



Minutes Tempe Aviation Commission March 9, 2006

Minutes of the Tempe Aviation Commission meeting held on March 9, 2006, 6:30 p.m., at the Public Works Conference Room, Garden Level, City Hall Complex, 31 E. Fifth Street, Tempe, Arizona.

(MEMBERS) Present:

Shannon S. Bradley
Seth W. Chalmers (Chair)
Troy McCraw
Mark Lymer
Joseph Salvatore (Vice Chair)
David Swanson
Edwin R. Wiggington

Guests Present:

Lt. Col. Khrisna O. Greene, 161/ANG
David Schwartz, Goodman Schwartz Public
Affairs
George Sullivan, Aviation Consultant

(MEMBERS) Absent:

William J. Acker (Excused)
Richard A. Collins (Excused)
Bernard A. Eilers (Excused)
Peter H. Schelstraete (Excused)
Duane Washkowiak (Excused)

Citizens Present:

Barbara Sherman

City Staff Present:

Oddvar Tveit, Environmental Quality
Specialist

Meeting convened at 6:31 p.m.

Seth Chalmers called the meeting to order.

Agenda Item 1 - Public Appearances

Barbara Sherman presented comments from Karyn Gitlis, former chair of TAVCO, to the FAA on the Final Environmental Impact Statement (FEIS) for Phoenix Sky Harbor International Airport.

Agenda Item 2 – Consideration of Meeting Minutes (February 9, 2006)

Joe Salvatore moved to approve the minutes, Edwin seconded the motion. To end discussions Joe called the question, which was seconded by David Swanson. The motion to approve the minutes from February 9, 2006, carried unanimously.

Agenda Item 3 – Updates From Staff

PAUWG-meeting:

Oddvar Tveit reported on updates given at the meeting:

1. RNAV Standard Terminal Arrival Routes (STARs) from northeast and northwest are currently being developed for Phoenix Sky Harbor. He hoped to see the drafts at the next PAUWG-meeting. The RNAV STARs are designed to mirror existing classic procedures

based on conventional navigational aids, which should mean no change to where the arrivals are routed.

2. The FAA Flight Standards District Office are planning flight safety seminars in the valley to keep GA pilots educated, the seminars are open to the public.
3. Runway (30C) closure at Williams Gateway Airport. The ILS will be taken down for at least 90 days, which will impact among others ANG air tanker operations.
4. Deer Valley master plan update. Noise Overlay Zoning is proposed, and the airport has already done a FAR Part 77 obstruction surfaces study in the 200 feet per mile gradient to prevent future encroachment.
5. RNAV/GPS procedures are after years in process about to be implemented at Goodyear Airport. Both inbound and outbound routes are located south of the airport to avoid interface with traffic north of the airport at Luke AFB and Glendale Airport.
6. The Phoenix Height Zoning Amendment was also addressed. It passed the Phoenix City Council by a unanimous vote. Oddvar mentioned that the zoning amendment is based on a study where FAA regulations for evaluating obstructions, FAR Part 77, TERPS (Terminal Instrument Procedures), aircraft performance and airline emergency operating procedures are factored in to make city development guidelines and a height zoning map for downtown Phoenix. He stated that what has been addressed in the media regarding a planned high-rise in Tempe, concerns the FAA's FAR Part 77 determination.
7. Luke AFB reported on changes made to the proposed SATR (Special Air Traffic Rules) after the public hearings. GA pilots will be required to get radio clearance before entering Luke airspace when F-16 fighters are operating at the base and the adjacent training area. The GA community is not happy with the proposal, and AOPA recommends that more accurate information about where F-16 traffic can be expected could meet the goal of reducing near misses between GA and military aircraft, which is the purpose of Luke's SATR proposal to the FAA.
8. Warren Meehan, PHX TRACON talked about the Class B redesign, and showed tracks over the proposed area over Mesa where the FAA propose to lower the ceiling of Class B airspace from 3,000 feet to 2,700 feet, indicating that most GA pilots already are transitioning through this area below the proposed lowered ceiling height.

Questions and Answers

- Does the lowered ceiling of Class B airspace mean that commercial jets will fly lower? Oddvar stated it is not expected. The purpose of lowering the ceiling of the controlled airspace in this area is to increase separation between GA using the airspace below Class B and the commercial airlines on approach to Sky Harbor. George Sullivan commented that the proposal for the design change came about because of airline pilots getting TCAS (Traffic alert Collision Avoidance System) alerts on final ILS approaches to Sky Harbor. If the airline pilot gets a warning a certain procedure needs to be followed, which can be "pull up" or another maneuver to increase separation to the lower flying aircraft. According to the redesign proposal GA pilots that do not communicate with ATC needs to go a little farther to the east and stay a little lower. The airline pilots are following the glide slope and their altitudes will not change because of the redesign proposal.
- This is not the impression you get from reading the newspapers? George confirmed that the Class B redesign proposal neither alter the flight paths nor the altitude of commercial traffic.
Lt. Col. Khrisna O. Greene explained to the members what takes place in the cockpit when a pilot gets a TCAS alert on final approach.
Oddvar also informed the members about public meetings announced by the FAA for the Class B redesign proposal at Glendale, Williams Gateway and Deer Valley airports.
- Why do they not have any meetings in the Phoenix area?

George replied that the meetings are where the GA airports are. The GA community is assumed to be the most impacted party.

- But this proposal will also increase the density of airplanes over Tempe and Mesa? George Sullivan stated that he did not think that would be the case. His reply was followed by a discussion between George and Seth. Oddvar stated that there are two separate federal initiatives referred to by the Chair. One is the Class B redesign the other is to implement simultaneous, independent parallel ILS approaches at Sky Harbor, which is facilitated by the redesign proposal. George explained that the current design of Class B does not contain carriers for simultaneous ILS approaches to Sky Harbor. Class B needs to be expanded. The reason for this is bad weather conditions, when pilots cannot see each other. George explained that in good weather conditions the controllers will continue to clear aircraft for visual approaches. Independent side-by-side approaches will take place in bad weather conditions. The objective is to have the same numbers of arrivals both in good and bad weather conditions. Today under bad weather the controllers can only run one final approach, which means a significant drop in arrival operations at the airport compared to good weather conditions. Seth stated his skepticism to the assumption that there would be no change in the flow of arrivals with the implementation of simultaneous independent ILS approaches at Sky Harbor. After being briefed by the TRACON manager his impression was that this tool would give controllers the opportunity to optimize arrival capacity both during good and bad weather conditions. George stated that to improve arrival efficiency you would need more controllers, it is not as easy as it sounds. His experience from Los Angeles International Airport told him that weather dictates when simultaneous, independent ILS approaches could be used. It is not easy for the controllers to run simultaneous, independent ILS approaches. They do it when they are forced by circumstances. Seth commented that money is what it is all about, once delays increase they will find ways to increase the arrival rates. George replied that what will increase in the future is what arrival rates controllers are able to accommodate under IFR, or bad weather conditions, not what is possible to accommodate under VFR or good weather conditions. This (VFR) capability will not be improved by running simultaneous, independent ILS approaches.
- Would it be possible for the airport to keep track of the arrival numbers with and without using simultaneous, independent ILS approaches? George replied that simultaneous, independent ILS approaches had yet to be implemented, but the FAA is required to keep track of those numbers. Joe Salvatore suggested that the Commission gets periodic traffic updates when this is implemented.
- How often is the airport under IFR conditions? George commented that he guessed it to be less than 5% of the time. When the sun hits the smog it is sometimes difficult for the pilots to keep visual references when landing towards the west.

Noise and Air Quality Symposium:

Oddvar Tveit gave the members a 3 point résumé of topics addressed at a recent Aviation Noise and Air Quality Symposium in Palm Springs. Air quality is emerging as an equally important issue as noise to the environments around airports as science improves and we get better at monitoring emissions from aircraft jet engines, and implement these improvements into models for calculating emissions. 1) Agency communication: Attendants were presented with successful and less successful examples of presenting aviation impacts to the public. The DGAC (the French Aviation Administration) has made CD's for the major French airports where major flight paths systems, and technical issues e.g. aircraft separation and Instrument Landing Systems can be visualized in virtual reality. According to Oddvar the presentation spurred the interest of many of the conference attendants. On the other hand the EA for the

Las Vegas Four Corner-Post Plan where new flight paths for RNAV departures has been subject to trial and error for 5 years to bring them into alignment with what was predicted in the Environmental Assessment (2001 EA), and elimination of routing that now is reintroduced in a supplemental EA, showed according to Oddvar how early information to the public about benefits of plans for new navigation technology and re-routing of aircraft create hopes for noise impact reductions that fade and end up being perceived as unfulfilled. 2) Pro Active Initiatives: Oddvar reported that Denver is an example where an airport has tried to be more in the front of impact issues, e.g. map airport emission source contributions to a regional and local SIP (State Implementation Plan) for an area not in attainment with National Ambient Air Quality Standards. Because of the unique IGA Denver has with neighboring municipalities, Denver International Airport tries to find ways through available monitoring systems to anticipate aircraft flight path deviations, and give early warnings to potential offenders of noise abatement measures. He stated that the Denver International Airport pays penalties to neighboring municipalities if average noise levels exceed certain parameters, e.g. 30 Leq (24h) depending on the distance from a municipality to the airport. 3) Sustainability: Oddvar emphasized that this applies both to environmental impacts and to the economics of aviation. That the airlines are paying more than an equal share of operational costs of running commercial service airports has been pointed out to the members of TAVCO by Commissioner Bernard Eilers. He has focused on landing fees based on weight which does not encourage effective use of airports in terms of more passengers per flight. With the airlines' economic problems and new actors (Very Light Jets) on the horizon, the sustainability of maintaining a lack of equity with regard to who pays what into the AIP is being questioned. Oddvar also mentioned the European Union's (EU) implementation of emission trading schemes that include community airports. EU's efforts to configure the scheme to include aircraft noise were addressed at the conference. Oddvar explained that you trade the right to pollute based on local credits or rights to pollute. These rights are publicly traded, which means they can be bought by airlines and the airport operator, but also by impacted citizens of a local community. (The announced point 4 in his resume "The invention way out" was not addressed).

Questions and Answers

- Ownership of airports in Europe?
They can be owned and/or operated by agencies or corporations that are state owned or the state has a majority share, or by privately owned companies.
- What is the status on the Freedom of Information Act (FOIA) request for side-step suspension documents to the FAA?
Oddvar said there was nothing new to report, a response from the FAA had not yet been received?

Regarding the FEIS for Sky Harbor, Oddvar stated that Section 4.2 on air quality, the part that is open for public comments, had been reviewed and a draft letter from the City was presently being worked on.

- Is the City going to protest that the FAA has limited comments to the air quality section?
Oddvar stated that he was not involved with preparing the final draft, but did not expect that would happen.
- Would the Mayor sign the letter?
Oddvar stated since he was not involved in drafting the final letter he could not tell.
- Has the City considered buying into Williams Gateway?
Oddvar responded that the Williams Gateway Airport has been interested in having other communities join the authority, and that the City has been aware that this has been desired by the airport authority for several years. However, because this interest on part of the

authority is motivated by the need to share the economic burdens of running the airport, any local community considering joining needs to look at expected returns on making such a commitment for their own community.

Seth told the members about the Arizona Institute of Transportation Engineers Spring Conference where two aviation related presentation were given. Mayor Hugh Hallman made the keynote speech and Phoenix Aviation Director David Krietor and Mayor Keno Hawker gave their updates what was going on at Sky Harbor and Williams Gateway. Seth expressed how he was impressed by both Krietor and Mayor Hawker at the conference. Listening to the presenters he found the statements in Sky Harbor EIS about Williams Gateway seem more out of touch with future prospects of aviation in Arizona than he thought before the conference started. Krietor was in his view very complementary to Williams Gateways future as a reliever airport for Sky Harbor. He stated that:

- Sky Harbor needs a reliever airport.
- No new cargo operator is desired for Sky Harbor.
- The fueling of ANG tankers are turned over to Williams Gateway

Mayor Hawker talked about:

- Williams Gateway forecast of 2 million passengers annually by 2015 (1993 Master Plan)
- Freeway connection to get to the new terminal
- The recent defeat by one vote to protect Williams Gateway from a residential encroachment.

Mayor Hallman talked about the LA area airport model and how to generate a concentration of employment inside the airport infrastructure.

Seth stated that if the east valley area is going to have 1.5 million residents coming in to the area and they will be within 30 minutes of Williams Gateway, it could become an Orange County type of reliever airport for Sky Harbor. He also stated that Phoenix Aviation Director recognizes the need for another commercial service airport for the region. A zip code survey done by the City of Phoenix Aviation Department shows that most of the airport customers comes from the east valley, and with more development on the west side of the valley another airport is needed Seth argued. The presence of Luke AFB to the west of Sky Harbor means that a western reliever airport needs to be located farther out, may be we should look at "Tonopah International". Seth suggested that Tempe assist Williams Gateway Airport by buying a share. It did not need to be a big share. The Town of Queen Creek's share is about 2%. The Town of Gilbert also has a small share, and the City of Apache Junction has been looking at buying a share. The City of Phoenix is still taking with Williams Gateway Airport about their share.

This conference showed that the key people are in communication about the future of aviation in the valley. He thanked George Sullivan helping him facilitate representation from the City Phoenix Aviation Department.

Questions and Answers

- Was there military aviation represented at the conference?
Seth replied that it was a conference for transportation engineers and the International Municipal Signal Association, nobody representing military aviation was there.

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

George Sullivan suggested that the request from TAVCO to be briefed on the height zoning amendment be addressed at the next meeting. He has suggested to Jane Morris, the Deputy Aviation Director for Planning and Environmental, also be present. She has been in her job for 5-6 months. He also commented on the implementation of RNAV in Las Vegas. He stated that Phoenix was scheduled to be next. The City of Tempe was excited about implementing RNAV and its potential of keeping aircraft to the desired flight path, and Tempe presented procedure designs that never saw the light of day. In Las Vegas the FAA tried to be proactive and engage the public, but ran into major problems. The technology was not as good as everybody thought it would be. What the FAA told the public would happen turned out differently, because of technical issues, pilot issues, controller issues etc. What the FAA found was that RNAV technology is not as good close to airports as farther out, e.g. 7 or 8 miles from the airport. So it was according to George good that Phoenix was not first on RNAV. The new STAR RNAV routes mentioned at the PAUWG meeting will stop a certain distance from the airport, and they are going to mirror the classic procedures, which means the ground tracks is not going to change. George also emphasized that the Williams Gateway Airport as a reliever is not a silver bullet, a lot of flight procedure issues have been looked at, a continuing process involving the local FAA, and both airport's administrations. Williams Gateway has both terrain issues and runway alignment issues to Sky Harbor traffic. This makes air traffic separation a big issue, and because of this we do not know how much air carrier traffic can be handled by the Williams Gateway Airport.

Questions and Answers

- What would be the ideal alignment for runways at Williams Gateway?
George stated that it would be in alignment into prevailing winds. He was not aware of why Gateway runways were aligned as they are. Cross-winds at runways are not a good thing.
- Would it be appropriate for the state to rebuild the airport?
George mentioned this was up when Williams Gateway did their master plan (1993). It was suggested to include an east west runway alternative to the plan, but the airport could not get it done, both for practical and political reasons. The Williams Gateway Airport has opportunity, but is not the total answer to the valley's aviation needs.
- What about a Buckeye?
George replied that looking at the airspace of the state 5-6 years ago, about 75% is military. Looking at how the airspace is configured there is a lack of alternatives.
- Where is the third airport going to be, with the expertise the City of Phoenix has with regard to commercial aviation they should know?
George replied that that is an issue for the state. It is more than a City of Phoenix issue. The state had a unique opportunity during Governor Symington. All the players were there including the military and the state spent \$ 1million of the FAA's funds, but it went nowhere.
Mark Lymer asked and got answers on the orientation of the runway for Williams Gateway vs. Sky Harbor.

Seth invited Lt. Col. Khrisna O. Greene to speak to the members. Khris appreciated the opportunity to come and listen and address the members. He emphasized that one thing is difficult technical issues that the FAA and pilots deal with, e.g. prevent TCAS alerts, another what is experienced at ground level. In pursuing their tasks he would be pleased to give his assistance to the commissioners. He reported that the ANG has received deployments to Stavanger, Norway and to Turkey in 2007. So the ANG will be back in 2008, which means that fewer military tankers will be flying around in the Phoenix area. The Predator Mission is

not as previously reported a no go for Arizona. It is going to happen, but not as fast as initially thought. The 161st is going to have the first training pilot crew and one of its pilots has already been trained as a Predator pilot, so the 161st and the ANG is still involved in the Predator mission. This means deployment of remote controlled flying vehicles, for surveillance and other purposes through satellite communication. The trend is to get pilots out of harms way and get robots out there instead. The Predator Mission is going to create airspace issues as well. He also reported on new tactical training required for the ANG, new special flight profiles has do be practiced. Practicing these approach profiles will not impact Sky Harbor or Williams Gateway. Fort Huachuca has volunteered to accommodate the training, which will keep ANG busy for the rest of 2006.

Questions and Answers

- What are the issues related to airspace for the Predator Mission?
Khris told the members that once the Predator takes off it needs cleared airspace around it. What concerns the ANG is that if TFR (Temporary Flight Restrictions) demands that the airspace needs to be clear of other traffic, the ANG cannot fly in it. Military airspace is not abundant in Arizona, it is shrinking. Adding missions makes it more congested.
- Can the Predators use airspace over places where there are houses?
Khris responded that there are no proposed plans involving flights over houses.
- What is the propulsion?
A prop engine, there is one version that has a jet engine.
Seth thanked Khris and expressed his appreciation for the quieter CFM56 engines on the KC-135R model.

Agenda Item 5 – TAVCO Issues and Tasks Update

1. How the Phoenix metropolitan area and Sky Harbor compares to other areas with airports in the U.S.

Seth referred to a newspaper article stating the Tempe Mayor and other east valley Mayors have proposed the idea of the Los Angeles model as the best one for the future of the valley with Sky Harbor as the main airport and several satellite airports serving suburban communities. The model would allow communities to get the benefits of commercial aviation and ease the noise impact from Sky Harbor on surrounding communities. Marks stated that his contribution was pending. Shannon was looking at the Stapleton to Denver International history. Edwin handed out web articles about Dallas/Forth Worth and pointed to an initiative for a perimeter taxiway system to eliminate the cross-over taxiway safety hazard. He asked if this might be implemented at Sky Harbor in some fashion. Oddvar mentioned that aircraft that land on the third runway need to cross over the center runway to get to the terminal facilities at Sky Harbor. To construct a taxiway at far the west end to avoid crossovers might be technically feasible, but could be problematic for e.g. air traffic reasons. George stated that there would probably be obstruction issues and air quality issues as well. Initially the center runway reconstruction project had extra taxiways at the west end, but these were taken out because of the 9-11 impacts on the airport's capital improvement plans. The availability of land is one issue, having aircraft depart over taxing aircraft is another issue.

2. Attend Finance & Aviation Council Committee Meetings.

David reported from February 21, 2006 meeting, and mentioned that Council Member Arredondo had suggested Tempe do its own aircraft noise monitoring as a future topic for the Committee.

6. *Review the Sky Harbor FEIS*

Follow-up: Seth asked that the task be deleted as it is assigned to the City.

7. *Aviation Conference*

Follow-up: Seth would look into this topic.

8. *Aviation goals 1-2-3*

Seth restated the proposed goals to be used in a TAVCO position paper. Shannon suggested that goal 3, IGA “nuts and bolts” be better defined. Seth explained that a simple format is needed to make it easily accessible with as little technical language as possible. Joe suggested the position paper become the credo of the commission for others to understand what the commission is about. Mark asked if the paper was to evolve into later recommendations. This created some discussion among the members. Joe stated the task of making goals into a position paper should be regarded as making a business plan for the Commission. Future issues should be related to the 3 goals before the members decide how they are dealt. Mark stated that the problem for the Commission is the fact that the goals are linked to issues that are not just Tempe issues. Focused on as only Tempe’s issues the Commission would not get anywhere in Mark’s opinion. Seth suggested a letter to Council to explain the goals the members are contemplating to pursue, and ask for guidance. Oddvar stated that the Council members are getting the minutes from commission meetings, and have access to their deliberations. As a commission for giving advice to the Mayor and Council members on aviation issues, they would typically expect that initiatives come before them in form of some desired action, e.g. a request for funding to assess particular impacts of aviation in Tempe. Joe suggested that the commission need to give the Chair of the Finance and Aviation Committee a tangible bottom line for him to go and fight for, as he already has done with regard to a letter from the Phoenix Aviation Department on a planned high rise in Tempe. He has clearly stated that the Council will not be dictated to as to what they can or cannot do in downtown Tempe. Oddvar reminded the TAVCO members that the Finance and Aviation Committee meetings are public, and items on their agenda can be for information only. At their last meeting they were briefed on the FEIS for Sky Harbor. He recommended that they be more specific on some of their goals and come to agreement on what they would include in a position paper, before they go ahead and ask for input or guidance with regard to the direction they are heading.

Follow-up: Seth would work on a position paper for the next meeting.

Agenda Item 6 - Commissioners’ Business (topics for future discussion)

Seth suggested that the Commission should get a presentation of Williams Gateway, its facilities and potential as a future reliever to Sky Harbor, and discuss a recommendation for the City to buy a share in the Williams Gateway Airport.

Mark represented his topics for discussion based on what he stated at the January 24, Community Town Hall meeting. He admonished the members not to start with why it can't, but why it can happen.

1. Change the east-west equalization rule for take-offs, and have all the planes take-off towards the west. He presented the following arguments for TAVCO to discuss a rule change:
 - a) Airport noise is a problem, mostly from take-offs.
 - b) Engine-out procedures are for take-offs.
 - c) Downtown Tempe has the highest population density in the Phoenix metro area.

- d) The notion that aircraft need to take-off into the prevailing winds are not as predominant with newer planes.
 - e) Sky Harbor is owned by the City of Phoenix.
 - 2. Talk directly to the airlines, and ask them as members of our community to be good neighbors. Tempe has tried without success to persuade; the FAA, Sky Harbor officials, City of Phoenix political leaders, Air Traffic Controllers to reinstate the side-step noise mitigation procedure.
 - 3. Recommend that the City make a recommendation to the Governor to instruct ADOT Aeronautical Division to conduct a needs assessment for air traffic facilities in Arizona.
- David commented that on the March 27, 2006 IRS (Issue Review Session) citizens comments made at the January 24, Community Town Hall meeting will be presented to Council. He also mentioned military flights over Riverside and Sunset neighborhoods coming in considerably more often than they used to, and should be addressed.

David Schwartz joined the meeting at 8:34 p.m.

George suggested that these are cross-country flights. The Sky Harbor flight IDs for these flights need to be given to Luke RAPCON (Radar Approach Control) for them to identify what traffic this is.

Agenda Item 7 - Schedule Next TAVCO Meeting

The Commission's next regular meeting will be Thursday, April 13, 2006.

Agenda Item 8 - Adjournment

The meeting was adjourned at 8:36 p.m.

Prepared by: Oddvar Tveit

Reviewed by: Don Hawkes

Authorized Signature
Water Utilities Department Manager