



Minutes Tempe Aviation Commission March 13, 2012

Minutes of the Tempe Aviation Commission meeting held on March 13, 2012, 6:30 p.m., at the Public Works Conference Room, Garden Level, City Hall Complex, 31 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Sally Clements
Richard Collins
Tara Ellman
Amy Fish
Karyn Gitlis
John Robert Johnson
Barbara Sherman (Vice Chair)
Alyson Star
David Swanson
Kurtis Zinger (Chair)

(MEMBERS) Absent:

Curtis Ritland (Excused)

City Staff Present:

Oddvar Tveit, Environmental Quality
Specialist

Citizens Present:

Dean Feldhausen
Aaron Stewart

Meeting convened at 6:31 p.m.

Kurtis called the meeting to order.

Agenda Item 1 – Public Appearances

The citizens present at the meeting introduced themselves to the commissioners.

Sally joined the meeting at 6:34 p.m.

Agenda Item 2 – Consideration of Meeting Minutes (February 14, 2012)

Barbara suggested an amendment on page one. Karyn moved to approve the minutes with the amendment. Dick seconded the motion. The amended minutes were approved by a unanimous vote.

Tara and Dave joined the meeting at 6:36 p.m.

Agenda Item 3 – Chair's Announcements

No announcements were made.

Agenda Item 4 – Updates From Staff

N.O.I.S.E membership:

An application for the city to join the organization had been completed by staff and is currently under review by the Public Works administration.

UC-Davis symposium:

Staff talked about the 2012 UC-Davis symposium that was dedicated to the FAA's implementation of NextGen technologies. The agency introduced plans on the ongoing Optimization of Airspace in the Metroplex (OAPM), utilization of Performance Based Navigation (PBN). With focus on major metropolitan areas the aim is to:

- Optimize flight paths and climb/descent profiles
- Institute a collaborative teams and broadly proliferate existing PBN experience and expertise
- Promote area navigation (RNAV) everywhere and Required Navigational Performance (RNP) where beneficial
- Integrate airspace and procedure design
- Decouple operations arriving and departing adjacent airports
- Use 3 nautical miles and terminal airspace separation rules wherever possible.

RNAV and Continuous Descent Approach (CDA) procedures that save US Airways and other airlines large amounts of fuel were highlighted at the symposium. One of the examples mentioned at the symposium was the "Eagul" RNAV Standard Terminal Arrival Route (STAR) to PHX from the northeast. However there are issues related to the implementation of area navigation around the country, which were addressed under the topic of being "RNAV'd." Airports expressed concern that there had been no federally structured implementation and communication with regard to RNAV. RNAV procedure initiatives have been generated locally and procedure designs have been tweaked to work for the airlines and ATC, not necessarily satisfying FAA's design criteria, and without airport noise officials' knowledge. FAA representatives stated that OAPM projects typically are outside the close-in areas of an airport, and will in scope typically be contained not to become subject to any Environmental Assessments under NEPA. The statement by Congress in the FAA Modernization and Reform Act of 2012 about categorical exclusion of new NextGen procedures was addressed, and is currently under review by the FAA's legal department. Any significant impacts on airport noise exposure contours because of RNAV procedures are not expected by the airports. Hartsfield-Jackson Atlanta reported that RNAV overlays and vector procedures had resulted in small increases of the 60 and 65 contours. Southwest Airlines had initiated an RNAV RNP approach procedure at San Francisco that lowered aircraft approach heights over the Woodside VOR, compared to step down approach height for the classic procedure, causing the airport to bring the issue to their noise round table with the goal of getting the altitude over Woodside raised from 4,000 to 5,000 or 6,000 feet. Phoenix stated that the airport disclosure map used by realtors to warn potential buyers of real estate about Sky Harbor impact areas, does not include current RNAV downwind areas from where the airport receives noise complaints. On the final day of the symposium Ambrose Clay, College Park, Georgia emphasized the importance of communication. He stated that with trust a community can become a beneficiary vs. victim, a supporter and facilitator for NextGen, and that continuous communication is vital to create that trust.

Agenda Item 5 – Airport Emissions

Staff presented airport emissions of criteria pollutants modeled in the Maricopa County emissions inventory. Airport emissions are a relatively small contributor as a non-road mobile source. Staff explained that the FAA's Emission Dispersion Model System (EDMS) is used to calculate emissions from the operations at valley airports, based on data received from the

airports about landing and take-offs, touch and go operations, the use of ground support equipment, auxiliary power units, time in mode taxi/idle times and fleet mix. The model assumes that emissions are spread evenly throughout the year. It does not account for how weather affects the daily emissions levels, such as the extreme heats' impact ozone levels and the inversions during the colder winter months trap emissions from escaping to the outer atmosphere. Staff displayed annual emissions of particulate matter, nitrogen oxides and sulfur dioxides modeled for valley airports including Luke AFB, and referenced an analysis for Heathrow where ground based and elevated emission from approaches, initial climbs and climb outs were calculated separately using an atmospheric dispersion model similar to AERMOD used by Maricopa Association of Governments to develop a 5% plan for regional PM-10 emission reductions. In the field monitoring to better understand dispersion of emissions around airports had been conducted at Heathrow and recently in a study of the dispersion of ultrafine particles near Santa Monica airport. Staff also addressed lead emissions, a concern around general aviation airports. Studies and Van Nuys and Santa Monica have shown there are higher concentrations of suspended lead around these airports, but they are still below the federal ambient air quality standard. At the end of his presentation staff addressed the problems that exist with regard to measuring Hazardous Air Pollutants (HAPs) at airports. Some HAPs specific to airport operations have a much higher potential toxicity than other HAPs, but a study performed under the Airport Cooperative Research Program (ACRP) has concluded that more research is needed to understand the impacts of HAPs from aircraft operations.

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

Staff was asked to notify Phil Freed about the side-step being a topic of interest to the commissioners before Phil schedules attendance at a future TAVCO meeting. Staff was asked to check into Monday morning take-offs and also present the following topics at future meetings:

- Noise monitor readings during a past center runway closure.
- Side-steps to the center runway

Barbara distributed an article on the Santa Monica ultrafine particulate study, an article on RNPs and a Wikipedia on Palmdale Regional Airport.

Agenda Item 8 – Schedule next TAVCO meeting

The next meeting was scheduled for April 10, 2012 at 6:30 p.m.

Agenda Item 9 – Adjournment

The meeting was adjourned at 7:40 p.m.

Prepared by: Oddvar Tveit

Reviewed by: Don Hawkes

Authorized Signature
Deputy Public Works Director - Water Utilities