

Minutes of the MNAA  
General Aviation/Operations/Planning  
& Engineering Committee



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Date: March 13, 2019                      Place: Nashville International Airport Board Room  
Nashville, Tennessee

Time: 9:00 a.m.

Committee Members Present: Bill Freeman, Chair, John Doerge, Vice Chair; Amanda Farnsworth; Nancy Sullivan

Committee Members Absent: None

Others Present: Doug Kreulen; Cindy Barnett; and Angela Edwards

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I. Call to Order

Chair Freeman called the General Aviation/Operations/Planning & Engineering (GAOPE) Committee meeting to order at 9:00 a.m., pursuant to Public Notice dated March 8, 2019.

II. Approval of Minutes

Chair Freeman called for approval of the Minutes of the February 13, 2019 GAOPE Committee meeting. A motion was made by Commissioner Farnsworth and seconded by Commissioner Doerge. The motion carried by vote of 4 to 0.

III. Chair's Report

Chair Freeman had no Chair's Report.

IV. Items for Approval

A. Approval of Reconstruction of Taxiway Alpha/Kilo Intersection

Traci Holton, AVP, Operations and Maintenance, briefed the Committee on this item. Staff requested that the GAOPE Committee recommend to the Board that it (a) accept the bid by Hi-Way Paving, Inc., (Hi-Way) for the Reconstruct Taxiway Alpha/Kilo project at Nashville International Airport (BNA) and (b) authorize the Chair and President & CEO to execute the construction contract.

Staff provided the GAOPE Committee a staff analysis for the Reconstruction of Taxiway Alpha/Kilo Intersection prior to the meeting.

Ms. Holton reported that this project will bring the taxiway up to current standards. Taxiway Alpha/Kilo Intersection is not compliant with FAA Advisory Circular (AC) 150/5300. It is currently a four node intersection, which violates the "Three-Node Concept". This intersection should be three node. Also, Taxiway R4, in its current configuration, provides direct access from the north cargo apron to Runway 13/31, which is also in violation of the AC. In addition to reconstructing Taxiway Alpha/Kilo Intersection, this project will also remove Taxiway R4, add LED lights and 30 feet paved shoulders.

An Invitation to Bid was advertised in early February. Three bids were received from Eutaw, Harper and Hi-Way. Hi-Way had the lowest bid at \$10.7M. The DBE goal established for the project was 14.9%. Hi-Way was able to obtain 14.9% DBE participation. Hi-Way will be using Archangel Protective Services, Gibco Construction, Kimberly, Inc. and Rutherford Contracting.

Hi-Way's bid was 3% higher than the engineer's estimate and 17% lower than the highest bid which was Eutaw. MNAA's Engineer of Record (Garver) evaluated the bids and determined they were responsible and responsive. The staff recommended the approval of Hi-Way's bid for the construction contract at \$10.7M. This is a 220 calendar day project which includes a winter shutdown which is likely. Construction could start before August but that will be determined upon receipt of the Federal Grant. August is expected to be the latest date construction would start.

Commissioner Joslin inquired about the timeframe for reconstruction. Ms. Holton responded that it will be 220 days but there is a winter shut-down included in that timeframe. If construction starts earlier, the winter shut-down might be avoidable, but it will be weather dependent. Ms. Holton stated that concrete will be used for the reconstruction instead of asphalt which will allow construction in colder temperatures.

Commissioner Farnsworth asked if these changes are being made because of the hot spots. Ms. Holton reported that is a new criteria and BNA will be eliminating a hot spot with this project. Mayor's Representative Wiltshire inquired as to the meaning of a hot spot. Commissioner Farnsworth explained that it is a spot where there are runway incursions because planes land in the same spots. Chair Freeman stated that this project is a "must-do" for the safety and operation of the airport.

A motion was made by Vice Chair Doerge and seconded by Commissioner Farnsworth to recommend approval of Reconstruction of Taxiway Alpha/Kilo Intersection. The motion carried by vote of 4 to 0.

V. Information Items

A. Airport Master Plan Update

Alan A'Hara, VP of Aviation at AECOM, gave an update of where BNA is on the Master Plan. Mr. A'Hara stated that AECOM is approaching the mid-point of the 20-24 month Master Plan study process and it is time to start communicating the findings to date and what is to come to stakeholders and the general public. At the last meeting, terminal facility requirements were presented, including the need for additional gates post BNA Vision. AECOM has begun to develop and evaluate alternatives for additional gates. Under the Master Plan Advisory Committee, there is a Technical Advisory Committee and a Community Advisory Committee. Both committees met in February and attendance is consistent with the attendees being the same committee members that initially joined on at meeting number one. Facility Requirements and Airfield and Terminal Alternatives were presented at the meeting. AECOM received good feedback particularly from the community advisory committee on what the public's interest may be and in turn how to share this information with the general public. There is a Noise Study Advisory Committee (NSAC) that has been assembled and they are working concurrently with the Master Plan Study as part of the noise exposure map update project. The NSAC will be next on the committee meeting list to be held in April.

The general public meeting was good. There was tremendous effort to get the word out. Through the use of social media, there was no problem getting the information out to the masses. There were between 60 and 70 people that attended. AECOM staff and MNAA staff were there to allow each of the members of the public to engage one on one. There were stations set up by subject matter and topic in sequential order which allowed everyone to "walk through the story" of the Master Plan that has been shared YTD. The crowd was updated on BNA Vision. There was a lot of interest in sustainability and environmental issues. Attendees were encouraged to fill out comment cards and there were a number of positive responses and comments. People are excited about the airport and how it is growing.

President Kreulen asked how many people showed up last year to this meeting. Mr. A'Hara stated there was one person last year. President Kreulen suggested that the growth in attendance is a good sign of receptiveness and the community appreciating where BNA is headed. President Kreulen complimented Jeff Roach, Traci Holton and Robert Ramsey for their work.

Commissioner Joslin asked if there was a consistent theme on the comment cards. Mr. A'Hara stated most were on the lines of sustainability, recycling, whether BNA was considering solar power or wind

power, rainwater collection and stormwater management. Literally half were regarding environmental consciousness and awareness. A couple of the immediate area residents were interested in the runway expansion projects and how that would impact their homeownership. There seemed to be some confusion about the potential new runway and attendees were advised that will be a much longer term project and the runway extension would be the most immediate project. Residents seemed to like the idea that it is in response to the need for more international flights, and they understood the economic impact to the area as well.

President Kreulen reiterated that when Mr. A'Hara reported on the public asking about the impact of the runway expansion on their homes, they were not asking about eviction but were saying "we're ready to sell." It was positive and showed readiness to talk to BNA about it.

Mr. A'Hara then presented some terminal gate layout options to get to the 60 gate range by the end of 2023. A number of alternatives have been looked at, but Alternative 1 seems to be the most preferred. Alternative 1 utilizes the north side of the terminal and the Concourse A area to gain the majority of the gates, increasing from 7 gates today upward to 16 gates if Concourse A is redeveloped. The existing Concourse A is the most efficient in terms of width, circulation area, concession opportunities, smaller hold rooms, etc. Additional apron to the north will be needed with this option. The existing taxiways work well with what would be the new A/B area. There would also be a need to reconfigure/reallocate space on the ramp to accommodate gates and a need for overnight parking of aircraft as well as de-icing activities that will have to occur on more planes. Likely there will be a need for additional gates on the south side to maintain balance with specific airline needs and area of the terminal balance. One option is to take the D concourse in construction now and turn the corner to get some additional gates on the end of D. That would require relocation of the facilities located there today such as the air freight building and where a lot of the airlines ground service is stored and maintained. Another option is to go out on the C concourse and build off the center hub area of C and put an additional concourse node to get some additional gates on C. Walking Distance is a factor that will be taken into consideration.

President Kreulen stated that the area on Concourse A that would be turned into apron is an 80 feet deep (hole #2) and that BNA Engineering is already working on preparing analysis needed and developing the engineering plans to figure out how best to go about doing that. He also stated there will be BNA Vision 2.0 and 3.0 and staff will come to the Board to explain that and how much it will cost.

Commissioner Farnsworth asked if the existing area would be sufficient for the wider bodied planes

such as British Airways and a possible Tokyo route. President Kreulen stated both planes could be here simultaneously and there would still be room for a third wide body or six narrow bodies. The new international facilities will be in the middle of the T-Gates, and that is where everyone will go for customs and clearance.

Mr. A'Hara stated that the combination of airfield alternatives, terminal alternatives and gate growth alternatives will be looked at for any space allocations or space growth for post BNA Vision. Mr. A'Hara then discussed Runway Extension Options. Runway 2L option looks to be the best option primarily due to the favorable property situation, including property already owned and a few parcels that would need to be added. This option would make the environmental property acquisition process a lot smoother.

The airfield and terminal alternatives will be evaluated in terms of Long Range Development Concepts, whether it be North/South or East/West.

Commissioner Joslin asked about the runway option that had a 13,000 feet runway. He asked if the 12,000 ft runway was long enough for anything BNA may have in the foreseeable future. Mr. A'Hara stated that 12,000 feet is indeed long enough and the particular option that Mr. Joslin referred to had an oddity to keep the runway inside of Murfreesboro and I-40. In order to comply with FAA distance criteria that would allow BNA to take credit for 12,000 feet of runway, 13,000 feet of pavement would need to be built. This is not the most effective approach.

President Kreulen stated that if an extension north on the one segment of the runway, to meet FAA distance criteria, I-40 would need to be lowered and that is cost prohibitive and another reason this option would not work. Work will continue on the Master Plan and staff will come back to the Board and start thinking in terms of three items:

- Gates to enable ability to expand air service and competition
- Extension of runway once gates are finished to support future Asia or global flights out of Nashville
- Build a new terminal

This item was presented for information purposes only with no action required.

#### B. Temporary GA Tower Analysis

Mr. Robert Ramsey, COO, presented options for a temporary tower for John C. Tune, start-up costs and timeline. Three ways to establish a temporary tower operation are:

- Mobile mounted cab on trailer
- Pre-fabricated cab or metal building
- Pre-fabricated cab on another structure that is then re-used as the permanent structure at a later date

The purchase price for the cab is approximately \$350,000. There are lease options available in conjunction with the air service provider (the controllers that would come with that). Costs vary on lease versus purchase. Utility installation varies from \$350K to \$750K depending on the location and temporary versus permanent. The timeline would be approximately eleven months. The anticipated time frame for solicitation and selection would be seven months. The additional four months could be done concurrently with utilities. Permanent utilities may extend the timeline.

There are four potential service providers for a private tower operation. Estimated operating costs are approximately \$300K to \$350K per year. This assumes a 12-16 hour day, which is basically a controller on two shifts, one controller on each shift and 365 days a year. There are multiple lease terms, typically 3-5 year terms, with shorter periods possible. Costs are structured as upfront payment and monthly fees.

Mr. Ramsey reported on other airports with temporary towers. Oxford/Ole Miss operates off of a tower grant fee; Houston Executive operates on fuel flowage fees; Bolton Field, Arlington Municipal, Stinson and Jacksonville are all part of the Federal Contract Tower Program and do not have fees associated with their tower operations because that is picked up by the FAA. Houston and Austin both fund with fuel flowage fees. Some challenges include:

- Solicitation would take about eleven months
- Financial and staffing resources would require solicitation of a federal contractor for a temporary operator for a couple of years. The staffing cost would be \$325K (average), which equates to \$0.18/gal in fuel flowage fee or a little under \$4/landing
- The temporary tower with utilities and everything to support it equates to \$0.38/gal in fuel flowage fee or about \$16/landing, bringing the total to \$0.56/gal in fuel flowage fee or almost \$20/landing.
- Ramp fees could be another approach. Those fees usually are higher for larger aircraft and lower for smaller aircraft.

Evaluating those numbers, and given the time frame for completion, the recommendation is to

expedite design and construction of a permanent solution and separate early package for sitework, utilities and roadway and apply and pursue admission to the FAA Federal Contract Tower Program.

Commissioner Farnsworth inquired as to the odds of getting into the Federal Contract Tower Program. Mr. Ramsey stated the odds are a lot better now than six months ago. BNA now has contacts in DC and with the Deputy Administrator. Due to the recent reauthorization bill for the FAA, they opened the Contract Tower Program and have allowances to open the program. Two new General Aviation Airports were entered into the program in the last three months. Commissioner Farnsworth asked if those were busier than John C. Tune. Mr. Ramsey replied that he did not know about those two particular airports but there are about one hundred fifty towers in the program today and Tune, if accepted, would be in the top fifty.

President Kreulen stated that BNA has had four staff interactions with the Associate Administrator of Airports, Kirk Shaffer. Mr. Shaffer used to be general counsel for BNA airport for 18 years. President Kreulen stated he believed Tune had a good chance of getting in the program. If Tune gets accepted into that program, the FAA would fund the tower controllers. Commissioner Farnsworth stated if the take-offs and landings would be in the top fifty, she felt like Tune would be a shoe-in and the next question would be getting funding quick enough to start building. President Kreulen stated Tune has the funding to build the tower and he has spoken to Mr. Shaffer. He wants to close another loophole about a remote tower and the benefit of that. There is more homework to do, but MNAA has the grant for \$4.25M plus Transportation Equity Fund money and are prepared to start moving dirt, finish design and start building a tower at Tune. The O&M costs, if Tune gets accepted, solves a huge problem. But if not, MNAA will have to do some combination of what Mr. Ramsey spoke about in terms of landing fees and fuel flowage fees.

Commissioner Farnsworth stated that she thought if a permanent solution is coming quickly, an intermediate solution would be wasteful. President Kreulen stated that the concern is if it takes eleven months and \$1.1M to put this in place, MNAA would be half way through moving earthworks for permanent tower. Chair Freeman, Commissioner Joslin and Commissioner Farnsworth discussed safety concerns at Tune. Chair Freeman agreed with the analysis that it doesn't make a lot of sense to take eleven months and spend that much money but the need is great, and it needs to be expedited if possible. Commissioner Sullivan asked if a remote tower was a temporary option that could be implemented sooner. President Kreulen stated that MNAA would have to check on that, and he recommends proceeding with the expedited approach right now. He agreed MNAA should look at the

remote tower and see if that is feasible, how long that would take and if the FAA would entertain it. The runway safety action team approach will also be used to get the FAA involved with hazard analysis. Commissioner Joslin stated the remote tower would be a great idea, but he would like to see someone on-site looking at the traffic pattern and listening to what is coming in from Nashville. Mr. Ramsey stated that there is a twenty-four month solution and there are a couple of things that need FAA approval, but Ms. Holton is working quickly on it to see what MNAA can do parallel to compress the schedule. Commissioner Farnsworth asked how quickly it could be done. President Kreulen stated that it has taken months to get this analysis done and staff owes the Board additional analysis on a remote tower and timing and on FAA support or review of the safety procedures at Tune. He also stated that staff would give another update at a future meeting.

This item was presented for information purposes only with no action required.

#### C. BNA Land Development Update

Ms. Margaret Martin, VP and Chief Development Officer, presented an update on BNA Land Development. The department is restructuring into a real estate side and a revenue development side. The real estate development side covers BNA and Tune, aviation and non-aviation. Team initiatives are:

- Collaborating with Strategic Planning to develop a strategic land development plan
- Developing a solicitation process, marketing plan and evaluation procedures
- Conducting comprehensive review of all aviation and non-aviation leases for contractual compliance
- Examining current market and industry data to ensure maximizing revenue through lease rates and tenant improvements

Commissioner Joslin inquired as to the old Sky West building. President Kreulen stated that Sky West is in a 100,000 square feet hangar. The site next to it was built and designed to hold two 737s within the same hangar. That spot is ready to build on.

Ms. Martin then described aviation projects that are in the pipeline. MNAA has struggled with insufficient staffing to support the needs of the airport and the needs of the community from an aviation perspective. MNAA has brought in a new real estate person to focus on aviation. The first project tackled was Hangar 14 located off of Murfreesboro Road with a roughly 15 acre parcel around it. The apron is in need of reconstruction. MNAA did a month to month Invitation to Bid – as is. Jet Linx won that bid and that will bring in around \$30K per month (previously it was only \$3K per month). At the same time, a Notice of Availability was put out on Hangar 14 and the surrounding 15 acre parcel in



November, and 3 proposals were received. Stated in the Notice of Availability was the need to fully re-develop the hangar and the surrounding apron. Evaluation is underway and staff is working on a recommendation to bring to the executive team.

Commissioner Joslin asked how long the hangar had been vacant. Ms. Martin stated it has been vacant for about two years. President Kreulen stated that with Ms. Martin's leadership and this approach, Invitations to Bid and requests for development go out nationally to let everyone know and MNAA is not holding special deals for anyone. Ms. Martin stated that Atlantic Aviation (AA) has come back to MNAA with another proposal to expand their current leasehold by extending their current lease term or sign a new lease with additional term. They want to take over additional hangars and make additional investments. This proposal is being evaluated now, however had to be put on hold because staff needed to be increased to put people in place that could do that work. Commissioner Joslin asked how much time was left on AA's current lease and Ms. Martin replied that she believes their lease runs out in 2028.

Ms. Martin went on to report on non-aviation projects in the pipeline. Five parcels have been identified under the Master Plan for non-aviation use and development. Ms. Martin stated that her department is working closely with Jeff Roach in Strategic Planning regarding the use of these parcels. For example, some of the parcels identified may need to be used for employee parking. There are a lot of calls on these parcels and Ms. Martin said her department is keeping the conversation going and not ignoring these calls, but it is a timing issue and must be consistent with the airport Master Plan. Once the final strategic plan is in place, those parcels will be solicited actively and proposals would be evaluated as they come in. Ms. Martin went on to say that her team will work with Strategic Planning on the possible expansion of Runway 2L and the need to acquire properties.

This item was presented for information purposes only with no action required.

VI. Adjourn

There being no further business before the GAOPE Committee, Chair Freeman adjourned the meeting at 9:47 a.m.



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Amanda Farnsworth, Secretary