#### **MEETING MINUTES**

### COMMUNITY WORKING GROUP 4/3/97, 7:00 p.m. - 9:00 p.m.

#### Best Western Thunderbird Inn

The meeting began with introduction of Carder Hunt, from the City of Scottsdale Strategic Initiatives department, who facilitated group discussion. Mr. Hunt explained that he was the airport director for a few years in the mid 80's and has knowledge of the airport's history, but explained his role is to help the group establish what process they will use to continue a constructive dialog.

Carder solicited the groups participation so that there is participation by the attendees in determining a response to questions and complaints.

Carder discussed how community working groups usually function; participants are group members and share a common destiny and trust, and the group has a responsibility to move discussions forward in a civil manner. The group as a whole determines what issues are of interest.

Some participants felt they had been misled in the past and are doubtful of the Working Group's effectiveness. They expressed they heard 10 to 15 years ago that there would be no nighttime flights, no commuter flights, and no jets, while these things have now come to pass. Some attendees felt today's reality does not meet yesterday's information, while the City maintains that today's conditions were made public in past plans.

Airport Director, John Kinney, advised that whatever issues are of interest to the group may be discussed. No issues have predetermined outcomes or are "off the table" for discussion.

According to Dr. Bert Koester, who advised he served on the committee, the noise committee was disbanded due to lack of interest.

In response to a question, Airport Commissioner Al Lasater, described what Ironwood village has accomplished in the past regarding new operational procedures that minimize noise and education about noise abatement for homeowners.

Mr. Kinney listed a few of the noise abatement regulations that have been enacted in the past: glideslope raised to 4 degrees, no intersection or formation takeoffs, and increased pilot awareness.

It was determined that meetings will be held on the first Wednesday of each month from 7:00 p.m. to 9:00 p.m..

The agenda issues and action items for the next month were determined to be:
Introduction, review & prioritization of groups concerns - Bell Crooker
Clarification of Noise Compatibility Plan (Part 150 plan) comment periods
Notification of attendees using postcards. Minutes to attendees only.
Press Release of group's formation
Copies of the Master Plan to attendees 1996 versions
Copy of the mailing list
Presentation on airport history & growth

The issues list was reviewed a final time, and the meeting adjourned at 9:00 p.m. See the following page for the issues list.

### **ISSUES THAT WERE RAISED INCLUDE:**

Define and clarify what is meant by airport expansion

What is the airport's plans for future growth?

Why is the airport necessary?

What documents guide the airport operation?

What are the rights and powers for homeowners, the FAA, the airport, pilots, and the City Council?

What is the role of general planning and land use in Phoenix & Scottsdale?

Phoenix residents perceive a greater impact upon them than Scottsdale residents

Obtain education on why the flight patterns are the way they are and why aircraft deviate from them

Review history to discuss past information

Establish open lines of communication and trust between participants

Working group should make a difference and change the noise level

Control the number and types of jets

Ban loud iets

Improve the noise complaint reporting system and accountability

Keep the airport safe

Reduce helicopter overflights over residences and raise their altitudes

Can we do a part 161 study?

## COMMUNITY WORKING GROUP MEETING MINUTES JUNE 4, 1997

#### SCOTTSDALE AIRPORT TERMINAL 7:00PM-9:00PM

The meeting began with Kevin Shirer, Airport Noise Abatement Specialist, facilitating the introduction of attendees, and a brief agenda review. Kevin apologized for the low attendance. At least six regular attendees called to advise they could not come this evening, and the previous meeting minutes did not include a reminder for the next meeting. A reminder notice for the next meeting will be included in future meeting minutes, and will be sent out in advance.

A general question and answer period was held for new attendees. Matt Weber inquired as to why there is no system to positively identify aircraft's altitude, flight track, and better track complaints for enforcement action. Complaints were aired regarding helicopters not flying within the helicopter corridors over Bell road. Kevin advised they are sending out a letter soon to all the based helicopter operators.

Cara Denby advised she is reporting to Phoenix Councilwomen Emma Barwood on these issues. Kevin advised the City of Phoenix City Manager's office and City of Phoenix Aviation Department are also receiving the minutes of the meetings.

There was a general feeling on the part of the residents that some pilots just don't care about noise and fly their aircraft anyway they want to, without regard for the impact. Bob Hudsmith advised there is a regular flight pattern for the same aircraft above Ironwood village, flying overhead almost every day in the morning. Can't we get the word out to some of these transient pilots to avoid flying over Ironwood? [Can't the airport create an optimum approach and departure flight track?] - JK Note

In answer to Mr. Weber's questions, John Kinney reviewed how the noise complaint system works and the difficulties with identifying aircraft. He also discussed some of the working group's previous actions.

Cara Denby discussed the results of the FAR Part 161 Committee meeting. Flight track changes and departure profiles are the responsibility of the local airport and FAA and may be changed without activating the FAR Part 161 process. She briefed that the flight tracks were established in 1967, and advised she did not know the best way to proceed to make changes, but believed that the flight tracks should be changed to spread the concentration of the noise. She is of the opinion that it is not the neighborhoods that have been encroaching on the airport, but the airport's jet and prop traffic that are required to fly further and more often over the surrounding community, and have been eroding the community's quality of life.

A question was raised as to what noise regulations were in effect at the airport prior to the enacting of the FAR Part 161 restrictions. Staff will research the matter and report back at the next meeting. Cara stated her understanding as to why the flight tracks could not be changed: no "net reduction" in the number of residences affected by a left turn out when departing runway 21, and the conflict with Sky Harbor corridors to the south.

A request was made to compare the Sky Harbor airport flight tracks to Scottsdale airport flight tracks, and receive a briefing on Sky Harbor's noise monitoring system operation. John Kinney advised that a previous noise committee had explored many of these same issues in the past and he will provide a list of their issues at the next meeting. It was suggested that a presentation from the FAA be given on airspace use and restriction, and runway use. [JK - Sean can't make any Wednesday meetings as he is teaching a class, but is available on Thursdays.]

Cara inquired as to the extent of the changes the group could effect, and reminded the group that their actions must also be acceptable to the airport to get them to change their way of doing business. She stated that the cost benefit analysis requested as part of the Part 161 process, should not necessarily just measure things in dollars, but also measure and value the quality of peoples lives. Cara addressed the issue of commitment to the group and that members need to stay involved. Cohesiveness, communication, regular attendance, and participation in subcommittees outside of the monthly meeting is the only way to affect change with the airport.

The group discussed that the members do not want to become technical experts in order to learn how to change the flight tracks.

Carder Hunt advised that as part of the discovery process following the FAR Part 150 study, the city and airport staff are also learning. The working group makeup, process, and results are not predetermined the city or airport administration. He advised the city and airport are committed to exploring every issue the group deems worthwhile.

Betty Kjellberg advised that she looks upon the role of the Community Working Group to be that of an outside viewpoint to that of the airport staff and City council, and who's views require examination.

Andy Incardona briefly discussed the results of the runway use survey which was conducted by the Scottsdale FAA Tower at the request of the Community Working Group. At a previous meeting the use of runway 03 (takeoff and landings in a northeast direction) was estimated to be approximately 60% of the runway operations, and approximately 40% of the remaining traffic was estimated to be departing and landing to the southwest. The most recent survey of May 8 through May 31, indicated that runway 03 was in use only 33% of the <u>time</u> the FAA Tower was open (0600-2100). Andy advised it is too early to predict if this is the norm or an aberration.

The Tower will check with their staff to determine if they can continue to monitor the runway use by time, and correlate the number of operations by runway. Andy will report back and is looking to track the activity by stage II and stage III aircraft. Kevin also distributed a chart of the data.

A question was raised about the retirement of Stage II aircraft under 75,000 lbs. Kevin advised of the stage II phase out for aircraft greater than 75,000 lbs. In the year 2000. However, only aircraft less than 75,000 lbs. may operate at Scottsdale, and advised of other locations across the country who are experiencing similar concerns about single event noise levels, etc..

Cara Denby briefed on her reading of the environmental impact study completed in 1980 for the lengthening of the runway. Cara was surprised to read the purpose statement of the FAA's EIS was to accommodate more business jets more safely year round at Scottsdale Airport.

She advised that aircraft emissions were only briefly discussed. And the discussion was limited to the emission of fuel vapors while refueling took place. She advised the valley has bad air and we should be looking at all sources of pollution, including aircraft.

Cara mentioned that it was noteworthy that many of the issues the working group was concerned with had been raised and explored in detail in the past through various channels. She questioned as to why the EIS was completed for a runway extension and not for a possible future commuter terminal. Kevin advised he recalled that EIS were required by law for runway extensions, but not for other airport projects. Carder Hunt also advised the city wanted to determine the impact of the runway extension on Cholla Park and the CAP canal.

Kevin suggested that the prioritizing of previously raised issued be postponed until the next meeting when hopefully more group members will attend. Newcomers to the group expressed reluctance to cover old

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ground and waste the group's time. However, they had issues to explore, and were not filled in on what issues had been discussed at previous meetings. Carder raised the point that the group had initially questioned how to incorporate newcomers into the group in a effective manner without having to constantly review issues previously discussed.

The idea of a summer recess was explored and dismissed. It was suggested that the next meeting date be moved back a week to avoid conflict with the July 4th holiday.

Andy Incardona suggested the group concentrate their efforts to make some effective change quickly and keep momentum going. He suggested that to keep meetings from being bogged down in debate, that the debate take place in the subcommittees and the monthly meeting be very structured to use time more constructively.

Many attendees reported they have noticed a marked decrease in aircraft noise in the past 30 days.

Kevin solicited Andy/Cara to kick off the next meeting with determining some possible objectives for quick success.

Carder Hunt suggested that the airport not publish names and phone numbers of subcommittee members, but act as a relay service for members to initially connect. If anyone wishes to work on an issue which has been given to a subcommittee, contact Kevin who will get you in touch with the subcommittee chair.

Carder repeated the City's commitment to exploring the concerns of the group and pledged the continued support of city staff and council. He advised the council members receive copies of the meeting minutes and are keep informed of the group's activities.

Cara listed possible/existing subcommittees and their chairs:
Curfew for State 2 aircraft - Cara Denby
Complaint reporting, tracking, and altitude enforcement - unassigned
Flight Tracks - George Livergood
Environmental Impacts/Air Pollution - Cara Denby
Aircraft Mix - Laura Brownfield
Runway Use - Andy Incardona

The first item for the next meeting agenda was determined to be the definition of several objectives for the group to pursue. Another agenda item is the review and prioritizing of previously raised issues.

The next meeting will be held in the airport terminal lobby, 15000 N. Airport Drive, Wednesday, July 9<sup>th</sup>, from 7:00pm until 9:00pm. This meeting date is one week later than normal, at the request of the working group members, due to the Fourth of July holiday.

New attendees are encouraged to arrive at 6:45pm. Airport Staff will be available to answer any questions you may have.

If you have any questions, please contact Kevin Shirer, Noise Abatement Specialist, at 994-7609.

### SCOTTSDALE AIRPORT RUNWAY USE SURVEY MAY 1997

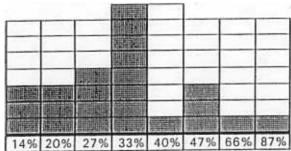
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## COMMUNITY WORKING GROUP MEETING MINUTES JULY 9, 1997

### SCOTTSDALE AIRPORT TERMINAL 7:00PM-9:00PM

The meeting began with an introduction of the group's purpose by Kevin Shirer, Airport Noise Abatement Specialist. The group's purpose is: citizens have asked that they be able to examine any aspect of airport noise abatement, as some didn't understand or trust the findings of the airport noise study, to better understand the study findings, or help airport management find other ways to deal with noise issues.

The agenda was reviewed and attendees were invited to suggest issues they wished to be discussed.

At the previous meeting, it was suggested that the first agenda item be to discuss possible objectives of the group, in hopes of solving some easy problems quickly. Andy Incardona and Cara Denby volunteered to chair this discussion. As Andy was not present, Cara discussed that this was an attempt to make some progress instead of just attending meetings.

Cara then discussed her difficulty obtaining complete data to help in understanding how the noise contours were generated. She also briefed on her review of the 1980 Environmental Impact Statement.

Cara voiced she still had questions on the source of the data which was inputted into the Integrated Noise Model (INM), and how it was gathered. Laura Brownfield also asked questions regarding the airport daily jet log, night time operations logs, monthly traffic counts by the tower, and the surveys conducted by the tower to determine fleet mix. Laura voiced suspicion of the data because the jet operations logs were discontinued in 1996, and she believed an error on the night time operations log form could have led them to be filled out incorrectly. Laura and Cara voiced a lack of trust of the study results based on her suspicion of the data, and suggested that Coffman skewed the data to make the noise contours reflect the wishes of the airport. Carder Hunt and Jim Harris both advised that they don't believe there was any unethical conduct on the part of Coffman, and that the FAA and Planning Advisory Commission both oversaw the study methodology and assumptions. Jim Harris provided answers to how the data was gathered.

Matt Weber inquired as to why single event data was not used to measure noise impacts. Jim Harris briefed on the requirements of the Part 150 noise study process using annual average noise (DNL metric).

Matt inquired as to how Scottsdale can enact single event noise restrictions. Jim Harris advised that in order to enact any noise restrictions, the airport would need to undertake a Part 161 study process.

John Kinney advised that any noise restrictions must be based on aircraft performance, not based on aircraft type, that airports that have noise restrictions had them enacted prior to the enacting of FAR Part 161 in 1990, and that Part 161 was created by the FAA to prevent a "patchwork quilt" of noise regulations that could compromise safety by requiring pilots to use non-standard procedures at each airport. Scottsdale's current restrictions on night time touch and go's and engine run ups are allowed because they were enacted prior to 1990.

Jim Harris and John Kinney advised that for aircraft under 75,000 pounds there is no scheduled phase out of stage II aircraft, and only aircraft under 75,000 pounds may legally operate at Scottsdale Airport.

John Kinney answered Matt's further question regarding enacting noise restrictions. That a Part 161 study would need to include a cost benefit analysis which shows a reduction of incompatible uses in the airport's 65 DNL contour without creating an undue burden on interstate commerce. Jim Harris advised to his knowledge, no airport has completed the 161 process due to problems with justifying a cost benefit analysis which meets the FAA criteria.

John discussed Cara and Laura's complaint of slow and incomplete response to their data request, and advised that the airport will ensure all information requested is provided by the next month's meeting. John suggested that a separate meeting should be held to go over the data gathering and INM input, and that Jim Harris would be available to brief the group at the next meeting on the INM data sources and inputting process. [A data review meeting was held on 7/29, from 7:00 pm - 9:15 pm with Cara Denby, Laura Brownfield, Jim Harris and Kevin Shirer attending. All agreed that the meeting helped clarify the outstanding questions on the data collection and INM input.]

Jim Harris answered a question from Laura Brownfield as to who completed the Part 150 Federal Grant application. Jim Harris advised that Coffman prepares the application and the City submits it to the FAA. Laura inquired about the salary and cost estimates in the grant application. Jim Harris briefly explained how those estimates are arrived, the grant funding process, and the amounts funded by the FAA, State and City. Laura advised she may want to go over the grant application in more detail.

In response to questions, Jim advised that Coffman Associates has completed approximately fifty Part 150 studies. He briefed that noise compatibility plans (NCP) may be approved or disapproved in whole or in part. He advised that one element of the Palm Springs NCP was disapproved because there was not enough data to support the NCP element. Cara inquired if the FAA has ever said that there was not enough noise abatement in an NCP. Carder Hunt advised that the FAA does not make value judgments such as this, and it is the local community's role to determine the noise abatement procedures at their airport subject to basic FAA Criteria.

George Livergood inquired as to the status of the Part 150 approval process. John Kinney and Kevin Shirer advised the study has been sent to the FAA and had undergone the preliminary review, and that notification that the formal 180 review process should start soon. The first 60 days of the 180 days is when any public comment on the study should be submitted for review by the FAA. Scottsdale has already approved the study, but there no prohibition on trying to change flight tracks. [NOTE: The FAA advised the formal 180 day review process has now started, effective 7/31/97]

Laura advised that in June of 1996 the noise exposure maps were accepted by the FAA, and inquired if there is a process to show the noise exposure maps invalid or inaccurate. Jim Harris advised that the noise study is a two step process; that the FAA has approved of the noise exposure maps, which had to been done prior to the submittal of the noise compatibility program (NCP).

Marilyn Dryfuss advised the citizens must submit empirical data to the FAA refute the study, and that she has seen in published the Federal register notices of changes in projects based on citizens input. Gwen McAlister advised the only way to do this is to hire a noise consultant to review Coffman's data, following the same methodology, and have an analysis conducted for the homeowners which would hopefully reflect the citizen's perception that they are exposed to more noise than the airport study shows. She estimates the cost to be approximately \$5000 for a site analysis.

Carter Hunt inquired if the group objective is to undermine the Part 150 study, what is the desired end result of this objective? Cara advised the objective is to stop the noise, and in order to do that they must conduct a Part 161 study which uses the Part 150 noise contours to measure noise reduction. They want to know if the noise contours are true and accurate, because if they are and there is no room for modifications, we (the citizens) will then just have to understand that this is the way the FAA wants to deal with their noise concerns, and this is the best result that can be obtained. Or, the citizens will then have to turn to congress to get them to change the criteria incompatible uses for noise contours to below 65 DNL.

Kevin suggested the group begin with the end in mind, and logically examine the homeowner's request to institute and night time curfew from the FAA's perspective. The FAA will ask, how may many homes or acres of incompatible land use will be removed from the 65 DNL contour by instituting a night time curfew. He suggested that the elimination of night time operations are statistically not significant enough to change the noise contour, and therefore would suspect that the FAA would not approved a night time curfew regulation.

Jim Harris advised that the Part 150 study and noise contours are a totally separate process from the airport master plan. They are not connected in any way, and invalidating the noise contours will not invalidate the master plan. In response to Cara's question, Jim advised the airport master plan does not require approval, but that the FAA has already approved the airport layout plan which is the one element of the master plan which requires FAA approval.

George Livergood advised another objective he is interested in is changing the flight pattern to allow traffic taking off to the southeast to turn left to the east, to fly over the airpark, not residences to the west. He suggested midfield left turns for touch and go traffic. Tom Cavanagh advised of a possible obstacle conflict with the Air Traffic Control tower structure.

Carder Hunt cautioned the group to not immediately dismiss the suggestion to look at left turns. He advised that most of the concerns he has heard relate to specific types of single event noise, rather than just the level of noise. If we can educate pilots and educate them about specific noise concerns, we can sometimes obtain dramatic results. The inquiries from pilots resulting from putting noise abatement procedure message on ATIS shows we can have a positive effect.

George advised of some reasons why with more residential development to the west, that the group should look at allowing traffic to turn to the east. Tom Cavanagh cautioned that just shifting the noise over someone else's area is not a noise reduction. George advised that there are now hundreds of homes to the west and that flight patterns should be re-evaluated now that the homeowners have moved in. Tom discussed his knowledge of flight patterns from a pilot perspective, and that sometimes a left turn of runway is 21 is approved but it is rare in his experience. Comments were also made that Scottsdale requested Phoenix to not let the area west of the airport develop into residential uses, but to no avail. Noise should be shared between neighborhoods on both sides of the airport according to George. Tom offered that many residents bought homes specifically to avoid being under the flight pattern and it's not fair to them to change patterns now, and that the number of people satisfied with the airport was far greater that those people who were dissatisfied.

Kevin advised that Shawn Arena, the Sky Harbor noise abatement officer and a FAA TRACON representative have been invited to attend the next meeting. Shawn has been requested to discuss noise monitoring and tracking systems, and the FAA has been asked to discuss airspace and flight patterns.

A complaint was voiced regarding helicopter noise over the neighbor hoods to the west of the airport due to helicopters not following the suggested routes, and a request was made to look at changing the helicopter flight patterns too. Kevin advised he is sending a letter out to the helicopter operators.

In response to a question, Jim Harris advised there are approximately twelve other companies that do noise monitoring.

The meeting adjourned at 9:00 pm. The next meeting will be held in the airport terminal building, on Wednesday August 6, 1997, from 7:00 - 9:00 pm. New attendees are encouraged to arrive at 6:45pm. Airport Staff will be available to answer any questions you may have.

Author's note: After the meeting, many attendees voiced concern that the agenda was not strictly followed, and as a result the meeting become unproductive. Requests were received for full reports from the subcommittee chairpersons, and a strict adherence to the agenda. If you have any questions, please contact Kevin Shirer, Noise Abatement Specialist, at 994-7609.

## COMMUNITY WORKING GROUP MEETING MINUTES AUGUST 6, 1997, 7:00 PM - 9:00 PM

<u>AUTHOR'S NOTE:</u> The minutes from the 8/6/97 meeting are presented in an edited verbatim format, which is not normally done due to the large amount of effort required. However, this detailed format was desired due to the excellent information presented by the two speakers, and to inform those who were not in attendance.

The next meeting of the CWG will be held on Wednesday, September 3, 1997, from 7:00 PM - 9:00 PM, at the airport terminal building, 15000 N. Airport Drive. If you have any questions, please contact Kevin Shirer, 994-7609.

**Kevin Shirer:** Well it's a couple of minutes after seven so we're going to follow the agenda and kick it off here right at 7:00 p.m. since we've got a full agenda. I did get a couple of calls today from members advising they did have to cancel. I'll open the meeting with a little review of what we're here for.

This is a Community Working Group. I'm Kevin Shirer, the Noise Abatement Officer, representing airport staff. We have two associates in attendance from Coffman Associates, Jim Harris and Kate May. And, we also have a couple of our Airport Commissioners in attendance, John Knudsen and Tom Cavanagh. The Airport Commission is very interested in following up with these issues, and they have been attending all of the meetings.

The reason why we have the Community Working Group is because during the acceptance of the Airport FAR Part 150 Study, we had a lot of comments from the community that they thought either the Airport did not listen to their concerns; or the community didn't really understand what the Part 150 Study was saying. So the airport committed to continue to work with the community to either find new areas of noise abatement that were potentially overlooked, or help people better understand the Part 150 Study recommendations.

We're going to start off with Sean Arena, the Noise Abatement Manager from Sky Harbor Airport. He is going to give us a 15 minute briefing on noise complaints and noise tracking systems, and a generic overview of the Sky Harbor system, so we can see if any of that would apply to Scottsdale Airport. Then, Skip Paschke with the FAA TRACON ,systems support manager, will then talk about the Valley airspace. Skip is here in response to past questions we had about flight tracks and airspace and how they interrelate. After that we will talk about our sub-committee issues, and if there are any other issues that anybody else wants to discuss that are not on the agenda, we can bring them up at that time.

Does anybody have any questions or anything before we get started? [no response] Well, okay then, feel free to get up and move about if you like. There are glasses up here in the front, there's water on the tables in front of you. Feel free to speak out; I will be your moderator.

So, let's bring up **Sean Arena** to talk about **noise tracking systems**.

Good Evening everybody. I have the pleasure of speaking tonight. In thinking of how I wanted to present this, I want to put a little format together that hopefully will give you an idea of what is available for aircraft flight track monitoring. At Sky Harbor we recently installed a system, about a year ago – September '96, that we've been very happy with. The way I want to bring forth this discussion tonight, is not necessarily saying what we do. Because that is really erroneous. I want to have a discussion of what is available. The whole nine months to a year prior to the installation, we learned a lot. We learned what type of systems are out there, what the advantages, disadvantages were, and what would work best for us. So, what I want to do is give you an overview.

There are <u>four types of noise monitoring systems</u>. Ours is a noise monitoring system as well, but our main duty per se is flight track monitoring. We have an agreement with the City of Tempe that stipulates how flight track monitoring is addressed. What I'll do is discuss four ways on how flight track monitoring can be utilized. Also to correlate how noise complaints can be matched or correlated with the monitoring system, and to wrap it up with a couple of important points that we found along way.

The first way of monitoring flight tracks, is a system called Direct Connect. What that means is you have a system that is in a central location, that is tied in via a modem to the local FAA Tower or TRACON. The bottom line is that the Direct Connect receives aircraft flight data from the FAA radar. You get a direct feed from the FAA radar and that gives you specifics on altitude, speed, direction and location relative to where the airport is. Now the catch to that is it requires FAA cooperation, and the nurturing of this relationship.

When the FAA is brought on board, they have a process that you have to abide by, either by a MOU (Memorandum of Understanding), or an agreement that stipulates they make the rules. Under these situations, the FAA allows you to have flight track data, and the first stipulation they give you is, it's not real-time. It's on a time delay basis. Ours is four days. Typically throughout the country you'll find anywhere from 4 to 14 days. And that timeframe is primarily for any filtering. If there is any sensitive type of activity that's out there -- law enforcement, Air Force One, any type of activity that's an incident, that type of data is specific to FAA criteria and the proprietor that is utilizing the flight track system is not privy to that information. With those stipulations, the system works out quite well.

Another stipulation is that the FAA allows the data only to be used in the rules the FAA allows. Again, you're not only bound to the 4 to 14 day release period, but they are very adamant – and this goes up to the regional and national level as well – that they only allow the airport proprietor to use the data for educational or informational purposes only. They will not allow the airport proprietor to use it for punitive purposes for fines, for any discrimination of aircraft type. The MOU that was struck between the Phoenix TRACON and the City of Phoenix stipulates that if any of the parties were to violate that agreement, the FAA will "pull the plug." There was a lot of

consternation about those rules that say well, gee, you know, that's not really fair on their part, but the bottom line was they gave us the data that gives us an operable system. So bottom line is no FAA, no flight data.

The cost – I was able to break down some cost. The approximate cost is \$300,000 to \$500,000. And that includes hardware and software installation. Part of that is an approximate 10 percent service contract maintenance that is maintained. It basically boils down to how many bells and whistles you want. You can have a 3-D facet to where you can show where aircraft are in relation to the airport and homes. You can put the viewer in 3 dimensional space and have them see where there home is and how aircraft operate in relationship to their home. Or, you can just have a 2-D factor to where you have a geo-coded map and you have aircraft flight tracks on that particular map. That's the Direct Connect method. A lot of misunderstanding goes out to where Direct Connect is confused with real-time monitoring. And it is not real-time, but given the 4-day process of getting the data, you're able to disseminate anything that interested parties are wanting to know.

The second type of monitoring for aircraft flight tracks is called the PASSUR. And what that stands for is Passive Secondary Surveillance Radar. That works very similar to the Direct Connect method. However, on airport property the vendor of the system installs an antenna that has direct line-of-sight to the ASR or the airport radar that the FAA uses. That antenna interrogates the FAA radar. It sends a signal out and the signal return gives the data of aircraft flight track and operations data. Again, you do have that delay factor, but one feature that the PASSUR offers that the Direct Connect doesn't have is that you get real-time - as it happens - flight tracks. So, as you sit in the central station you do get to see what happens right away. But, the caveat with that is – and it's very important to realize – that even though you get to see what's going on, you don't know who it is until the filtering factor, or time delay, that Direct Connect went through; 4-14 days. So, from the airport point of view, if someone were to call up and say, what was that aircraft that just flew over my house? I want to know who it was and what was going on. You can respond to them and say, yes there was an aircraft event that occurred, we don't know who it was, we don't know what speed it was, we don't know what type of aircraft it was, we'll have to wait till the FAA releases the data. So, again the FAA's criteria is involved. But the ability of having the actual flight tracks is available. That system runs approximately between \$150,000 to \$300,000. You have the similar type of service contract set up that you would have with the Direct Connect. So that's a different way and a lot of airports are going that way.

I'm from California and a lot of airports in California have done that. A **lot of airports** have coupled the PASSUR with a recording device; a continuous recording device that listens in to the aircraft and air traffic control communications, and you are able to play back the tapes at a given time and find out who the operator was. So that closes the loop, but it's somewhat time-intensive, but it depends on what the needs are. [question from audience - What's the cost of the recording equipment?] I'm getting to that, that's my next program.

The third step, as a segue into our question, is a voice recording system only. With only a recorder, you don't have any flight track data. An example that I came up with that I'm familiar with is Palomar-Carlsbad Airport near San Diego. They had a recording system that listens to the communications between the air traffic controllers and the pilots. That system is approximately \$100,000. Again, if you want a lower or higher end model – it depends on what you want, but basically it runs about \$100,000. Now the disadvantage with that type of system is, not that the system isn't reliable, but there are loopholes. When the tower is closed or during nighttime operations, sometimes pilot's don't broadcast, as there is no requirement, and it is not considered unsafe to do so. If you don't have any flight track data, and you hear just the noise – you don't know who it is. The only way to get that data is to go to the FAA and 14 days later they will come back and release flight strips or flight data and you will be able to investigate further. But at that point the horse is already out of the barn. It's really kind of a defensive versus a proactive approach. So that's the third way of doing things.

<u>The fourth way</u>, and we're going down the hierarchy here, is actually not necessarily a system but a procedure. <u>The airport actually has spotters</u> – human beings that are on the field that literally write down aircraft registration numbers, position for approach, departure, and they in turn track the time, the aircraft type and anything about it and then 14 days after the fact the FAA releases the data, they're able to put the data together.

So those are the four different spectrums from one to the other with some variation in what's out there. And, so we wanted to look at what's available to us. The cost on the spotters is obviously time and staff personnel – how the airport wants to work their constraints with people. They may not have the availability of having a lot of people do that. They may have volunteers. There is an airport in California that I'm aware of that has 7-10 people who were strictly spotters. But each airport is different, and the criteria and wants and needs are different as well.

Now, when you're able to get the flight operations data, if you want to correlate, and what Kevin mentioned in the previous Minutes, is one of the big interests here in Scottsdale is you want to correlate flight events with noise complaints. Primarily you're able to do that with the PASSUR or the direct connect systems. For those systems, the vendor offers a software package that correlates complaints to a geographical information system map.

Excuse me if I talk down to you if you're familiar with this but I want to make sure everyone understands this quite well. The GIS computer map of streets that the vendor purchases from companies which specialize in database geo-coding of maps. That is incorporated in the system and the operator at the airport is able to input on the computer keyboard name, address, time of occurrence, type of complaint or inquiry and the system correlates any type of flight data with the noise level if you have a noise monitoring system tied in as well. The system gives you a window and says between this time, say given five minutes of a leeway, which with aircraft operations that's a lot of time when you're dealing with, you can have a lot of operations in there. You must use the process of elimination after that because there may be fifteen aircraft

at this particular time that can be the one that you're looking for. Then it becomes a human factor element to decide was it the Lear 23 that caused it or was it the Metroliner? Was it the 172? I mean those type of things come into play when the operator makes the decision who is most likely responsible. So that is a very broad overlay of how the systems integrate the flight data that's built in, and the input that the operator puts in for noise complaint data.

The last issue I want to talk about revolves around the matter of trust. Now realizing that each airport is different, but we found this from the beginning. The City of Tempe has stipulated in their agreement that they wanted a central site similar to what was put in at Sky Harbor so they could make sure that they get the data too. The whole issue of trust comes in to play and I want to address this in two ways. The element of trust stems of a trust between the airport proprietor and the FAA, and the airport proprietor and the community. Because of the memorandum of agreement basically the FAA has the leverage if the airport proprietor or users do not comply with the way the system is to be operated. So that element of trust has to be built up, has to be fostered and just to be there. Communication has to go on and it's very important because without the data if you go with a direct connect or a PASSUR or any type of flight data that is fed from the FAA, you're really grasping at straws. The other element of trust is between the airport and the citizens around it. We found that when the data becomes available, the citizens realize that while you have all this information, this is really great and you can tell us this and that; what we found for example is that sometimes the misunderstanding came about from a hidden agenda. We get questions like how do we know that that data isn't correct? You might have filtered it after you got it from the FAA, or why did they filter it in the first place?

So, I invite everyone to see our system, we offer tours, and we offer demonstrations of our system and have the non-airport proprietor use the system. That provides an element of integrity and trust because if their own constituency can see that they get the data that the airport gets, it helps. The item of a hidden agenda pretty much goes away, and to be honest with you over a period of time, trust is fostered and hidden agenda seldom come into play. To have someone call and voice a concern about a particular aircraft event and say it's over my house at 200 feet and then they come in and see that actually it was ¾ of a mile east and 2,000 feet above, that does help matters a little bit more.

To conclude, what I wanted to do was give the availability of options that are out there right now and how things are addressed. I know I didn't touch on this at all, but I'm primarily dealing with the flight track system. Noise monitoring has been around for 25 years. Flight track monitoring, with the graces from the FAA; primarily in the last 10 years. Now airport proprietors have the availability of a Direct Connect, they don't necessarily have to go to a PASSUR to intercept or interrogate a separate system. They can be tied into the system and get the same data that the controllers get.

So, with that I want to open up for any questions that anyone might have. [from audience: The kind of data that the FAA can provide either to a Direct Connect or the PASSUR requires the tower to have radar right? The tower here at Scottsdale does not have radar as far as I know and I don't think they plan to]. Skip, you might be able to

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help me out is this something that could be tied in through another facility. You would not be required to have a physical radar installation on the site. What you would have the necessity of doing though is having adequate radar coverage in the area – whether it came from that physical location or another location.

[Skip Paschke - FAA] Scottsdale right now has a television replay of radar called a "Bright System" because it's capable of being seen in daylight. Later on this fall that will be driven off of an antenna that we are currently installing at Williams Gateway Airport. That should be able to provide coverage near, if not all the way, to the ground in the area around here (SDL). Right now the problem we have is one simply of lack of sites. In between the Scottsdale Airport and our radar antenna at Sky Harbor lies Camelback Mountain and that's what eliminates the coverage at SDL – low altitude coverage. [O.K., So then there would not be that additional cost to the City Airport beyond what he talked about] Right.

Do we have any monitoring system here at all for noise or for flight track? **Kevin**. Putting on my airport noise abatement hat... only airport staff. [So when I call, if I call, and say hey this is the time and I describe the aircraft what do you do?] If you request a call back, airport staff calls you back. The evening and weekend staff are typically out on the airfield inspecting, conducting maintenance duties, etc. When we have a noise complaint coming in to the Noise Line, staff gets notified by pager. If their work task allows a call in on the cell phone to check the noise line and hear the complaint, staff usually gets the complaint within 5 or 10 minutes. If they are involved in an incident or some activity that's going to keep them tide up for a while, sometimes it goes up to an hour before the Noise Line is checked. They call back the complainant if a call back is requested, they usually check with the air traffic controllers on duty in the tower depending on the complaint nature, or often they sometimes have first hand observation of an operation. Sometimes we'll get a call of an aircraft that the tower has not information on. There are some unresolved complaints, because it just wasn't reported correctly, the information wasn't gathered in a timely fashion, there wasn't a flight strip on that aircraft, etc. .

Are there any other questions? Part two of that question was what are we contemplating if anything? Well, that's what we're here for, one reason for the working group was for the group to come up with recommendations to the airport. [The airport has no plans at this time for noise monitoring?] The airport's noise abatement plan is in the Noise Abatement Study, and Jim Harris can brief us on what the plan specifically recommended for noise monitoring systems.

<u>Jim Harris.</u> One of the first things that was recommended was to step into that level of technology by the airport acquiring some portable high-tech noise monitors to go out and start physically checking; setting up in hot spots where there are common complaints and getting some measurements. This will yield some actual data that we can work with as opposed to just well how loud was it?, which is very subjective or isn't an objective viewpoint. So the monitors will allow the airport to try and identify those complaints that can correlate some of those frequent, common occurrences, say with an older Lear Jet. [That doesn't correlate the noise level to who the aircraft is?] With the noise monitor out there you can usually get pretty good data which with

some comparison with the FAA flight strips. [You could identify the aircraft?] I think it would improve our success rate over what we have.

[Only if the monitor is positioned out at that time] Well again, normally the monitors are set up for a certain threshold of noise. So, in other words, they are set up so that they know it's an aircraft event and it's screening out typical day-to-day activity — trucks driving by and cars driving by, and will only pick up a certain level and duration of noise associated with an aircraft that will trigger it. So depending on the proximity to that monitor, obviously if it goes directly overhead it simply would be louder than if the aircraft goes off center line or over to another direction.

<u>Jim Kanellos</u>. I like the idea of a audio recording system. Truck noise is not going to be at the same location at a certain time. Here every aircraft coming into this airport or leaves this airport. Whenever there is any communication between the pilot and the Tower, it is going to be recorded. If somebody should call and say, a plane came over the house at 200 feet, when he calls the airport, the airport going to know, it will be recorded again, and provide some window where events took place. It may be 5 events in a particular window – whatever, but it would still be narrowed down when its being recorded. I know many times, I'll call and they'll say we don't know. Was it a jet, prop, etc.? This way, you'll have reel tapes and I've worked with these things, and large reel tape, if you play them back you can search those.

But if something happens, the first call within five minutes or so, which is a good lengthy period of time, but still you're going to have that information. You can play it back and say look these are the people we talked to, these are the aircraft that came in and left at this time period. Now if it was two single engine planes came in, or maybe two props and one jet and the jet made the noise, well you're going to know it was that jet during this period of time that came in and flew over somebody's home. So I think that's a good one. I think what we could also do is have one in the Tower and have one in this building. So we have more expedience, so if someone calls you or the operations staff, we don't have to rely on field staff. It will be on there and can immediately be taken off the tape either in this building or over there and you don't have to bother to call him.

**Kevin.** I think our first step to increase .....(cut off by Jim) [It's the lowest price and I think it will work the best of any]. **Sean Arena** One thing I want to interject.. I failed to neglect to mention, which probably would help out. Even though I mentioned the fact the minority – very, very, small minority of pilots may not broadcast on the frequency. That equipment has the ability of multi-frequency capture. So, if you don't catch a pilot on the CTAF by chance, which is the Tower frequency, they use a ground frequency – you might be able to catch them on the ground frequency and be able to correlate the two together. So, you can have, I believe eight to ten recorded channels, depending on the type of equipment you look at. You have a multiple choice of frequencies where if you miss one call, you may be able to catch him on another one. Approach control may be another one, or you might have a ground. So that's what ties really well with this. To give you a good variety to give you ability to capture the loop.

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[How is this equipment usually funded? Is the cost absorbed by the airport or you fellas help out or...] <u>Sean</u> Well, it's a little bit of both. Sometimes I know the FAA has criteria for noise abatement mitigation monies that are set aside. I think it depends on how, what kind of type and expense of equipment you're looking at. Most of the experience I've seen, is that the airport has born most of the cost. But I've also seen a joint venture as well. So I kind of go maybe case by case, but it can be a big expenditure. <u>Kevin.</u> Right now our plan only calls for the portable noise monitors, for which federal money may be available, but that's all contingent upon the Federal Government.

Thank you so much for coming Sean. (Sean) Thanks for inviting me.

Without further ado, <u>Skip Paschke</u>, and thank you so much for talking to us about airspace. I'm Skip Paschke, if you need a title, it's FAA systems support manager at Phoenix TRACON, doing mostly airspace procedures.

I've been asked to talk about airspace, not necessarily the traffic pattern at Scottsdale, but some of the drivers that take place around the Valley. In fact we had the opportunity to talk to the Airline Transport Association yesterday on basically the same kind of thing around the Valley.

What you have to look at though, is that just as this airport here originally started out as a military airport, this whole southwestern area started out that way. And, as of today, the areas you see on the map that are colored, are all areas where for all practical purposes aviation cannot fly unless you have a camouflage paint job on your aircraft. They're all military reserved areas. Where that impacts us is that no matter how an airplane gets out of the Scottsdale Airport, if they want to get out southeast bound, they can't get through in just any direction, we have to bring them through an approved corridor. Now, if it was only one airplane out of Scottsdale, it would not be much of an issue. But please bear in mind that every airplane that operates in and out of this Valley also must avoid the surrounding military reserved airspace, which creates a level of compaction.

I've been around this Valley for a long time, in fact, I came through this control tower as manager back in 1979 for awhile, so I have a lot of heritage and a lot of love for this particular airport. But it may surprise you to learn that Sky Harbor Airport is right now the fifth busiest commercial airport in the United States. And when you look at some of the airports like Chicago O'Hare, Los Angeles, Dallas Fort Worth, we've got some stiff competition. In fact, for those of you who have flown through Dallas-Fort Worth, you'll know there's a terminal complex down the center and a whole set of runways down one side and a whole set of runways on the other side. Either one of those sets of runways is larger than the entire airport of Phoenix. And, of course, it was designed for the jet age.

As far as compression, one of the things I did want to talk about here – the colors of the lines we have on the map here – the reddish coloring is the various arrival routes that we have for turbo jet aircraft that come and out of Phoenix. If you notice on the airport provided chart, you're looking at a lot of victor airways. Victor airways for all

practical purposes are operated by light single-engine aircraft or aircraft that can't get above about 18,000 feet. Once you start to get into the higher performance mode, and sometimes those are the aircraft that generally make more noise because the jet departures, you get a little more restricted.

Anybody coming in from southern California is going to come in on the arrival path a little south of Buckeye, not on Victor 16, which is where low level Buckeye traffic would come from. Anybody out of the southeast would pass about 15 miles east of Casa Grande on the way in. And of course you've got the arrivals out of the northeast. We have an arrival for lower performance and satellite arrivals so we try to keep the jet flow as positive as possible. These aircraft by the way will be entering TRACON airspace just about over Bartlett Lake, making a direct line to a NAVAID which is located just east of Sky Harbor. Our aircraft controllers will turn them north of the salt river, depending on whether we're going to take them on a downwind and land on runway 8 at Sky Harbor (arrivals from the west) or whether we'll be running them into a sequence for landing on runway 26 (arrivals from the east). The yellow area that you see here is referred to as a class Bravo.

For those of you who are familiar with aviation and airspace, years ago there was a rule making that came out that dealt with what was referred to as the enplaned passenger. It was not for pilots. It was for you and me riding in back. This Air Traffic System is funded by the Federal Government, and therefore we are part of funding that whole thing. The spirit was that when we buy a ticket and go into a highly congested area there should be some margin of added safety.

So, consequently, the requirement is that anyone that operates an aircraft in this area, (class Bravo airspace - Sky Harbor airspace) regardless of whether they are an air carrier or a Cessna, has pre-defined altitudes, that aircraft must be talking to Air Traffic Control. Our objective is to keep those aircraft to the maximum extent possible contained but safely separated inside this particular air space. It used to be called a TCA or a Terminal Control Area and then about three years ago they changed the nomenclature and they called it a Class B or a Class Bravo. [Could you point out where Scottsdale Airport is] Scottsdale would be situated right up in here well inside or below the Class Bravo airspace.

Added on to that of course (on the map in blue) are the various departure routes out of town, so as you can see when somebody is on an arrival route coming in, right next to them we've got somebody on a departure going out of town. So we have kind of a domino effect around the Valley here, if we move one thing it really affects 3, 4 or 7 things.

As far as the immediate area around Scottsdale is concerned, one of our biggest concentrations is to bring aircraft in, and believe it or not, even in the turbo jet era, to get them to a lower altitude to land on the runway. You know one of the more popular airplanes out right now is the 757. The good news is it's a very quiet airplane. What is very difficult for air traffic, unlike the old 727's the Pilot could drop them like a rock, the 757 will glide forever. We have extensive problems with getting them down in time to make a normal landing; where you're not sitting in the seat, hanging on your

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seat belt as you're making an approach. Most air carriers don't like that because they're very much interested in passenger comfort.

So we have a concern to keep air traffic out from underneath the traffic pattern as it reaches the vicinity of Sky Harbor. Once a Sky Harbor bound aircraft passes Scottsdale Airport, one of our biggest intents is to get them down on a base leg for runway 26 in Phoenix (landing from the east). Some of our heaviest traffic periods occur in the late afternoon and early evening and that is when the winds favor runway 26 in Phoenix.

What will happen is we will get a stream of traffic coming in over Prescott coming in from the northwest. We get a stream of traffic coming in over Tonto and Bartlett Lake coming in south/southwest, and we will try to blend these two arrivals into one single stream to land on the north runway. Because we're probably going to have enough pressure off of these other flows from other areas to keep the south runway at Sky Harbor busy.

One of the real demands we have on the Air Traffic Controllers at Sky Harbor is that we have to keep pressure on the runway. We have a total capacity right now on a perfect night, where we can land 60 arrivals during any given hour. If we miss one of those spots, we're only going to land 59. And if we miss another one, 58, and the efficiency goes down. There are many times during the evening from about 5:30 to 8:30 at night, where we are bumping right up against that 60 per hour number. More actually, holding aircraft on the ground in El Paso, Albuquerque, sometimes as far back as Chicago, simply because we do not have the available runway at Sky Harbor to be able to get them in.

So there's a lot of importance that we have on maneuverability to be able to keep that pressure on the airport. That being said though, one of our highest priorities is one which is simply a six letter word called safety. Long before the San Diego PSA incident, people were concerned that this Valley with its mixture of aircraft was one that could be targeted for something in terms of a notable incident. I knock on wood and say that that has not transpired, but I'm also very proud to say that there's a lot of efforts that go on to insure that just isn't a coincidence and that's something that's architected in.

You asked earlier about radar and radar location. I will tell you that part of the departure procedures out of Scottsdale, because it is mapped out, is what they refer to as a non-radar departure procedure. If you and I were flying an aircraft regardless of whether it was a jet or a Cessna and we were to fly under instrument flight rules IFR, and we followed the departure procedure out of here and we climbed at a minimum climb gradient and then followed the headings and so forth, there would be no radar on us until we got up to about 4,000 feet. But there would be the guarantee that we would safely clear all terrain and obstructions so that our flight would not jeopardize either us or the neighborhood.

Without radar, the latitude of change isn't as large as it would be in a radar environment where the criteria is far more tight because you do have that level of radar coverage, and we can issue clearances for multiple headings. So, while aircraft depart

off of runway 3 or 21, they will all make the turnout to northwest bound. That works out very well in terms of the congestion in the Valley here. If we turned anyone southbound from Scottsdale, we're heading them right towards the traffic pattern at Phoenix Sky Harbor. Probably something that (1) is going to be very disruptive toward Phoenix; and (2) it's going to force us to not allow the aircraft to climb. So actually by doing that what we're going to be doing is increasing the level of noise because we're going to be forcing aircraft at low altitude. If we can get this aircraft higher than the one at Sky Harbor, then we're simply going to be forcing the one off of Sky Harbor to stay lower. So we're just choosing which one we're going to be restricting at low altitude. And one thing we do try to do, is to be good neighbors and be conscious about trying to get people up and out because we realize that at higher altitudes the noise and so forth is far less disruptive.

A quick overview. I'll be happy to entertain questions — I'll be happy to talk about anything because quite honestly I've been doing this for awhile and this is kind of become my passion. So, I can talk to you for an hour and a half very easily. I'm trying to pick up a little of your time, and yet not shortcut in anything.

One thing I know of that has been my experience in dealing with a lot of aviation communities is if I was to localize it here, a lot of the problems seem to be between Cactus and Bell Road and between Hayden and Scottsdale, right? Because you live in the immediate area. I'm going to tell you I only live two miles the other side of Scottsdale Road, so I'm in your neighborhood. I can't always fix all of the noise because what happens in that particular area causes ramifications throughout the Valley. If we get an airplane that does something different in the short-term out of here, we're going to have to, as an air traffic entity, figure out what we can do with them in the long-term to get them out of the area, minimizing any inconvenience on anyone.

[Question - I live Thunderbird and 60<sup>th</sup> Street and I've noticed that the Sky Harbor planes are flying over that area and that's the way the planes take off from there. So why is that okay for them to do that now, why can't they do the same thing the other way. Can you show me on there what flight track that is?]

Okay. A good quick way, if I can get a map with the best degree of visibility. This other map is a little larger and we can give you a little more detail. Basically, the aircraft are coming in right about over the McDowell mountains on the east side of the valley here. What we're trying to do is get them on a downwind north of Sky Harbor, to fill an opening to the west of Sky Harbor and sequence them on in to land on runway 8. What's happening is, the controller from time-to-time, because we do have a maneuvering airspace here, the controller will take an airplane and tighten up their flight track little bit to be able to fit an available opening in traffic coming up in the traffic sequence. One that would go unused if we didn't do that type of sequencing. The aircraft coming out of Scottsdale initially come up climbing to 5,000 feet. The lowest we can bring the air carriers down north of Thunderbird Road is 6,000 feet. So we have a built-in buffer already as soon as that aircraft departs. And this by the way, normally is operated by the controller that works the area up here, and can climb the departure to 8,000 feet very quickly.

[Then on the other side, how low can the plane go that goes right?] This way? [Yeah.] [How low can the plane coming into Sky Harbor go?]

Once he crosses the area by Cactus and Thunderbird, he can drop on down to 4,000 feet. I will tell you that when we're on 26 that's almost routine. Now, I will also tell you the airplane may not be at 4,000 feet. What the controller is doing is giving him a clearance to 4,000 feet, in other words this may not be instant descent. Once we've given one aircraft the clearance to 4,000 feet, from an air traffic vantage point, 4,000 feet is not useful for other aircraft. So we would have to keep somebody below that at 3,000 feet because we don't know the rate of descent. It's not like it's a guaranteed glide path. It depends on the characteristics of the aircraft. I'll tell you right now the characteristics of the company – America West and Southwest fly the same airplanes significantly different. That airplane may come down very, very rapidly or the pilot may hang it on up there. I wish sometimes we had more control of that but the system isn't set it up that way.

[The Scottsdale aircraft are flying very low, why can't they fly out further and higher]. Regarding the local logistics, I got to be honest with you, I don't follow them to be able to answer as intelligently as some of the local tower people can. From an air traffic vantage point, when we bring larger aircraft in to SDL, they're usually descending, they're not coming in at 3,000 feet. And to keep them north of the SDL airport is for us a safety advantage, as opposed to bringing them in south of the airport.

Many of the jet aircraft that arrive just show up, they're descending out of others areas. In fact, we have some that come across the top of Sky Harbor at 5,000 feet and on rare occasions, we're able to bring them straight in on idle power descent. But frequently what we have to do is get them down low enough or get them around other traffic. Bear in mind please that we have the obligation to separate everyone in the class B airspace. So, once someone got in the traffic pattern there may be some options. From my vantage point now, getting them in and out of the traffic pattern, may be an entirely different logistic. It may be something where we're starting to crowd in on the traffic pattern in Sky Harbor.

[I'm curious about the traffic patterns out of Sky Harbor. Those that you have a runway to the north – you have two runways down there, is that correct?] Yes, parallel north and south. [Do all the airplanes that take off from the north runway to the east branch off to the northeast?] No sir. They do not. The City of Tempe has struck an agreement with the City of Phoenix that, at least as of right now, aircraft will depart over the river bottom. So, regardless of which runway we're using at Sky Harbor, they all have to get into a single file to get out going east. [At what point do they then branch north, as I understand that there's a traffic pattern out here between 5 miles out or whatever, where there's planes going to the northeast and that is part of the problem of not making a left turn out of the SDL runway, because you've got planes coming in the opposite direction.] Aircraft proceed out the river bottom until they are about 5 miles east of Sky Harbor. [And then do they turn northeast or northwest?] Some aircraft will. Now lighter aircraft, piston power, turbo prop aircraft,

can diverge at the end of the runway – they are not bound by the noise abatement for the City of Phoenix and the City of Tempe. [How about height? Do they have to climb to a certain height?] Jets are initially climbing to 3,000 feet. [They go across the Valley at 3,000 feet?] Basically, they could, yes. [Now, would that interfere with southwest bound planes coming out of here?] Without question. I'm not rehearsed for exactly everything you're saying so please accept that. I was not prepared for this question, but I will tell that without question, there would be a conflict there.

[Skip, one thing you mentioned was not only those departing to the northeast, but you also have the inbounds coming in from the northeast. So you're trying to provide the vertical separation so that you have the mix of the departure off to the southeast out of Scottsdale to further complicate that —so, if somebody wants to leave this airport and head south — what do they have to do? Go out and go clear around?] Now you're talking IFR departure, like a jet or a Cessna? A light aircraft could proceed southeast bound out of here. In fact some of them may do that. I believe off of 3 you have a right turn, off of 21 you still have the right crosswind departure and maybe they would cross over the top of the airport, but they would not make a left turn. [off of 21 can they go east?] Yes. It does occasionally happen, but it's very rare. But a jet — no because they have to climb to 3,000 feet.

[Tom Cavanagh - You didn't answer him right — you cannot take off of 21 and turn left because of noise abatement, you have to turn right — you cannot just turn that way. Now maybe you can get special permission] [He said every now and then] [I've NEVER seen it!] [Thirty years I've been flying out of here!] [Tell these people, what I've been trying to tell them for months — is that pilots just don't willy-nilly leave or come in here. People like him, control us consistently, all the time, every flight, every place and you just don't —how many times have you guys arrested somebody?] <u>Skip</u> I'll be honest with you, we try to avoid that because that is not our game.

[Do you give out violations?] We have, yes. I will also tell you right now that the current mode is that we will punish you by bringing you down to the TRACON for an hour and a half to sit and watch and find out what you did. Because our spirit about it is that you survived this one, we'd like to improve your odds of surviving the next one. I got to tell you that probably twenty years ago a lot of air traffic controllers had egos because they were pushing airplanes around, and I think that is changing now. And you guys are our customers, but we also take it pretty serious that like what happened in Guam yesterday, we don't want to put on our conscience, much less on the Valley conscience and you know what I'm getting at. A phenomenal safety record – we will go the long extra mile and I hope your experiences have been good. [Oh yes, thirty years].

[What is the minimum altitude – did you say when they come from Cactus going south towards Sky Harbor – between 7-10,000 feet going south, they're coming from up north?] Out of the northeast on 26, on a night like tonight [coming over Scottsdale Airport here] right [and they're flying about what 7-10,000 feet?] yes, between 7-9,000 feet [does that put a limit on the smaller aircraft flying in and out of Scottsdale Airport, where they have to fly below their minimum which is 1,000?] No. [Is there a reason that they should be flying below 1,000 feet because of commercial aircraft are

coming in at 6-7,000 feet?] No, that would have absolutely nothing to do with it. In fact there is a federal air regulation that requires you to be within, above 1,000 feet above populated areas, except during the act of landing and departing.

[Are you familiar where Mayo Clinic is up here?] Yes. [Do you think aircraft leaving and taking off approaching Scottsdale should be at least 1,000 feet when they're in that area?] In all candor I'd have to map it out. I think there's a minimum climb grading of 154 feet a mile if you were to map out something. Now that's a very low performance airplane, okay. Most pilots want to get up, just in case the engine goes quiet in front you, you want to have as much room to figure it out, you know. I mean, most pilots are concerned for their own safety and for the safety of others.

If I am not mistaken, the minimum climb grading is 154 feet a mile. So you map it out by 5 miles and you could get [that's dragging it out] Yes, that's dragging it out. I got to tell you I don't know many pilots that would want to do that. There may be some that would be lazy enough that they...[there's a constant -they fly between here and Mesa – just back and forth, back and forth, and you've got 6 to 10 an hour constant and they're just flying low over the Valley, that's it. I guess they feel there's no need to get up there, once you've reached an altitude of say 400 feet, 500 feet, you're safe and you can go all the way across the Valley at that altitude].

Author's note: The tape ran out at this point. End of verbatim transcription.

Skip concluded his discussion and received a round of applause from the group.

A short discussion was held regarding recommending a recorder system for Scottsdale versus portable noise monitors. No consensus was reached.

Frank Martinson then presented some of his observations after reviewing the noise complaint data from 1997 to the present. He pledged to continue to review the data for any trends the airport can take action to remedy, and suggested the AOPA "Fly Friendly" video be shown at the next meeting to help get the word out about what the aviation community is doing to combat aircraft noise impacts.

Kevin advised that Mr. Jim Harris was available to conduct a short briefing on how noise contours were generated from observed data. However, since the persons who has questions regarding this subject were not present, he would ask Jim to come back for the next meeting.

**END OF MINUTES** 

## COMMUNITY WORKING GROUP MEETING MINUTES SEPTEMBER 3, 1997, 7:00 PM - 9:00 PM

The next meeting of the CWG will be held on Wednesday, October 1, 1997, from 7:00 PM - 9:00 PM, at the airport terminal building, 15000 N. Airport Drive. If you have any questions, please contact Kevin Shirer, 994-7609.

An aircraft overflight demonstration will be held on Sunday, September 21, 1997, from 2:00 p.m - 3:00 p.m. at the airport terminal, 15000 N. Airport Drive. The overflight demonstration is to be held at the airport so that aircraft may fly are heights below 1000 feet. The FAA will not sanction a demonstration above a residential area at altitudes lower than 1000 feet.

The meeting began at 7:00 p.m. with introductions. Kevin Shirer, Noise Abatement Officer, passed out copies of the FAA notice of the Part 150 review. The official review period started on August 20, 1997, and public comment regarding the Part 150 study may be submitted to the FAA until October 20, 1997. He also advised of the upcoming helicopter operator noise abatement meeting to be held on September 10, 1997, and encouraged attendees to review the draft revisions to the Pilot Guide being passed around and submit comments. Members commented on the helpfulness of the previous verbatim meeting minutes. Kevin thanked everyone for their positive comments and advised that verbatim minutes takes a much staff time and effort, he will attempt to have them done if valuable information is presented, like in the last meeting.

The first agenda item was a review of the AOPA Fly Friendly video by Mr. Frank Martinson. Frank is a pilot and lives close to the airport to the southwest, and wanted to have the CWG take an active role to raise noise abatement awareness in the pilot community through voluntary efforts. The video relates to propeller driven general aviation aircraft, not jets, and is from the pilots perspective to help educate them what they can do to reduce aircraft noise.

Frank suggested a possible objective would be to get the flight schools to make their students aware of the tape and include the procedures and/or the video in their training curriculum. Frank advised that 17% of noise complaints received at the airport so far this year are regarding propeller driven aircraft. Kevin introduced Mr. Ed Helmnick, who is Chief Pilot with a flight school located at Desert Aviation, Flight Dimensions. Ed will present what they do as a flight school operator to increase their pilot's awareness of noise abatement procedures. [The 20 minute video was shown]. Frank stated since getting involved in the CWG his awareness regarding noise abatement has increased and he now is more aware of his altitude and power setting when over the residences. Kevin advised of some of the flight schools noise abatement efforts: no-single engine out training at SDL by Sabena, noise abatement briefings by Southwest Flight Center and Flight Dimensions.

Ed Helmnick discussed their noise abatement awareness procedures: first item in flight dispatch book is the noise abatement procedures, noise abatement briefing with flight instructors, distribution of pilots guides, quiet operating Katana propeller aircraft. Ed advised that their aircraft were designed to meet the more stringent European noise regulations, and at full power overflight at 1000 feet the aircraft could not be distinguished from ambient background noise level. Flight Dimensions has been in operation at Scottsdale airport since last fall and has eight aircraft. Ed invited the members to accompany him on a free demonstration flight.

In response to a question from Andy Incardona, Kevin advised the current airport pilot guide contains many of the recommendations contained in the Fly Friendly video. Ed reviewed their typical flight tracks, and advised they vary with their destination, weather, traffic and other factors. Ed advised that they remind their pilots in their noise abatement briefings that the terrain to the north rises, and that the tendency is to fly the pattern altitude. Andy discussed the difficulties in judging altitudes, and Ed offered to arrange a flyover demonstration. The members agreed that a flyover demonstration would be helpful to learn what appears to be the legal altitude because people's perception varies widely. Kevin advised that he would work with Ed and the group members to put on a flight demonstration to help judge altitude.

William Gott with the Scottsdale Pilot and Aviation Association (SPAA), the group has approximately 130 members, and advised they have shown the Fly Friendly video to their membership, presented by the Aircraft Owners and Pilots Association (AOPA) southwest representative. They also make it available to their membership through their lending library, and printed a notice about the video in their last newsletter. He is also a member of the Civil Air Patrol (CAP) and advised their regulations state they may not fly below 500 feet.

Laura Brownfield commented on the video's discussion of perception and that it must be dealt with, and why the closing of airport's nationwide has stimulated the aviation community to participate in the CWG. A brief discussion was held on why some airports close.

Frank responded to a comment from Belle Crooker that it's not that pilots don't care about noise abatement, some just aren't aware of the importance in flying the noise abatement procedures. Ed remarked that he would be happy to present some information on pilot procedures at a future CWG to help the non-pilots better understand the terminology and flying procedures.

Andy remarked that the attendance at the CWG meetings by residents has steadily dwindled and he was trying to understand why. Perhaps the number of attendees have lessened because initially residents were rallied to defeat the Part 150 study and became disillusioned once the Part 150 study was accepted by the City? He complemented the airport staff and pilot community that their participation has remained steady. Laura advised she talked with Don Hopkins, a former anit-noise activist, who said he became frustrated and decided to become less involved. From her review of past documents, the anti-noise activist movements have always been in conjunction with a noise study update and the groups faded away after the study was

completed. There was a noise abatement committee which involved some of the CWG members, and a group from Phoenix worked for over two years and made recommendations to City of Scottsdale, which she thought very few were accepted. Laura stated the group is starting to take a more positive turn and some members may have been turned off by some of the conflict. She suggested that former members be sent a card or notice encouraging attendance now that the group has changed focus, and encouraging people who may have become frustrated with the issue and stopped call the complaint line, to re-engage in the CWG dialog and the noise complaint process.

Colleen Reed advised she lost interest in the group but initially had a lot of energy and hope for the group making positive change. She advised that the noise has decreased, thanked the airport for their efforts, but still had some doubts if the CWG was making real change. She suggested that the community may be depending upon the airport to do what they should be doing. She wants to stay in the neighborhood and will start calling the complaint line again.

Laura commented that most people complain because they want to stay in their neighborhood but want assurances that the aircraft noise won't ruin the value of their neighborhood. Kevin advised that the root issue of many noise complaints received is the concern for safety, property values and quality of life, and he tells complainants what the airport has already done (such as the runway weight limit and the master plan) to allay fears of larger aircraft ruining their quality of life and devaluing their largest investment.

Laura remarked that her fears were partially allayed by receiving a detailed briefing from Kevin and Jim Harris of Coffman on how the noise contours were generated, and asked if Jim could present this information to the group in the future. Kevin advised he would check to see when Jim could attend and present this information to the CWG.

Kevin commented that attendance may be lower because of the time of the year and because airport traffic is down for the hot summer months. He expects the historical trend to continue and noise complaints to rise again in the fall with the increase in traffic, and with new homeowners experiencing the busy traffic periods for the first time. He suggested an update on the CWG progress may be of value but that approximately ninety people are on the CWG mailing list and are receiving the minutes. Belle echoed that the minutes are encouraging attendees to stay involved and people can see through copies of the enforcement letters that complaints to the noise line are more effective now.

Laura asked if something be done in advance of big events to encourage aircraft operators to not fly late at night. Kevin advised he would check with the Fixed Base Operators. He advised that the CWG has helped the airport create a new policy; letters are now sent when complaints are received on late night/early morning landing/takeoffs, and operators are asked to schedule future flights between 6:00 a.m. and 11:00 p.m..

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Laura asked if there has been any progress on getting customs service available at SDL. Kevin advised he hasn't heard of anything but there is a high cost associated with customs service. Bill and Ed discussed why they think customs service at SDL wouldn't significantly increase traffic. Only destination traffic would want service. Itinerant traffic would most likely clear in Nogales or Tucson because it would be closer to the border, the limits on range and endurance of the pilot and aircraft, and the higher elevation in Nogales.

Kevin confirmed that the group would like to like to have an aircraft overflight demonstration on a Sunday afternoon, and he would check with the FSDO and Tower. Ed advised that Saturday morning is usually the busiest period for a flight school.

He advised the internet web site should be up and running any day now, and will initially contain basic noise abatement information, but will be expanded in the future to be very expansive. The airport web site may be reached through the City of Scottsdale home page. [www.ci.scottsdale.az.us/trans/airport] Additionally, the airport is checking into the cost and feasibility of creating a noise abatement CD rom.

He reported the Kierland homeowner association has offered to provide space for a monthly noise abatement article. George Tissen suggested that the column be made available to other homeowners associations in the area. Kevin advised that he now has much more time to devote to noise abatement position since the airport has obtained an additional staff position, allowing him to focus only on noise abatement and airpark coordination.

Laura inquired if the airport has taken any steps to prevent operations by loud aircraft types. Kevin advised the airport must be careful so that their efforts regarding specific types of aircraft are not seen as discrimination. In response to Laura's question, he suggested that complaints for early morning flights do not necessarily have to be called in as they happen, but to preserve sleep, to call first thing in the morning after fully waking up. The security guard keeps track of the aircraft between 10:00 p.m. and 6:00 a.m. and he will send out a letter for one complaint for an early morning operation.

Frank inquired as how the airport publicizes the "26-NOISE" complaint hotline. Kevin advised it is listed in the phone book, and that they hope to improve the hotline next year after the City obtains a new phone system. Laura provided some comments on the pilot guide. Kevin advised the new pilot guide shows stylized preferred flight tracks, the diagram is consistent with the recommendations in the Part 150 plan, and all flights are conducted with safety as the primary directive.

In response to a question, Kevin stated the first phase of implementation of the Part 150 study is obtaining noise monitors. A brief discussion was held regarding the procurement and operation of noise monitors. In response to a question, Kevin advised that there will not be an Air Fair in October of this year as originally anticipated. Frank advised from his review of the noise complaints, there have been 488 complaints year to date, which equates to a rate of 2.3 complaints per caller, as some callers are repeat callers.

Laura Brownfield inquired about the ordinance change to widen the runway. Kevin commented that the Masterplan to widen the runway is being followed up on and there is a wholesale re-writing of the ordinance in progress which includes adopting the master plan recommendation to widen the runway by 12 ½ feet on each side to improve safety. He added that the runway widening will not bring in any larger aircraft, or any more aircraft into the airport than can already be accommodated. Kevin reported the limiting factor on the size of aircraft which may serve the airport is the runway to taxilane centerline, which would be cost prohibitive to change.

Some discussion was held regarding the nationwide pressure on older jet operators to phase out use of the older noisier jets.

# COMMUNITY WORKING GROUP MEETING MINUTES 10/1/97, 7:00 - 9:00 p.m.

#### [Next CWG meeting 1/7/98, 7:00 - 9:00 p.m., see page 4]

The meeting began with the Airport Noise Abatement specialist, Kevin Shirer, recapping the purpose of the Community Working Group: to maintain a constructive dialog between the community and the airport to educate pilots and residents about noise abatement issues, pursue program improvements. Copies of the monthly noise report were distributed along with copies of noise abatement enforcement and airport disclosure letters.

Opening remarks were solicited. Laura Brownfield commented that a large aircraft with a rainbow on the tail comes in frequently around 8:30 a.m. in the morning, and while quiet, she believes it's approach to runway 03 is usually lower than most aircraft. She inquired what action could be taken by the airport. Kevin advised he will pass along her concerns to a likely operator (Scenic Airlines), although a "low" approach can be a normal approach for that type of aircraft.

An error in the previous meeting minutes was noted: the front cover page stated "August" when it should have said "September". Matt Weber mentioned he stopped attending the meetings because he thought the group wasn't getting anywhere, but after reading the comments regarding attendance in the September meeting minutes, he decided to attend. He believes a lot of information is exchanged at the Community Working Group (CWG) meetings, however, aircraft noise still persists and helicopters still fly over his neighborhood. He is interested in pursuing a curfew.

Kevin briefed about the aircraft overflight demonstration which was held on 9/21/97. John Gomes from the Civil Air Patrol and Jeannine Helmnick of Flight Dimensions donated their time and aircraft for the demonstration. Many people at the last CWG meeting expressed interest in attending, however, only three residents attended even after ample prior notice. After the demonstration, the attendees (both pilot and non-pilot), agreed that it is very difficult to accurately judge aircraft altitude visually from the ground; the tendency is to judge a lower altitude, and the perception of altitude changes with aircraft size and the noise made. Flight Dimensions advised they are willing to provide demonstration rides for CWG members.

A based helicopter pilot meeting was held on 9/3/97, and unfortunately only three of the ten invitees attended. Kevin advised that meeting minutes will be sent out to the bases helicopter operators, and the airport is compiling a list of helicopter operators across the State to inform them about our noise sensitive areas. A mass mailing is required since it is the most effective way to inform transient helicopter pilots of noise sensitive areas. The based helicopter pilots expressed interest in learning about what specific areas they should avoid to lessen noise impacts.

Laura remarked that she doesn't notice helicopters flying over her neighborhood anymore and inquired if there had been a change in the helicopter routes. Kevin stated any changes are a result of raising the pilots awareness of the need to fly over less populated areas, and that no official routes have changed. One news station helicopter pilot who regularly departs in the early morning has modified his departure to fly north of the canal before turning west or south, so that overflights are done at a higher altitude. A frequent caller living in Kierland recently advised the helicopter overflights have reduced significantly since the meeting. His house is within 1/2 mile of the helicopter landing site at Air Services International located at 73<sup>rd</sup> street and Evans.

Marlene Baker requested Mr. Shirer explain why it was determined the helicopter reporting point currently located at Thunderbird and Pima roads (point pima) should remain as is instead of being moved. Marlene believes moving the reporting point location may help avoid overflights over Patterson Ranch, a residential community north of Thunderbird road, abutting the industrial area. Mr. Shirer explained that the goal of the noise program is to decrease noise impacts. After talking with the Tower chief, our noise consultant, and some helicopter pilots, he believed moving point Pima north to Raintree and Pima wouldn't prevent helicopter overflights from occurring over Patterson ranch (pilot education to avoid the area will do this). Moving the reporting point would likely increase the area of

overflights in the residential area at Raintree and Pima; there would be no net decrease in noise impact. Marlene asserted that the pilots are "cutting the corner" and so moving the point more northward would move the overflights over the industrial area with continued "corner cutting". Kevin stated they will continue their pilot education efforts to avoid certain areas as long as avoidance procedures do not compromise safety and reduce noise impacts. He thinks this will be effective with continued effort by the CWG and the staff. Marlene advised the airport needs to do this aggressively because she has noticed more helicopter overflights now than in the past. She acknowledged that the helicopters usually fly lower closer to the airport to avoid fixed wing aircraft traffic at higher altitudes and this contributes to the noise, and requested she receive a copy of the statewide helicopter mailing. She also stated the density of a residential neighborhood should make no difference in preferred flight routes, all routes should be over commercial areas, not low density residential areas.

Mr. Jim Harris of Coffman Associates was introduced; Coffman Associates completed the latest noise study. He recapped that a meeting was held on 7/28/97, with Laura Brownfield and Cara Denby, and they thought the other CWG members would like to learn more about what noise contours are and how they are developed. Jim added that this is normally a two hour presentation that has been condensed into ten minutes. The noise contours are a predictable method developed to measure human response to noise levels. The Integrated Noise Model (INM) computer program was first developed in 1978 and has been refined five times for more accurate modeling. The INM uses the A-weighted decibel scale (DbA) and adds a nighttime penalty for any operations between 10:00 p.m. and 7:00 am. The noise model sums all the aircraft events and produces a contour for an average day. The contour is a cumulative effect measured in DNL, not an actual decibel level measured in decibels - dB.

Inputs into the model are described thoroughly in the Noise Study, Chapter 2, and include a description of the airport, the altitude, average temperature, average daily operations, the runway use percentage and aircraft types (fleet mix). Some assumptions need to be made in the absence of data for every aircraft operation for every day of the year, as was the case with the latest Scottsdale study. The average number of aircraft operations is assigned to various aircraft types, based on the best data available (State registration and special five week survey by the FAA Tower). The estimate for nighttime operations was determined by the security guard logs and data from when the FAA Tower was open during early morning hours. The fleet mix estimation does include helicopters. The consolidated or "average" flight tracks are also defined. At the time the study data was being gathered, Scottsdale did not have a radar system, so the consolidated flight tracks were determined by interviews with FAA controllers and observations. Field noise measurements are not used to generate the contours, only as a check of the model's predictability.

The noise model then calculates the noise generated by the various aircraft on the assigned flight tracks at the various times of the day and night, and connects the areas of equivalent impact to create contour lines. Marlene Baker inquired when are the airport noise contours going to be updated since traffic appears to be changing. Jim advised any updates are done voluntarily by the airport, and have been done approximately every five years in the past. He added that the noise compatibility plan has an element for obtaining portable noise monitors. Jim Kanellos requested a portable noise monitor be set up at his property to measure the sound level.

Jim Harris briefed that noise does occur outside the contour levels and this is recognized by the airport and also now by an "airport influence area" under a new State law. Marlene Baker stated the City council is still allowing high density development around the airport and this will be a problem in the future. Laura Brownfield briefed the group on her impression of the INM meeting of 7/28/97, stating she had expected a very detailed presentation showing how raw data was transformed into the INM input/output, and that is not how the modeling works since assumptions must be made. There were some errors in the security guard log entries, but felt that Coffman did a good analysis given the reasonably accurate data. Laura also remarked that aircraft noise seems louder than usual when it is very humid. Jim confirmed that the transmission of sound is different with different climatic conditions.

Matt Weber stated he thinks that the flight track near his neighborhood west of the airport is accurately described. Laura stated there was no noise monitor in the area directly southwest of the airport, although there are frequent overflights of this area, and presumably the field monitoring would have shown the contours should have extended out further. Laura stated if the contour line extended past a church or a school it would invalidate the study and prevent the airport from getting federal funding for projects in the airport master plan. Jim corrected that the two

plans are separate, while they are sometimes done at the same time to get the most recent forecasts (which are done in the Master Plan). Laura advised that she and other residents thought the two studies were linked, and asked why weren't they corrected in the past. Jim advised this had been discussed at the July meeting and the misunderstanding was corrected then.

Matt Weber asked what the residents could do to force the airport to institute a curfew. Kevin explained the Federal Aviation Regulation Part 161 cost-benefit study requirements, and the minimal effect of the nighttime operations at Scottsdale on the 65DNL contour, which is what the FAA uses to measure the benefit of a proposed noise restriction. Jim Harris explained how the Part 161 requirement came about as a result of the airline fleet retirement rule legislation (for aircraft over 75,000 lbs.), which also restricts the ability of airport operators to enact noise restrictions. Jim and Kevin confirmed for Marlene that since the airport has received Federal funding, the airport is bound by the FAR Part 161 restrictions, which would make it improbable the FAA would approve of enacting a curfew. Most of the airports which have curfews currently, enacted them prior to the passage of FAR Part 161 in 1991. Matt advised that in his opinion loud single events at night bothers people the most and it appears that Federal law would need to be changed to allow a curfew at Scottsdale.

Laura advised that many avenues are blocked by Federal regulations. However, the CWG ought to concentrate on the areas in which we can have some effect. She asserted many people who are disturbed by aircraft noise have stopped calling the noise complaint line, and the airport ought to send out a post card to the 800 names on the noise mailing list encouraging people to use the noise complaint line now that the airport is being more responsive to complaints. She feels this is the only constructive avenue we can pursue at this point. Frank Martinson suggested we also pursue voluntary commitments by noisy jet operators to not fly at sensitive hours (11:00 p.m. - 7:00 a.m.). Kevin relayed that the complaints received do not indicate late night activity being bothersome to the community on a daily or weekly basis. Jim commented that as a result of the airport/community efforts, the FAA has put a recorded noise abatement announcement on the Automated Terminal Information System (ATIS) that pilots listen to before they obtain a clearance. Scottsdale is the first airport in the country that he knows of to put noise abatement information on the ATIS. [Author's note - Large lighted signs reminding pilots to use noise abatement procedures were also installed at the departure ends of both runways in 1996]

Laura commented that she endorses the suggestion to have the meetings on a quarterly basis in the future since it is too difficult to get everyone together on a monthly basis and people may loose interest. She appreciated the positive actions the airport is taking as a result of the 150 study and the CWG meetings, however, she urged the group to keep making incremental progress.

In response to a question from Marlene, Kevin advised the Airport Commission usually meets the third Wednesday of every month at the airport terminal. Noise abatement is always on the Commission agenda and noise concerns may be raised there also. The airport commission meeting schedule is seldom changed and the meeting agenda is posted with the City Clerk's office, and at the airport 72 hours prior to all meetings. Residents with noise concerns were also encouraged to call Kevin if they didn't want to wait for the next CWG quarterly meeting or monthly Airport Commission meeting. In response to a request for regular notices of expansions of tenant activity, Kevin advised that large mailings of monthly noise reports and notices of tenant business activity are not appropriate as they would become cumbersome and expensive as more people requested such update notices. He will look at the feasibility of putting current information on the airport Internet website on a monthly basis. Noise abatement information may now be found at "www.ci.scottsdale.az.us/trans/airport/sdlap/htm", or conduct a search for "Scottsdale Airport."

Kevin advised he will do his best to encourage communication between the airport and the group members between meetings. However, group members ought to take some responsibility to keep themselves involved, and not wait for calls or mailings from the airport if they have concerns. Coffman Associates has continued to provide information and briefings and every CWG meeting has had at least one airport Commissioner in attendance. Kevin shared that the airport has brought forth significant resources and time and energy to the noise abatement issue, and the community members should recognize that effort and hold up their end of the Community Working Group. Marlene and Kevin agreed that keeping the communication going in the absence of monthly meetings is important.

Bill Gott suggested the CWG members write the Scottsdale City Council to help prevent noise impacts on future residential developments in noise sensitive areas. Marlene also encouraged staff to voice opposition before the City Council to residential development in the recommended influence area and changes to the general plan incompatible with the airport noise. Frank Martinson commented that the City enacted land use restrictions in the past and lost a resulting lawsuit, and therefore some residential development is occurring close to the airport. Kevin suggested that land use and the airport influence area could easily be an entire meeting just on these topics and suggested these issues be discussed as a regular item at future meetings. Matt pointed out that efforts have taken place in the past to prevent residential development and it has still taken place.

Kevin and Jim briefed the group on the Noise Compatibility Plan (NCP) recommendations on land use. Airport staff has begun meeting with Development Services staff to incorporate the NCP recommendations into existing zoning regulations. Jim showed the group a map which indicates land use and areas in the recommended airport influence area which potentially could be developed with residential uses. Marlene suggested the CWG members get behind the NCP recommendations when they are before City Council for inclusion into existing code. Kevin reminded the group that there is also two sides to every opinion and there will be opposition to property being included in an airport influence area; concerns about possible impacts on property value or perceived limits on land use.

The discussion turned to the next agenda item and Jim Kanellos briefed the group on his suggested routing of the aircraft flying between Scottsdale Airport and Mesa Falcon field; aircraft should fly south of Shea Boulevard over the Salt River Pima-Maricopa Indian community longer, and then fly north to avoid the residential areas north of Shea. Bill Gott answered a question from Kevin and advised when flying between Mesa and Scottsdale airports he normally flys over the SRPM Indian community, and begins flying over developed areas in Scottsdale at approximately 98<sup>th</sup> to 92<sup>nd</sup> street at an altitude of at least 1000 feet above the ground; the minimum traffic pattern altitude. Jim stated many aircraft appear to be lower than that. John Knudson advised Bill's flight track description is typical (with some variations due to air traffic instructions), however, it seems to him that this general flight corridor has existed for many years due to the location of the two airports. Bill advised when runway 21 is in use a typical flight track can take him east of 92<sup>nd</sup> and Shea, not over Jim's area. Bill explained that "straight line" routes are desirable and the new Desert Ridge development along Tatum south of Deer Valley, north of the CAP canal is in a similar situation because of the traffic between Deer Valley and Scottsdale Airports.

Jim advised the traffic has increased significantly over the past two years. Kevin briefed the group on the Federal Executive Order on Environmental Responsibility which the FAA is reviewing. His understanding of the Order is that a public process must be followed for shifting noise impacts on disadvantaged or minority populations, and the City could possibly be sued if the airport were to recommend Jim's suggested flight track without meeting the requirements of the executive order. A detailed discussion of the flight tracks and approach and departure pattern ensued. Kevin stated he will continue monitoring the status of the FAA's regulation to learn more about the Executive Order.

Future meetings of the Community Working Group were then approved to be on a <u>quarterly</u> <u>basis</u> with the next meeting being on <u>January 7, 1998</u>, at the airport terminal from 7:00 p.m. to 9:00 p.m.

Kevin advised he will send a copy of the monthly noise reports to the regular attendees of the CWG in advance of the next meeting to facilitate communication and continued awareness, and advised he is available to meet anytime with the subcommittee chairman to continue progress on their issues if they so desire.

Meeting adjourned.