

Minutes of TUG Meeting – February 17, 2016

Jim Dramis, TUG Vice President

- Welcomed all attendees and guests and facilitated introductions.

Renee Spann – Airport Manager

- No current construction projects.
- Awaiting permits and environmental survey to commence replacement of taxiway Bravo with taxiway Victor.
- In 2015 Teterboro conducted 14,383 operations (down 1.3% from 2014)
- There were over 51 days during 2015 that daily operations exceeded 600.
- Busiest day of the week remains Thursdays for 8 out of 12 months.
- January 2016 operations increased 7.8% over January 2015.

Pam Phillips – Manager, Operations & Security PANYNJ

- The next Chief Pilot webinar planning is underway and expected to take place in late April or early May.
- Please forward topics and suggestions for the webinar.
- Ralph Tamburro has been tracking ATC delays for all NY/NJ airports. The metric that he is using is by (days, aircraft, and minutes).
- Looking at maintaining equitable delays among the metropolitan airports.
- We would like to know what statistical reports operators would like to see. For example: During October 2015 there were (11) delay days, (336) aircraft impacted, (13,549) delay minutes.

Gary Palm – Manager, TEB Tower

- The RSAT meeting will take place concurrently with the Chief Pilot Webinar.
- Total accumulation of snow at Teterboro has been 28 inches for the season.
- If you have any issues with the snow removal efforts please reach out to Pam Phillips as the airport has been working hard to remain open and safe.
- There were zero runway incursions in 2015 after the new procedure to exit RWY 6 at the end was implemented (exit at Alpha vice Bravo taxiway).
- Pending construction of Taxiway Victor will be a “high speed” taxiway to facilitate quicker exiting of aircraft from runway 6 into the Alpha taxiway run-up area.
- This will also eliminate the taxiway Bravo hot spot and increase safety and controller flexibility.
- Teterboro is still looking at expanding the Delta airspace to the north to eliminate VFR traffic from conflicting with ILS 19 traffic at TUGGZ. Please report any traffic conflict issues to tower.

Dean Snell – NBAA

- The NBAA Air Traffic Desk is open 24/7 and monitors air traffic delays.
- Biggest delay impact for Teterboro is when weather conditions force LGA into utilizing ILS 13 which results in a ground stop at Teterboro.
- The LGA RNAV (GPS) 13 helps alleviate this issue but when the ceilings drop they must switch to the ILS.
- This condition will be further exacerbated when JFK shuts down RWY 4R for (6) months beginning in 2017.

Dana Rose Kelly & Gerald Lynch – FAA

- Provided the following updates to forthcoming Teterboro procedures.
- Quiet Visual RWY 19: On-track to be published on 31 March 2016. It has been flight inspected and approved but still working on the environmental approval. Looking at issuing at 180 day test period but they don't expect that it will require the full test cycle. This procedure will avoid overflying the Hackensack Medical Center. The new procedure also avoids the potential obstacle warning as a result of the ABC antenna.
- RNAV (GPS) RWY 24: On-track to be published on 26 May 2016. This procedure decouples LGA & TEB traffic while providing better minimums than the current VOR RWY 24. The flight inspection date is pending but they do not expect any delays.
- ILS or LOC RWY 19: Tentatively schedule to be published on 26 May 2016. This procedure includes a new RNAV (GPS) transition. This transition decouples TEB/CDW/MMU traffic. Awaiting approval for the missed approach procedure that will mirror the current ILS RWY 19 procedure.
- RUUDY SIX RNAV Departure: Revision to this procedure is still under review. The FAA is looking at several options that will best eliminate pilot deviations. The design phase is scheduled to be completed NLT September 2016.
- See the [FAA presentation here](#).

Moranda Reilly (CGH Technologies), Chris Sutherland, Chris Collings & Michael Earl (Harris Corporation) – CPDLC Departure Clearance

- Harris Corporation is the FAA's integrator for NextGen Data Comm program.
- Data Comm transition from ATC Tower to Voice Augmented by Data enhances departure clearance.
- Crews logon to the airport DCL at departure minus 30 minutes with their Flight ID or Tail Number. Tower will approve the CPDLC session and crew will receive an "ATC Comm Established" message.
- ATC tower can deliver re-routes or weather re-routes via DATALINK directly to the crew up until departure. Aircrew load the new route/change directly via their FMS which will eliminate crew errors.
- Segment 1 Phase 1 – Tower Services
- Segment 1 Phase 2 – Enroute Services
- Numerous benefits: reduces communication time between controllers and pilots, throughput efficiency, controller/pilot efficiency, environmental and safety.

- Presently (72) airports have PDC capability but by the end of 2016 (56) of those airports will have CPDLC-DCL capability. As of today there are only (7) airports in CONUS with DCL. EWR will have DCL capability beginning Friday, February 19th.
- Teterboro will have DCL capability by the end of March 2016. Other local airports getting DCL capability will be JFK, LGA, HPN and PHL.
- Equipment required for DCL: FANS 1A and VDL Mode 2 or VDL Mode 0.
- Operators must contact their service providers to establish the CPDLC-DCL capability.
- ICAO Flight Plans must be adjusted: Field 10a should include either (J3 for FANS 1/A over VDL Mode 0 or J4 for FANS 1/A over VDL Mode 2). Additionally, Field 18 should have: DAT/1FANSP2PDC.
- There is a Flight Deck User Guide available for operational problem reporting: <https://www.nbaa.org/ops/cns/datalink/DCIT-TDLS-Flight-Deck-User-Guide.pdf>
- Should DCL fail, the crew should revert back to voice.
- Most common issue is that crews attempt to logon with the incorrect Tail or Flight ID number.
- [See the presentation here.](#)
- For more information visit: <http://dcis.harris.com/user-participation>

Pat Reines – Honeywell Senior Manager of SmartPath GBAS

- ILS system is now over 50 years old and requires (1) localizer antenna and (1) glide slope antenna for each approach.
- Ground Based Augmentation System (GBAS) requires only (4) GPS receivers, (1) VHF Antenna and (1) Dual Processor Station to provide 26 precision approaches. With the upcoming block point (2) software change that number increases to (48) approaches.
- The need arises to augment the GPS for precision approaches due to potential satellite constellation mode failures that may go undetected for up to 45 minutes. Therefore, the potential is there for bad positional information being relayed to the aircraft during an approach.
- By placing the (4) GPS receivers at surveyed locations they always know where are and they can detect GPS constellation failures immediately. They will ignore the “bad” satellites and send up information that defines the approach to the aircraft. The GBAS system can operate with only (2) out of the (4) GBAS receivers operating.
- The GPS receivers provide (1) meter accuracy during and approach with a 23 nm service volume.
- In summary, augmentation provides (3) things: (1) GPS error correction, (2) Integrity (eliminates bad satellites), (3) path points to the aircraft (2x per second).
- Aircraft will require additional onboard equipment to fly a GLS approach. The crew will tune a (5) digit GPS approach identifier and will fly the approach just like an ILS.
- The FAA has required no special training for the airlines to execute GLS approaches with the exception that they must read the (8) page GLS training manual.
- The difference between an ILS and GBAS is that the GBAS sends up data via beams of energy and the aircraft flies “path points”.

- With GBAS you can program your desired path angle to a touchdown point. This can be useful in putting “heavy” aircraft on a shallower slope while “lighter” aircraft can be on a steeper slope, thus avoiding wake turbulence issues.
- There is no need for ILS critical areas or ILS hold short lines.
- Multiple concurrent GBAS operations can be conducted all the time.
- It is possible to construct a RNP (curved) approach with a GBAS GLS (final segment). This enables maximum efficiency and can save fuel, time, and carbon emissions.
- Numerous countries have approved GBAS approaches: (US, Germany, Spain, Australia, and Switzerland).
- General Aviation avionics development to implement GBAS is underway but is not yet available.
- By the end of 2016 there will be over 4000 airline aircraft equipped with GBAS.
- GBAS is capable of CAT II, CAT III approaches and auto-land.
- [See the presentation here.](#)

Closing Remarks – Jim Dramis

- Thanked all the presenters and attendees.
- Encouraged operators to contact their state representatives and to vote “NO” on Bill 4441 (ATC Privatization). There is a link on the TUG website that will lead you to your state representatives.
- The next TUG meeting will be on April 20th, 2016.