BRIGHAM CITY CORPORATION
AIRPORT ADVISORY BOARD MINUTES
FOR *Wednesday, January 4, 2012*

Present: Byron Hansen, Chair
Gary Bywater, Board Member
Dr. David Hess, Board Member
Benjamin Jones, Vice-Chair
Fred Kluss, Board Member
Boyd Young, Board Member

Excused: Tyler Pugsley, Public Works

City Staff: Brian Rex, City Council
Bruce Leonard, City Administrator
Andrea Clark, Administrative Assistant

Guests: Justin Pietz, Armstrong Consultants

Approval of Minutes – Chairman Byron Hansen
Chairman Hansen officiated the meeting, starting with the approval of meeting minutes from November 2, 2011. There was no public comment.

The Airport Advisory Board (AAB) welcomed Brian Rex as the new Councilmember who will be participating on the Board and Justin Pietz, the Planning Manager at Armstrong Consultants and principal in the firm. Mr. Pietz flew here from Colorado to make a presentation to the Planning Advisory Committee (PAC) and will be presenting the same information to the Airport Advisory Board during this meeting.

After the PAC meeting, Mr. Pietz, Mr. Leonard, and Mr. Jones went over the Master Plan in detail. After which, Justin met with Bennie Kay, FBO, and discussed ideas on the Master Plan and received his feedback. Mr. Pietz reported that D&D is the only FBO that he was not able to make contact with, but he will call D&D and follow up.

Mr. Pietz commended Mr. Leonard and the Airport Advisory Board on the work they have done and the pride they take in the airport. Mr. Leonard has dedicated a lot of time and energy in the airport and it shows. He said that Brigham City has an outstanding airport and everyone should be proud of what they have got here.

Mr. Pietz presented Armstrong Consultant's vision and plans for the Brigham City Airport which include:

- The Airport Master Plan Process
- Design Standards for the Airport and what the FAA requires
- Airside and landside development and next steps

Mr. Bywater mentioned that Mayor Fife said that Brigham City has the eighth busiest airport in Utah--he would like to know what airports are busier than ours? ***Mr. Pietz said he would send that information to Mr. Leonard to forward to the AAB.***

Mr. Pietz continued by saying he has gone through the inventory, forecast, facility requirements and the recommended development alternatives chapters which are Working Papers No. 1 and No. 2. The next working paper will include the draft airport layout plan drawing set, the financial overview chapter, the environmental overview chapter, and the financial compliance chapter. Those updates are about ready to be sent, but he wanted to make sure everyone is comfortable with the layout for the future land-site development. This will be an overview of the flow chart (hand-out) and they are getting closer to putting a draft report together. Once the draft report is submitted, the FAA will review the draft airport layout plan and then provide us with comments and recommendations. Armstrong will make adjustments and send out the final documents for the City to approve, sign, and then send to the FAA for their final approval.

Mr. Pietz showed a visual aide of Airport Reference Codes that shows airplanes associated with different types of Airport Reference Code.

- The ABC is the approach speed of the airplanes and how fast they come in. The faster, the higher the letter.
- Roman Numeral is related to the wingspan of the airplanes that come in (width A1 smallest to D6 being the biggest and fastest coming in to the airports).
- The Brigham City current reference code is C2 which means we can accommodate the corporate-style jets or our runway width can accommodate up to a Boeing 737, but that is not our design aircraft; however, the next lower design standards best meet our airport facilities.
- Recommended air-side development is the warm-up pads at the end of runway.
- Possibility of by-passed taxiways (Mr. Pietz discussed in the PAC earlier).

Chairman Hansen commented that he wasn't aware that we decided to do away with the bypass taxiway. He asked Mr. Pietz to please make sure that the taxi-lanes are located far enough back that a plane coming down off the end of the runway that uses that end taxi-way can come around and won't have his wing close to another plane that is doing a run-up, i.e. a larger jet coming in that encounters a smaller plane doing a run-up at the end. Some airports have that run-up area so it precedes the beginning of the runway.

Mr. Pietz suggested that the only problem with that is there are several surfaces that come off the end of the runway that need to be protected from airspace. On instrument runways, there is a departure surface and it is going up on a slope of forty-to-one. It could be a close-in obstacle for airplanes that are departing or arriving at the airport.

Chairman Hansen asked if we filled in the area between those taxi-ways will that create ample space. Mr. Pietz said that most planes doing run-ups there are smaller, so as long as they have a "taxiway object free area" which would provide the wing-tip clearance for airplanes on the taxiway. We will take the Group II Taxiway OFA (Object Free Area) and we will put a line there for a "non-movement area boundary line" and if you are

behind that line then the airplanes on the taxiway are guaranteed wing-tip clearance provided they are a Group II airplane (which is your Airport Reference Code). A Group III airplane whose wingspans are even bigger could encroach into the Group III taxiway OFA, but Group II would be clear.

Chairman Hansen pointed out that the issue of doing a run-up with the wind coming from the east is that they get the Prop Wash going into Larsen's hangar. Mr. Pietz said that is a potential issue because you want to be lined up into the wind when doing the run-up there and where your prop wash is going is a concern. (Before we had by-pass taxiways at the end, airplanes could pull up to the hold bar and do their run-up then other airplanes can taxi behind and not be so close to the land-side).

Mr. Leonard mentioned that Mayor Fife has been in contact with USU on their pilot training program and they are very interested. In addition, Utah Valley University said that if USU is not going to come over then they would be interested. They indicated our facility was a lot better facility then what they were currently in.

Mr. Pietz reminded the AAB that just because something is shown on the Airport Layout Plan Drawing, it doesn't mean you have to do it; however, if it is not on the plan then you can never get funding for it. In order to get FAA funding, it must be shown on the plan.

Mr. Young asked if you have three aircraft lined up to take off with the current configuration, where will the prop blast be. Is it big enough to turn into the wind without having to make three U-turns? If it was further to the south and even if it was a little further to the west you can go in, make a turn and come up, the next one can come up, and the next one can come up and your prop blasts will be going downwind and it would not affect anyone else waiting on the runway.

Chairman Hansen said that on a nice airport you have enough room on the run-up area for three planes in a row parallel to one another to be able to do the run-ups simultaneously. Mr. Young added that if we get a school in here, we may need that much.

Mr. Pietz added that in flight training you "rack 'em and stack 'em" and it takes a while for student pilots to go through and do their pre-flights. The more room the better.

When you do the by-passes, it provides a spot for taxiing up and go to first exit their on the bypass and do your run-up there and a plane behind you can go right along the taxiway to the end of the runway and take-off. You can be sitting here on a by-pass doing your run-ups. You could have both—you could have one with enough room for an airplane to get into the wind and do their run-up on the bypass taxi. You can have it so that an airplane comes here and they get off and do their run-up on the bypass taxi-way.

Mr. Young asked if the bypass taxi-way was short at the end and they are doing a run-up, then how do you taxi behind it? Mr. Pietz said you would have to watch out that if a plane is behind you that the power is not set real high—that is one thing to watch. Mr. Young said if the run-up area was further to the south then Alpha 1, they would be clear

and out of the way of anybody taxiing out. Chairman Hansen said that is where they are trying to keep that airspace clear.

Mr. Pietz explained that the surface is actually started into the runway and the departure surface is 1000 feet wide, 500 feet on each side of the runway and goes up at a slope of 40-to-1 (trapezoid shaped). If you are behind the hold bar, you are outside of the obstacle free zone on the runway and the FAA doesn't consider that to be a hazard. They consider it more of a hazard being off the end of the runway. We could go bigger on these, but the depth is what it is because you've already got that taxiway, the apron area in front of these hangars, so there is only so much room (east and west) but could make it a little longer if that is what you would like.

Dr. Hess suggested that in order to avoid blowing stuff into Larsen's hangar, may want to consider painting directional arrows for parking to show directions to keep from blowing into Larsen's hangar. ***Mr. Pietz confirmed that they will expand those and throw the By-pass Taxiways back on.***

Mr. Rex asked why the de-icing pad was located in front of Larry's hangar? Mr. Pietz said that was a spot that was identified that was kind of centrally located on the apron; however, they are open to suggestions if there is something that is more fit.

Mr. Pietz said that we need to think about the collection tank and where that needs to go and how to plumb that in and have the least impact. When they drain that, it will have to be cut into the pavement to drain it so that it can go into the collection tank--keeping the impact on cutting the line in your existing apron as minimal as possible.

Mr. Rex asked if he could get his plane out if someone was de-icing? Mr. Pietz doesn't see a lot of de-icing operations going on—he thinks it will be pretty occasional. A few airplanes, but doesn't think they will be stacked up. If that were an issue, we could think about another location for sure or even moving it out a little further from the building.

Mr. Pietz said that we've got that center line shown there and we should be sure that there is wing-tip clearance there and it is not an impact.

Mr. Young asked about moving it just south, in front of the existing pilot's lounge, between those two hangars. ***Mr. Pietz liked that suggestions and said he would make that adjustment.***

Mr. Pietz showed a slide that conveyed as many of the different types of hangars as close as possible to the existing pavement and utilities that would fit in that space; however, it will depend on what the demand is.

Mr. Pietz explained that these (taxi-lanes) are FAA eligible projects; however, they are low priority for the FAA. The FAA's priority starts on the runway, they want to make sure that everything on the runway is set-up and then they move to the taxiway. If everything is in good shape and you meet all the design standards, which you do, then

you are eligible for these types of land-side projects. That is where you get 95% FAA funding on those.

Mr. Pietz continued that once we move forward after this meeting, this plan is kind of set and will move forward with laying it out like a development type scenario where we will have corners surveyed for future hangars and put together a hangar development guide where if someone wants to build a hangar then they can pull out the book and decide what size they want to build, it will have a finished floor elevation, the corners surveyed and they can order as efficiently as possible. We are trying to get final buy-off on this.

Mr. Young asked if we have gotten completely away from the terminal building that was displayed in some earlier documentation. Mr. Pietz explained that the pilot's lounge shown is a little bigger than the existing lounge and we have included a little bit of green space on the side where there could be picnic tables to sit and watch planes with a chain-link or ornate iron fence that looks nice between where they are at and the apron where they are operating. We wanted to show spots for where commercial FBOs could go, but we don't really see a commercial operation type terminal building but if that ever happened, we could go where those FBO buildings would go. There is also some flexibility there if someone wanted to do a restaurant, deli, or sandwich shop there.

Mr. Pietz said they had a wetland evaluation done to see where potential wetlands are in the future development area. The Army Corp of Engineers wants to avoid all wetlands and build in upland areas first. After the upland areas are filled and there is nowhere else to go, then we are justified to expand into the wetlands. We can get most of the hangar developed without impacting wetlands. You can still do quite a bit of apron expansion without getting into those.

Mr. Young asked why they don't go and eliminate the wetlands near airports considering that bird strikes and aircrafts don't mix. Mr. Pietz said the FAA wants to put together a Wildlife Hazard Assessment Plan and come up with mitigation plans to deter birds from the wetlands, but the Army Corp of Engineers wont' allow elimination just because they are near an airport. They do a lot of work on wetlands where they are impacting wetlands because there is no other choice and they have to move forward and mitigate the wetlands. The FAA won't allow to mitigate wetlands on a site within 10,000 feet of airport is what the advisory circular says. We have to mitigate wetlands away from airport and reduce the bird hazard, but for the existing wetlands on the airport they are kind of grandfathered in.

Mr. Leonard reported that the mitigation is not one-to-one with the Army Corp of Engineers, instead we required three-to-one or five-to-one so if you fill one acre of wet property then you have to go and create three to five acres. That is what they did when we did the Airport Expansion Project—the ratio was more than three-to-one, but we ended up buying 350 acres to create a wetland. Mr. Pietz said you also have to make sure they are least 10,000 feet from the end of runway and it depends on the type of wetland.

Byron asked if we still had a bank of wetlands somewhere that we could use as credit for future use. Mr. Leonard said we used it all; however, there is a bank of wetlands to buy just south of where we mitigated, R&P Wetlands, but it is not owned by the City.

Mr. Pietz reported that usually apron expansion and taxi-lane development is categorically excluded which is the lowest level of environmental analysis. Basically, the categorical exclusion for fencing projects, taxi-lanes, small projects like that they will categorically exclude for projects that are more involved environmentally like a runway extension or an airport reference code operate you have to do an environmental assessment. If they determine that there is impact in the environmental assessment then you go on to the next level which is an environmental impact statement. With this development taking place in the wetlands area, this last leg of development is quite a ways out in the future—it is the last phase.

Mr. Pietz said he has gathered information from tenants, Bruce Leonard, and others at the PAC meeting earlier. He has not received any comments from the FAA or the State yet, but they are reviewing the documents and we don't usually see a lot of comments from the taxed portion. The airport layout plan drawing set is going to be about 12 sheets and includes an air space evaluation, land-use compatibility, and the terminal area drawing. The airport layout plan sheet is the final product and that is the one the FAA will actually approve and it will be signed and approved by the City as well.

Mr. Pietz reported that Working Paper No. 3 is 98% ready to go. They'll make final adjustments based on comments received from the PAC and AAB meetings held today and get it sent out for review within the next couple of weeks. The FAA's airspace review on the Airport layout plan is typically 45 days, but depending on workload it could be 90 days. They will get the draft report out which will include all of the working papers with all of the comments that were received for all to take one last look before it goes final. There will be another chance to look at it with the revised cover with all the comments. They'll make any adjustments and put them in the final document.

Chairman Hansen commented that long before we would ever get into the wetlands on the north we have the ability to put in two to three times the number of existing hangars that have taken 100 years to get there. Therefore, he believes the airport is layed out really well for hangars of all sizes and dimensions. For the appearance of the airport, does it make sense to get uniform covering standards for the buildings and have one uniform color for this section this section another?

Mr. Pietz confirmed that is something that the AAB and the City should think about. Every community is a little different on what they want to allow and what they don't. They have some sample architectural standards that they have put together for other airports and it is a sample that can be changed around.

Chairman Hansen would like to see some general guidelines that would make it easier to let newcomers know the expectations when they are looking. Some uniformity would be

very beneficial and give the airport a more uniform appearance of the airport like it was designed with a master plan in mind.

Mr. Pietz said he would address restrictive covenants and provide some sample architectural standards and you can change the language as you see fit.

Mr. Pietz said when he was talking with the FBOs that they said the taxiway connector is a little narrow and they would like to see it widened out to accommodate larger planes that come in when the hunters are coming in. Therefore, he would like to show it being widened by 50 feet in the plan to have a little added safety there. The FBOs really didn't have any other comments other than that.

Dr. Hess would like to see a sign welcoming to Brigham City Airport, perhaps similar to the Rock Monument recently placed by the golf course.

Mr. Bywater would like to put a billboard on the freeway by the airport that says Brigham City…A great place to fly and live. Mr. Bywater also pointed out the numbering system doesn't make sense as you enter the Airport having Gate #2 first and Gate #1 in the middle. If Gate #1 is the main gate then the sign should say Main Gate. The AAB agreed that the gates should be renumbered in consecutive order.

Mr. Rex asked who counts the airport operations at our airport. Mr. Pietz said there really isn't a good way to count the operations unless you have a motion sensor camera that will snap a photo of the tail number. We do have log books and the FBOs who help "guestimate" those numbers.

Mr. Young asked regarding the taxiway numbering-- from Alfa 1 and then Alpha 2, 3, and 4 that do not join the runway (only the taxi-way) then from Alpha 1 to Alpha 5 is the same distance from Alpha 5 to Alpha 6—is there a reason for that?

Mr. Pietz said that is just how it has been identified in the past and that is how the previous decision was made to market it.

Mr. Young suggested naming the ramps R1, R2, and R3 that lead off the taxiway onto the runway. ***Mr. Pietz agreed we could show that change on the plan and when the signs get updated it is just a panel change.***

Mr. Jones commented on a report that the FBO operators are not in compliance with the EPA requirements on the studies for their fuel tanks. They are required by law to have a plan on how to handle spills from their fuel tanks—that would include Bennie Kay and Wayne Larsen.

Mr. Leonard commented that they can't be covered by Federal FAA because the owner is the person responsible for the tanks according to the FAA rules and they have to pay for it themselves.

Mr. Leonard would recommend to the City Council that if we did two at the same time it might be a little less than $9,000 (~approximately $4,500 each). If we paid for out of the Airport Fund to get it started so that those two FBOs were in compliance then they would have to be responsible. Mr. Pietz will prepare a request and Mr. Leonard will send to both with a letter regarding their compliance.

Mr. Pietz commented that they need to have secondary containment on their fuel tanks themselves, so they can either have double-walled which counts as secondary containment or if they are single walled then they need to have a berm around them that can hold a spill. ***Both Benny and Wayne have new tanks that are in compliance, but one old tank is not. Chairman Hansen believes this should be addressed as another topic, separate from the Master Plan. This will be added to a future agenda.***

Mr. Rex asked Mr. Pietz how much his services are costing the City to develop the Airport Master Plan? Mr. Leonard said that we signed a contract for around $190,000; 95% of that is FAA and paid by the government and 5% is paid for by the City.

Mr. Leonard explained that the Airport gets $150,000 of entitlement money from the FAA every year. That money goes towards these projects and typically we would do a Master Plan or an update about every five or ten years or after every big project.

Mr. Jones asked what the pattern altitude is. Chairman Hansen said that is not going to be in this Master Plan, but typically 800 feet elevation and 5000 feet altitude. Mr. Jones believes that 5200 is more correct. Mr. Pietz said that if you wanted this to be set in the publications, he can help with getting the form submitted to the FAA.

Mr. Jones believes that we should set the altitude because we have one document that says 5230 feet which is not correct and another document says 5,030 feet.

Mr. Young read in Section 3 of the City Code that says that visual traffic pattern procedures as recommended by the FAA Advisory Circular 9066 Alpha and updates the Air Op with the exception of the pattern altitude of being the mid-point of runway being shall be 800 feet AGL.

Chairman Hansen suggesting addressing this in another meeting. Mr. Leonard would like to take the 800 out make reference to however it is listed and not put the altitude in here but reference whatever data we are going to tie it to. Mr. Pietz said he would help establish guidelines and publishing.

Mr. Leonard said that we moved our operations up to 40,000 instead of current number of 25-28,000 and the 5010 will get updated as well. He is also working on a uniform land lease agreement since they have been different over time. As leases expire, everyone will renew with the same agreement. ***Bruce will bring a sample of the Master Lease Agreement to the next meeting.***

Meeting adjourned.