MEETING MINUTES
Office of Economic Development
Economic Development Advisory Board
57 E. 1st Street, Mesa, AZ 85201
Lower-Level Council Chambers

Date: September 7, 2021 Time: 7:30 AM

MEMBERS PRESENT	EX-OFFICIO	STAFF PRESENT
Jim Kasselmann, Chair	Mayor John Giles (Excused)	William Jabjiniak
Rich Adams, Vice Chair	Chris Brady, City Manager (Excused)	Lori Collins
Brian Campbell	Sally Harrison	Chris Molnar
Deb Duvall	Jeffrey Pitcher	Nick Juszczak
Matt Likens	Jennifer Zonneveld	Maribeth Smith
Christopher Nickerson		
Natascha Ovando-Karadsheh		
Dominic Perry		
Brad Wilson		

MEMBERS ABSENT	GUESTS
N/A	Ron Thompson
	Steven Latino
	James West
	Mark G. Gaspers
	Christina Upah
	Leann Shaffer

The EDAB meeting was conducted in-person and via Virtual Platform with options for public participation.

1. **Chair's Call to Order**

Chair Kasselmann called the Economic Development Advisory Board meeting to order at 7:31 a.m.

2. **Items from Citizens Present** - None

3. **Approval of Minutes from June Board Meeting**

Chair Kasselmann called for a motion to approve the minutes from the August 3, 2021, meeting.

Brian Campbell moved to approve the August 3, 2021, minutes as presented; seconded by Brad Wilson.

AYES – Kasselman, Adams, Campbell, Duvall, Likens, Nickerson, Ovando-Karadsheh, Perry, Wilson
NAY – None

Chair Kasselmann declared the motion carried by unanimous vote.

4. **Hear an overview of Arizona Laboratories for Security and Defense Research**

Nick Juszczak, Project Manager with the City of Mesa, is charged with overseeing AZLabs, a very unique facility and will provide a brief overview of AZLabs. I also have my counterparts with ASURE our security provider. So as the City, we cannot hold a facility clearance level (FCL) or DD254, so that's what ASURE provides. They also provide our physical security and run the Guard team. AZLabs was initially Williams

Air Force Base, which was built in the 40s. That served as the Air Force base through 1993 when it was closed through Base Realignment and Closure. In 1969 it became or started serving as the research lab for the USAF and that lasted until 2011. The City took an interest in 2011 and purchased the property in 2014. Currently, we have about a 6-1/2-acre campus, over 85,000 square feet of space split between five buildings, on-site cleared guard force, and government security standards. We offer flexible leases from 12-months to 5-years, so we're very flexible in that regard.

Ron Thompson, Director of Operations, thanked the Board for inviting them to present today and, more importantly, thank you for the amazing partnership that the City of Mesa has had with Assure and with ASU with all of our broad efforts out there. It's been amazing. We'll start this fairly focused I think today by way of introduction. I'm Ron Thompson. I go by RT. I've been working at ASU now for a couple of months, having just retired from the Air Force after 30 years. My last job was the command chief out at Luke Air Force Base. I grew up here in Phoenix, left a little over 30 years ago, and then found my way back for my very last assignment. So very excited to be here. My job over at ASU is with a company called ASU Enterprise Partners, which is a 501(c) that stands wholly separate from the university but supports the university and it's the parent company to a number of business units. ASURE is one of them. Enterprise Partners holds the foundation that does all of the fundraising and support activities. Along that vein, we have Sky Song innovations that does patenting, intellectual property and tech transfer. We have a fairly new division called RealmSpark, which is like a venture capital for ed technology, emerging startups. We have some overseas interests. And University Realty does some commercial real estate business for the university. And then there is ASURE. So ASURE is ASU Research Enterprise but is not the research enterprise for the university. The university has Knowledge Enterprise that does the bulk of its research and has all of the subordinate schools and connectivity there. We are the extension of that university for the activities that the university can't naturally do. So in the same way that University Realty and University Real Estate in and out of the university, right, deal with different legal reasons that the university might purchase a piece of property or we might purchase it, is the same reason that ASURE exists, and very specifically, the security classification is one of the biggest ones. Arizona State University holds a secret level of clearance for the university at large. ASURE holds a top-secret with special compartment information capability or TSSCI. That is what I'll let Steven get into that in-depth. He is our director and our expert. He is our research compliance guru. And James on his team and we'll let these guys get into those weeds. What we generally do at ASURE, though, I'd like you guys to understand what we do beyond just being your partner and customer and employee and a whole bunch of interrelated relationships here for AZLabs, we also are the extension of the research activities that is focused largely on Department of Defense level or really we'll say national security rather than Department of Defense, because it's not just military. There are intelligence apparatuses, other government agencies and other activities that sometimes do research and/or development or other activities at that top-secret level and we're the facilitator to help with that when the university has a Ph.D. who's an expert in whatever it is that the government's interested in and then Steven will help facilitate some of those things. And from time to time we actually lead some of that research. When I say lead, I would say really facilitate, so ASURE does not have currently its own staff of PhDs. It has a small staff of engineers and some support personnel for project management, et cetera. We have facilities at Sky Song and Arizona Labs and we are currently in transition as alluded to with the ambiguous job title. My actual day job at Enterprise Partners is I'm the associate vice president for the Office of Strategic Alignment, which ties all of EP's activities across the university and out into industry in the community. And then because of my military background, they asked me to also be the director of operations for ASURE to help with this. What it means to ASURE is we're at a tipping point for our growth where we have to decide to continue to do business the way we have been, which is a fairly smaller scale research, applied research laboratory as an extension of university, or try to follow the model of schools like MIT, Georgia Tech, Virginia Tech, Penn who all have - it's complicated, but they have relationships with the federal government in a formal capacity, and they do tens to hundreds of millions of dollars in research through those relationships. They also have anywhere from 600 to 2,700 people on staff in these applied research labs, so significantly larger organizations. So we're at this point where we're trying to decide, grow or re-entrench in our smaller model and we should hopefully have a decision on that in the next couple of months. Either way all it

really means is how much governmental classified research can we help generate, facilitate and execute, whether it's classified or unclassified. We're currently doing projects for the Marine Corps making a lightweight collapsible ammo can that may replace all of the ammunition cans, right, the little green boxes you see soldiers, sailors, Airmen, Marines run around with. We're working on a variety of drone projects, a hydrogen drone, a number of other things that currently are sitting out at the lab. And where the future goes will be interesting. If you're familiar with the new economic initiative, Prop 308 and what that funds and how that's feeding into ASU, that's probably an indication of where we'll go. Micro-electronics, smaller technologies, human performance, extreme environments, advanced manufacturing, those are some of the areas of focus, and I think that's what you may have to see for us. That's big. Let's get you back on the small. And I want to introduce Steven Latino again. He's our director of research compliance programs for all of Enterprise Partners and specifically focused on ASURE and the lab.

Steven Latino, Director of Research Client Services at ASURE, stated AZLabs holds a special spot in my heart because my dad retired out of the Air Force from AZLabs way, way back. That's where I was born and raised, graduated at a high school of Mesa, so I'm really happy to be a part of this project. I'm actually going to kick it to James West as he's going to fill you in with his day-to-day of what's going on at the labs and then we'll come back to me.

My name is James West, kind of de facto chief security operations officer slash facility security officer from the government standpoint. And I manage the day-to-day security apparatus, security operations, contingency planning, safety and advisement, as well as kind of the downstream articulation from new administrations at the White House and what their policies, procedures, dialogues and implemented changes are for industry that goes broad spectrum. The reason I've highlighted this particular topic on your screen, which is called the Security Vulnerability Assessment, or SVA for short, it is the paramount document that we as ASURE operating with the City at AZLabs that allows us to do work. The SVA is - I won't call it a labor of love. Unlike AZLabs, the SVA is a tedious, arduous set of documents, questionnaires, programs, certifications and audits kind of all encompassed into one. This year we're running about 100 pages for our documents. They're taking me about 2-1/2 months to compile. And this goes through every facet. What's our industrial security standpoint? What do the alarms look like? What kind of cameras do we use? What is our personnel management? How many badges have we issued? All the downstream nitty-gritty that doesn't seem very important this document loves to highlight. Right now with DCSA, which is the Defense Counterintelligence and Security Agency, they're our industrial security representative who basically audits and checklists this document, the SVA. We're on track right now to receive a satisfactory, which is the highest of the three categories. Very simply, we're extremely happy in the last 12 months between the City of Mesa's investments and the number of changes we've done from documentation, unification, strategic alignment, things like that. We're like I said, we're on track to receive that satisfactory, which is above the industry standard on norm. And then like I had mentioned, we advise the City of Mesa on every little policy change or kind of document dialogue change that happens from the new administrations. Part of this, the reason our SVA is on track to receive satisfactory is - really falls into these two specific categories when it comes to our improved security posture. This is yet again the most important thing that the City of Mesa's invested in. We want to make sure that your investment doesn't go to waste. So it falls into two programs, two kind of silos -- executed changes or soon completed and then planned. So out of our executed changes, the big ones have been under facility and integrated systems. Obviously, we with the City have been able to get the new chillers. We got the contractors cleared. The chiller program was a massive investment, but it was well worth it. It basically sets the baseline for the facility for the future probably for the next easy 10 to 15 years is my assessment. Bathrooms, I know Nick has been kind of laboring through that. And then our electronics - our electrical and fire systems for public safety aspects have been radically overhauled and we're continuously upgrading those to meet either new standards or advanced compliance criteria. We as ASURE don't make recommendations outside of whatever the Department of Defense or other government entities might need for programs. Otherwise, everything else, and one of the big things that you'll see for doctrine changes is what I call unification. We really wanted to go with the baseline of what City of Mesa uses in all of its other facilities down to the nitty-gritty. However obviously because of our client base, there are

special recommendations we make. Our integrated system upgrades, obviously I had mentioned cameras and information technology systems, those have been radically overhauled as well to great effect. Hopefully we can continue that, and we'll get some good projects going for that. The other biggest thing that I can say that has been a major success from a us to you kind of aspect has been the decommissioning. So, when you guys inherited it back in 2014 there were a slew of legacy systems from the Air Force Research Lab and from the US Air Force. A lot of these technical systems were no longer in compliance. They're not supported by large vendors like Cisco or from your Trane or other, you know, industrial vendors. These legacy systems are risk for safety, life, limb, and eyesight. And luckily over the last 12 to 18 months, we've been able to remove almost 90% of those legacy format systems. Our planned changes, I know we talked about doing air handlers and some other infrastructure. Generators are a big thing. We don't want any outages. And then emergency access, we worked with Fire and PD to come up with a concise, simple and effective, cost-efficient solution to be able to deliver public safety capability to AZLabs in an absolute paramount time. Our integrated systems, obviously we're in the last changes of our fiber and IT infrastructure upgrades and then some of our access controls with onboarding with a new tenant. New tenants, we've got a potential long-term lease with an OGA, a government entity. And in there we'll make some special recommendations but that's based on that vendor specifically. And then final note is yet again, part of that unification is solidifying us as ASURE with City of Mesa assets so that we have a wonderful partnership and cross bridge cross colonization between all the apparatuses. Many of you know we're right next to the airport so we have weekly or monthly briefings with Arizona Airport Authority. We work with their director of operations for both air and ground. We work with Mesa Fire and Mesa PD and then we work with Gilbert Fire for emergency and contingency drills as we progress further in this relationship.

Steven Latino mentioned that thanks to Bill and Nick's leadership and support in this venture, we've hoped to receive that satisfactory. We have received that satisfactory rating in the past. Just as a highlight and a good way to end this conversation, since this is the Economic Development Advisory Board, the value of AZLabs in the upcoming NDAA National Defense Authorization Act, there's slotted about $100 billion of DOD classified spending. This is in what we call Technology Readiness Level 3 and above, which is from prototyping to the actual development, testing, and evaluation of equipment. So, this is exactly kind of what AZLabs was built for and I think this is a great place to focus. I've listed some of the key technology areas that are listed in the NDAA for this upcoming year. And then dual-use is becoming a hot topic. So dual-use being something that is developed for the military or DOD space, however has a commercial application. So commercial allows the funding to happen and innovation to happen faster. But the DOD gives you that long-term contract to allow your business to grow and keep growing. So, we have a $700 million small business set aside and $175 million investment fund for seeding into dual-use ventures. And we think over the next year we're going to see a lot more small business play, which AZLabs, you know, reduces the overhead and burden for small businesses to get started. That brings small businesses into the City of Mesa. So, the ASU ASURE partnership and what we bring to you besides just running your facility is the faculty, students, research, and the startups that come out of the university, right? So, we're hoping to deliver the innovation to market through classified research and development, classified capstone's where students get cleared in their senior year at the university to go work into the Boeings, Northrop Grummans or even start their own classified or controlled industry company there at AZLabs. The dual-use startups are helping those faculty members or students take their idea into the next level and get into AZLabs so that they can be marketable. And then workforce development, creating the trusted workforce of tomorrow and using AZLabs as the training location and capability. That's the dream and that's what we think AZLabs brings to the City of Mesa overall. I really appreciate your time today and pending any questions, that's all I have.

Natascha Ovando-Karadsheh commented that her father also retired from Williams Air Force Base, and she was born there as well. What are the vacancy rates right now, what percentage and what type of tenancy do we have? Also, what type of forward investment is needed to really fill AZLabs with tenants? I've toured the facility over the years and know you are working diligently on maintenance issues, but how far do we still need to go to make this the flagship? Because I know there aren't a lot of facilities like

this out there, and especially with this type of a hybrid management between a city and a university. I would love to hear your thoughts.

Nick Juszczak stated AZLabs is at approximately 50% occupancy. As James alluded to, we do have one potential client that's looking at taking Building 3, which would be about 9,300 square feet. A significant amount of square footage. We've made a huge financial investment in upgrading the chillers last year, which was fantastic; however, the legacy systems remaining are now sweating and causing interior roof leaks. We're currently working on a plan to upgrade the bathrooms, which include ADA compliance.

Mr. Jabjiniak stated that we've employed ASURE, previously Allion, and they've come in to work with us to fill the building. The capital side of maintaining the facility falls to the City and there has been a major investment of capital in the property already. We started with basically the envelope, make sure it's secure, did some roof work and some other things and now we're into systems. Mr. Brady and I discuss AZLabs yearly during budget allocation. This is a unique facility, although it doesn't make money for the city, it helps these businesses grow. That's the spin.

Brian Campbell asked James to clarify for everyone the TS acronym since the government uses so many.

James West stated, very simply, it stands for top secret.

Mr. Campbell thanked our ASURE guests for their service, what you guys do prior to coming here is fantastic and we do appreciate it and what you're doing now is amazing. I also want to go on the record of thanking Chris Brady on the funding side. Bill and Chris have been great champions of this facility also. I've heard a lot about the technology upgrade, the fiber upgrades. How is the SIPRNet coming along? That's one of the big issues we're facing and have faced in the past to try to get this thing moving. Because a satisfactory rating on your assessment is fantastic and you should be complimented on that. That's always been a challenge for us.

Mr. West stated that's an interesting yet frustrating question. I've talked to several government entities. We're trying to stage to the point where we can get an authorization to operate (ATO) to pull in SIPRNet. It's not as easy, for the Board's awareness, is not as easy as simply asking Cox to hook up a classified network, which is SIPRNet. It stands for secret Internet. But more importantly, it's a very complicated, arduous process like anything with Uncle Sam. It is roughly a 12 and 18-month process to get it pulled in. But more importantly, at this current time, there has been no express interest from the two government agencies we've reached out to in the intelligence community to justify pulling it in.

Mr. Campbell stated that his personal perspective has always been one of the biggest challenges we've had at this facility to be able to get it to that larger level, that larger presence, whether it's a Virginia Tech. You know, when we were doing this, we did a Redstone tour and that process and we understand the vision that this could become, but that's always been one of the challenges. Has there been any discussion on finding that right tenant that would justify the SIPRNet approvals and perhaps working with them on a financial basis to make it worth their while to help us achieve that, because that would create such an opportunity for us out there at the lab if we could solve that puzzle? That's where the economic development promotion marketing side meets the logistic side.

James West stated that we've got a couple of interested parties, although I won't call them tenants or occupants yet. I'm formerly of the intelligence community so I try and navigate through either old relationships or direct business and line-item contracts coming down from the NDAA. More importantly, we've engaged Fort Huachuca and other I will say Beltway agencies. We're in process and talks. There is one tenant that has, or I should say one group of tenants that can definitely say, "Okay, we want this. We want to move here. We want to install a program here. Therefore, we will directly put in whatever we need to facilitate that." That I think is our mainstay focus right now, at least from my aspect, but I know both my director and my director of operations have kind of other viewpoints as well.

Mr. Latino stated that with some of these interested tenants that are coming over the next few months, we do have the Defense Intelligence Agency (DIA) coming to do a site survey. They are the agency that owns SIPR and higher classification networks.

Mr. West continued that this is the first time that DIA are going to walk the grounds giving us the opportunity to say, "We need SIPR to support this contract or a tenant." Like you alluded to it's between $120,000 and $200,000 to drop a SIPR line, a singular SIPR line.

Mr. Campbell stated that this to me is a keystone issue. We all share the vision of an expanded AZLabs and what it can accomplish. Of all the challenges, I would encourage that one the most. And my last question is what can we do to help you achieve that vision? Because this is fantastic work that you're doing, and we need to support it more.

Mr. Thompson stated from a political lens, it's probably the most helpful just to get the word out that this valley is a great place to come for national security business in general. I think everyone's trying to beat that drum across the valley and I think if we can get that out here, then naturally as people come into the valley, they're going to discover that you guys have a premier facility that has all these amazing capabilities. From my lens, I don't know how many of you have government military clearance-like background. There's a lot of acronyms and a lot of jargon that we've been talking about. There are many echelons to security clearances and the higher you go, the more complicated, the more expensive and the far narrower the audiences but the much more impactful the work and the much deeper the pockets and the checkbooks are that go with those programs. You start to get into what would be called like black programs because they're shrouded and completely cut off from everything else. So, if you guys are working within your own networks to generate the interest in bringing that business to the valley, I think this becomes a natural thing there. You know what's great is James talks about his labors of love and his not labors of love. What he spends a bunch of time actually doing as well is networking and doing business development, which really isn't necessarily what he's on staff to be doing. He's on staff to keep all this stuff up, running, legitimate, cleared. I'm also not a business development guy in my role, but I spent a lot of time on the phone talking to people in the Beltway.

Brian Campbell agreed that politically this is an issue we need to drive. When we lost Senator McCain, we lost a huge champion of this project. That has set us back, although we're trying to help Senator Kelly and Senator Sinema understand just how important this is. I know we've had Senator Kelly out to visit, but we need to keep beating that drum and we'll continue to help you do that.

Rich Adams commended James on the progress made recently. How fast does the security technology advance? If you put in a system, is it good for a year or variable?

Mr. West stated that it depends on the industry and product. All the cameras and all the card access systems and other digital technology have digital protections in place to a real degree. You can expect that the government wheel of compliance and standards will last probably between three and five years before there's a significant reinvestment to look at that technology. For instance, the cameras have a minimum 5-year hardware lifespan with at least another three to five years on the operational side with maybe little or no maintenance at all. So, we're looking at safely between seven and ten years before the system needs to be overhauled. Now that is best case scenario. I make recommendations based on what is compliant today and what could be adaptable for tomorrow.

Jeff Pitcher mentioned that his background is a real estate attorney, so the questions that come to me are just who do you want to be? What type of tenants do you want? I've heard the research side, but I've also heard the DOD side. Ultimately, what type of tenant are we really targeting?

Mr. Juszczak stated that it's a great question and we've struggled with that question ourselves while we're out there. We're looking at space programs, technology, and military defense. Back in early May, we had an event at AZLabs called Infinite Movement and Senator Kelly was our keynote speaker. That was a great achievement and allowed us to make him aware of this statewide resource. But really, those are the target verticals like technology, space, military defense, cyber.

Matt Likens mentioned he toured the facilities a couple of years ago. It's a fascinating program, and everybody I think sees the potential in it. And as Jeff said, we all come at this from our own perspective. I'm a startup medical device person, mainly commercially oriented. I'm not a technology person at all. The red flags go up when I hear that business development is part of James' responsibilities and part of Ron's responsibilities and maybe part of everybody's responsibilities, but who owns it? I try to make sure it's clear that somebody owns the sales process within an organization that I'm responsible for. I can hold them accountable then. So just a perspective I wanted to share.

Bill Jabjiniak stated that because the City of Mesa owns AZLabs, Nick has some responsibility at a high level. Nuts and bolts go to James West, and then it's his and Steve's network that really is going to help us pay off with paying tenants. It is a team effort, but I think we know our limitations just like we own it but can't operate it as a city. Hence why we must contract to maintain that security clearance for us as well.

Chair Kasselmann invited the ASURE team to come back again to keep this momentum going and stay connected. I think our interest is reflected in the degree of questions and discussions from the rest of the advisory board today. We appreciate the time that you put into your presentation today and I look forward to seeing you again in the future.

5. Hear an overview of Boeing operations in Mesa

Mark Gaspers, Senior Manager for Government Operations for the Boeing Company in the Southwest, thanked the Board and Bill for inviting Boeing to present today.

Christina Upah, Mesa Site Leader Director of Operations, started in this role three months ago and is honored to be with you. She has been with the Boeing Company for 24 years, starting back in 1997 as an aircraft mechanic on the Apache. Throughout her career at Boeing and Mesa, she's held roles in human resources and production support. She has been the Director of the Domestic Apache Program Office, as well as the Director for the International Program Office, doing a lot of work overseas with foreign militaries and foreign allies and governments. So again, a pleasure to be here. I'm an Arizona native, born and raised. I have three kids who graduated from ASU and one who's a senior right now. And my husband and I own and operate a business in Mesa, Arizona as well so our roots are strong here.

Leann Shaffer introduced herself as part of Boeing Global Engagement, leading Boeing's community investments as well as employee engagement across Mesa, Arizona. She's been with Boeing for about three years and has a background in technology. So excited to be here and share with all of you.

Mark Gaspers began the presentation by calling out three items. Obviously, our facility has a long history in Mesa and has experienced the city's support for the changes and growth that have come over the recent years. The core of our business is the Apache and the protection of our flight operations. Second, our workforce. Certainly, the importance of us being a local Mesa company and the ties that that brings relative to all of our education partners and your understanding, which has been tremendous as a community, as to what our education and workforce pipeline needs are for the future. And then lastly, given the nature of our business and similar to what you heard previously on the defense side in particular, helping understand our federal needs relative to Department of Defense programs, partnering and being that additional support and voice within the congressional delegation has been greatly

appreciated over the years and will continue to be important. As we sit here in September of 2021, we are building up to our celebration next year of the Mesa site's 40th anniversary. So, for those of you who remember going back to the Hughes helicopter decision to move out of Southern California and embark on a nationwide search, we ultimately landed in Mesa as the premier place to develop and test rotorcraft in the United States. We are very proud of that history, and we look forward to partnering with you to continue to celebrate those 40 years but the decades to come that we hope for this community and for our company. On that note, we welcome you to join our Facebook page where you'll continue to see highlights of leaders like Christina and others as we build up to a celebration of our 40th anniversary. With that, we'll show a Boeing video overview.

Mr. Gaspers stated that what he loves about video is it just highlights the work that's done every day with Christina's team and others on the site, the employees who are your neighbors and who are residents of the city of Mesa and across the community, and the tremendous work that they do for our warfighter, but also for the breadth of what aerospace and defense is touched by the Mesa site. I know many of you know this, but just a brief kind of update and understanding of the breadth of the work we do before handing it to Christina. Again, Apache is the backbone, and we hope that we'll continue to be the case for many years to come and along with the rotorcraft products such as the Chinook that we test as well. But you can fast forward 40 years from what Hughes did in that they purpose-built this facility for the Apache helicopter. And we're very fortunate that they did so. But over the course of Hughes, McDonnell Douglas to Boeing, the site has developed to touch essentially everything that the Boeing company does in aerospace and defense today. I'll make one point on that - why is that important to not be just singularly focused? When we're dealing with defense budgets year to year or if we're fortunate to be in a multiyear situation, we're going in to have to fight to make those justifications for that product every year. And as you run your businesses, you can appreciate that that level of uncertainty essentially is very disruptive. So, to have a site that it has a backbone of Apache but also is able to host other work is good protection and support for the future to make us all stronger. So where are we today? We have approximately 4,300 employees with Boeing directly across Arizona. The vast majority of those are at the Mesa site or tied to the Mesa site, approximately 4,000. How do we break that up? So, you can think of it as three pillars, and that's the way I like to think of it as a three-legged stool, in that you have vertical lift, so everything that's built upon the Apache development, production and fielding, testing. Also tied to that is our vertical lift testing with the Chinook helicopter and Little Bird. But we also have fabrication centers within Boeing Defense that touch a number of products that aren't produced here but are built at our other facilities around the country. So, you think of electrical wire bundles, composite parts that are touching F-18 and other products, touching commercial aircraft as well. The development on the new side of our facility over on Greenfield is tied to that fabrication center. And lastly, the third leg would be enterprise services, corporate work and global staffing, facilities and asset management, indirect supply chain that are now joined up here at the Mesa site. A side note, we do also have the global security operation center for the company that's located here. That's our eyes and ears across the globe 24/7, making sure that we know where our employees are and can keep them safe, from pulling a fire alarm to a threat being in a particular country and we needed to get our employees out. This intel analyst and others are located here. When you think about those three pillars, what I like to call out is the critical nature of the education pipeline that leads all of those. So, from Apache and everything relative to our production team with Christina to all the fabrication work that goes on, we would not be successful were it not for the great community college partners that we have here. Mesa Community College in particular, and Leah Palmer is our absolute hero. Their partnership across the district and with Chandler-Gilbert have really enabled the success of our fabrication centers and our production line. We look forward to having a fuller meeting with them as well this week talking about the future. Our university partners, when you think about all the business operations side of Apache and the work that happens in our enterprise services, having that strong university partner in addition to the great engineering work is critical. And then great innovative city programs like the Mesa College Promise, which we're proud to be part of and I'll let Leann talk about that, looking towards the future in terms of what our workforce needs will be. Inspiring the next generation is critical to our success. So that, I'll hand it over to Christina to talk more about Apache and her work.

As Mark said, I belong to the Vertical Lift Division Christina stated, and what we do in partnership with our folks in Pennsylvania, we build all the rotorcraft products for the Boeing Company. It is so important that we have that partnership because there's a lot of synergies to be had with the Vertical Lift programs and bringing those platforms to Mesa. As Mark said, we're not just a one-trick pony. We're also doing the Chinook flight testing and engineering here in Mesa, which our weather here in Arizona, makes flight testing of rotorcraft products very attractive. Also, having a non-union workforce makes Mesa very attractive in respect to our partners at Vertical Lift. We have about 1,200 folks that report to me building the Apache as well as a number of platforms across Boeing's portfolio. And we also have our Little Bird aircraft that will be resuming operations in 2023 and resuming that flight testing and final assembly program, which we're very excited for. I think one of the struggles that we've had over the past couple of years is our workforce demographics and being able to retain and attract the talent here locally. So again, those partnerships with the local colleges, communities, as well as high schools and elementary schools and bringing that talent in through our pipeline early on is going to be critical to our future success. That is really where my focus is. Ensuring that we have the right people so we can thrive and strive to continue to build this magnificent helicopter.

The evolution of the Apache dates to 1983 when our first Apache went down the assembly line here in Mesa, Arizona. Today's Apache is not the Apache of the 1980s, I'll tell you that. With investments from our customers and Boeing, this aircraft has continuously evolved to be the world's greatest attack helicopter through innovative solutions, state-of-the-art technologies and advanced capability for the warfighter, for the soldier. We have delivered in Mesa, Arizona over 2,400 Apaches through the A, D, and E model programs. Now what's most remarkable about this is that our Apache, our A models and D models are continuously coming back into the factory. So, we're utilizing the frame, the fuselage of the Apache and many of the parts so we save money for the taxpayer versus building new-build aircraft. Although the presentation states we have 1,200 Apaches worldwide, we've built over 2,400 Apaches. The US Army has about 4.5 million flight hours served in a number of conflicts from the Persian Gulf to even those conflicts today in Afghanistan. This aircraft is proven and lethal. We are so proud that our workforce here in Mesa builds this aircraft. I can't stress that enough. One of the things that we need moving forward is advocacy, defense advocacy. We're approaching our multi-year two, which will bring our Apache production well into 2028. So that's a $1.7 billion domestic contract that's currently in negotiations and we anticipate receiving that contract in early 2022. In addition to our 16 allied international defense nations, we have another ten that are also interested in the Apache. So, we intend to continue to build those relationships and partnerships with Australia being our most recent LOA that was signed and subsequent to that, Morocco will be going down our assembly line next year for the first time, so an African nation, which is very exciting. It's very important as we move into the future to modernize and to keep investments in the Apache, not only to support our workforce here locally, but also our warfighter to ensure that they have the most advanced capability and technology to serve in the fight.

Leann stated in relation to our supplies, and just put this in context, just in one year the amount that we spend on suppliers in Arizona is the same or similar to having two Super Bowls. It's pretty significant. We're excited to be a part of the state, part of Mesa. Looking at our workforce, we do actively recruit veterans. That's a big part of our workforce. We have a Boeing Veteran Engagement Team, and this is a big part of my work in the investments that I do in the community, as well as engaging our employees and volunteering in the community. Boeing provides a very generous continuous education program that is the Learning Together program. So once an employee is with the company for a little bit, we do support them in their continuing education into ongoing degrees. When I joined Boeing, I was really impressed with the number of employees reaching out and just really, really enthusiastically wanting to get involved and volunteer in the community. As you know, COVID had an impact on that, but we were able to pivot to a lot of virtual events. Charitable contributions total approximately $2 million annually and within that, just the focus areas I mentioned, veterans. I mentioned my background in technology, so STEM is very near and dear to my heart. Workforce development around that, engaging our employees, investing in underrepresented youth throughout our community is really important. And then I would say in the last

year, we've always focused on the underserved communities, but we've really stepped up from a racial equity standpoint. We've done some significant investments with indigenous communities, our communities of color. We also have several nonprofit boards as well. Just a few examples of some of the things that we do in the community, we have drives throughout the year, we have what's called Liftoff For Learning back to school drive, Spirit of the Holidays, and the Food and Essentials drive in the Spring. With this one in particular, we made an investment with the Mesa Hydration Donation Campaign and are really excited to be a part of that with the United Food Bank and the city to be able to support a very big need in the community with water. Boeing has a very generous program with many employees mentoring our First Robotics team. They're able to apply for a grant and then the Boeing Company will give $500 towards that team to apply towards what they may need during the competition or preparing for the competition. STEM Signing Day we rolled out about three years ago is where students have the opportunity to apply and those that are selected are honored and they have to have an interest in STEM and going on to education. It doesn't necessarily have to be a four-year degree. It could be two-year or some trade but just essentially they have an interest in STEM. We want to honor them, celebrate them for making that decision. And then the last couple of years, we've offered a mentor program alongside that so that while they continue their journey, that they have a Boeing employee who can mentor them and come alongside them. Educator Pro Connect is a program working with the County Superintendents Office on their Educator Pro Connect Platform. Essentially, it is a matching tool for teachers to connect to business professionals for speaking events and contests. Falcon Field Open House, that's one, as well as Aviation Fascination that we've always been proud to be a part of. One of the programs that we helped to start was the Mesa Arts Center Arts in Service Program, which allows service members and their spouses, they've added that component as well, to get world-class art classes, everything from welding to ceramics to jewelry. It's just really great to see what they produce. And then Mark mentioned earlier the Mesa College Promise Program. We have made investment in that as well. Workforce development, really engaging those students and being with them throughout their journey is really important to us as we look at our future workforce.

Chair Kasselmann thanked each of them for sharing an update on Boeing with us today.

Brian Campbell also thanked them for the presentation. On a personal note, as a large property owner near Boeing, I want to state on the record, you guys are wonderful neighbors. Although our two land uses couldn’t be more incompatible, you guys make it work and we're very, very appreciative of how you help us work in that field. What can we do to help protect some of the infrastructure around Boeing, particularly the Cowboy 2 alignment, which is critical to the flight path and testing?

Mr. Gaspers stated that relative to the various flight alignments and again, for those of you who aren't as familiar, so those are developed in partnership with the other airport users. Falcon Field is one of the most crowded airfields in the country. And so, established patterns allows aircraft and the towers, and we have our own tower, but in partnership with Falcon to quickly communicate various routes and be able to head out on those routes without much disruption. If you look at our main route that was referenced which heads north on Greenfield or Higley, depending on a variety of factors in the airspace. We understand that the city and the environment has changed but I think what we are thinking relative to us and other rotorcraft users is that you are going to then potentially constrain our ability to operate if you have residential that's encroaching on that a half-mile east of Higley and a half-mile west. So residential within that area is and will be very problematic, not just for us, for any of the users of the airport. We appreciate you and all of the others that have come and worked with us. We want to have those discussions directly or in forums like this to try and work out solutions. I think again, to the city's leadership and Development Services Department and those here on the Economic Development Advisory Board, you helped understand and balance the ability for all of us to grow together.

Mr. Campbell asked when working with large employers I hear the term aging workforce a lot. And that's a challenge as you try to replace that aging workforce with the younger folks as they come through.

Without divulging too much, is that a challenge you're facing and how can we better work with community colleges to fill that pipeline with the retirees and the aging workforce?

Ms. Upah appreciated the question because it is a challenge today. In fact, on my assembly line right now, 54% of our employees are zero to five years and about 30% of our workforce is retirement eligible. So, over the next coming years, we will be looking for talent. One of the key strategies that I have in this role is partnering, building that partnership with the community colleges and our universities to ensure that we're filling that pipeline. And then also working retiree programs, bringing our retirees out from retirement to help partner and do that knowledge transfer for mechanics in our workforce in general, because a lot of the folks who have designed this aircraft back in the 70s are now retiring. That knowledge transfer is going to be critical to our future success.

Mr. Campbell's last question relates to the next-generation aircraft. Without divulging too much, what in terms of RPA platforms are we looking at and are those happening at Boeing?

Ms. Upah stated that there are two next-generation Apache. We have our V6X, which we have RDT and E funding that we're trying to secure to support that. That platform will be incorporated post-2027 so it would be in the 2027- 2030 range. That capability will be focused on the cockpit operations and 360 survivability capability. Right now, our TADS, our modern-day sensor on the aircraft cameras that are in the front of the aircraft are only focused forward. What we want to do for the Apache pilot is change that so they have a 360 view, and they can see aircraft behind them or in front of them. That's really the focus for V6X and also to change that cockpit. Our future pilots are about 11 years old right now and they are gaming people. We want to move to a more iPhone featured or something that's different for that user of the future, that pilot of the future. So V6X will be heavily focused on those main items as well as advanced weapons systems, survivability, and enhancements to our MMPR mission - multi-mission processor in the aircraft. Subsequent to that, we have the extended range Apache, which would be 2030 and beyond. So that aircraft for the future will probably be a different fuselage in general. It will be able to be not only a rotary operation, but a fixed-wing operation so it would be able to pivot between those two capabilities.

The Boeing team thanked the Board and City for their support.

Chair Kasselmann thanked the Boeing team for coming out today. Great presentation and I think we can probably stand to hear a little bit more in the future about the flight patterns and some of those future challenges just to put it in the visual world for all the members of the Advisory Board, because that's something that we've learned is very important to pay attention to.

Bill Jabjiniak also thanked the Boeing team for speaking to the Board today. Could you speak to what's next for the Mesa campus?

Christina Upah stated that what's next is just continuing to grow the Apache platform and bring more capabilities to Mesa. I think bringing the Strategic Centers of Excellence, so those composites, the sheet metal, the electrical brain, that work content to Mesa. Growing jobs in Arizona is really our focus. We want to maintain a non-union workforce. That's very important to us right now to ensure that we can remain agile and flexible in bringing the workforce here.

6. Director's Report

Bill Jabjiniak mentioned that the August 12th Facebook announcement received worldwide press coverage as well as the NTT announcement. The City of Mesa received two additional seats on the Greater Phoenix Economic Council (GPEC) Board due to an increase in Mesa's population. Jim Kasslemann and Natascha Ovando-Karadsheh will be moving to ex-officio non-voting side of the

Economic Development Advisory Board (EDAB) and will be appointed to the new GPEC Board. That will open two seats on EDAB.

Sally Harrison mentioned that the Mesa Chamber of Commerce is partnering with Bill and the Office of Economic Development on two bus tours. The first tour covers Southeast Mesa on September 29th, and the second tour is the morning of October 13th and will cover the remainder of Mesa. Seats are filling quickly, but if you're interested, please register on the Chamber's website. It will be a great morning for both tours.

7. Other Business

- The next EDAB meeting is October 5, 2021.

8. Adjournment

Chair Kasselmann called for a motion to adjourn.

Brian Campbell moved to adjourn the September 7, 2021, meeting at 9:03 a.m.; seconded by Natascha Ovando-Karadsheh.

AYES – Kasselmann, Campbell, Nickerson, Ovando-Karadsheh, Perry, Wilson

NAY – None

Chair Kasselmann declared the motion carried by unanimous vote.

Submitted By:

William J. Jabjiniak
Economic Development Department Director