



Minutes Tempe Aviation Commission November 19, 2014

Minutes of the Tempe Aviation Commission meeting held on November 19, 2014, 6:30 p.m., at the Public Works Conference Room, Garden Level, City Hall Complex, 31 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Lane Carraway
Sally Clements
Shannon Dutton (Vice Chair)
Gordon Gauss
Lance McIntosh*
Barbara Sherman (Chair)
James Wennlund

(MEMBERS) Absent:

Mark Garrigan (Excused)
Karyn Gitlis (Excused)

Citizens Present:

Larry Gutos
Darlene Justus
Donald Kehl

City Staff Present:

Oddvar Tveit, Environmental Quality Specialist

Meeting convened at 6:32 p.m.

Barbara called the meeting to order.

Agenda Item 1 – Public Appearances

Donald Kehl talked about aircraft noise as a global problem in need of a systemic solution. He was working on an approach to address the problem. He would share his ideas with the commission after completing his research. The most significant noise source in his neighborhood is the train's signal horns. Frequency and volume has increased. Larry Gutos talked about the consistent presence of planes over the Elliot and McClintock area that used to be free from over flights. Over the past six months or so smaller planes have appeared in addition to the big jets flying over his neighborhood. Darlene stated she looked forward to see staff's presentation where arrivals are coming in over north Tempe. The farther north they come in, they also risk incidents with occasional private drone operations.

Agenda Item 2 – Consideration of Meeting Minutes (August 6, 2014)

Barbara Sherman solicited a motion to approve. Shannon Dutton moved to approve the minutes as drafted. Gordon Gauss seconded the motion. The August meeting minutes were approved by a unanimous vote.

Agenda Item 3 – Update from Staff

The last quarterly meeting of the Phoenix Airspace Users Working Group (PAUWG) for 2014

*Attending by telephone conference call.

was moved to Thursday, November 20th, 2014. The monthly noise report for October 2014 has been completed and show improved departure compliance with the 4 DME Standard Instrument Departure (SID) procedure. US Airways planes flying under the "Cactus" call sign did exceptionally well in complying with both the PHX Gate and the Tempe Corridor compliance measure after the flyover waypoint in the middle of the Gate at 4-DME was introduced in recently published flight procedures. Some wind from the north and north east has caused complaint from a resident in north Tempe about nighttime departure deviations towards the northeast away from the riverbed. The British Airways B747 still has problems making the PHX Gate.

Agenda Item 4 – Implementation of PHX RNAV IDPs September 18, 2014

Staff has received a request for information from senior staff about the situation in Tempe after the flight procedure changes were put in place for PHX in September and had resulted in protests from neighborhood representatives west of the airport. Lane Carraway stated that he in conversations with Tempe elected officials had asked if they had heard anything from Tempe residents about flight paths changing over their homes. Staff presented depictions of east flow departure tracks before and after new area navigation (RNAV) SID procedures were implemented with an airspace map. He showed how the departure plates have expanded to nine departure routes. These include alternative routings designed to keep planes on separate alternative paths to bypass or go through Military Operations Areas (MOAs). With MOAs located on both sides of PHX depending on when these areas are open or closed to civil aviation, the new RNAV SIDs intend to improve separation between routes, shorten route mileage and reduce the need for vectoring, which is visible on the overall footprint of dispersing tracks. The dispersion of flight tracks from departing jets using the airspace over Tempe has become much smaller with the new RNAV SIDs. Staff's depictions only showed jets departing to the east from PHX before and after September 18th, 2014. Track dispersion on each route segment was depicted in detail. Graphs showing compliance with the 4-DME SIDs over the recent months were included and explained. The presentation also included graphs of monthly compliance, average monthly noise (Ldn A) levels at Tempe monitors, and complaints received per month since 2010. Staff also included depictions of routes and flight tracks for RNAV Standard Terminal Arrival Routes (STARs) over Tempe. RNAV Required Navigational Performance (RNP) arrival routes at PHX were implemented back in January 13, 2011. Two of these routes and particularly one route coming inform northeast enable arrivals by RNP approved airlines to land from the east uninterrupted in situations when the PHX traffic situation allows it. Fuel saving and expedient Continuous Descent Approaches (CDAs) open up these paths to more aircraft, which at times can pose challenges for PHX air traffic controllers when these direct paths are merged with other incoming paths into two parallel final approach paths over north Tempe. It is at this stage of the flight just before landing when aircraft intercept the runaway glide slopes, which is of particular interest to north Tempe residents as expressed tonight by Darlene Justus. At the point a plane intercept this slope, determines where and at which altitude the incoming plane will be over north Tempe. Staff displayed examples of altitude profiles of 1,200 ft. to 890 ft. AGL for selected descending planes merging to final approach courses between Rural Rd and Mill Avenue. He showed examples of altitudes at which pilots can execute S-turns in congested traffic situations and altitude profiles for aborted take-offs, when a pilot decides to make a go-around to make a second attempt to land from the east. Upon Barbara Sherman's initiative staff finished the presentation by showing examples from airports in Europe where RNP and CDA have been used to design final approach arches with waypoints to merge and keep aircraft separated. This would mean less flexibility for air traffic controllers and airlines at airports like PHX that enjoy much less bad weather and have excellent visual conditions most of the year. The members asked staff about RNAV RNP's over south Tempe. Very few complaints have

been received, mainly related to the airspace congestion and noise from the layers of air traffic above homes as mentioned by Larry Gutos. James Wennlund suggested that the commission changes its focus from departures to arrival operations and start collecting data on the impacts of arrivals over Tempe. Perhaps work to get acceptance for an arrival gate, establish a step down procedure with minimum altitudes, and areas dedicated for holding patterns at higher altitudes. Grants for triple pane windows under the flight paths could also be something the commission could pursue. Technology seems to solve the departure problem. More effective and less noisy engines have put more distance to residents faster when planes depart over Tempe.

James Wennlund left the meeting at 7:37 p.m.

Upon questions from Donald Kehl staff explained about routing of smaller fixed wing aircraft and helicopters in the PHX Class B area, and how training flights have limited access inside PHX Class B airspace. The members gave their comments on a draft statement written by Barbara Sherman distributed in the meeting handouts. The draft should include a statement about the commission's future focus being on arrival operations instead of departure operations. Barbara confirmed improvements in departure compliance by referring to her own recently made observations of departures that stayed in the riverbed. RNP arrivals routes ending over south Tempe and the mix of small aircraft and helicopters is also an issue that should be addressed in the statement. The possibility of establishing an arrival gate, how to provide assistance to install multi-paned windows and the need for new buildings to be designed not to reflect exterior noise exposure should also be included. Staff was directed to incorporate the proposed changes.

It was also mentioned that the city should make a positive statement about improvement in compliance facilitated by the new RNAV SIDs.

Agenda Item 5 – Drones

The members decided to postpone discussion of the topic until the next meeting.

Agenda Item 6 – Commissioners' Business (topics for future discussion)

In addition to the discussion of private use of drones in Tempe, a discussion of the need to relocate City of Phoenix fixed noise monitoring sites in Tempe was requested.

Agenda Item 7 – Schedule next TAVCO meeting

The next meeting was tentatively scheduled for December 9, 2014.

Agenda Item 8 – Adjournment

The meeting was adjourned at 8:49 p.m.

Prepared by: Oddvar Tveit

Reviewed by: Marilyn DeRosa

Authorized Signature
Deputy Public Works Director- Water Utilities