



Minutes Tempe Aviation Commission July 17, 2007

Minutes of the Tempe Aviation Commission meeting held on July 17, 2007, 6:30 p.m., at the Public Works Conference Room, Garden Level, City Hall Complex, 31 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Bernard A. Eilers
Troy McCraw
Richard Pagoria
Gloria Regensberg
David Swanson
Connie Thompson
Duane Washkowiak (Chair)
Edwin R. Wiggington

City Staff Present:

Oddvar Tveit, Environmental Quality
Specialist, Water Utilities
Department

(MEMBERS) Absent:

Shannon S. Bradley (Excused)
Sandeep Gopalan (Excused)
Ross Meyer (Excused)
William Justus
Joseph Salvatore (Vice Chair)
(Excused)

Guests Present:

James Davies, Noise Abatement
Specialist, City of Phoenix
Randy Payne, Noise Program Manager,
City of Phoenix
George Sullivan, Aviation Consultant

Meeting convened at 6:37 p.m.

Duane Washkowiak called the meeting to order.

Agenda Item 1 – Public Appearances

There were no public appearances.

Agenda Item 2 – Consideration of Meeting Minutes (June 12, 2007)

Duane solicited comments to the minutes and asked for a motion to approve. Gloria moved to approve the minutes, and the motion was seconded by Bernard. The minutes from the June meeting were unanimously approved.

Agenda Item 3 – Updates From Staff

RFQ for professional aviation noise and air quality analysis:

Oddvar informed the members that a proposal received from Wyle Laboratories Inc. Wyle in association with U.C. Davis in response to the City's RFQ and City staff had scheduled a meeting with the respondent in early August 2007 to discuss their proposal.

Questions and Answers:

- Would this be open to the public?

This is the initial stage where City staff calls on the respondent to present their qualifications to City staff and address how they view the services requested by the City.

- When do you see a decision being made?
He stated that the proposed scope would be addressed to determine what work is needed to come up with the answers the City is looking for, and how that corresponds to what expenses the City is prepared to take on to get this done. The Water Utilities Department has been processing the RFQ. There is a lot our procurement staff has to deal with on a daily basis, and much of it has been come through upgrades of the water infrastructure. It is difficult to say at this point in time.
- Could we ask City procurement?
Since there is only one respondent it should be possible make the process go quicker to get a decision than the when we have several to select from.
- Because these outside consultants charge a lot for their services, could City staff do the work and have the consultant approve it?
To have merit we needed to be done by professional expertise that can work independently and only as needed get assistance from City staff to help them access the information they need from Phoenix that is stored in their computer system. The analysis we have asked them to do involves collecting information through sampling in the field with instruments and expertise the City do not have.
- The RFQ included air quality as well, would there be federal funding available? It includes air quality, and that is why Wyle teamed up with U.C. Davies to make the proposal. The air quality part relates to development and City planning of appropriate uses for a particular area. Even though ground emissions might become part of an emissions inventory for a study area that is close to the riverbed where there are old landfills, it is not a redevelopment (Brownfield) type project.
- Do you have an estimate of how long it will take to get the study done?
That is too early to say, the proposal includes some time estimates, but it all comes down to the scope, and how much work needs to be done to produce the data needed for the analytical part of the project.

Follow up: Staff was requested to provide the members with an estimated time line or expected progress dates for getting to the stage when a firm can be hired.

The FAA Reauthorization Bill:

Oddvar stated that this update was requested because one member had expressed interest in the current status of the administration's proposal. The proposal deals with:

- 1) Modernization of the air traffic control system introducing new ways of financing the change over to new technology and paying for the operation of the air traffic system, making it more similar to what we today see within Eurocontrol. A more independently run service with increased focus on accountability; what customers are paying should reflect the kind of service they receive. The administration's proposal is to have General Aviation pay more into the air traffic control system.
- 2) Airport development incentives, where the proposal is to increase revenues that can be generated locally through Passenger Facility Charges (PFC s).

The proposal has resulted in two new bills after Senate and House committee negotiations in March 2007, the House bill (H.R. 2881) tones down the need for financial reforms to modernize the air traffic control system, but proposes increases in fees and charges, e.g. what PFC s large airports can levy, the PFC ceiling, is increased from the administrations proposal of \$6 to \$7.50. The reauthorization bills are now going to the Ways and Means Committees,

and it is likely that they will end up with proposing increases in fees and charges, but the Congress needs to agree upon how large the increases will be for the next 4 years both for airlines and GA. Large airports will likely be able to generate more revenue both from expected growth in passenger volume and utilization of a higher PFC s, but a portion of those revenues still need to go to support the federal grant-in aid program for airports (AIP). The administration's proposal is based on forecasts on how much demand for air travel will grow, and legislators need to consider to what extent the desired modernization of the air traffic control system can be financed by this growth and proposed increases in user fees. The current authorization runs out in September, so the pressure is on to have the committees agree on a bill that could come to the floor soon.

Richard emphasized that you have to find a balance point, so the fee increases does not become self-defeating. Oddvar stated that airports compete for airline customers and will do careful considerations before they decide to utilize a significantly higher PFC ceiling. Sky Harbor has attracted its business over the years by keeping a low profile on fees and charges. George commented that it is not only a question of how ticket charges will increase it is also a question of who keeps the money and where it goes. As with gas tax supposed to end up in the Highway Trust fund, much have ended up in the General Fund. Likewise airports have generated money that has ended up elsewhere. This is why the federal government is looking at ways for airports to get easier access to the money when they need it.

Agenda Item 4 – Update From the City of Phoenix Aviation Department

George Sullivan had nothing new to report on activities at the airport. As requested he had invited the Phoenix Aviation Department to come and talk about noise complaints. He introduced Randy Payne and James Davies. James explained his background to the members. George stated that the department had been understaffed, but James had worked diligently to catch up on the noise reporting, which now is up to date.

Agenda Item 5 – City of Phoenix Procedures for Handling Complaints on Aircraft Noise

Randy Payne made a presentation that included the following topics:

1. The Phoenix Noise and Flight Track Monitoring System (NFTMS). He explained that data from the system is accessible to Tempe, and it receives:
 - a. Radar data that is released by the FAA with a 24 hours delay, reduced from 72 hour delay after the FAA upgraded their system from ARTS (Automated Radar Terminal System) to STARS (Standard Terminal Automation Replacement System). He presented a map showing radar tracks from June 28, 2007 as a typical day. Within an area of 60 miles and up to 20,000 feet MSL 1534 flight tracks represented traffic in and out of Sky Harbor and 5266 tracks traffic to and from other airports.
 - b. Noise data from 20 monitors, 8 (NMS 9 to 16) of them are located in Tempe, placed in vicinity of homes and schools/public buildings. The system was established in 1996. He explained that the monitors provide different types of noise metrics, DNL is used to generate noise contours, a weighted measurement where a 10dBI penalty is added to noise levels registered between 10:00 p.m. to 7:00 a.m. The monitors are calibrated every year, and the data can be played back in a graphic format, and can be used to model noise contours. The FAA's funding contributions to sound insulation projects only apply to those inside the most recent 65NL noise contour. The decision to overlay these with the original 1992 65 DNL contour meant that the City of Phoenix had to pay all of the costs for projects offered outside the new, smaller contours. Randy displayed the modeled contours for 2004 and 2015 showing a

shrinking of the contour from the Pima freeway to Scottsdale Road. The reduction in the size of noise contours is mainly a result of anticipating the phase-out of the loud Stage 2 aircraft over 75,000 pounds by 2000, and a need for airlines have more cost efficient fleets, which was accelerated by the downturn that occurred after 9/11/2001. He explained that the lines are best guesses, but if new contours were to be generated for existing condition, they probably would not turn out much different from the FAR Part 150 study forecasts for 2004 and 2015. Even if passenger numbers have increased and are expected to increase to 50 million annually in 2015, you cannot make direct comparisons between expected passenger volumes and number of operations because there are more passengers per flight today than e.g. back in the late 1990s and 2000.

2. Noise Complaints.

Complaints are received through a phone call, e-mail or regular mail. To be registered as a noise complaint, some noise has to be heard and a complaint has to be filed by a person. This was a decision made by the Aviation Department. When a list of e.g. a thousand planes is received, the department verifies that people have heard and made notes of every plane, before each one is registered.

Bernie commented that if the goal is to identify areas where people are particularly bothered by aircraft noise, one complaint would typically represent a number of residents that also were disturbed by the same flight, but did not file a complaint. If you make the effort of setting up your own monitoring system, it would in reality be just as good as calling in a complaint. Randy told the members that the decision not to accept automatic complaints was made after a person set up a TACAS (Traffic Alert and Collision Avoidance System) at his home, a system designed to alert pilots about other planes in the sky, which produced 10,000 phone calls in 6 months, apparently registering every car passing by his house, and continued to call in complaints during 9/11, 9/12 and 9/13 in 2001 when there was no traffic in the skies. He emphasized that they are running a noise information office, which provides information to people that call in noise complaints, which also is done by Tempe. The office provides information, and can alert the FAA to look at certain flights. Duane expressed that it is worth investigating how technology can be used by residents to express the noise disturbance from air traffic while waiting for a new Part 150 study. Randy and George stated that new technology is reducing noise at the source and would be expressed in the newer noise contour lines. Randy warned against using technology to inflate the perception of noise that people express by filing noise complaints. He also explained how the department queries the system when they receive a complaint, to correlate noise events and flight tracks to the time indicated in the complaint. If a system like the one set up by Troy, includes FAA operational data for the airport, the noise as a perceived disturbance is vacated, you end up focusing on operations as a basis for how many complaints you have. He showed how a noise event can be played back in the NFTMS computer system where aircraft type, altitude, runway, destination, and correlated noise events are displayed, to find events that correspond to the time indicated in the complaint. George pointed to noise events being separate from complaints. Randy continued by stating that the information found by querying the system is entered in the comment field for a complaint and explained in feed-back to the person that made the complaint if requested. The complaints end up in the noise reports. Airline station managers get a copy of the noise report where complaints are included.

3. The 4-DME Deviations

Randy talked briefly about the different ways to measure departure compliance; the different corridor concepts that Tempe presented when the NFTMS was established and the Phoenix gate in use by the airport. The gate is located approximately 5 miles to the east of the airport close to the Pima freeway. A 5,500 foot lateral line extending 1,000 feet north of the north runway and 1,000 feet south of the center runway. He showed 3 days of eastbound jet departures extending from June 1, 2007 through June 3, 2007 amounting to 596 tracks, where complaint related tracks and gate deviations were highlighted. There were 29 gate deviations. Each track is examined for its integrity and potential impacts caused by adverse weather. James Davies explained that responsible airlines are notified, and asked to explain the reason for their aircraft deviations. 90% of the airlines that respond blame the deviations on air traffic controllers' instructions. The department checks with the tower or TRACON to verify that controllers are aware of the agreement with Tempe. The FAA tries to help the department, but most airlines find these notices annoying. George stated that once every year he and airport noise staff are conducting air traffic controller briefings asking for their cooperation. Randy explained that some of the chief pilots react positively and say they will take steps to try to avoid future deviations. He showed what is included in the department's noise reports, and ended his presentation by informing the members about noise information material that can be accessed on the City of Phoenix Sky Harbor web site, (<http://phoenix.gov/skyharborairport/about/comm-noiseinfo.html>).

Questions and Answers:

- Could noise be identified to airlines?
Yes, the system and Tempe staff could provide you with that type of information.
- Are airlines penalized for exceeding noise level reductions anticipated by the phase out of Stage 2 that is the basis for current noise contours?
No, aircraft needs to have FAA noise certification, a valid document that shows that the aircraft satisfy minimum Stage 3 noise certification requirements. This needs to be separated from deviations that can result in a reaction from the airport.
- How do you identify areas that are noise impacted when you do a FAR Part 150?
You would have an independent consultant do the work and have what Phoenix did for the last study, a planning advisory committee where the public and neighboring municipalities participate with the objective of making joint agreements e.g. on where additional portable noise monitors should be set up.
- How much does a Part 150 cost?
That would probably be in the area of \$1 to \$2 million. It should not be a problem to get federal grants to get a new study done it is rather a question of time, and resources, the noise office is currently trying to hire a third person.
- Could the department revisit the automated complaint issue, and define what could be acceptable before you continue to categorically deny those types of complaints?
We could today count every time one of the fixed noise monitors exceed a certain noise level, it would not represent complaints. The circumstance when people are annoyed by a plane always changes and people have individual thresholds for tolerating noise. For example, if you put a monitor outside your home and a plane is flying over your home, it might produce an acceptable level of noise. However, tomorrow, when you are tired or the sky is cloudy and more of the noise is reflected to the ground, the noise might generate a complaint.
- When noise events occur that result in a complaint, is there a process to go back to the respective airline or pilot and tell him to stay within the noise contour levels?
Randy explained that when something unusual occurs, e.g. if F-18's land at the airport

they are on the phone to make enquiries about the flights. There are no formal procedures to notify pilots about correlated noise events. Oddvar stated that as long as the pilot complies with normal flight profiles according to directions from ATC and the aircraft complies with federal noise certification standards, there is little an airport can do towards the individual pilot that is determined to be responsible for a noise event.

- There are no penalties for the airlines?
Randy confirmed that with the phase out of heavy Stage 2 aircraft the end of 1999 was the result compromise with the airline industry. In return for the expenses of making modifications and modernizations to their fleets, local airports could no longer impose new local restrictions (Airport Noise and Capacity Act of 1990). Restrictions in place before the law went into effect were grandfathered. That is why airport like the John Wayne, Orange County have restrictions in place, e.g. a 3 strike rule and the pilot can no longer fly to that airport. For an airport to impose restrictions on Stage 2 jets under 75,000 pounds, the small corporate jets, it has to do a Part 150 study and a feasibility study called Part 161, which is a cost-benefit analysis. A difficult process and few airports have tried it.
- So what in your opinion can airport do?
Work to together when a new part 150 study gets going and make use of new technology (RNAV) that can benefit containment of flight tracks.
- So airlines can just relax?
It is not that economy comes first, safety does come first. It is in that context that new technology, efficiency and noise abatement has to fit.
- So there is nothing municipalities can do? Richard mentioned moving large airports outside the urban core has been tried. Randy explained that when Denver moved its airport out of the city to county land, an agreement was signed with the county that said that the airport would owe money to the county to the extent noise abatement restrictions were not adhered to every year. The problem at Denver is the same as here, encroachment, farmland gets developed, business gets established around the airport and people that work there wants to reduce the commute, and so land use gets to be important for the airport. At the Deer Valley Airport, which the City of Phoenix owns and operates you have housing to the south and state land and a car manufacturer proving ground to the north. Because it is part of Phoenix, the City has been able to enact zoning regulations that prevents new residential developments. Tempe is building new residential in the areas where it is not recommended by the Part 150, recommendations that Tempe agreed to implement with the IGA. But Tempe is land locked and the airport understands Tempe's reasons.
- So what is the solution?
Tempe and Phoenix is working together on new developments to avoid having new high-rises being built too tall, which is important to the airport, and future residents needs to get notified that it is an airport close by. In Goodyear house are built a quarter mile of the airport where a DC-10 is stored. It is not that often the Goodyear airport is used by big planes, but that is today.
- What is the relationship between the IGA and the Phoenix Gate?
The agreement states that the setting up the NFTMS system with noise monitoring sites and a system to identify departure deviations was to be done by Phoenix. Phoenix received suggestions from Tempe, but Phoenix came up with the current methodology, which it was entitled to do according to the IGA.

Gloria stated that a new part 150 study for Sky Harbor would be appreciated, and Duane commented that cooperation on acceptable noise thresholds needs to be a future goal with the help of constant monitoring also through automated systems set up by enterprising residents.

Connie suggested that a survey might need to be done to find out about people's awareness on where and how to complain. Randy stated that this Channel 11 will show segments about the airport where the noise office will be providing information about where to call etc. The airport also has a Speakers Bureau education program, if a homeowner association or a Kiwanis Club wants to know something about the airport and what the airport is doing. Duane suggested that the type of information Connie mentioned could be handle by Tempe e.g. include the information in a newsletter for the water bill. Bernie and Gloria commented that information would reach home owners and generate complaints but not contribute to changes in the behavior of the industry that is responsible for making the noise. Randy stated that one of their investigations into a deviation during late hours had revealed that the pilot was prepared to go straight to 4-DME on departure, but the air traffic controller thought he made the pilot a favor by turning him quickly back west to where he was bound. The chief pilot apologized for maneuver after having received the notice of deviation. George stated that the airport cannot tell the air traffic controllers what to do, but can encourage them to help the airport be a good neighbor. This is something the airport needs to do periodically because over time controllers forget and new ones get hired.

Follow up: Duane encouraged the members to e-mail questions they might have with regard to noise abatement issues to staff, so they could be forwarded to the manager for the City of Phoenix Community Noise Reduction Program, one week advance of the meeting where noise abatement would be on the agenda.

Agenda Item 6 – Letter to Arizona Republic Regarding Article on Noise Complaints

Duane introduced the topic, and stated that the article was brought to their attention because it gives the reader a false impression that noise is no longer an issue in Tempe. Connie asked how her comments to the draft could be included. Duane got the members agreement on having any comments they might have on the draft letter e-mailed to staff for preparation of a final version that would be signed and could be sent off to the Arizona Republic.

Agenda Item 7 – Commissioners' Business (topics for future discussion)

1. Gloria stated that if the airport is going to have 50 million passengers going in and out of Sky Harbor, it is hard to believe that noise is not going to increase. The Commission should discuss how to get to a regional airport solution. Dave supported Gloria's suggestion, and stated that the need for a serious discussion of a regional airport system on the state level has to be vigorously pursued. George commented that working on the Governor Symington Regional Airport Task Force it became quickly clear that every participant has issues and something to defend as it relates to a regional airport, not only Phoenix. After spending \$1 million of FAA's moneys and over a year of discussion nothing got accomplished. David asked to have this item not be deferred to a future meeting.
2. Rich suggested looking at how the City of Tempe can be a better government to its residents in terms of reducing noise. If Phoenix does not do what the members would like to see get done, the members should discuss other solutions. Duane suggested that assistance to multi-family housing inside the 65DNL could be looked at in such a context. Troy mentioned that what is, and what is not a City of Tempe responsibility had been discussed previously by TAVCO, and the discussion ended up in a multi-family housing recommendation to the Council. No specific topic was listed considering a presentation and a discussion on the City of Phoenix Community Noise Reduction Program was already on the schedule.
3. Connie suggested that sometime in the future the members should discuss a review of the IGA. Duane stated that this had been addressed some time ago, where the

members agreed that it at the time saw no other ways of dealing with outstanding issues than through legal action (2002), but to what extent disagreements we have over the IGA could be settled through negotiations with Phoenix could certainly be a topic for discussion.

4. Oddvar stated that the previous chair, who is a civil engineer, had asked him to let the members know about a technical presentation by consulting firm representative, (Han Chu, PSOMAS at the Transportation Development Institute 29th International Air Transport Conference), on what was done for the airport back in 2002 on GIS mapping, a tool used by the airport to identify homes within the 65DNL. With support from Duane members did not see any purpose of asking for a copy of the presentation or checking into having a presentation arranged for TAVCO.

Agenda Item 8 – Schedule Next TAVCO Meeting

Staff was asked to push the schedule of the next meeting to August 14th 2007.

Agenda Item 9 – Adjournment

The meeting was adjourned at 8:09 p.m.

Prepared by: Oddvar Tveit

Reviewed by: Don Hawkes

Authorized Signature
Water Utilities Department Manager