



October 20, 2021

Ms. Lisa Goodman
Procurement Officer
City of Tempe
31 East Fifth Street
Tempe, Arizona 5281

Re: Tempe Arena Request for Proposals, No. 22-030 (Rio Salado Pkwy & Priest Dr)

Dear Ms. Goodman:

As representatives of multiple organizations across the aviation industry, our collective organizations offer the following set of initial comments related to maintaining safe and efficient operations in support of passengers and cargo shippers relying on Phoenix Sky Harbor International Airport (PHX). We are committed to working closely with the Federal Aviation Administration (FAA), local government, and other stakeholders to improve aviation for the traveling and shipping public.

Our nation's aviation industry drives approximately \$1.7 trillion in annual U.S. economic activity, and it is responsible for more than 10 million U.S. jobs. Our organizations vigorously advocate for America's air transportation system to be the premier model of safety, operational efficiency, and environmental responsibility—and to be the indispensable transportation network that drives our nation's economy and global competitiveness.

We recently became aware of the Arizona Coyotes and Bluebird Development's proposal to construct a professional-sports arena and a multi-purpose entertainment-district complex—that includes residential towers—approximately 10,000 feet due east from Phoenix Sky Harbor International Airport's center and south runways. Called the Tempe Entertainment District (TED), this sports-and-entertainment and residential-tower venue threatens airlines' safe and secure takeoff and landing procedures at PHX. Without a significant amount of additional information, we would likely need to express our opposition to this development because of concerns that it could create air-navigation safety issues at Sky Harbor. The attached slides depict the hazard.

Based on the information available at this time, we have the following concerns about TED and its potential threat to safe, secure air navigation on the east side of PHX's south two runways. We also urge the Coyotes and Bluebird to provide the additional development information, and ultimately seek to engage our collective organizations so that we can be more informed about the proposal and proposed safety and security risk mitigations.

The cranes used to construct TED's tallest buildings (at 125 and 140 feet above ground level (AGL)) may penetrate the runways' protected airspace (called imaginary surfaces), which in turn would effectively prevent east-flow departure and west-flow arrival traffic during the (typical) two-year construction window for the development.

As a result, this barrier to normal east-flow departures and west-flow arrivals would force most of that air traffic to PHX's north runway, which we are informed could not accommodate the additional takeoffs and landings without significant delay and disruption. In effect, the airport's capacity would be adversely affected, if not significantly reduced. The airlines' flight operations would be safety-compromised and the frequency and quality of their PHX air service seriously disrupted.

TED structures and the cranes needed to erect these buildings will likely penetrate airlines' One-Engine Inoperative (OEI) surfaces. This could cause significant takeoff-weight penalties, including seat limitations, and the obstructions could otherwise adversely affect the type of aircraft and passenger totals that airlines could safely transport—especially in hot summer months.

The FAA requires all commercial air carriers to develop critical safe takeoff-and-landing procedures, including an unobstructed path for an aircraft to fly if, during takeoff, the plane loses an engine. Most OEI procedures assume the aircraft must fly at a lower altitude in order to safely return to the airport. If our member airlines are forced to re-engineer their OEI procedures, the emergency operation of a partially disabled aircraft could require weight penalties to enable the plane to take off and—if the plane loses an engine—to safely land.

These potential weight penalties could negatively affect—in significant ways—the airlines' respective business models, and they would impact (if not disrupt) flights to further destinations such as London, Frankfurt, and perhaps even the east coast of the United States. Under poor weather conditions, (e.g., the fog on gameday of the 2015 Super Bowl in Phoenix), the TED buildings—and most certainly the cranes during construction—could require the FAA to raise the approach minimums for aircraft landing in west-flow.

Other negative impacts are more technical—but also troubling—including ATC RADAR spoofing, access for other aircraft to the airspace (such as local aircraft towing banners or helicopter traffic), and Temporary Flight Restrictions during major sporting and venue events. These are just some of the anticipated conditions that will create real safety issues and real potential for a significantly reduced arrival capacity in west-flow under foreseeable circumstances.

Air traffic and large sports venues often generate issues/concerns that require collaboration to mitigate. As national organizations, we have previous experience from which to highlight, that stadium and entertainment-district developments near major commercial airports with 24-hour operations have resulted in hazards—such as laser lights, bright marquis lights (neon) at night (which affect flight-crew night vision), pyrotechnics, drones, and unauthorized small aircraft—pose unacceptable risks to aviation operations. The FAA has limited authority to prohibit these actions, and by design, relies to some extent on local and state aviation zoning and regulations, to ensure safety.

The FAA will take action to avoid risks that affect normal and safe operations at the subject airport. For example, over the weekend of September 25-26, 2021, unauthorized drone activity near a stadium just east of Chicago O'Hare (ORD) forced FAA and Air Traffic Control to suspend operations on two of three landing runways in order to maintain safe-flight operations. The inevitable impact: the disrupted and restricted approaches and landings at ORD forced commercial aircraft into extensive holding, flight delays, and diversions.

Significantly, when major developments such as TED are built in close proximity to airports, the improvements encroach on the airport's existing runways, and in turn the encroachments limit future growth. The developments inevitably stimulate and incentivize more development in the area generating additional concerns. Experience has proven that when one project like TED has been developed and built, other similar developments will be built closer and closer to the airport air-operations area, which in turn will prevent future airport development and generate noise concerns

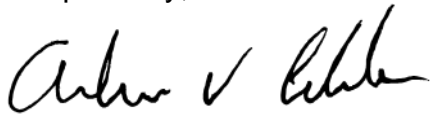
We urge the City of Tempe, the City of Phoenix, FAA, and PHX stakeholders to thoroughly investigate TED's potential safety and other negative impacts to flight operations at PHX. Much more information is necessary, and the development should not proceed until the safety and negative impacts have been carefully examined and evaluated. The City of Tempe, the Arizona Coyotes, and Bluebird have an opportunity to be fully *transparent* and provide all of the data and information necessary for our review, and for a full understanding of the TED development's impact on Sky Harbor, particularly of air-navigation safety.

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If these questions remain unanswered, and if our industry's concerns are not addressed, airlines and other operators could be forced to reduce or end some service at Sky Harbor. This would affect the airport in consequential and lasting ways for the indeterminate future. The uncertainty would harm the region's economy and undermine Sky Harbor's ability to meet passenger volumes and airport-improvement requirements for years to come. For these reasons, the Coyotes and Bluebird may also want to reconsider other solutions such as developing another location that will not create a safety-of-flight problem or reduce the airport's capacity.

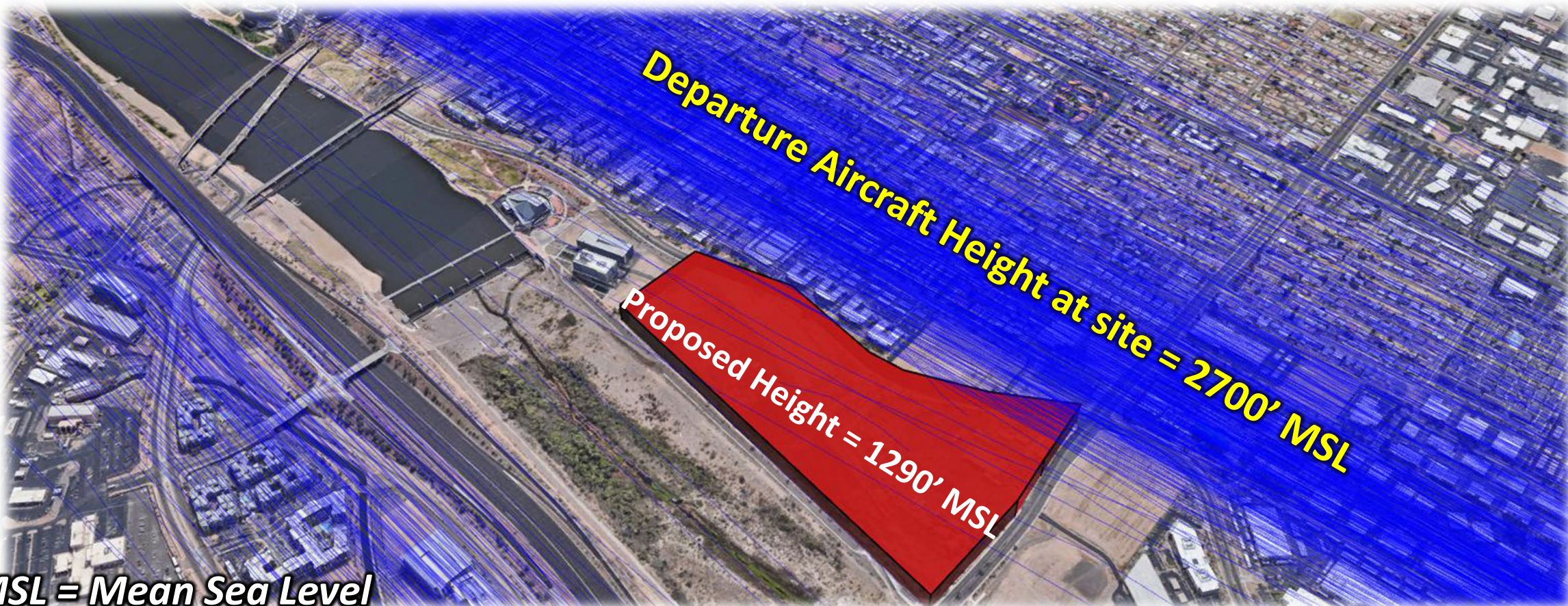
Please ensure our collective organization's concerns are considered, addressed, and resolved during the design phase. We also extend our collective offer to further review and comment on the proposal as it evolves. These initial considerations as well as our offer to provide additional review may be helpful in your approval process and your evaluation of the Coyotes and Bluebird's proposal. Thank you for your consideration with regards to our concerns, and we look forward to your response.

Respectfully,



Andrew V. Cebula
Vice President, NextGen and New Entrants
Airlines for America

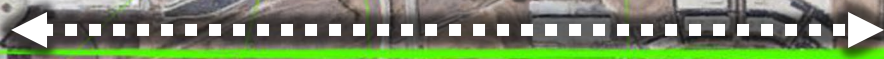
Cc: Tempe Mayor and Council
Phoenix Mayor and Council
Andrew Ching, Tempe City Manager
Ed Zuercher, Phoenix City Manager
Jeff Barton, Phoenix Assistant City Manager
Mario Paniagua, Phoenix Deputy City Manager
Chad R Makovsky, Phoenix Director of Aviation
Airlines serving Phoenix Sky Harbor International Airport



MSL = Mean Sea Level



Distance from runway to site = 9800'



Arrival Aircraft Height at site = 1700' MSL

Proposed Height = 1290' MSL

MSL = Mean Sea Level