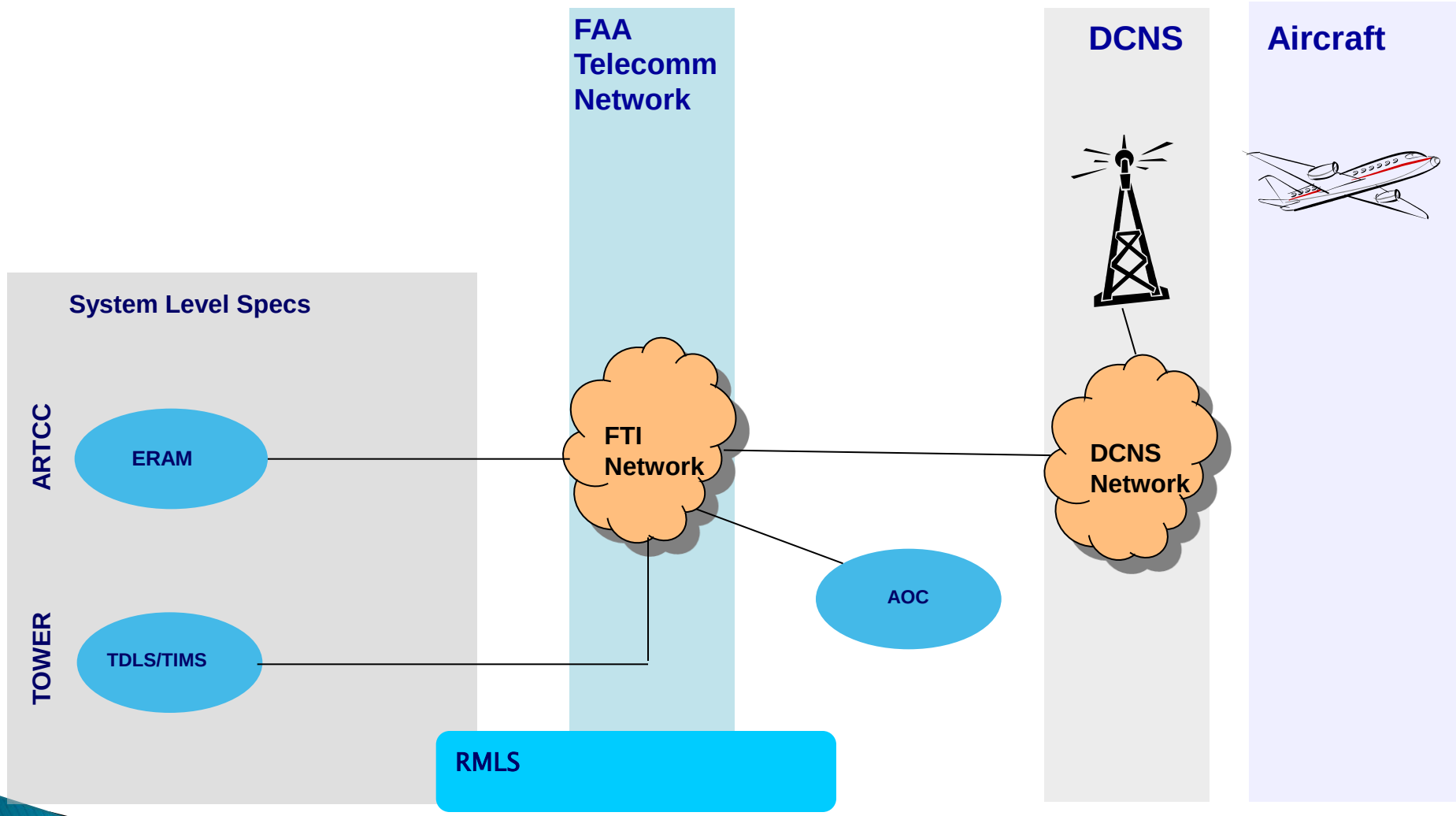
Gary Palm, KTEB Air Traffic Manager, FAA

Program Overview

- Provides data communications services between pilots and air traffic controllers, supplementing existing voice communications capabilities
- Provides a data link between ground automation systems and flight deck avionics for air traffic control (ATC) clearances, instructions, traffic flow management, and flight crew requests
- Controllers will be able to deliver instructions with a push of a button and without the need to utilize voice frequencies
- Enables the transmission of complex instructions to be quickly and correctly loaded into an aircraft's flight management system, upon acceptance by the pilot



Data Comm Architecture



Tower Service Requirements

- En Route Automation Modernization (ERAM)
  - Need ERAM Data Comm Release (EAD) running at one of the National Sites (ZLC or ZTL) and Parent ERAM prior to IOC
- Tower Data Link Services (TDLS)
  - Complete rollout of TDLS Tech Refresh (V11)
  - Need TDLS Departure Clearance (DCL) Release (V12) running at the IOC Keysite
- Data Comm Network Services (DCNS)
  - Need DCNS tested and accepted and interfaced to one of the ERAM National Sites to support IOC
- FAA Telecommunications Infrastructure (FTI)
  - Need all required FTI services ordered and in place to support IOC
- Avionics
  - Equipped aircraft (FANS 1/A and VDL-2) to support Data Comm implementation waterfall

Key Data Comm Terminology

- *Logon:* Pilot requests DCL service via logon. Logon processing performed to establish the identity and data communications capabilities of a flight desiring data communication services
- *Correlation:* Process to ensure a controller-to-pilot data link communications (CPDLC) session is established with *one and only one* aircraft and an individual flight plan
- *Pending Clearance:* This is a clearance that a Controller has processed but has not been delivered to the A/C
- *History:* This is a record of clearances for PDC and CPDLC transactions between Controller and A/C
- *Session:* A virtual connection between TDLS and the aircraft for the exchange of CPDLC messages
  - Session Established: Requires processed flight plan on TDLS, A/C logon, and Flight Plan Correlation to be completed
  - Session Terminated: Can be done by Pilot or Controller at anytime. TDLS System initiates termination 10 minutes after departure message
- *Blocked List:* List of aircraft disallowed from logging on. Blocked status for an aircraft may be system-generated (e.g., too many invalid logon attempts) or manually added (or removed) from an AT Specialist Workstation

CPDLC Message Data Flow

National ERAM NAP Realm

Parent ERAM & Data Comm Tower

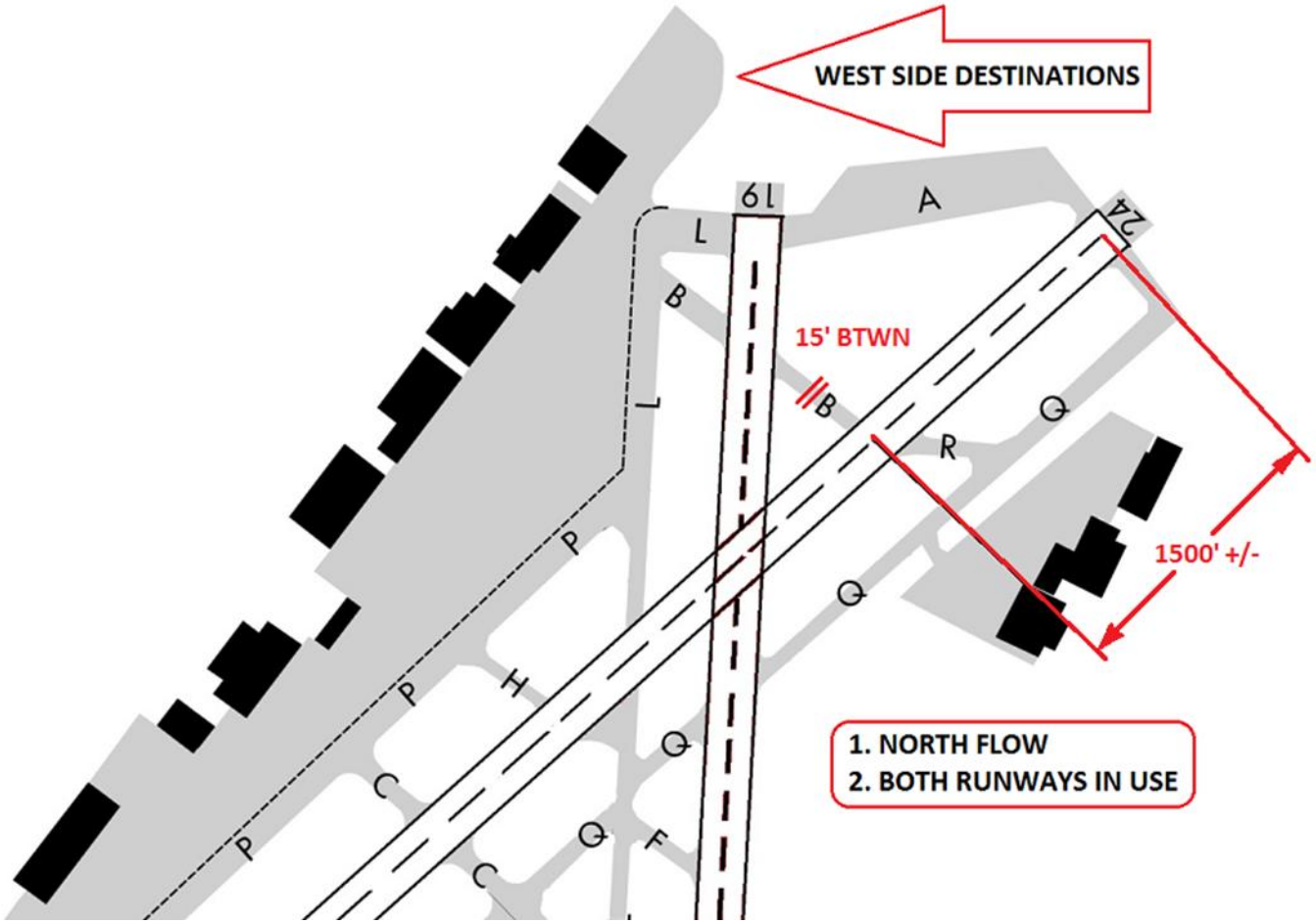
DCNS

FANS Equipped A/C

TDLS

- Flight data update
- Logon/session status
- Logon request/response
- CPDLC Session message/response

- Taxiway B


WEST SIDE DESTINATIONS
19
A
Z4
L
B
15' BTWN
B
R
1500' +/-
P
P
P
H
C
C
F
1. NORTH FLOW
2. BOTH RUNWAYS IN USE

N90/TEB Webinar Brief

Mike Porcello and Steve McClain

November 5, 2015

Playbook Routes 2016

TEB

USING NE TO FL VIA J6 PLAYBOOK
-TO ALL FL DESTINATIONS: PARKE J6 HVQ BULEY J91 ATL
APF KTEB PARKE J6 HVQ BULEY J91 ATL *J43 SZW TYNEE1*
BCT KTEB PARKE J6 HVQ BULEY J91 ATL *J89 OTK PRRIE2 KBCT*
FLL KTEB PARKE J6 HVQ BULEY J91 ATL *J89 OTK JINGL4 KFLL*
FMY KTEB PARKE J6 HVQ BULEY J91 ATL *J43 SZW TYNEE1 KFMY*
FXE KTEB PARKE J6 HVQ BULEY J91 ATL *J89 OTK JINGL4 KFXE*
MCO KTEB PARKE J6 HVQ BULEY J91 ATL *J89 OTK PIGLT4 KMCO*
MIA KTEB PARKE J6 HVQ BULEY J91 ATL *J89 OTK SSCOT3 KMIA*
PBI KTEB PARKE J6 HVQ BULEY J91 ATL *J89 OTK WLACE2 KPBI*
PIE KTEB PARKE J6 HVQ BULEY J91 ATL *J43 SZW KPIE*
RSW KTEB PARKE J6 HVQ BULEY J91 ATL *J43 SZW TYNEE1 KRSW*
SRQ KTEB PARKE J6 HVQ BULEY J91 ATL *J43 SZW TEEGN1 KSRQ*
TMB KTEB PARKE J6 HVQ BULEY J91 ATL *J89 OTK SSCOT2 KTMB*
TPA KTEB PARKE J6 HVQ BULEY J91 ATL *J43 SZWFOOXX4 KTPA*

Playbook Routes 2016

MMU/CDW

USING NE TO FL VIA J48 PLAYBOOK
-TO ALL FL DESTINATIONS: MOL J22 VXV J91 ATL J89 OTK/J43 SZW
APF LANNA J48 MOL J22 VXV J91 ATL J43 SZW TYNEE1
BCT LANNA J48 MOL J22 VXV J91 ATL J89 OTK PRRIE2 KBCT
FLL LANNA J48 MOL J22 VXV J91 ATL J89 OTK JINGL4 KFLL
FMY LANNA J48 MOL J22 VXV J91 ATL J43 SZW TYNEE1 KFMY
FXE LANNA J48 MOL J22 VXV J91 ATL J89 OTK JINGL4 KFXE
MCO LANNA J48 MOL J22 VXV J91 ATL J89 OTK PIGLT4 KMCO
MIA LANNA J48 MOL J22 VXV J91 ATL J89 OTK SSCOT3 KMIA
PBI LANNA J48 MOL J22 VXV J91 ATL J89 OTK WLACE2 KPBI
PIE LANNA J48 MOL J22 VXV J91 ATL J43 SZW KPIE
RSW LANNA J48 MOL J22 VXV J91 ATL J43 SZW TYNEE1 KRSW
SRQ LANNA J48 MOL J22 VXV J91 ATL J43 SZW TEEGN1 KSRQ
TMB LANNA J48 MOL J22 VXV J91 ATL J89 OTK SSCOT2 KTMB
TPA LANNA J48 MOL J22 VXV J91 ATL J43 SZWFOOXX4 KTPA

Playbook Routes 2016

- Dynamic re-routes outside of the published routes will continue based on weather and volume
- Low altitude routes for close-in destinations are probable
- Playbook routes are listed as departure airport specific but can be used at any of the three listed

RUUDY 5

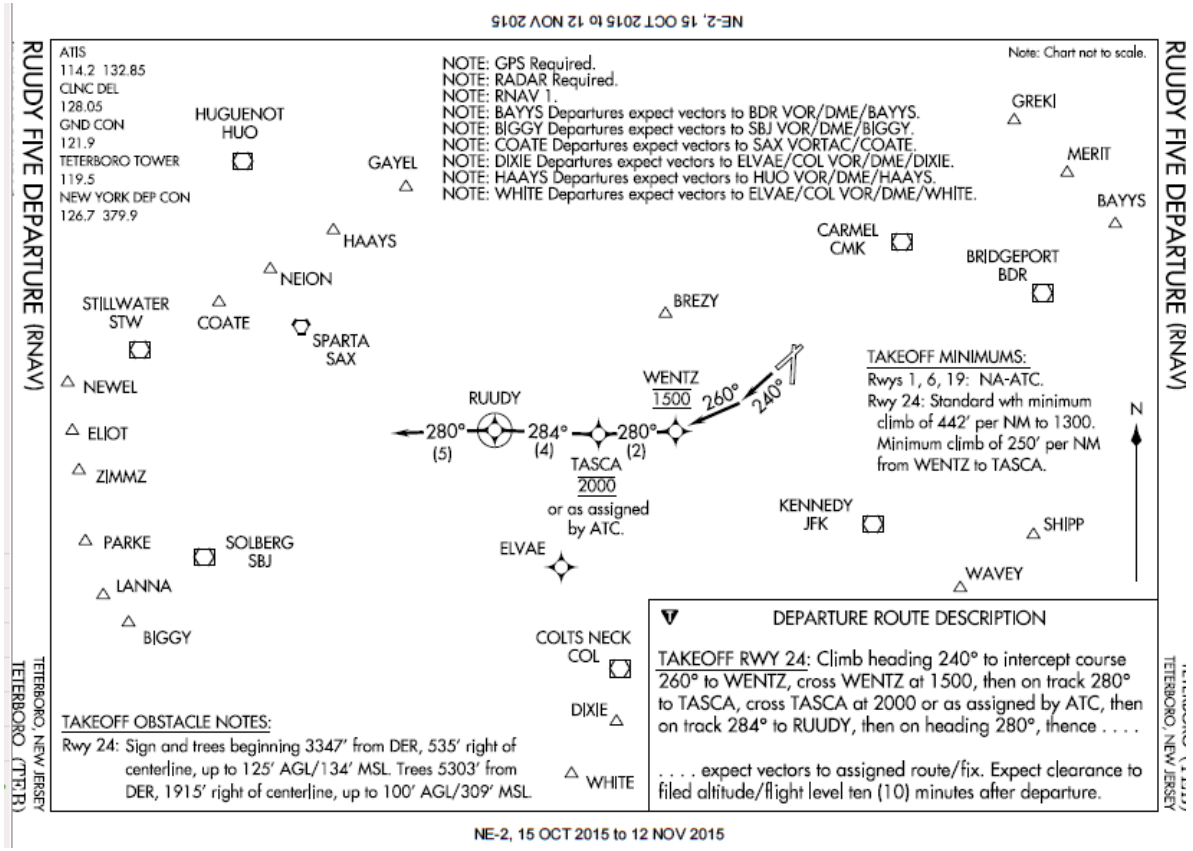
N90 wishes to reduce pilot deviations on procedure

Difficult to find single point of failure that causes deviations
- Miss mandatory crossing altitude 1500 @ WENTZ
- Miss turn towards WENTZ

N90 changed the way crossing altitudes were depicted on the plate- no impact

Sept 2015 convened panel to evaluate procedure and recommend solutions

RUUDY 5

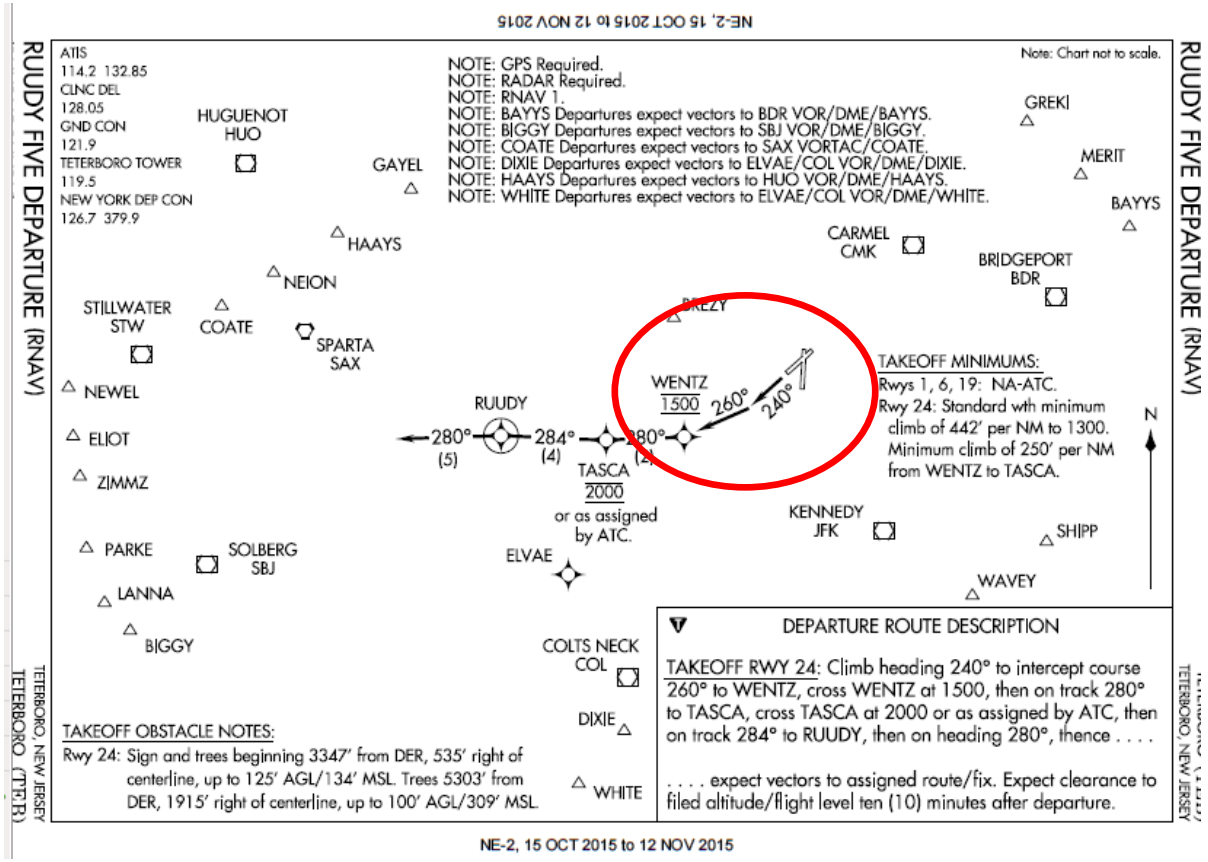


Recommendations:

Reduce clutter- Recommend procedure spread to two pages

Add a side looking Plan View

RUUDY 5

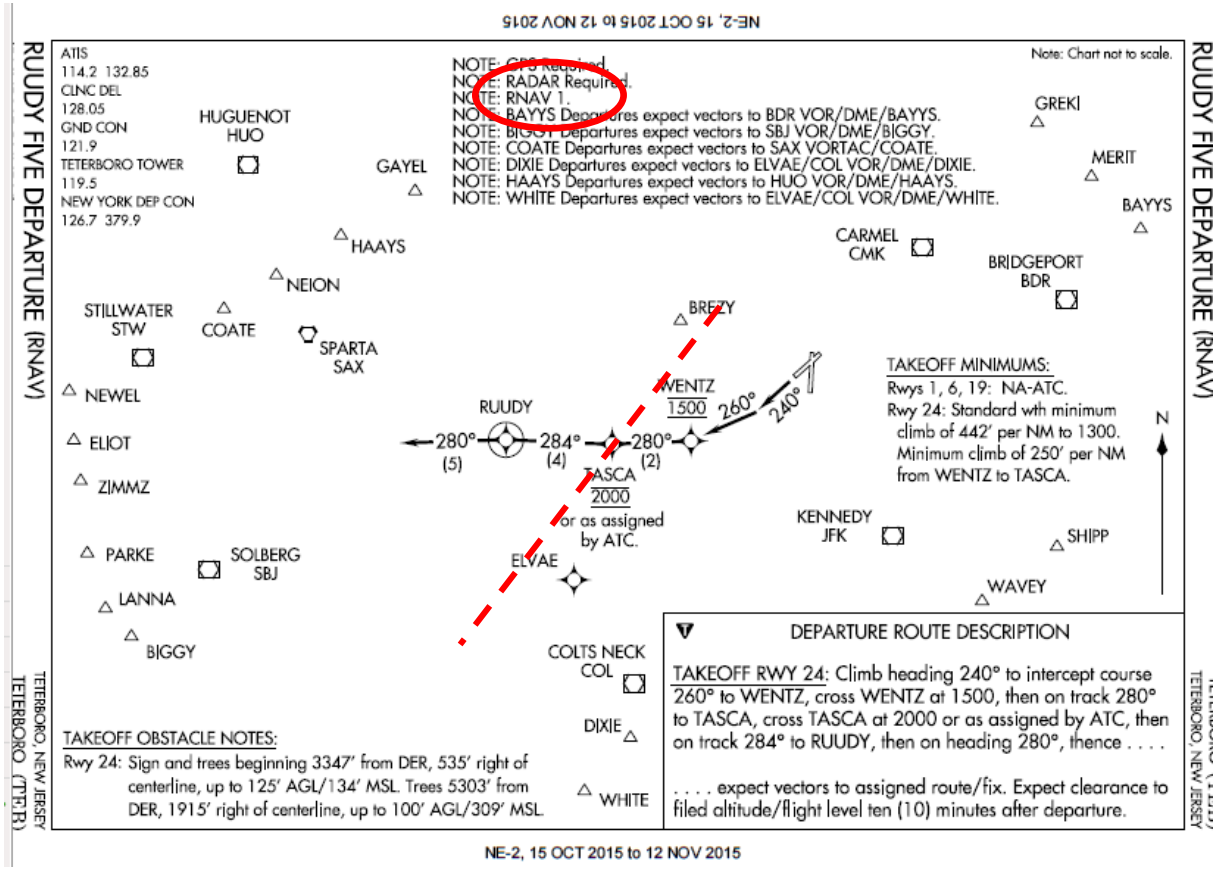


Recommendations:

Eliminate headings/course- simplify by going direct to WENTZ

Bold or Circle WENTZ and altitude to draw attention

RUUDY 5



Recommendations:

Add to note "Note RNAV 1 Capability Required"

Add depiction of EWR 22 final

TEB Quiet 19

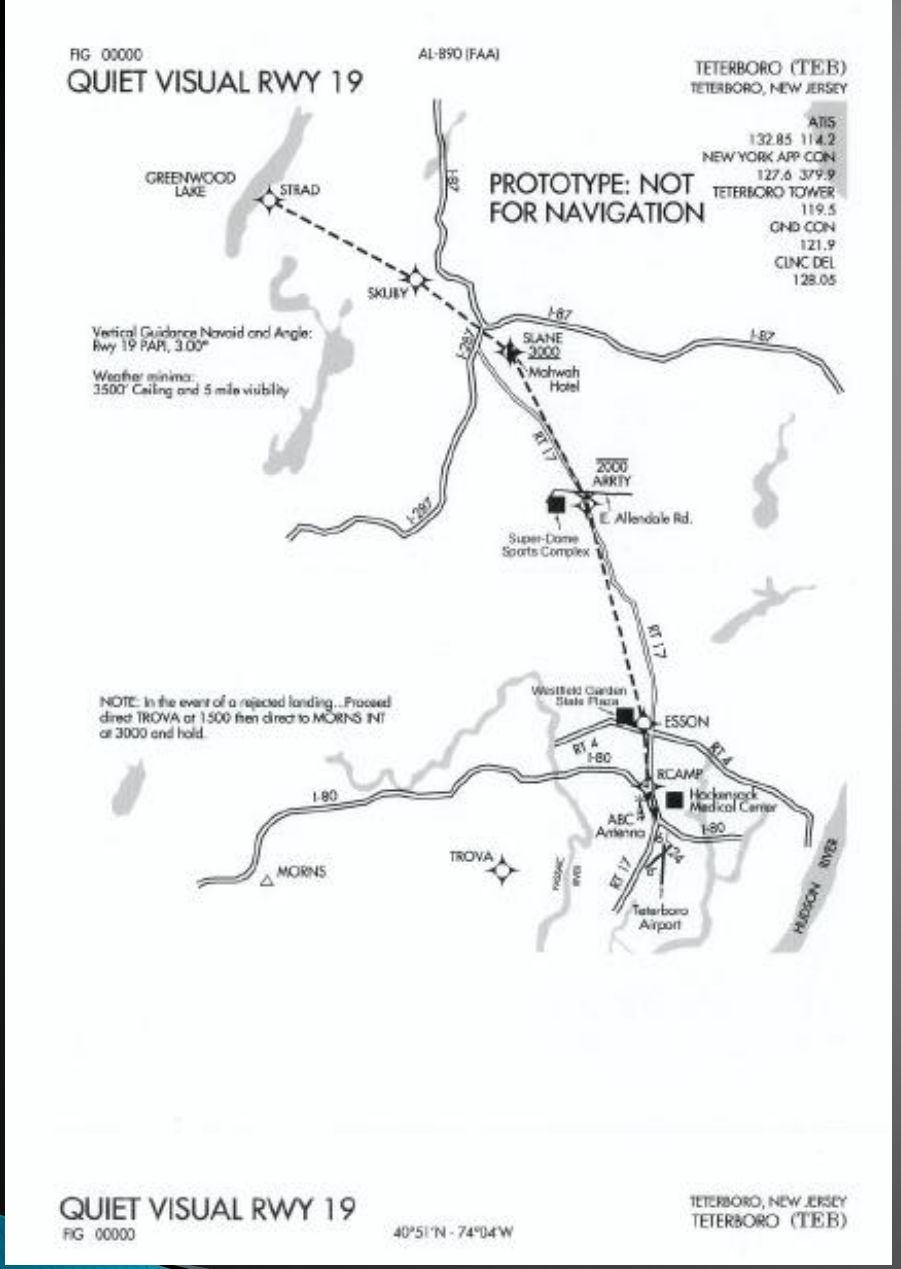
Failed Flight Check twice due to inability to distinguish visual aids

N90 worked with OSG and Flight Check to find acceptable redesign

Added more detailed language to procedure description

OSG is confident we now have a procedure that will pass Flight Check.

Environmental process should be streamlined



When cleared for the TEB Charted Visual RWY 19, proceed direct to the Mahwah Hotel (SLANE), cross Mahwah Hotel @ or above 3,000ft. From Mahwah Hotel on a heading of 157degrees follow RTE 17 South to (ARRTY), Cross RTE 17 (TEB 360R 11DME)(ARRTY) Super-dome Sports Complex 1NM East @ or below 2,000ft. Continue South to the intersection of RTE 17 & RTE 4 Westfield Garden State Plaza (EESON). Continue south on RTE 17 until it joins I-80 at the ABC Antenna (RCAMP). Remain East of the ABC Antennas and West of Hackensack Medical Center.

TEB ILS 19
TEB RNAV (GPS) Y 19
TEB RNAV (GPS) 24

Environmental is being remodeled

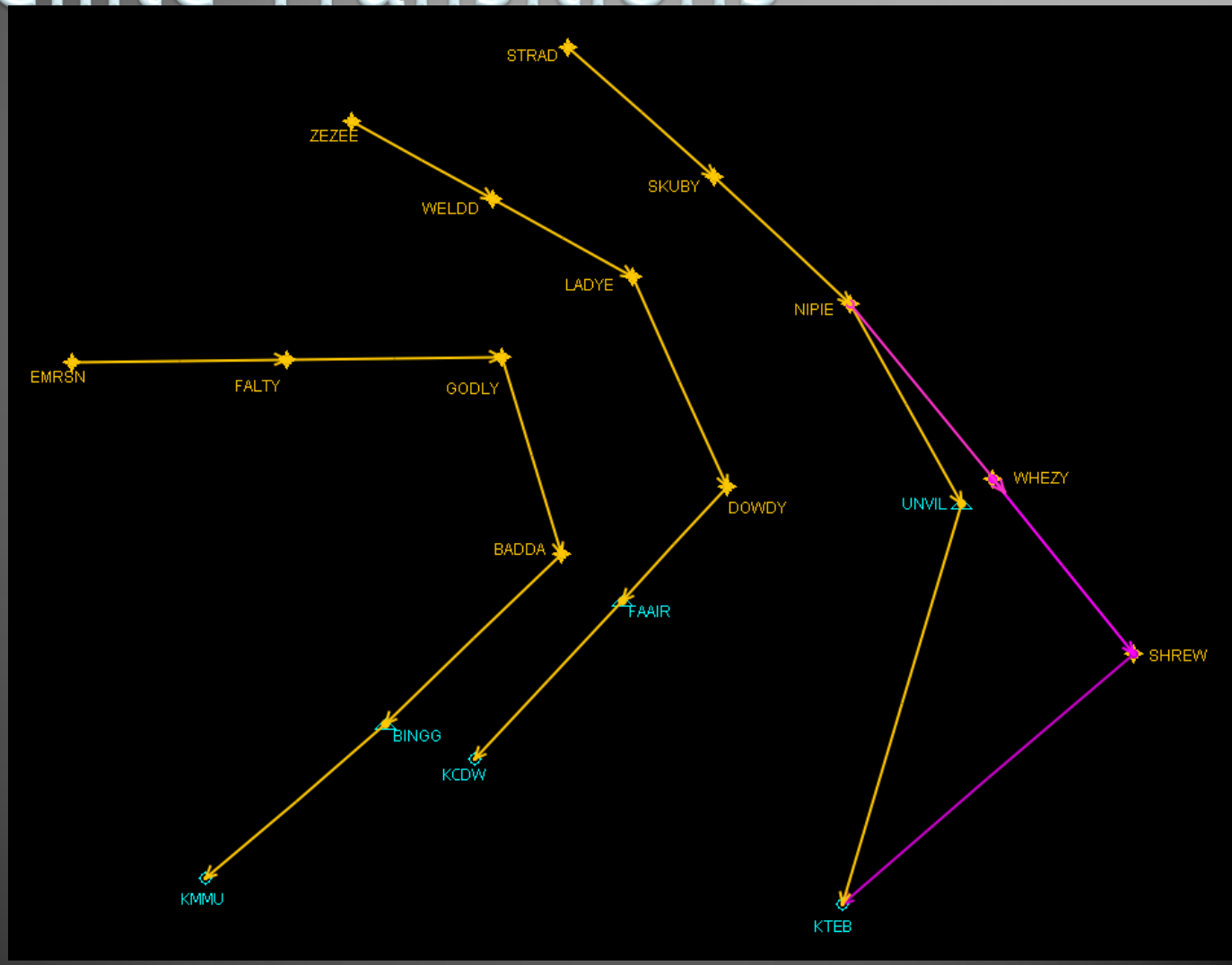
Approach not authorized until Environmental and Legal is complete

EWR Satellite Transitions

MMU published/used

CDW published
12/10/15

TEB TBD



Initial Environmental Review (IER) Process

1. Prescreen filter tool
2. Noise Model
   - Methodology
   - Cumulative noise
3. Develop IER document
4. Legal Sufficiency
5. State Historic Preservation Office (SHPO)
6. Public Notification
7. CATEX
8. Publication

TEB ILS 19
TEB RNAV (GPS) Y 19
TEB RNAV (GPS) 24

Pub date Nov 12, 2015

Environmental is being remodeled

Approach not authorized until Environmental and Legal is complete

Please email any questions to tlee@panynj.gov

Nighttime Noise

Gabriel Andino, Noise Abatement & Environmental Compliance Manager, KTEB

Late-night Noise Abatement Procedures

- If operating at TEB between 2300L and 0600L please help us to reduce the airport's noise footprint:
  - Use manufacturer or company recommended noise abatement departure procedure.
  - Use minimum safe reverse thrust upon landing.
  - Request preferential runways:
    - Runway 19 for departures (Request DALTON TWO to avoid delays) when airport is in South Flow.
    - Runway 1 for arrivals (conditions permitting) when airport is in North Flow.

Upcoming Issues & Spring Webinar Items

- Spring Webinar: Fuel Spill Prevention, ARFF, RSAT, Construction, Suggestions?
- What TEB delay information do you as users actually receive from FAA?

Email questions to tlee@panynj.gov

Presenter: Ralph Tamburro

FINAL NOTES

Follow up questions-Please email tlee@panynj.gov

Next Webinar-Spring 2016, please submit agenda suggestions to Pam Phillips at pwalden@panynj.gov

Helpful websites:
http://www.panynj.gov/airports/teb-flight-crew-briefing.html

https://www.youtube.com/watch?v=gDKuPB2l0UA

http://nbaa.org

http://fly.faa.gov

http://teterborousersgroup.org

Questions & Answers

- Question 1: Is the TEB Formal Deicing Program provided anywhere on TEB or the PANYNJ website?
- Answer: It is not on the PA Website however, we've provided the procedures for the airport and pilots to NBAA and TUG for posting on their websites.

- Question 2: Ramp Boss is a new term to us. Is that a role filled by each FBO? How do we identify and communicate with the appropriate Ramp Boss?
- Answer: Each FBO has their own Ramp Boss and that individual can be reached on the specific FBO's frequency.

- Question 3: Where is the Dalton Two departure published? My charts only show Ruudy Five, Teterboro Nine, and takeoff minimums.
- Answer: It's in the Airport Facility Directory on page 405 and it's in Jeppesen, plate number 10-3. There's also a utube video on how to fly it: http://youtu.be/YLWtPFHcQlM

Questions & Answers Cont.

- Question 4: Do braking action reports to TEB tower or ground get entered into PIREP system?
- Answer: Braking action reports from pilots are too time sensitive to enter into the PIREP system, the reports are provided to pilots when they are on final approach or earlier in their arrival sequence.

- Question 5: It might be advised to publish the FAA AIM guidelines for braking action reports. Also, are there any mu reports for braking as opposed to pilots reports for braking action to close the runways. One pilots fair may be another's good, and vice versa and a lot of pilots misreport braking action.
- Answer: The FAA AIM paragraph on braking action reports & advisories is a bit lengthy for a slide but may be found on page 673 of the 2015 book. Also, we do not currently report mu numbers however, we are currently reviewing our policies regarding this. We'll keep you posted thru NBAA and TUG.