City of Phoenix
AVIATION DEPARTMENT

June 28, 2022

Mr. Andrew Ching
City Manager
City of Tempe
31 E. Fifth Street
Tempe, AZ 85281

Re: Correcting Statements Made by the Developer of the Proposed Tempe Entertainment District

Dear Mr. Ching:

On behalf of the City of Phoenix and Sky Harbor International Airport ("Sky Harbor"), I would like to thank you for inviting me to present at the June 2, 2022 Tempe City Council special meeting regarding the proposed Tempe Entertainment District ("TED").

It is important that Tempe Staff and Council are provided a complete set of facts in order to make fully informed decisions on matters impacting your community, the region, and the state. This letter is meant to formally correct the record of misleading and incorrect statements made by Bluebird Development, LLC (the "Developer"), including those made at the special meeting. This is critical because Tempe is the party bound by the 1994 Intergovernmental Agreement ("IGA") between our two cities, not the Developer. Therefore, I want to make sure Tempe has accurate information as it considers this proposal, and its obligations to Phoenix under the IGA.

In summary, this letter will explain that: (1) Sky Harbor does not oppose the Coyotes moving to Tempe; (2) the binding IGA that the City of Phoenix and the City of Tempe signed in 1994 prohibits any residential development at the location of the TED; (3) there are no exceptions to this prohibition on residential; (4) the contour maps the Developer continues to rely on are inaccurate; and (5) Phoenix has no desire to end the IGA so long as Tempe continues to fulfill its own obligations.

1. Sky Harbor does not oppose the Coyotes moving to Tempe.

Sky Harbor does not oppose the Coyotes building their new facility in Tempe, or even at the TED site. To the contrary, based on assurances from the Developer that they will mitigate issues that have the potential to impact safe air navigation to and from the airport, Sky Harbor currently does not object to building the Coyotes stadium at the proposed TED site.

Sky Harbor objects only to the residential component contained within Tempe's RFP and the TED proposal because it violates the longstanding agreement between Phoenix and Tempe and will unilaterally unwind decades of investment in noise mitigation measures designed to reduce impacts to Tempe residents, as explained below. This objection is narrow and wholly unrelated to the Coyotes or their stadium.

2. The IGA prohibits new residential developments at the proposed location for the TED, as the FAA has explained.

In 1994, the City of Tempe and the City of Phoenix entered into the IGA to, among other things, resolve ongoing disputes, some resulting in litigation, over aircraft noise and to set long-term plans for the development of both Tempe and Sky Harbor. Specifically, in the IGA, Tempe and Phoenix agreed "to take all actions necessary, consistent with applicable laws and regulations, to implement the land use management strategies recommended in the F.A.R. Part 150 Noise Compatibility Plan and Program" for Sky Harbor (the "Part 150").[1]

The Part 150, in turn, establishes an extensive set of measures "to improve the compatibility between aircraft operations and noise-sensitive land uses in the area, while allowing the airport to continue to serve its role in the community."[2] Among other things, the Part 150 solidified the parties' agreement that within the 65 DNL contour, they would "exclude residential" uses.[3] The Part 150 recommends this measure specifically to avoid "high concentrations of residential development" that would otherwise be allowed in mixed-use areas "east of the airport and within Tempe."[4] In other words, the Part 150 prohibits exactly what Tempe's RFP and the subsequent proposal calls for: a high-density residential development within the 65 DNL contour east of Sky Harbor in Tempe.

Tempe also specifically agreed in the IGA to "take such measures as are necessary to ensure that new development undertaken in connection with the Rio Salado project or in noise sensitive environs within its jurisdiction will be compatible with the noise levels predicted in the [Part 150]."[5]

The residential development called for in the RFP is <u>not</u> "compatible with the noise levels" in this 65 DNL area. In a recent letter, the Federal Aviation Administration ("FAA") itself confirmed as much: "FAA policy states that residential development within an airport 65 DNL noise contour is incompatible land use."[6] And it further confirmed that "[t]he FAA," like Sky Harbor, "is concerned about potential changes in airport land use

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[1] IGA art. III(3).
[2] 1999 Part 150, at 6-1.
[3] 1999 Part 150, at 6-24.
[4] 1999 Part 150, at 6-24.
[5] IGA art. III(3).
[6] April 1, 2022 Letter from FAA to City of Tempe, at 1-2.

compatibility and the introduction of high-density residences"—like with the TED proposal—"within an area known to experience considerable aircraft noise."[7]

Under the IGA, the Part 150, and consistent with FAA guidance, Tempe therefore must take all necessary measures to prevent the TED proposal's residential aspect.

Separately, at the meeting the developer discussed an unrelated development at Priest and 3rd Street. The inclusion of residential units in this project is also a violation of the IGA. Sky Harbor was not notified of this project, as is required under the IGA. Sky Harbor first learned of this project at the Tempe City Council meeting on May 26, 2022 and Sky Harbor's attorney promptly notified the Tempe City Attorney of its concern the next day.

3. There is no exception that makes residential, including multi-family residential, compatible.

The Developer has incorrectly told Tempe that residential development is somehow permitted within the 65 DNL. Based on the out-of-context and misleading use of an overlay chart in the Part 150, the Developer asserts that there is an exception that makes residential compatible by simply using remedial measures such as sound insulation or avigation easements.

But the Part 150 does not include any such exception. The Part 150, instead, makes it clear that the general standards in the overlay chart are superseded by the stricter zoning prohibition against residential development otherwise found in the Part 150.[8] Even the author of the Part 150—who created the overlay chart—told your City Council that the Developer has misconstrued that chart.

And federal guidance has no such exception either, as the FAA explained in its most recent June 1, 2022 letter to Tempe. In the letter, the FAA corrected the Coyotes' misunderstanding that the federal regulations have an exception for housing that is sound insulated. The FAA and Dan Elwell, who led the FAA's noise program before becoming head of the FAA, both confirmed that sound insulation applies only to *existing* residential, not new residential, and that the introduction of new residential uses in this area is non-compatible.

The FAA's position is clear: "As noted in FAA's letter to the City of Tempe (April 1, 2022), it is FAA policy that FAA's approval of remedial noise mitigation measures (including land acquisition and residential sound insulation treatment) are limited to

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[7] April 1, 2022 Letter from FAA to City of Tempe, at 1.
[8] 1999 Part 150, at 5-10 (explaining that the underlying zoning and overlay zones are combined and that the "strictest requirements of both zones apply to the affected property").

existing non-compatible development." [9] There is no way that the Developer can meet its promise to Tempe that it would comply with all FAA policies, regulations, and approvals when the FAA has gone on record twice now to state that the TED's proposed residential is not compatible and cannot be made compatible under federal policy.

Finally, others at the meeting cited an exchange of letters between the Phoenix and Tempe mayors in 1996 as somehow modifying the IGA to allow multi-family residential in the 65 DNL. It does not. That letter does not even mention the IGA and nowhere states that multi-family residential is allowed. Further, in no way does this informal exchange of letters by former mayors constitute an amendment or binding interpretation of the IGA to allow multi-family residential. Any amendment to the IGA would have required written agreement by the cities, which would have required Phoenix City Council approval, none of which occurred.[10]

Moreover, this informal exchange of letters by former mayors predates by 3 years the updated Part 150, which was required in the IGA and by Tempe as part of the settlement of Tempe's lawsuit over the third runway. Again, the updated Part 150 excludes *all* residential development, with a specific emphasis on prohibiting large-scale residential development.[11]

In fact, Tempe was expressly told during the Part 150 process that the exchange of letters by the former mayors did not alter the land use measures Tempe agreed to implement. I attach the July 12, 2000 letter that is included in the Part 150 record. As you will see, Tempe's request—based on the 1996 letter—to remove the measure prohibiting all residential, including multi-family residential, was explicitly rejected. As Tempe was told: "Under F.A.R. Part 150, multi-family and condos are not considered compatible within the 65 DNL noise contour."[12]

4. The noise contour maps that the Developer has used are outdated and inaccurate.

The Developer presented the Tempe City Council decades-old maps that predate the current contour maps. The current maps account for the significant technological advancements in aircraft engine design that have considerably reduced noise impacts over Phoenix and Tempe. Reduced aircraft noise levels have allowed the airport to

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[9] June 1, 2022 Letter from FAA to Mr. Ching, City of Tempe, at 2.
[10] IGA art. III(6.2) ("Any and all amendments, waivers and modifications of this agreement must be made in writing and signed by the party to be bound," i.e., the City of Phoenix and the City of Tempe).
[11] 1999 Part 150, at 5-8 (recognizing that the zoning measures "cannot guarantee that all noise-sensitive uses will be avoided, although large-scale residential development would be effectively prohibited.")
[12] July 12, 2000 Letter from David Fitz to Ms. Wilhelmsen, City of Tempe, at. 6.35

create new contour maps over time that benefited Tempe and Phoenix by permitting both cities to develop more land for uses that would have previously been determined incompatible.

Indeed, the noise contour maps have been updated several times since 1999. Most recently, the FAA approved new maps in 2019 as part of Sky Harbor's Comprehensive Asset Management Plan (CAMP). These current maps are on file with the City of Phoenix Aviation Department, published on the airport's website, and are available at the FAA's Airports District Office.

And Tempe clearly directed the Developer to obtain "the most current noise contour maps from the City of Phoenix."[13] The City of Phoenix provided the most current contour maps to the Developer, and yet the Developer continues to use their outdated maps to assert incorrect claims despite Sky Harbor repeatedly explaining to them that the maps they produced are outdated and very misleading.

5. There is no plan to end the IGA so that Sky Harbor can extend a runway, as the Developer claims.

Another false theory the Developer presented at the June 2 meeting was that Sky Harbor has concocted a secret plan to extend a Sky Harbor runway and, to do so, must convince Tempe to terminate the IGA. This fabricated theory is false and unfortunate.

To state unequivocally, Sky Harbor does not want to end the IGA. We willingly entered it, as did Tempe, to further our mutual interests. We still believe the IGA is in the best interest of your and our constituents, as well as our cities, and we intend to continue upholding our binding promises. We hope Tempe will do the same, but will consider agreeing to terminate the IGA if that is the course Tempe chooses, expressly or implicitly by refusing to adequately address Sky Harbor's concerns.

But the most absurd part of the Developer's sensational conspiracy theory is that the runway extension is a secret that was somehow inadvertently shared with them. The planned runway extension is a widely known, well publicized, and publicly reported proposal. We intentionally shared the planned runway extension with the Developer. We shared that plan with the media, showing large renditions of the planned runway extension, including on February 23 and 24, 2022. We have featured that plan on Sky Harbor's website, for months, at https://www.skyharbor.com/CAMP. And importantly, we shared this plan with Tempe's own Aviation Commission (TAVCO) in November 2021.

Sky Harbor serves the public interest and has no ulterior motives or hidden agendas. All of Sky Harbor's efforts to date have been to defend the IGA—exactly as the IGA requires. Sky Harbor has been extraordinarily open with Tempe to explain how Tempe's

[13] Tempe RFP #22-030, at 4.

RFP and the Developer's subsequent proposal would put Tempe in breach of its IGA obligations and the FAA's policies.

For decades, the City of Phoenix, Sky Harbor, and Tempe have collaborated to ensure that Sky Harbor can safely and effectively operate—to serve Tempe, the growing Valley, the State of Arizona, the nation, and beyond—while simultaneously mitigating related burdens on surrounding residents. We sincerely hope to continue that history of collaboration.

In light of that history, we were admittedly disappointed to first learn of Tempe's RFP and interest in including incompatible residential on this parcel through public media reports and not directly from Tempe staff. Given recent increased demand for development around Sky Harbor, and to further our goal of productive collaboration, I want to remind you of Tempe's obligation to notify Sky Harbor airport management of any other proposed development that includes noise sensitive uses, as is required in the 1999 Part 150 Program. [14]

I hope this clears up any of the misleading comments and confusion surrounding this proposed development. We look forward to continuing to work with you, and it is our hope that you will accept our June 9th letter of request to meet and amicably resolve these issues to prevent the need to leverage the more significant remedies provided in the IGA.

Sincerely,

Chad R. Makovsky, C.M.
Director of Aviation Services

CC: Tempe City Council
Tempe City Attorney
Bluebird Development, LLC c/o Nick Woods
Jeffrey Barton, Phoenix City Manager
Mario Paniagua, Phoenix Deputy City Manager

Attachment July 12, 2000 Letter from David Fitz, Coffman Associates to Ms. Wilhelmsen, City of Tempe

[14] 1999 Part 150, at 6-25

Dan

Coffman Associates
Airport Consultants

July 12, 2000

Ms. Shannon Wilhelmsen
City of Tempe Liaison
31 East Fifth Street
Tempe, AZ 85280

Dear Ms. Wilhelmsen:

This letter is in response to your comments received May 19, 2000. To aid in your review of this response letter, I have restated your comments in the order in which they are presented in the May 19, 2000 correspondence.

Comment 1: Page 4-3. We recommend that future "technical conferences" include representatives of the communities surrounding the airport. We found that there were inaccurate assertions and statements made according to the minutes of the September 22nd conferences that should have been challenged and clarified.

Response: As you stated in your correspondence, the September 22, 1999 technical conference was convened to "brainstorm potential noise abatement measures and troubleshoot preliminary ideas identified by the consultant". It is our opportunity to learn, understand, and bounce ideas off of experts in the aviation field who operate, control, and maintain aircraft in the Phoenix environment. The City of Tempe and TAVCO were invited to this technical conference. Only a TAVCO representative elected to attend this meeting.

Comment 2: Pages 4-4 and 4-5. Under the topic of "Current Status" the statement indicates that runway changes always occur when the wind exceeds 5 knots. According to the FAA, runway changes must occur when the prevailing wind exceeds 5 knots or whenever it is operationally advantageous. The comments from the airline representatives who were part of the technical committee indicate that tailwind operations are frequent and that the wind does not influence the runway choice.

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Response: Changing the flow direction of the Sky Harbor International Airport can be very difficult to do on a timely bases (especially during peak periods) due to the number of aircraft that need to be re-sequenced. Therefore, there will be times when aircraft will land with a tailwind. For safety, it is always preferred that aircraft land into the wind when wind velocity exceeds 5 knots. When winds are less than 5 knots the airport can be operated safely in either direction.

Comment 3: Page 4-4. Under the topic of "Current Status" the comments state that the Aviation Department recommends the use of NBAA procedures for business jets. It is not clear if this recommendation includes a turn prior to the 4-DME. The City of Tempe does not support any jet aircraft turns prior to the 4-DME.

Response: NBAA noise abatement departure procedures are thrust and flap management procedures that promote noise abatement by reducing the noise generated by the aircraft and not turn procedures (See description on page 4-15 and Exhibit 4F). Therefore, the recommended use of the NBAA procedures will not turn aircraft prior to the 4-DME.

Comment 4: Item NA 5. Under the topic of "Current Status," it states that turboprop aircraft routinely depart using a 120-degree heading. We believe that this item is mutually beneficial for the City of Tempe and Sky Harbor Airport and warrants further definition to ensure that the use of this procedure does not become an environmental irritant to the community.

Response: Comment noted. The 120-degree turn from Runway 7 is recommended for propeller aircraft less than 12,500 pounds and the turn is to be initiated at the end of Runway 7.

Comment 5: Item NA 7. Under the topic of "Current Status," it states that a hush house is being considered in order to allow engine run-ups 24 hours a day, while reducing run-up noise at all times. There currently is no run-up noise during the curfew hours and the City of Tempe opposes any run-up noise increases during the current curfew hours. The City will not support the suspension

of the current curfew on engine run-ups unless the new facility can ensure that there will be no increase in the current nighttime noise levels emitting from the airport.

Response: The run-up policy prohibiting run-ups between 11:00 a.m. and 5:00 a.m. is recommended to be continued. It is recommended that before the nighttime prohibition on maintenance run-ups is released, that it be done on a trial basis at first to collect data on the noise output produced by the run-ups out in the community. If the noise levels are moderate, and if the complaint record indicates that no problems are being caused, then nighttime run-ups in the enclosure would be allowed on a permanent basis.

Comment 6: Items NA 10 and 11. Under the topic of "Current Status," it is stated that the FAA is currently developing procedures for Runway 7 and 25. A letter dated May 13, 1998, from the City of Tempe to the Manager, Phoenix TRACON, requested a progress report on the development of air traffic procedures for the new Runway 7-25. To date, no response has been received.

Response: Comment noted. We can not speak on behalf of the FAA, but it is our understanding the procedures are being developed for Runway 7-25.

Comment 7: Item NA 11. Under the topic of "Current Status," it states that the FAA is currently developing procedures for Runway 7-25, which is scheduled to open in September 2000. The City of Tempe has not been privy to the FAA development efforts and is extremely concerned that the use of Runway 7-25 may increase the amount of noise or overflights aircraft the City currently experiences with the two existing runways. The City opposes any arrival procedure that does not employ a side-step maneuver to Runway 25, not more than three miles from the end of the runway. Any turbojet departures from Runway 7 will be expected to pass through the 4-DME gate and abide by the same departure procedures that are used for the current East departure operation.

Response: See response to comment 6.

Comment 8: Page 4-7. The City of Tempe agrees that aircraft departing to the East could enhance noise abatement efforts by using Runways 8L and 8R. The City does not support the use of Runway 7 for turbojet departures unless the aircraft execute a left turn to comply with the current 4-DME procedure. The City of Tempe concurs with the consultant's recommendation to explore the establishment of a runway use program that will maximize the use of compatible corridors.

Response: An analysis was performed on a noise abatement use program and discussed on pages 4-30 to 4-34. Our analysis indicated that increasing the use of the available noise abatement corridors would effectively widen the noise contours in these areas and increase noise over residential areas not currently in the 65 DNL noise contour. Therefore, this recommendation was not carried forward.

Comment 9: The City of Tempe does not agree with the consultant's observation that the removal of the 4-DME procedure would assist in achieving an equal operational distribution of traffic. The City believes that the FAA could adjust the times that it changes landing and take off direction to more evenly accommodate an equal distribution of air traffic operations. Currently, it appears that runway changes are dictated by the hour of the day when wind is not a factor.

Response: FAA has stated that a true 50/50 split can not be achieved due to the wind and departure capacity limitations to the east(4 DME procedure). Increasing departure to the east during period of high winds (more than 5 knots) from the west is not considered safe. Increasing departures to the east would result in significant aircraft delays, increased cost in fuel burn, decreased air quality, and missed passenger connections in Phoenix and in destination cities. Therefore, the 4 DME procedure does inhibit the ability to achieve a 50/50 runway use split at Phoenix Sky Harbor International Airport.

Comment 10: The City of Tempe concurs with the consultant's assessment that FMS and GPS systems can provide precision navigation. The City believes that the use of these types of technologies can be used to meet the environmental and noise concerns of the

communities surrounding the airport, without derogating the benefits of current noise abatement procedures.

Response: Comment noted.

Comment 11: It is suggested that the 4-DME causes separation delays. The FAA must take greater care regarding departure sequencing, e.g., successive departures with different initial departure fixes. Other airports are sequencing aircraft for departure so that aircraft with the same flight route are not lined up behind one another. The separation standards require a 3 mile separation between successive departures, unless visual separation is applied between the aircraft. Sequencing successive departures with different initial departure fixes at Sky Harbor would greatly enhance departure capacity.

Response: The sequencing successive aircraft departures with same initial departure fix is not the capacity limitation for eastern departures. If this were the case the same capacity limitation would exist for western departures. The capacity limitation occurs when aircraft are funneled over the Salt River which effectively reduces Sky Harbor down to one departure stream instead of two (ie one line of aircraft with a separation of 3 miles vs. two lines of aircraft separated by 3 miles).

Comment 12: The FAA needs to aggressively develop a side-step procedure for Runway 25 during VFR conditions.

Response: A side-step procedure for Runway 25 is recommended in the updated Noise Compatibility Program.

Comment 13: The use of a 120-degree turn when departing to the East for non-turbojet aircraft deserves consideration. The City of Tempe, as stated previously, believes that the size of aircraft, point of turn, ground track, and pilots' ability to proceed on course should be specified.

Response: See response to Comment 4.

Comment 14: The City of Tempe opposes a straight-in approach to Runway 25. Such an approach will impact noise-sensitive areas of the City, which have previously been outside of the arrival paths for Sky Harbor. The IGA specifies that a side-step maneuver to Runway 25 will be used for aircraft approaching from the East to that runway.

Response: The 2004 baseline noise exposure contours were modeled with the side-step approach. Assessing the straight-in is beneficial in quantifying the benefits of the side-step. The side-step approach was found to impact 124 fewer people than the straight-in approach to Runway 25.

The IGA does not specify that a side-step maneuver to Runway 25 will be used for aircraft approaching from the east. The IGA lists the noise mitigation procedures on page 4, but refers to the description of these procedures on page 15 of the FAA's Record Of Decision (ROD) dated January 18, 1994. Page 15 of the FAA ROD describes the side-step approach to Runway 25 "This procedure would be an informal procedure, with the option to use or not use by the pilot-in-command, weather and air traffic permitting."

Comment 15: The consultant states that the "DRAFT" airport master plan mentions a fourth runway at Sky Harbor. The City of Tempe does not agree with the consultant that a fourth runway may prove beneficial for noise abatement. A dispersal of noise has the ability to affect more people, possibly on a less frequent basis.

Response: The addition of a fourth runway could potentially reduce noise impacts by dispersing aircraft noise over four runways instead of three. This would effectively reduce the noise impact over a finite area and spread the noise over more of the airport.

Comment 16: The City of Tempe concurs with the consultant's recommendation that a run-up enclosure should be considered.

Response: Comment noted.

Comment 17: Unrestricted climbs to final altitude will ensure a continual climb by the aircraft. Altitude stops at 3,000 and 7,000 feet MSL can result in an aircraft leveling off and then applying power to begin a climb. It is preferable to have departure aircraft continue to climb rather than level out at a lower altitude.

Response: Our profile analysis depicted on Exhibit 4G after page 4-16 showed no evidence of aircraft leveling off at any point below 7,000 feet MSL. Aircraft leveling off at 3,000 feet was due to the Biltmore Transition which has since been removed.

Comment 18: Approach procedures should be established which ensure that jet aircraft are established on the final approach outside the power plant. If aircraft were established on the aircraft's final approach leg further East of the airport, it would enhance safety because pilots would have more time to adjust altitude and final approach speeds. Such a change will cause flight patterns to avoid noise-sensitive areas and align the arrival traffic over the Salt River.

Response: All approach procedures from the east (both instrument and visual) are designed to establish aircraft on the final approach path prior to the power plant (located approximately four nautical miles east of the airport). In fact, the published visual approach to Runway 26L specifically requests that approaching aircraft remain east of the power plant before establishing a final approach, for noise abatement reasons. In some instances, aircraft may be vectored to enter the approach path west of the power plant for safety or air traffic capacity reasons.

Comment 19: The City of Tempe appreciates the airlines' efforts to climb quickly when departing over the City and their adherence to the 4-DME procedure. The City also appreciates the airlines' avoidance of the populated areas on landing and their efforts to "fly quiet" on their westerly approach to the airport.

Response: Comment noted.

Comment 20: The City of Tempe does not advocate the imposition of a cap on the number of scheduled operations as a measure to constrain noise.

Response: Comment noted.

Comment 21: The airlines, through their scheduling practices, have the ability to influence hourly demand and airport delay issues.

Response: The airlines scheduling practices reflect consumer demand. Generally, business travels demand morning flights to their destinations with late morning/afternoon arrivals to attend meetings and late afternoon/early evening flights to return home. This causes concentrations of arrival/departures during the day.

Comment 22: The City of Tempe does not support the consultant's implication that the current curfew on engine run-ups hinders the operators and will likely result in litigation. The City feels that the current curfew must remain in place until a "hush-house" can be built in a location that does not provide an increase in the level of airport noise currently experienced during the curfew hours. If a "hush-house" is constructed and cannot provide the same level of noise mitigation as the current curfew, then the curfew must remain in place.

Response: See response to Comment 5.

Comment 23: This alternative calls for aircraft landing from the West to land on Runways 8L and 7. It specifies that departures in this configuration would depart to the East on Runways 8L and 8R. When aircraft are landing from the East, the recommendation is to arrive on Runways 26L and 26R. Departures would use Runways 26R and 25. The consultant states that this configuration provides noise relief to additional airport neighbors. The City of Tempe believes that this Alternative is responsive to the residents bordering the airport.

Response: See response to Comment 8.

Comment 24: The City of Tempe objects to any attempt by any party to challenge the Inter-Governmental Agreement (IGA) that was signed by the City of Phoenix, the City of Tempe, and the Federal Aviation Administration. The IGA guaranteed the City of Tempe that the 4-DME noise abatement procedure would not be challenged by the airport proponent or the FAA and

prohibited a third party from interfering with the provisions contained in the document.

Response: Comment noted. It should be noted that the Federal Aviation Administration did not sign the IGA. Only the cities of Phoenix and Tempe signed the IGA. The 2004 baseline noise exposure contours were modeled with the 4 DME procedure. Assessing the a 15-degree splay is beneficial in quantifying the benefits of the 4 DME procedure. The 4 DME procedure was found to impact 4,763 fewer people than the 15-degree departure procedure.

Comment 25: The FAA currently staggers the arrival traffic 5 miles in trail and is able to get a departure off the airport between each landing. The staggered final allows an aircraft to land while another departs. The FAA, through the use of visual separation, can currently decrease the in-trail separation between departure aircraft. The airport does not have high-speed exits from the runway, which accounts for a lengthy occupancy time on the runway by each arrival. There may also be limitations on the size of aircraft that can occupy a taxiway when aircraft are arriving on the adjoining runway. Runway use policies requiring aircraft to depart specific runways based on its direction of flight are in place at the airport. All of these items limit airport capacity and efficiency. At the present time, the responsible entities appear unwilling to acknowledge and accept responsibility for these items and are therefore not taking action to correct them.

Response: Aircraft departure separation can not be reduced to the east because aircraft departing from Runways 8L/R are funneled over the Salt River which effectively reduces Sky Harbor down to one departure stream instead of two. The Phoenix Aviation Department and FAA Control Tower are very aware of the aircraft capacity and have implemented every capacity enhancement option mentioned in your comment as well as several other capacity enhancements. Sky Harbor has several high speed taxiway exits from all three runways (15 total). Currently all taxiways are strength rated to handle commercial size aircraft. Taxiway-runway separation meets FAA requirements, therefore there are no limitation on the size of aircraft that can occupy a taxiway when aircraft are arriving on

the adjoining runway. Aircraft departing to northern destinations are directed to Runway 8L-26R and south destination to Runway 8R-26L.

Comment 26: The 4-DME is a parameter that must be complied with by any entity seeking to increase airport efficiency and capacity. Airports, airlines, and Federal officials have many customers, but often focus on each other as their primary customer, while forgetting that none would exist without the citizens who fund their operations or use their services.

Response: Comment noted.

Comment 27: The consultant states in his conclusion on Page 4-37 that: "The use of the 4-DME procedure significantly reduces the airport's operational efficiency and capacity." However, the consultant fails to list the other items that reduce airport efficiency and capacity. The consultant further states: "However, this procedure continues to be an effective noise abatement procedure and should be continued."

Response: See responses to Comments 11 and26

Comment 28: This procedure has the potential to expose new residential areas to noise above the 65 DNL level. If this issue is mitigated, the use of a 120-degree heading should be specified. Factors such as aircraft size, the point of turn to the 120-degree heading, the route of flight (track across the ground), and a specific point at which the pilot can resume their intended route of flight should be specified. Depending on the size of the aircraft using this procedure, there may be a specific time of day that this procedure would not be used.

Response: Our analysis showed no increase in residential added to the 65 DNL noise exposure contour. A small reduction of 54 existing and future potential residents would be removed from the 65 DNL noise exposure contour. Also see response to Comment 4.

Comment 29: The City of Tempe objects to a straight-in approach to Runway 25. The 1993 EIS document specified that aircraft on approach to Runway 25 would maintain an alignment with Runway 26L until reaching a point approximately three miles East of the runway (Sun Devil Stadium and Mill Ave.) and then turn to align with Runway 25 for landing.

Response: See response to Comment 14.

Comment 30: The consultant states under Operational Issues on page 4-42 that the straight-in approach to Runway 25 would not restrict the departures on Runway 26L until the landing aircraft had commenced the side-step from Runway 26L to Runway 25. An acknowledgment by the pilot that they are to side-step to Runway 25 is sufficient to allow departures on Runway 26L.

Response: An acknowledgment by the pilot that they are to side-step to Runway 25 is <u>not</u> sufficient to allow departures on Runway 26L. Both Runways are held open until after the aircraft crosses the Runway 25 threshold. This is a safety precaution put into place in case the pilot changes his/her mind or is unable to perform the side-step. Also see response to Comment 14.

Comment 31: The City of Tempe is opposed to IMC approaches to Runway 25 using the straight-in approach guidance of an Instrument Landing System (ILS) or similar navigational aid. This procedure is contrary to the recommendations made in the Airport's 1993 EIS.

Response: See response to Comment 14.

Comment 32: The City of Tempe supports the construction of a noise run-up pen. As stated by the consultant, a run-up pen as described will only reduce the engine run-up noise by 15 decibels. Although this pen will reduce noise, it will not provide the level of noise mitigation (i.e., quiet time) that the current curfew on engine runs provides. The City of Tempe objects to any attempts to shorten or cancel the existing curfew unless and until it is proven that an engine run-up facility provides the same level of noise mitigation.

Response: See response to Comment 5.

Comment 33: The 65 DNL line and the Airport Influence Area (AIA) are pivotal to the implementation of all of the land use measures in the Part 150 Study. The drawings in the study are curvilinear and lack the detail necessary for this implementation. Contour lines should be squared off to the nearest street so that property

owners and neighboring cities may easily identify affected properties.

Response: Chapter Five considered the adoption of an Airport Influence Area for Sky Harbor International Airport (Revised Arizona Statute Section 28-8485). A recent revision (May 2000) of Revised Arizona Statute Section 28-8486 Public Airport Disclosure requires the recording of this public airport disclosure map in the office of the county recorder in each county that contain property in the territory in the vicinity of the public airport. This map is therefore sufficient to notify current owners and potential purchasers that the property of interest is located in or outside of a territory in the vicinity of a public airport. Thus, the revision to Arizona Revised Statute 28-8486 eliminates the need to establish an Airport Influence Area under Arizona Revised Statute Section 28-8485. An Airport Planning Area has been recommended using the same boundaries for the purposes of future land use planning.

Comment 34: The AIA has been significantly expanded. The relationship between noise contours and the size of the AIA is unclear.

Response: See response to comment 33. While aircraft noise contours are of obvious value in defining an airport influence area, the contours are very fluid. As the noise contours presented in Chapters Two and Four demonstrate, they may change over time, depending on the volume of traffic, the mix of aircraft, and aircraft operating procedures. Recognizing that land development is a high consequence event which is very expensive, and often virtually impossible to reverse, it makes sense to use a reasonable "worst case" set of noise contours to help in defining an airport influence area. The recommended APA was determined by overlaying the 1999 noise exposure contours and all the radar flight track data used to determine flight tracks for computer noise modeling.

The 1999 noise exposure contours are the largest noise contours and represent a reasonable estimate of the largest area which is at risk of being exposed to aircraft noise above the threshold level of 65 DNL. The flight tracks are illustrated on Exhibits 2H, 2J, 2K, 2L, 2M, and 2N in Chapter Two of the Noise

Exposure Maps document. The areas that are most commonly overflown by aircraft have been squared off to the nearest street.

While each of these factors needs to be considered in determining the boundaries of the APA for Phoenix Sky Harbor International Airport, they will not be considered equally in determining land use management measures for the area. The area within the 65 DNL noise contour will be given the greatest emphasis in obtaining land use compatibility. The area between the 65 DNL contour and the boundary of the APA will be considered primarily for fair disclosure measures to notify future residents of the area of the vicinity of the airport and the likelihood of aircraft noise and overflights.

Comment 35: Page 5-5. Tempe strongly objects to any recommendation to revise its General Plan and other planning documents to eliminate any residential use from its mixed-use districts. Tempe has complied with and relied on the agreement in its land use planning for land within the 65 DNL. The 5-point agreement is consistent with long-standing national policy – that single-family residential is not considered a compatible land use inside 65 DNL, but that multi-family, condos, hotels, etc., could be compatible. This recommendation should be withdrawn so as not to undermine the multi-level, intergovernmental commitments that form the basis of our local relationships and planning.

Response: Under F.A.R. Part 150 multi-family and condos are not considered compatible within the 65 DNL noise contour (See F.A.R. Part 150, Appendix A, Table 1).

Comment 36: Tempe questions the use of an outdated 1999 contour line for land use controls, especially when the FAA states that noise contours are shrinking throughout the country and will steadily continue to do so as we move toward Stage 4 technologies. The Part 150 Study should reflect national trends and project shrinking noise contour lines along with modified boundaries into the future.

Response: See response to comment 34.

Comment 37: Page 5-6. The Part 150 should suggest a process for formulating and implementing such guidelines. Previous Part 150's have addressed many of the same issues with no initiative on the part of Phoenix to implement. The burden of monitoring non-compatible land use proposals should rest with the airport operator and not surrounding communities.

Response: The airport operator, the City of Phoenix, does not have land use planning jurisdiction within Tempe. The City of Phoenix can only recommend and encourage proper land use planning in the vicinity of the Sky Harbor International Airport in other jurisdictions.

Comment 38: Recommended zoning amendments are far outside of the proposed AIA. What is the justification for this, and what is intended to be shown in the map?

Response: See response to Comment 33 and 34. The zoning amendments are within the proposed APA.

Comment 39: Where is noise overlay zoning used around the Country? A list would be helpful.

Response: The cities of Mesa and Maricopa County both have overlay zoning in the area. Others include Raleigh Durham, Springfield MO, and Douglas County CO.

Comment 40: Exhibit 5J. Why does the 1999 65 DNL contour line veer southeast of the 1992 line, and what implications does this have for the Airport's Residential Soundproofing Program? Almost all of the resources committed to soundproofing in Tempe to date appear to be outside the line.

Response: The primary reason for the 1999 65 DNL contour line veer southeast of the 1992 line is runway use. Runway use between Runway 8L-26R and 8R-26L is more equal now than in 1992. Fleet mix and increased compliance with the 4 DME are other factors the shift the 1999 noise contour to the southeast.

Comment 40: Tempe suggests using noise and avigation easements similar to those used in South San Francisco that are much more user friendly.

Response: Comment noted.

We appreciate your interest in the Part 150 Study and the time devoted to reviewing our working papers. While this situation is difficult given the history, level of controversy, and the very serious concerns of all parties, we believe we have viable recommendations the can be mutually beneficial.

Please feel free to call me (1-800-892-7772) or Jim Harris (602-993-6999) at any time if you want to discuss any of your concerns or offer other suggestions.

Sincerely,

David Fitz
Associate

cc: Mr. David Krietor, Acting Aviation Director
Mr. John Solomon, Senior Assistant Aviation Director
Mr. James H. Matteson, Acting Deputy Aviation Director
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Mr. Jim Harris, Coffman Associates
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