

SCOTTSDALE MUNICIPAL AIRPORT

A FOCUS ON COMMUNITY ISSUES

**Submitted To The
CITY OF SCOTTSDALE**

By

**COFFMAN ASSOCIATES
AIRPORT CONSULTANTS**

SEPTEMBER 1989

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Scottsdale Municipal Airport A Focus On Community Issues

INTRODUCTION

During recent public hearings and neighborhood meetings regarding the Scottsdale Municipal Airport, a number of citizens have expressed concern about aircraft noise originating from the airport. Specifically, several issues were identified including:

- STEPS TAKEN FOR NOISE ABATEMENT
- NOISE MONITORING
- STAGE I AIRCRAFT
- PART 139 APPLICATION
- TRAFFIC PATTERNS
- AIRPORT ENFORCEMENT
- NOISE ABATEMENT COMMITTEE

This report will attempt to address these issues and provide recommendations where appropriate.

STEPS THE CITY HAS TAKEN FOR NOISE ABATEMENT

For the past fifteen years the City of Scottsdale has been a leader both in the Phoenix Metropolitan area and in the country in its attempts to be a "good neighbor". The following is a brief, chronological history of events as they relate to noise abatement at the airport.

1974 The city implemented a noise abatement turn for departing VFR traffic.

1978 Entered into a joint resolution with Phoenix to prevent Scottsdale Municipal Airport from becoming an air carrier airport, but did not preclude commuter airline service.

Created a Noise Abatement Committee to deal exclusively with noise issues. Included a representative of Phoenix on the committee.

Procedures were established that limited the minimum descent altitude for practice VOR approaches to 2500 MSL.

Restricted the size of aircraft using Scottsdale Airport to 60,000 lbs.

Prohibited touch-and-go operations between 9:30 p.m. and 6 a.m.

Prohibited simulated engine failure and formation takeoffs to the southwest.

Runway 03 was designated the calm wind runway.

Signs were installed at each end of the runway, calling pilot's attention to noise abatement procedures expected of them on departures.

Lengthened the runway over 3000 feet to the north to move aircraft noise away from the neighbors to the southwest.

Displaced the threshold of Runway 03, 750 feet to the north and raised the Visual Approach Slope from 3.2 degrees to 4 degrees to keep aircraft higher over the neighborhood to the southwest.

1983 A letter of agreement with the tower and the helicopter users was executed, which established approach and departure corridors and restricted flights to open areas and higher than normal altitudes.

1984 The Papago Air National Guard agreed to fly at higher than normal altitudes when entering and departing the traffic pattern.

Commissioned one of the first Part 150 Noise Compatibility studies ever done by a general aviation airport.

1986 Restrictions were placed on engine run-ups that limited the time of day and location where engine run-ups can be conducted.

A local pilot training operation agreed to stop touch-and-go landings and limit aircraft to full stops.

1989 Published a noise brochure designed to educate current and prospective residents of areas near the airport and others with an interest in airport issues.

Over the years the airport has also expanded it's efforts toward noise abatement through continuing education including the following:

- ATIS Broadcasts containing messages reminding pilots to fly at or above the VASI for noise abatement.
- Annual pilot briefings to discuss noise abatement.
- A published pilot's guide which reminds pilots of noise abatement.
- The airport director and the tower chief meet with any and all groups who wish to discuss airport noise and noise abatement.
- Articles are published monthly in both the SPAA newsletter and Airpark News which usually discuss aircraft noise.
- Notices of the sensitivity of the Scottsdale Airport Environs are published in all airport informational manuals.

In December of 1986, the FAA approved in full, twelve (12) of the fourteen (14) action elements proposed as a result of the Part 150 Study, and the City has implemented them. These include the following:

1. Relocate initial point for helicopter arrival and departure to the intersection of Scottsdale and Bell Roads.
2. Encourage use of NBAA Noise Abatement Departure Procedures.
3. Avoid maintenance runups between 10 p.m. and 7 a.m.
4. Avoid straight out and left turns after departure from Runway 21.
5. Avoid stop-and-go landings on Runway 21.
6. Avoid intersection departures from Runway 21.
7. Avoid formation departures from Runway 21.
8. Avoid simulated single engine practice from Runway 21.
9. Avoid right downwind, right base and straight-in approach to Runway 03.
10. Avoid right turn outs prior to the airport boundary on Runway 03.
11. Avoid touch-and-go landings between 11:00 p.m. and 6:00 a.m. As implemented, the prohibition of touch-and-go operations extends from 9:30 p.m. to 6:00 a.m.
12. Avoid descent below 2,500 feet MSL on practice VOR instrument approaches.

Two measures were not approved by the FAA when submitted, but are scheduled for implementation as described below.

1. FAR Part 36, Stage 2 compliance for use of Runway 03 for landings and Runway 21 for departures--all aircraft not in compliance with all FAR Part 36, Stage 2 noise levels will be required to land on Runway 21 and depart on Runway 03, whenever practical.

The FAA noted that Scottsdale's control tower operates without radar. Adequate operational safety cannot be provided in a "head-to-head mode, even if the number of operations is low. Safety would be further compromised when the tower is closed (between 9 p.m. and 6 a.m.). This recommendation can be restudied after BRITE radar is installed in Scottsdale Airport's control tower, tentatively scheduled for mid-1990.

2. Right turns by IFR aircraft to 300 degrees for noise abatement as soon as practical when departing Runway 21. The Standard Instrument Departure (SID) at the time the study was completed called for a turn of 260 degrees.

The FAA did not approve this procedure when originally submitted because it conflicted with an established procedure used in the event of lost radio communication. However, since that FAA decision in 1986, changes in equipment used by the Air Traffic Control system have enabled tower personnel to publish a new Standard Instrument Departure calling for a turn to 300 degrees. This will keep IFR traffic north of Thunderbird Road and over open desert west of Scottsdale Road. The new SID goes into effect September 21, 1989.

NOISE MONITORING

Need

For the most part the only true need for the establishment of a "permanent" noise monitoring system is when measures are implemented, such as an ordinance, which set specific noise limits at specific locations. In these cases the noise monitoring systems are used to determine if aircraft, either on departure or arrival, have exceeded specified maximum noise levels at a particular noise monitoring site. When permanent systems are established, several monitoring stations (microphones) need to be positioned at various locations both on the airport property as well as locations in areas considered noise sensitive. This can require the placement of many noise monitoring stations, depending on what areas are considered noise sensitive. Generally the noise monitors collect and store data (aircraft noise levels) over a twenty-four hour period. The data is then retrieved via telephone line and modem by a main computer, which then interprets and sorts the data. If the monitors have detected an aircraft exceeding a specified noise level, the airport staff must then determine which aircraft has violated the

noise limit. At Scottsdale Municipal Airport this could only be done by retrieving available flight strips (not all aircraft depart IFR) from the Air Traffic Control Tower (ATCT), reviewing security records for the hours when the tower is closed, or establishing a recording system which continuously monitors tower frequency. Regardless of what method is used, it is an extremely time consuming and costly process, and not entirely foolproof.

The Master Plan and F.A.R. Part 150 Noise Compatibility Study which was completed in 1985 did not recommend the establishment of any aircraft noise limits, therefore no permanent noise monitoring system would be required for enforcement. The study did however, recommend that periodic noise measurements be conducted to validate existing noise contours and to address specific complaints or concerns. This noise monitoring can be conducted with "portable" monitors by a consultant or by airport staff should the city decide to purchase the equipment. The portable noise monitors provide greater flexibility in that they can be easily and quickly moved to different locations, so that site specific concerns can be addressed.

To validate the existing noise contours, the noise levels in the airport environs should be monitored through periodic measurements, with portable equipment, at a series of standard sites. A program consisting of no less than ten consecutive days of continuous measurement at each location could be conducted each calendar quarter. The cumulative average day Ldn noise levels can then be calculated for each consecutive four quarter period. These averages will allow the airport to remain current in its knowledge of existing noise levels throughout the area.

Cost

Depending on the type of permanent noise monitoring system that is installed, the initial cost can run from several hundred thousand dollars to several million dollars. To determine the cost of a system that would be comparable to what would be necessary at Scottsdale, various airports with monitoring systems were contacted. One such airport, Hayward Air Terminal, which is located in the San Francisco Bay area, has recently installed a new permanent noise monitoring system. The airport, which like Scottsdale, is also a general aviation airport, installed the system because the city has recently passed a performance based noise ordinance which establishes noise limits. The system includes four (4) permanent noise monitoring stations and an IBM PS-2 Model 80 computer, as well as software specified by the airport staff. Two of the noise monitors are located on airport property while the other monitors are at a local school and a commercial site. Both of the off airport locations

required property easements in order to utilize the sites. The Hayward noise monitoring system was installed approximately one year ago at a cost of \$210,000. The City's attorney, however, has requested that the airport staff gather at least a year and a half of local aircraft noise data before attempting to enforce the ordinance.

To install a similar system at Scottsdale today, would require a minimum investment of at least \$250,000 to \$350,000, depending on the number of monitoring sites that would need to be established. In addition, assuming the need for at least two additional staff positions, and system maintenance and operating costs, the annual costs could be as much as \$125,000 per year. On the other hand, a portable monitoring system would cost approximately \$15,000 and would require only one additional staff position. In this case the annual system maintenance and operating costs would be approximately \$50,000. As a result, the total cost over five years, would be nearly \$1,000,000 for a permanent noise monitoring system, while the five year costs for a portable system would be approximately \$265,000. However, if the quarterly noise monitoring were to be contracted out by the City, the cost would be approximately \$30,000 per year, or \$150,000 over five years. Typically the only time noise monitoring equipment is considered eligible for FAA funding is when it is a part of an F.A.R. Part 150 Noise Compatibility Program that has been approved by the FAA.

Effectiveness

In and of itself, noise monitoring is not an effective noise abatement technique. Permanent noise monitoring systems are generally a "tool" used to enforce aircraft noise limits established by city ordinance. Often times, fines that are imposed for violating these noise limits are just considered by pilot's as a part of the cost of operating at the airport. Other times aircraft operators may fly their aircraft in such a way as to lessen the noise at the monitoring station itself. This practice, commonly known as "beating the box", while lessening the noise at the monitoring site, can result in unsafe approach or departure procedures. It is important that all of the factors (cost, need, and effectiveness), as well as all of the options be thoroughly examined before considering the establishment of any permanent noise monitoring system. Nearly half of all permanent noise monitoring systems in use today are located in California. Many of these systems were not established voluntarily on the part of the airport, but were installed as part of the airports requirement to comply with the state noise law. In order to determine how many of these systems are actually used for enforcement and how effective they have been, the Airport Environmental Specialist for the California Division of Aeronautics was

contacted. As a result several airports were contacted and information gathered including the airports annual noise abatement budget and history of enforcement. The following table outlines this information.

<u>Airport</u>	<u>Annual Noise Abatement Budget</u>	<u>Noise Prosecutions/Fines or Action</u>
Montgomery	\$107,000	One pilot and plane banished
Santa Monica	\$175,000	25 fines issued since 1984
Van Nuys	\$ 60,000	Monitors are used for noise contours
Torrance	No response	No Response
Hayward	\$125,000	System will collect data the first year
Orange County*	\$400,000	One fine issued per year
Long Beach*	\$370,000	250 citations for general aviation in 1988

*Long Beach and Orange County are served by air carriers as well as general aviation aircraft.

It should be noted that all the airports use their noise systems to identify and issue noise warnings to pilots for first violations. This procedure is similar to what is used at the Scottsdale Airport today.

Conclusion

According to the Scottsdale Airport records there were 295 citizen aircraft noise complaints registered at the airport in 1988. During the same period of time there were 192,541 aircraft operations (takeoffs and landings). This equates to 1.5 complaints for every 1000 operations. Further examination of airport records reveals that there were approximately 15 complaints for every 1000 jet operations. By using this data one can conclude that only 0.15 percent of the total operations at the airport would be considered "noisy" enough to warrant a complaint, while only 1.5 percent of the total jet operations received complaints.

Earlier in this discussion three possibilities for noise monitoring were discussed including a permanently installed system, a portable system to be owned and operated by the airport, and contracting out

periodic noise monitoring. The total number of complaints do not warrant the high costs associated with the City acquiring either a permanent or portable noise monitoring system. Instead it is recommended that the City follow the recommendations of the Part 150 Study and establish a program of periodic noise measurements conducted by an independent consulting firm. In response to the recommendations of the Phoenix AD Hoc Committee on the Scottsdale Airport, it is important to note that the Phoenix City Council also did not agree with the establishment of a permanent noise monitoring system.

STAGE I AIRCRAFT

Regulation

F.A.R. Part 36 - NOISE STANDARDS: AIRCRAFT TYPE AND AIRWORTHINESS CERTIFICATION specifies aircraft noise limits, based on gross weight, measured at three specific points; under the takeoff flight path, on the side line from the extended centerline of the runway, and under the approach flight path. The noise level at each of these points is measured as an effective perceived noise level (EPNL), in units of EPNdB. FAR Part 36 defines Stages I, II, and III (noisiest, quieter, and quietest) aircraft, sets compliance schedules for noise certification of new aircraft, and describes the methodology that must be used in noise certification tests. All jet aircraft certificated after November 1975 must meet the Stage III requirements. The only restriction on Stage I aircraft is provided for in F.A.R. Part 91, Subpart E. It basically states that all commercially operated jet aircraft with certificated operating weights over 75,000 pounds must meet either Stage II or Stage III requirements. Therefore, Stage I aircraft that are under 60,000 pound airport weight restriction may continue to operate at Scottsdale Municipal Airport.

Impact

According to airport records and FAA Advisory Circular 36-1E - NOISE LEVELS FOR U.S. CERTIFICATED AND FOREIGN AIRCRAFT, of the 28 jets presently based at Scottsdale Municipal Airport 18 (65%) are Stage III, 7 (25%) are Stage II and 3 (10%) are Stage I jets. At the present time there are no federal proposals to phase out or eliminate the use of either Stage I or Stage II aircraft at airports such as Scottsdale. However, due to the age of the aircraft and the economics of operating them, they are being replaced at a fairly rapid pace by the newer more fuel efficient Stage III aircraft. In fact, according to the National Business Aircraft Association, of the approximately 2700

business jets flying today only 27 (1%) are Stage I aircraft. Therefore, the impacts of Stage I jets are very small and are continuing to decrease.

Conclusion

According to Federal Law, for a jet to be considered a Stage II aircraft, it must meet certain noise limits established for three specific points: takeoff, approach, and sideline. The limits may be exceeded at one or two of these points if, 1) the sum of the exceedance is not greater than 3 EPNDB, 2) no exceedance is greater than 2 EPNDB, and 3) the exceedances are completely offset by reductions at other required points. However, the Part 150 Study recommended that Stage II aircraft that cannot meet the noise limits for all three of the required points depart the airport to the northeast (Runway 03) and land to the southwest (Runway 21), wind and weather permitting. By taking this action, the City of Scottsdale has attempted to keep the "noisier" aircraft departures and arrivals to the north over the City of Scottsdale.

Since Federal law allows Stage I aircraft under 75,000 pounds to operate, any attempt to ban these aircraft at Scottsdale Municipal Airport could be considered a local preemption of federal law. Since there are presently three Stage I jets based at the airport, it could also be considered a discriminatory action and could be legally challenged. This same rationale would also apply to any consideration of a night-time curfew on these jets, or any jets for that matter. Therefore these type of restrictions should not be pursued further.

PART 139 APPLICATION

Operation Impacts

At Scottsdale Municipal Airport the operation impacts resulting from Part 139 are relatively small. Based on conversations with the FAA the only requirements to acquire a Part 139 Operating Certificate will be to provide additional security fencing to prevent "inadvertent entry" by individuals or vehicles, decreased response time for the Airport Rescue and Fire Fighting (ARFF) equipment, and tighter controls on aircraft fueling practices and equipment. The only other impacts that would occur would be space requirements for aircraft (parking apron) and passengers (terminal and auto parking). It is important to note that the only difference between the operations of the airport today and when a Part 139 Certificate is obtained is that commercial aircraft capable of carrying over 30 passengers, but

weighing less than 60,000 pounds, could operate at the airport. For example a DeHavilland Dash 7 aircraft can carry 50 passengers and has a maximum gross takeoff weight of 44,000 pounds. This is far less than the operating weight limit of the airport, as well as the weights of several of the aircraft operating at the airport today.

Future Fleet Mixes and Volumes

While no one can predict exactly what the actual volume of traffic will be at the airport in the year 2005, the Master Plan did provide an estimate of operational activity, including aircraft of the type that is typically used by the commuter airlines. By the year 2005 the forecasts estimated 310,000 annual operations (takeoffs and landings). In fact the forecasts have proven fairly accurate since the operational level of the airport for calendar year 1989 is expected to be extremely close to the forecast operational levels shown in the Master Plan. During the Master Plan an evaluation of both existing and future aircraft noise was conducted and included the type of aircraft which are being utilized by the commuter airlines at the airport today. It was estimated that by 1990 approximately 3.2 percent of the total operations would be by aircraft similar to those used by Stateswest and Mesa Airlines (turboprops). To achieve this level of activity the airlines must conduct over 18 takeoff and landings each day. They are presently conducting an average of approximately 10 takeoff and landings per day. By the year 2005 they must conduct nearly 34 operations per day to equal the amount estimated in the Master Plan and Part 150 Study. Clearly the estimates used in the Master Plan are on the high side and would tend to produce an over-prediction of the noise exposure. Aircraft over 60,000 pounds were not used in the calculation of future noise exposure since these aircraft are prohibited, by City ordinance, from operating at the airport.

Conclusion

Acquiring a Part 139 operating certificate for the airport would not allow aircraft any larger or noisier than those aircraft allowed to operate at the airport today. It would just allow commercial operators to utilize aircraft which weigh less than 60,000 pounds, and have the capability to carry more than 30 passengers. Since no negative noise impacts are anticipated with this action, there is no reason the application for a Part 139 certificate should not be considered.

TRAFFIC PATTERNS

Current

The aircraft traffic pattern for the Scottsdale Municipal Airport was established in 1967 and aside from minor adjustments has remained unchanged since then. Pilots fly what is known as a left-hand pattern when using Runway 03 and fly a right-hand pattern when using Runway 21. Different pattern altitudes are assigned to different aircraft types. For example propeller-driven planes enter the pattern at 1,000 feet above ground level (AGL) at the airport, while jet-powered aircraft enter at 1,500 feet AGL and helicopters enter at 500 feet AGL. In 1980, the City of Scottsdale established by ordinance Runway 03 as the calm wind runway. This means that until tailwinds are greater than 5 knots all aircraft will utilize runway 03 and depart to the northeast over the City of Scottsdale. This action was taken to reduce the number of "noisier" aircraft departures over the City of Phoenix. FAA tower personnel estimate that approximately 60 percent of all aircraft departing the airport takeoff to the northeast (Runway 02). In addition, for those aircraft that do depart to the southwest (Runway 21), a noise abatement turn was established to minimize the amount of residences exposed to aircraft overflights.

FAA Restrictions

The airport operator may request the establishment of, or changes to, airport traffic patterns. However, the patterns must be reviewed and approved by the FAA. The city may not unilaterally change the patterns. The FAA will review any proposed changes and evaluate the effects on safety margins and air traffic. This type of a review was conducted in December of 1987 when FAA determined that the alternative of aircraft making a left turn when departing Runway 21 was not considered viable for both safety and operational reasons. During the hours the tower is open the FAA provides control for aircraft operations including traffic separation and clearances for both takeoffs and landings.

Alternatives

Due to potential impacts, the consideration of changing aircraft traffic patterns should be examined very closely. The change in traffic patterns can affect more things than just aircraft operating procedures. For example, a change in either arrival or departure procedures can often expose more people to aircraft noise than were exposed prior to the change, or might route aircraft over other noise sensitive land uses such as schools or nursing homes.

Conclusion

Since the FAA does not believe a change in the traffic pattern (Runway 21 left turn) would be acceptable for the reasons stated earlier, this option should not be considered further. It should be noted, however, that the FAA does plan to implement a Standard Instrument Departure (SID) procedure for IFR departures on Runway 21. This procedure should tighten up the right turn by departing aircraft and should provide greater avoidance of the residential area southwest of the airport.

AIRPORT ENFORCEMENT

Current Practices

The actions that would require some form of enforcement on the part of the City are outlined in the City Code and include but are not limited to the following:

- No stop-and-go landings shall be made on runway 21.
- No formation takeoffs shall be made on runway 21.
- Simulated go-around and practice single-engine operations on runway 21 are prohibited for multi-engine aircraft.
- No midfield departures shall be made on runway 21.
- Runway 03 is designated as the calm wind runway.
- Touch-and-go landings are permitted between 6:00 a.m. and 9:30 p.m. only.
- Operators of aircraft entering or leaving the traffic pattern of the airport or using the runways or movement areas for the purpose of landing or taking off, shall be holders of a valid, current, student pilot, private pilot, or commercial pilot certificate with rating appropriate to the type of aircraft operated and conditions under which they are operating. Reciprocal certificates issued by foreign governments are acceptable if the authorization contained in the certificate is comparable to the domestic certificates mentioned and are so accepted by the Federal Aviation Administration.

- No aircraft may land or take off at the airport unless it is equipped with brakes and a functioning radio capable of direct two-way communications with the control tower, except in the case of an emergency or with prior consent.
- No jet or turbo-prop aircraft engine shall be run except on warm-up pads or in areas authorized by the city.
- No person shall practice touch-and-go aircraft landings without permission of the control tower.

Traffic pattern altitudes above mean sea level for aircraft operations at the airport are as follows:

- (1) Helicopters, two thousand (2,000) feet.
 - (2) Propeller (piston), two thousand five hundred (2,500) feet.
 - (3) Turbine-powered, three thousand (3,000) feet.
- Arrivals at the airport shall be on runway 03, left base only, and shall avoid flight over populated or noise sensitive areas whenever possible, consistent with safety. Runway 21 right base or as authorized by air traffic control may also be used for arrivals.

Departures at the airport may be on runway 03 and a left turn shall be made after reaching four hundred (400) feet above ground level. A right turn is permitted if authorized by air traffic control. When departing on runway 21, make right turn after reaching four hundred (400) feet above ground level. Pilots are encourage to avoid flight over populated or noise-sensitive areas whenever possible, consistent with safety.

No aircraft shall be permitted to operate from the airport in excess of the weights published in the most current F.A.A. Master Record, and in any event, no aircraft shall be permitted to operate from the airport that has in excess of forty-five thousand (45,000) pounds of gross weight for single-wheel aircraft or sixty thousand (60,000) pounds for dual wheel aircraft, except in an emergency.

- The width of the airport runway is seventy-five (75) feet. No alterations or modifications to runway width are permitted.

Any of these code violations would be considered misdemeanors, which would result in penalties and/or fines for each violation if prosecuted. It is the responsibility of the City to enforce the ordinances and to levy fines and/or prosecute the violators. If a pilot violates a Federal Aviation Regulation relating to the safe operation of an aircraft, then it is the responsibility of the FAA to enforce the regulation. While it is not a requirement, the airport does follow-up on aircraft noise complaints. If an operator appears to have flown his or her aircraft in such a way as to create a substantial amount of noise, the airport will notify the aircraft owner and request that the operator attempt to "fly quieter" in the future. At the present time there are no penalties associated with individual aircraft noise events.

Alternatives

Various alternatives for noise abatement were examined in the Master Plan and Part 150 Study. Several of the noise abatement techniques that were evaluated would be considered restrictions (i.e. single event noise limits) and were discarded because the small amount of noise reduction resulting from the measure was outweighed by the negative economic burden placed on the aircraft operator. The possible alternatives the airport may have is to step up enforcement efforts, to increase the penalties and fines for those regulations already in place, or to conduct another detailed evaluation of the potential noise abatement techniques through an update of the Part 150 Study. Since many of the goals of the previous study have been or are presently being accomplished, an update should not be considered at this time.

It should be noted, that any action taken by the City should be reviewed and approved by the FAA. Any noise abatement measure that might be considered discriminatory or pose an undue burden on interstate commerce may be challenged legally, or may result in the FAA suspending future federal funding to the airport.

Conclusions

The City has been enforcing, and should continue to enforce the rules and regulations identified in the City Code. In fact in the last few years there have been prosecutions relating to violations of the code. It is recommended that the City continue it's enforcement policies and for the airport to continue to notify pilots who have not adhered to the noise abatement guidelines established for the airport.

NOISE ABATEMENT COMMITTEE

Objectives and Purpose

The Airport Noise/Compatibility Committee is a standing committee of the Airport Commission and acts at their discretion. The purpose of the Committee is to advise the Scottsdale Airport Commission on matters pertaining to the operation and conduct of Scottsdale Municipal Airport which may have an impact on the surrounding communities. Such matters include, but are not limited to:

- A. Pattern location
- B. Noise Abatement procedures
- C. Land use planning
- D. Nighttime operations
- E. Soundproofing
- F. Commercial traffic
- G. Public and pilot education
- H. Such other matters as the Airport Commission determines are within the scope of its general purpose.

The goal of the Airport Noise/Compatibility Committee membership is to have an even blend of airport interest groups and local homeowners. Appointment may include representation as follows:

- A. A Phoenix resident selected by the Mayor of Phoenix
- B. A representative from the Scottsdale Pilots and Aviation Association
- C. A representative from among the Scottsdale Airport Service providers
- D. Representatives from such other groups as deemed appropriate by the Airport Commission and City Council. (i.e. homeowners effected by noise.)

Meetings are held on the third Thursday of each month. Agenda items are generated with the concurrence of the Chairman and the Airport Director or by a majority of the members of the Committee. If it is determined that no agenda items exist or there is a lack of a quorum, a meeting may be cancelled. If a member of the Committee is absent for three consecutive or four out of six meetings, his or her office shall be automatically vacated. Committee members are asked to contact the airport office if they are going to be absent from a meeting. The Commission shall make appointments to fill vacant unexpired terms, with the approval of the City Council per Section 204 in the Noise Bylaws.

Noise Committee Actions

1978 Entered into a joint resolution with Phoenix to prevent Scottsdale Airport from becoming an air carrier airport.

Restricted the size of aircraft using Scottsdale Airport to 60,000 pounds.

Prohibited touch-and-go operations between 9:30 p.m. and 6 a.m.

Prohibited simulated engine failure and formation takeoffs to the southwest.

Lengthened the runway over 3,000 feet to the north to move aircraft noise away from the neighbors to the southwest.

Displaced the threshold of Runway 03 750 feet to the north and raised the Visual Approach Slope from 3.2 degrees to 4 degrees to keep aircraft higher over the neighborhood to the southwest.

Commissioned one of the first Part 150 studies ever done by a general aviation airport.

Approved the Part 150 Study which would serve as a balanced, long-range plan for noise abatement and compatible land use near the airport.

The FAA accepted the Part 150 study and approved 12 of its 14 noise abatement recommendations. The last two recommendations will be resubmitted in the near future.

1989 Published a noise brochure designed to educate current and prospective residents of areas near the airport and others with an interest in airport issues.

Scottsdale Airport is considered a model of its type nationwide and around the world, frequently hosting people who want to build a similar facility. The former airport manager was invited to discuss the Airport's noise abatement and land use program at the University of Georgia symposium on airport noise and land use planning.

Conclusions

The Noise Committee Chairman and airport staff are strongly committed to noise abatement issues. There are a sufficient number of agenda items for the Noise Abatement Committee to meet on a regular basis. Land use planning and zoning recommendations will be made later this year. The recommendations from the City of Phoenix Ad Hoc Committee on Scottsdale Airport noise will also be discussed and an action plan recommended. Citizen input will continue to be a very important agenda item at each meeting.

SUMMARY

As outlined in the discussion above, the City of Scottsdale has over the years, made continual efforts to address noise concerns as they relate to the Scottsdale Municipal Airport, including directing 60 percent of the aircraft departures over the City of Scottsdale. It is, however, a fact that aircraft make noise and that noise is a part of virtually every metropolitan area. As illustrated by several California airports, restrictive measures such as noise limits have not made the aircraft noise problem go away. But it is equally important to recognize that each year the effects of the noisier Stage I aircraft are reduced due to the retirement of the aircraft or conversions of its engines. In addition, allowing commercial aircraft with capacities of over 30 passengers have been shown to have little impact on the existing and future airport noise conditions. Also, changing the traffic pattern is not considered feasible due to operational and safety concerns expressed by the FAA, and in fact, changing the pattern could produce new and/or additional noise concerns. In conclusion, the City of Scottsdale should continue its present efforts toward noise abatement. This would include maintaining its current noise abatement procedures, pilot education, public information, and enforcement of existing airport regulations.

September 13, 1989

TO: Honorable Mayor and City Council

FROM: Jorge Carassco, City Manager *Jc*

SUBJ: City Manager's Report 09/18/89
Airport Action Plan Follow up

On July 17th 1989, a City Manager's report was submitted which outlined an action plan to respond to six key airport issue areas. These issue areas were identified during the public hearings on Part 139 Certification, and in subsequent neighborhood meetings on the airport.

The six key issue areas were identified as follows:

- * Noise Monitoring.....need, cost and effectiveness
- * Stage I Aircraft.....regulation, impact and alternatives
- * Part 139 Application.....operation impact and future flight mixes/volumes
- * Traffic Patterns.....current, FAA restrictions and alt's
- * Airport Enforcement.....current practices and alt's
- * Noise Abatement Committee....vacancies and objectives

After defining these key issues and carefully considering the community's interest, community sensitivity, and the need for objectivity, staff decided to retain the services of an airport consultant. Koffman and Associates has prepared a comprehensive report addressing these issues and it is attached for you review.

Due to the extent of the material provided, we have scheduled a work study session for October 23rd to review the report with you. This will allow you sufficient time to fully consider the information provided. In addition, the new Airport Manager will begin work October 2, 1989 and this schedule will allow him to participate in these very important discussions.

In addition, we have prepared a "news release" that there will not be public discussion on September 18th and that copies of the report will be available for public review.