

Minutes of TUG Meeting – May 21, 2014

Jim Dramis – TUG Leadership

- Jim welcomed everyone to the meeting, and attendees introduced themselves.
- Special thanks to Lisa Sasse and VisionSafe EVAS for sponsoring TUG's luncheon!

Pam Phillips & Renee Spann – Port Authority & Airport Operations

- March 2014 operations at TEB saw a 1% reduction in total movements from last year, at 12,328. April 2014, at 13,161 movements, was down 1.5%. Year-to-date, there have been 48,394 movements.
- Construction projects slated for 2014: Expanding the Runway 1 safety area, and creating a patrol road around the airport perimeter.
- The approach paths to Runway 1 and Runway 6 have been resurveyed for obstacles. These changes will be reflected in the next one or two chart cycles.
- Port Authority of NY and NJ will hold a webinar on June 10, 2014 from 11am – 12pm. Topics to be discussed are obstructions, impact of LGA Rwy 13 usage, TEB approach & departure procedures, RNAV X Rwy 6, severe weather reroutes, and customer questions.
- For more information on the webinar, contact Pam at pwalden@panynj.gov

Jim Dramis – Review of Business Aviation Forum (BAF) Meeting

- A BAF meeting was held on May 8. Jim and Dave Belastock attended.
- The Collaborative Trajectory Options Program (CTOP) was discussed. The goal of CTOP is to reduce airspace congestion during constraints in the system, such as weather, volume, or special events.
- CTOP allows operators to submit alternate routes of their choice to avoid constraints, providing additional options for controllers and pilots. These routes, called a Trajectory Options Set (TOS), would help operators avoid ground delays or in-flight reroutes.
- A phased approach is being taken with CTOP. Initial deployment occurred in spring 2012 and is continuing to be implemented.
- Operators are encouraged to educate themselves on CTOP, and communicate with their flight plan service providers and encourage them to support CTOP initiatives.
- For more information on CTOP, visit the NBAA site at <http://www.nbaa.org/ops/airspace/tfm/20121213-new-ctop-initiative-aims-to-erduce-airspace-congestion.php>
- The larger issue of alternate flight routings, and how they impact business aviation, was discussed. When a constraint (such as weather) occurs, ATC reverts to their Playbook routes, which are published routes designed to circumvent constraints. However, General Aviation operators are typically unaware of where to find these alternate routes.
- The FAA Operational Information System (OIS) is an excellent resource for finding additional available routes: <http://www.fly.faa.gov/ois/> Very useful information, such as the National Playbook and Severe Weather plans, can be found on the left-hand sidebar.

- To view the reroutes that are currently being used nationwide, click on “Current Reroutes,” which will show a list of all active reroutes. Next, click the “Show Advisory” button next to the appropriate constraint. A window will open which shows a list of Origin / Destination airport pairs, with the route that is being used.
- A common set of reroutes in the NYC area are called SERMN (SWAP Escape Routes Metro NY, pronounced like “sermon”) routes. These routes provide escape trajectories in northern, eastern, and southern directions to avoid weather moving in from the west.
- Although they may reduce delays, SERMN routes often involve flying longer distances at much lower altitudes, resulting in the consumption of significantly more fuel.
- Operators are encouraged to learn more, using resources such as <http://www.znyswap.org/zny-learning-center.aspx> and <http://www.znyswap.org/sermn-route-guidance.aspx>
- Another option for flights arriving/departing the NYC area is the AZEZU “Deep Water Route.” AZEZU is a fix located some 200nm southeast of Atlantic City, NJ. The AZEZU routing is an option that may be available during weather constraints, and pilots are encouraged to request it, provided they are properly equipped for overwater routings.
- See TUG’s summary of the BAF meeting here: http://teterborousersgroup.org/wp-content/uploads/2014/05/BAF_Presentation_2014-05-08.pptx

Gary Palm – Teterboro Tower Manager

- Due to construction this summer at Newark, the TEB RNAV X Rwy 6 approach will be utilized. Some operators using Collins ProLine 4 are still having problems with that approach, because their FMS cannot display all of the step-down fixes in the procedure.
- Runway 19 glideslope perturbation is still being addressed. To date, there has been only one loss of separation in the past 2 years due to this issue.
- Dalton Two visual departure is still being under-utilized. ATC needs more data on this departure, and encourages operators to request it when delays occur. It will almost always reduce delay times.

Steve Bruneau – Product Manager, Pulsar Informatics, Inc.

- Steve presented his company’s Fatigue Risk Management System, which can be used by numerous industries to estimate fatigue levels. Their solution for aviation can be found at http://www.pulsarinformatics.com/frms_aviation.html
- Their software provides a user-friendly interface that allows duty times and sleep times to be “dragged and dropped” into a timeline, which then overlays fatigue level on a scale of 1 to 15. Duty and rest periods can be moved in order to optimize one’s alertness.
- The system accounts for the effects of time zone changes on the human body, making it useful for international flights. It can span a 10-day period, allowing operators to plan their work and rest periods to minimize fatigue.
- Although fatigue has usually been difficult to define, there are reliable mathematical models to predict it, and Pulsar Informatics’ solution allows operators to easily quantify fatigue levels. Since different individuals may respond differently to the same level of fatigue, it is important to understand one’s own physiological symptoms of fatigue.

- Their products support NASA and U.S. Navy operations, and certainly have value in all aviation operations.
- See Pulsar Informatics' presentation here: http://teterborousersgroup.org/wp-content/uploads/2014/05/PulsarInformatics_FatigueRiskMgmtTUG.pdf

Captain John Ransom – Safety Operating Systems

- Capt. Ransom is a former airline Chief Pilot, and his company is actively involved in providing safety solutions to the air transportation industry. <http://www.safeopsys.com/>
- He delivered a presentation on Lithium Ion battery safety. These batteries are used in common portable electronic devices (PEDs) such as laptop computers, tablets, and cell phones. Several catastrophic airplane disasters have occurred as a direct result of Lithium Ion battery fires.
- If exposed to heat, direct sunlight, or overcharging, these batteries may go into a thermal runaway, and heat themselves to hundreds of degrees. Once that event occurs, smoke, fire, and battery explosions will occur.
- Several FAA documents, such as AC 120-80 and SAFO 09013, have been written on the subject. However, John challenged the FAA's guidance of not touching an overheating PED. For example, if a laptop caught fire in the flight deck, would the pilots really want to keep it in there?
- See the presentation here: http://teterborousersgroup.org/wp-content/uploads/2014/05/Lithium_Battery_Fires-2.pdf

George Brilmyer – HighWater Innovations

- George's company has designed a product called PlaneGard, which is a containment case to protect people and property from Lithium-ion battery fires in portable electronic devices. <http://www.highwaterinnovations.com/products/planegard/>
- PlaneGard includes protective gloves and goggles, a case to easily scoop up a burning device, and a suitcase-like container in which to place it. The user then pours water into the case to help extinguish the fire.
- The cost for one PlaneGard containment case is approximately \$7,500. For additional information or product quotes, contact HighWater Innovations at 423-794-8900, or email mgilchrist@highwaterinnovations.com
- See the product presentation here: http://teterborousersgroup.org/wp-content/uploads/2014/05/PlaneGard_TEB.pptx (NOTE: Videos might not work properly.)

Steve Riethof – Aviation Hall of Fame & Museum of NJ

- Wings and Wheels Expo – Scheduled for Father's Day weekend, June 14-15, 2014
- Will feature World War II aircraft, military vehicles, and contemporary show cars.
- Contests, interesting exhibitions, and food concessions will all be available.
- Volunteers for the event are needed. Please contact the Aviation Hall of Fame & Museum of NJ at 201-288-6344, www.njahof.org