



DCA SIDs – Internal Design Meeting 2 Notes

October 19, 2021

Decision Points

The team reviewed the SIDs from the previous meeting (10/7/2021) and stated they were happy with RICH to ALEEX and now looking at EAST SIDs

The client asked us to do a noise analysis and determine where best to locate the East SID tracks according to the Design Philosophy.

- What they are looking for is an analysis on two separate tracks that was previously done
- The notional diverging arc design previously looked at by ABCx2 is not currently within criteria and there is no separation standard for that design. It would most likely take years to develop appropriate criteria and separation standards for such a design.

ALEEX to DOGUE

- Jim asked, “what the best place to put the next leg is?”
- With turn anticipation and where the leg currently goes is densely populated
- Tim asked why the track can’t follow the I-495 corridor
- Determine how far GUCER is from the airspace boundary
 - 2.5 NM
- Jim asked if the track could go up interstate through the industrial area in North Bethesda and then go east
- Tim asked to add a waypoint 2.51 NM NE of ALEEX (new WP between ALEEX and DOGUE, ALDOG)
 - The added leg proved to be too short
- Jim asked to extend the leg past ALEEX by half a mile along the existing course. Move DOGUE to NW, removing ALDOG.
 - Issue in design evaluation showed to short of a leg length between REV-DAX to BEBLE, $1.95 \leq 2.02$ (We need to revisit this to ensure criteria is met)
 - Three schools are located between ALEEX and DOGUE (39.0376, -77.1222 high school), (39.0417, -77.1309 middle school), and (39.0448, -77.1271 elementary school). High school may be under flight path.
 - No airspace boundary issues
 - This design was saved as the AMEEE-ABCx2
 - Tim asked to keep in mind a procedure naming convention the next time reporting is done
- The flight of a 737-800 turn anticipation was added on screen over the new design
 - The anticipated flight path was over a golf course, industrial areas, and between the schools



SOOKI splits at DOGUE

- Jim asked if this diverges by 15 degrees from AMEEE today.
- SOOKI is 92 and AMEEE 107, leaving 15 degrees today
 - Jim asked to assume that this is good for now. There were no objections.

SOOKI to new DOGUE

- SOOKI needs to go over ALEEX-NEW and DOGUE-NEW and then out
- SOOKI also needs to use REV-DAX
- SOOKI was redesigned to match new AMEEE-ABCx2 from the airport to ALEEX-NEW
- New SOOKI-ABCx2 and AMEEE-ABCx2 has a divergence of > 16 degrees at DOGUE-NEW
- Procedures and WPs were renamed adding “new” to the name

Procedure names

- Jim suggests that the procedures be dated to keep track of what was designed in this meeting (route name, date, and version number/letter)

New DOCTR

- New DOCTR-ABCx2 redesigned to match new AMEEE-ABCx2
- New DOCTR-ABCx2 and SOOKI-ABCx2 has a divergence has 14 degrees (same as existing)
- GUCER WP (a waypoint on the AMEEE) was added to DOCTR-ABCx2 to see if it would help with divergence.
 - The divergence between the new DOCTR-ABCx2 (with GUCER) and new SOOKI-ABCx2 was still not 15 degrees
 - The team discussed that 15 degrees of divergence may not be needed. Jim mentioned this being an issue with previous designs.
 - GUCER was removed from new DOCTR-ABCx2
 - Jim mentioned that this may be a good talking point, showing that this provides a little more dispersion on the eastbound tracks.

Effect on population using the existing AMEEE and the new AMEEE-ABCx2 with a 737-800

- Visually it looks like the new AMEEE-ABCx2 is over a less populated area
- Comparisons between the AMEEE-ABCx2 and the existing AMEEE procedures show consistently less people affected by noise at the various LA_{max} decibel levels in the new design than the existing AMEEE



Conflicting SID JCOBY off of Dulles Airport (IAD)

- Jim mentioned that the team needs to be sure the new procedures did not move too far to the NW and conflict from the JCOBY SID from IAD
- DOCTR from GRIMM is 3.91 miles apart
- Jim stated that this should be good

Jim stated that this is what will be presented to the NOA.

Due to time constraints, the meeting was adjourned.