Please mute your phone, questions will be entertained by email.

During the presentations please submit any questions to tlee@panynyj.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

- ZNY ADSB
- SWAP Briefing
- Fix Balancing
- Airport Delay Metrics
- GBAS & Construction Update
- Charted Visual Procedure for runway 19
- Helicopter Route Review
Presenters

- **Pam L. Phillips**, Mgr., Operations & Security, Port Authority of NY & NJ, TEB

- **James C. Schultz III**, Traffic Management Officer, FAA En Route and Oceanic Services, NY

- **Michael Porcello**, N90 Traffic Management Officer

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

- **Gary Palm**, KTEB Air Traffic Control Tower Manager, FAA

- **Gabriel Andino**, Noise Abatement & Environmental Compliance Manager, KTEB
Please email any questions to tlee@panynj.gov
ZNY ADSB Operation

- Continue Use of ADS–B during Oceania and Fort Fisher Radar Outages

- The ZNY workforce is highly trained as to the advantages and uses of ADS–B during RADAR outages

- Continue to use Southbound on L453 currently unavailable Northbound
Process When Oceania Or Fort Fisher OTS

- NOTAM issued
- System Impact Report Issued through ATCSCC
- Controllers notified to expect use of ADS-B
- ERAM System enabled to show ADS-B is operational
Oceania Radar Outage – Sample

- A0136/16 – OCEANA (QVR) RADAR WILL BE U/S. DURING THE OUTAGE THE FOLLOWING RESTRICTIONS ARE IN PLACE:
  1) NORTHBOUND: L453 WILL BE CLOSED. 2) SOUTHWEST BOUND: M201 WILL BE CLOSED BETWEEN INTERSECTIONS ATUGI AND HANRI. ONLY AIRCRAFT EQUIPPED WITH OPERATIONAL ADS–260B OUT MAY USE THE FOLLOWING ROUTES: 3) SOUTHBOUND: L453 BETWEEN INTERSECTIONS LEXAD AND ONGOT 4) NORTHEAST BOUND: M201 BETWEEN INTERSECTIONS HANRI AND ATUGI.
ADS-B Coverage at 35K MSL with Ground Stations at Abaco Island, San Salvador and Grand Turk

ADS-B line-of-sight (LOS) range approx 225nm – 230nm at 35K ft msl

ADS-B Ground Stations (proposed)
Non-ADS-B Indicators

- Pink/Coral “A” indicators will be present for all non-ADS-B aircraft
Please email any questions to tlee@panynj.gov
SWAP 2016

- SWAP – Severe Weather Avoidance Plan
- Initiated when Severe Weather impacts routes in ZNY airspace
- May be initiated for weather outside of ZNY when reroutes become excessive
- Based on historical data, during May, June, July and August there is a 48% chance of New York Center implementing SWAP on any given day.
- New York Center’s SWAP Goal – mitigate the inevitable delays associated with the event through the timely opening and closing of routes and issuance of amended clearances.
Reroute Process – Normal Day

- Center gets flight strip 45 min before P time
- Tower gets strip 30 min before P time
- Ideally, any amendment is done by the Center within that 15 min window
- Amendments are done to pref route, route around WX or for fix balancing
- If amendment is entered less that 15 min before P time, Center advises Tower
- If a/c will depart more than 15 min before P time, Tower apreqs w/ Center
Reroute Process – SWAP day

- Route determined when Tower “moves” flight to TAXI status in DSP
- Flight is Cleared as Filed or Revised
- Ideally, flight will depart within 30 minutes
- Not unusual to have multiple revisions due to dynamic nature of WX
ATCSCC Route Advisories

FYI – means that the routing in the Advisory is available for those that wish to use it to avoid possible delays on the normal routes.

RMD – means that the routing in the Advisory is RECOMMENDED to avoid delays on the normal routes.

RQD – means that the routing in the Advisory is REQUIRED due to constraints on the normal routes.
Route Strategies for GA Aircraft

- AZEZU route to/from Florida – always available unless an Advisory or System Impact Report (SIR) signifies otherwise. Often issued as FYI or RMD

- SERMN (SWAP Escape Routes Metro New York) – low altitude routes designed to keep aircraft out of high altitude structure. 3 separate SERMN scenarios, or playbooks:
  1) North (really west) – to upstate NY, YYZ, western PA, Ohio, as far west as Michigan
  2) East – to New England
  3) South – to DC Mets, ORF, RIC, RDU, ROA, CHS, GSO, CAE, SAV – Often issued as RQD

- Use GREKI routes to upstate NY, YYYZ ORD, MSP and further west – often issued as RMD

- J75, J48 or J6 routes to Florida to avoid delays via WHITE
Filing Flight Plans out of the NY area – first 200 miles must be via one of the routes indicated

<table>
<thead>
<tr>
<th>Route</th>
<th>Flight Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q812</td>
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<tr>
<td>Q818</td>
<td>GAYEL Q818 WOZEE</td>
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<tr>
<td>Q436</td>
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<tr>
<td>J60</td>
<td>NEWEL J60 DJB</td>
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<td>J64</td>
<td>NEWEL J60 DANNR RAV J64 EWC</td>
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<tr>
<td>J80/J110/Q480</td>
<td>ZIMMZ Q42 MIKYG Q480 AIR</td>
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<tr>
<td>J6</td>
<td>PARKE J6 MRB</td>
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<td>J75</td>
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<tr>
<td>J209</td>
<td>WHITE J209 SBY</td>
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<td>J174</td>
<td>WAVEY EMJAY J174 SWL</td>
</tr>
<tr>
<td>Q42</td>
<td>ZIMMZ Q42 PSYKO</td>
</tr>
</tbody>
</table>
How can Business Aviation help?

- File in compliance with ATCSCC Advisories.
- DO NOT REFILE if less than 45 min prior to original P time.
- If refiling, ALWAYS call center to remove original flight plan.
- Use NRP rules when filing routes (first and last 200 miles on a preferred IFR route)
- Utilize Alternative Routes if they are FYI or RMD:
Please email any questions to tlee@panynj.gov
Fix Balancing for N90 Departures
WHITE Avoidance

- Most restricted fix
- BIGGY is only available for select destinations (DCA, BWI, CLT)
- ZNY Sector 55 volume is a factor for LANNA departures
- PARKE makes use of available capacity in ZID airspace
- Takes advantage of under-utilized fix
Examples of Playbook Routes 2016

TEB

USING NE TO FL VIA J6 PLAYBOOK
-TOP 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 KFCY
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 KMIN
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 SZWFOOKX4 KTPA
Playbook Routes 2016 Cont’d

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

- Beneficial during the winter when most satellite traffic is southbound
- 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
  - [http://www.fly.faa.gov/rmt/coded_departure_routes.jsp](http://www.fly.faa.gov/rmt/coded_departure_routes.jsp)
Playbook Routes always on option depending on weather
Provide a game plan for top destinations (IAD, CLB, YYZ, etc.)
Avoid GAYEL
DUCT, SERMN
NEION Available?
Please email any questions to tlee@panynj.gov
Presented By:
Ralph Tamburro, Delay Reduction Project Manager
The Port Authority of NY & NJ Aviation Dept.
TEB OPERATIONS

Year | TEB
----|----
2011 | 150,000
2012 | 155,000
2013 | 160,000
2014 | 165,000
2015 | 170,000
TEB TOTAL DELAYS

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Delays</th>
</tr>
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<tbody>
<tr>
<td>2011</td>
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<td>2400</td>
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<td>3800</td>
</tr>
<tr>
<td>2015</td>
<td>4400</td>
</tr>
</tbody>
</table>

- Total Delays
ARRIVAL AND DEPARTURE DELAYS
Please email any questions to tlee@panynj.gov
GBAS & Construction Update

Presented By:
Ralph Tamburro, Delay Reduction Project Manager
The Port Authority of NY & NJ Aviation Dept.
Port Authority’s Construction

JFK runway 4R/22L
High potential for ILS 13L operations

LGA Central Terminal Building project

EWR Terminal A project
Resurface the runway
New High speed F and H
Remove old F and H

3 Closure periods
Feb 27–Jun 1
Jun 1–Sept 6 (Nightly)
Sept 6–Nov 17
LGA CTB existing
LGA CTB Future
Ground Based Augmentation System Update

- GBAS is planned for future installation at JFK, LGA and TEB
- EWR system Upgrade which will allow Cat II approaches
Please email any questions to tlee@panynj.gov
TEB Runway 19 Quiet Visual
Test not to exceed 6 months
Presented By:
Gary Palm, TEB Air Traffic Manager
This new visual approach was developed to avoid the Hackensack Medical Center area and reduce noise.

In February 2016 the new Charted “Quiet Visual’ Runway 19 approach passed flight check inspection.

April 4, 2016- test not to exceed 6 months.
Proposed TEB Rwy 19 Charted Visual Flight Procedure (in blue)

(STRAD- SKUBY- SLANE- ARRTY- ESSON)
Current Flight Tracks to TEB Rwy 19 (In Green)
TEB Runway19 Quiet Visual (Enlarged view)
Date of Publication:
March 31, 2016

Weather Minima:
Ceiling 3,500
Visibility 5

Chart will be updated to provide route and visual landmark clarity
Please email any questions to tlee@panynyj.gov
Teterboro Airport

Helicopter Noise Abatement Routes
CAUTION: Multiple obstructions in the proximity of the helicopter routes – refer to current aeronautical charts for location and heights!

NOT FOR NAVIGATION!
Helicopter Noise Abatement

- Most helicopter complaints originate east of the airfield (Moonachie/Little Ferry) and west of the airfield (Hasbrouck Heights).

- Helicopter operators are advised to:
  - Adhere to routes whenever possible.
  - Avoid residential areas.
  - Maintain 1,000 ft. altitude if overflying residential areas.
Local Complaint Locations: Fourth Quarter - 2015
Please email any questions to tlee@panynj.gov
Fall Webinar: RSAT, Winter Operations, Suggestions?
What TEB delay information do you as users actually receive from FAA?

Email questions to tlee@panynj.gov
FINAL NOTES

Follow up questions—Please email tlee@panynj.gov

Next Webinar—Fall 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