

ATTACHMENT #4**Allan Heese**

From: pat.oien@faa.gov
Sent: Wednesday, March 22, 2006 3:58 PM
To: Allan Heese
Cc: jim.lomen@faa.gov; patricia.sullivan@faa.gov; Rorie Watt; Ben Mello; Terry Stone; Tom Carson; John Coleman; Jerry Mahle; byron.k.huffman@faa.gov; debbie.roth@faa.gov
Subject: Questions regarding new RSA alternative
Attachments: Juneau sketch.jpg; Response to JNU questionsmarch22.doc

Hi Allan,

The attached document includes responses to the comments in your March 13, 2006 email regarding an RSA option, as described in a meeting between FAA and CBJ on March 3, 2006, currently under consideration by the JNU Airport Board. This alternative is depicted in the attached figure.

Alternative 6B represents the least damaging environmentally preferred alternative. However, the RSA option in consideration (a combination of Alternatives RSA-6A and RSA-6B) provides JNU with a greater runway safety margin than currently exists, increased structural pavement, and a lower construction and maintenance cost than the EMAS alternatives, or than RSA-5C or RSA-1. At the same time, this option would affect less habitat than most of the RSA alternatives, although still about 2.5 acres more than RSAs 6A and 6B.

Please contact me if you have any questions.
Pat

5/2/2006

1) First of all, this alternative appears to not satisfy the purpose and need.

Response: This option does satisfy purpose and need, as stated on page 1-30 of the DEIS, to bring the Airport into compliance with FAA's standards.

Specifically,

- a) The landing distance requirements would not be met for 737-400 and -900, unless additional weight restrictions would apply. Please have Barnard & Dunkelburg show what the slippery and wet length of the runway at JNU is for the 737-900 for takeoff and landing operations. (Extrapolation from DEIS charts would lead to the conclusion it could require close to 9000' for a slippery runway.) They should update all of applicable tables and illustrations in the DEIS to facilitate comparison of current & proposed alternatives context.

Response: It is unclear how the commentor reached a conclusion that the 737-900 could require "close to 9,000 feet of runway for landing under slippery conditions". At any rate, the information cannot be "extrapolated" from Table 1-7 of the DEIS (presumably the charts referred to in the comment).

The specified landing length requirements for both the B-737-400 and -900 series aircraft were presented in the April 2005 DEIS. For the B-737-400, Alaska Airlines specified a maximum landing weight of 121,000 lbs., which requires a landing length of approximately 5,900 feet in consideration of the Flaps 30 setting and wet runway conditions. The RSA option would reduce the existing Landing Distance Available (LDA) from 8,457 feet to 8,057 feet for landings in both directions, but still provide a safety margin of 2,157 feet for wet pavement landings. It should also be noted that AC 150/5325-4B entitled *RUNWAY LENGTH REQUIREMENTS FOR AIRPORT DESIGN*, provides guidance for determining required runway landing lengths for airplanes with a maximum certificated takeoff weight of more than 60,000 lbs. According to this guidance which was published in July of 2005, the highest landing flap setting for the specified aircraft should be utilized (i.e., the Flaps 40 vs. the Flaps 30 setting), and results in a further reduced landing length requirement of 5,750 feet.

In addition to this planning manual data, advisory information was also provided for reduced braking conditions associated with slippery runway conditions, referred to as "contaminated runways". It was determined that an additional 2,550 feet of runway would be required for the B-737-400 aircraft in consideration of the medium braking coefficient. According to correspondence from Alaska Airlines, contaminated runway conditions are encountered at JNU approximately 20 days each year, and the Airline believes that the contaminated runway length requirements should be

considered in the assessment of the landing length requirements for the Airport. However, there are no provisions or FAA guidance for inclusion of the contaminated runway length requirements in the determination of required runway landing length requirements as specified in AC 150/5325-4B.

In consideration of the B-737-900, a specified maximum landing weight of 146,300 lbs. was utilized for the Flaps 30 setting and wet runway conditions, and resulted in a 6,800-foot landing length requirement. As with the B-737-400 aircraft, this required landing length would be further reduced to approximately 6,400 feet, in consideration of the Flaps 40 setting. Additional landing length data for contaminated runway conditions will be requested from Alaska Airlines for the B-737-900; however, as stated previously, use of this advisory information/data is not recognized by the FAA or included in AC 150/5325-4B entitled *RUNWAY LENGTH REQUIREMENTS FOR AIRPORT DESIGN*,

b) AK airlines previously strongly opposed these restrictions which would (paraphrasing): reduce cargo and passenger capacity and reduce their ability to sell last minute seating. What is the Alaska Airlines official corporate response to this plan? Have they been asked specifically about this alternative & responded in writing which we can review? What specific communication with Alaska Airlines prompted the comment that Alaska Airlines would support the new proposal?

Response: FAA has informally discussed this option with Alaska Airlines and provided the airline with the attached sketch. FAA sent a letter to Alaska Airlines on March 22, 2006 requesting them to formally comment on this option. The reduction of the existing LDA from 8,457 feet to 8,057 feet for landings in both directions would have no impact on existing passenger or cargo capacities, and have no impact on last minute ticket sales, which would only be relevant to departure criteria. In fact, the additional accelerate stop distance available (ASDA) provided to Runway 26 by the alternative (i.e., 8,457' vs. 8,657') would actually increase the available takeoff weights for Alaska Airlines on departures to the west. Alaska Airlines will be provided the opportunity to comment on this RSA option, and their input will be disclosed in the FEIS document.

c) Researching the previous Capital Move Initiatives, we found that lack of access to Juneau was a recurring reason used to promote relocation of the capital. The Airport Board and some members of the Assembly had strong objections to any reduction of service to Juneau because any reduction in landing length reduces present and future airport capacity and reduces ultimately Juneau's ability to attract new carriers. (This may result in our needing to take this alternative before the Assembly for broader discussion, rather than just the Board.)

Response: We encourage JNU to take this alternative to the Assembly for broader discussion. This alternative would not cause a reduction in service, as the second sentence of your comment asserts, nor do these changes have any affect on existing Airport "capacity." (The responses to previous questions explain why the operational distances provided under this alternative should be satisfactory to Alaska Airline or other carriers.) We do not believe that this alternative would have any affect on JNU's ability to attract other carriers. As evidence, we note that JNU has not attracted new carriers with its current runway configuration.

d) Please compare the new alternative with the original runway-shortening proposals of several years ago. This seems very similar to Alternative RSA-2C from the DEIS, which was dismissed as not meeting Purpose and Need.

Response: There is no similarity between this alternative and Alternative RSA-2C. Alternative 2C included relocation of both thresholds, with no change in runways length. Alternatives involving reductions in operational distances were eliminated from full consideration in the EIS for a variety of reasons. None of those alternatives is relevant to the alternative in discussion.

2) The Chief Pilot from Alaska Airlines through the Pilots Union or Association wrote an impassioned plea not to shorten the runway. They stated public safety would be reduced due to increased public danger during landings in poor runway conditions. This letter was a part of the official comment to FAA for the PDEIS and presented in public forum. How is the concern addressed by this alternative?

Response: FAA acknowledges the concerns expressed by pilots, who generally would not be favorable under most circumstances to a reduction in runway length. We believe most pilots would acknowledge the operational benefits of this alternative, specifically that the runway landing thresholds remain unchanged from existing conditions, and the approximately 743 additional feet of full strength pavement and RSA beyond that currently in place at JNU. In addition, the FAA's airport design guidance for runway length requirements is presented in AC 150/5325-4B. There are no provisions included in this AC for calculating landing lengths on contaminated runways.

3) All previous alternatives have gone out to everyone through the DEIS. This includes resource agencies for public, corporate and agency comment as per the NEPA process. How will this alternative be included in the NEPA review?

Response: This alternative would have to be evaluated as a separate alternative within the Final EIS, as the disturbance footprint and environmental impacts would be unique from those described in the DEIS. The public will have the

opportunity to comment on this alternative when the FEIS is published. FAA will consider comments received on the FEIS in the Record of Decision.

4) How was this alternative developed such that the 400 feet of lost landing distance arrived at? Is there some rationale that supports 400 feet instead of 300', 500' or some other number? The argument would likely be that if we don't place the 350' of additional fill at each end, we only lose 750' of landing and maybe only a little on takeoff. We have covered that ground before & found it undesirable.

Response: The FAA's first objective was to design an alternative in consideration of the JNU Airport Board's proposed "compromise" that would meet RSA standards for a traditional grade and fill RSA without EMAS (i.e., 1,000 feet of overrun protection at either runway end). The 400 feet of "lost" LDA is a consequence of the design standard.

5) Is there some additional room on the west end to place additional fill that would allow a longer Landing Distance available? Also, can the parallel taxiway be extended further to the west that would allow additional build out of full-strength pavement for use as runway, using the full west-end RSA to be actual runway similar to the proposed east end configuration?

Response: We concur with Tom Carson's March 13, 2006 e-mail on this subject; there is not sufficient room between the Mendenhall River and the Airport for further expansion to the west beyond that shown on Alternative RSA-6B and this RSA option (without placing fill into the river). The primary constraints are the need to retain both the Dike Trail/EVAR and the Float Plane Pond access road. We believe the Runway 08 departure threshold shown on the sketch is as close as possible to both of these features. The main concern is human safety, as jet blast from the design aircraft can be quite powerful.

This alternative does not include extension of the parallel taxiway. If JNU elects to implement this option on a permanent basis, FAA would consider extension of the parallel taxiway at some time in the future if there were a documented operational need.

6) How is the FAA viewing de minimis? If the State determines the JNU preferred alternative meets de minimis criteria, will the FAA accept that determination? If so, what would be the need for any compromise, as we would then be agreed on the preferred alternative?

Response: Consideration of all local, state and federal resource and regulatory requirements included in the DEIS has resulted in FAA's selection of RSA 6B as the preferred alternative. As FAA has stated on numerous occasions, DOT section 4(f) is only one of the criteria FAA has considered in making its determination.

7) Is it true that JNU could opt for this alternative as a permanent configuration and never need to install EMAS? Would we ever be able to get back the 400' lost landing distance through a subsequent (supplemental?) EIS or would we forever be looking at an EMAS alternative?

Response: JNU could at its discretion opt for this alternative as a permanent configuration to address RSA requirements, and not install EMAS. The airport could also choose to install EMAS at a future date. Installation of EMAS would allow the Airport to increase certain operational characteristics. For example, the LDA for both runways would increase to 8,645 feet (assuming an EMAS of approximately 337 feet, with 75 feet blast protection). The ASDA for both runways would increase to 8,833 feet.

8) If JNU accepts this alternative, will the FEIS occur earlier than if we reject it? Please explain why?

Response: Agreement between the FAA and the sponsor on this action and components of other actions would certainly help facilitate completion of the EIS. However, barring other delays requested by the Sponsor or unforeseen circumstances, FAA will continue with preparation of the FEIS.

Allan Heese

From: Allan Heese
Sent: Thursday, April 06, 2006 5:01 PM
To: 'patricia.sullivan@faa.gov'
Cc: Ben Mello; Jim.Lomen@faa.gov; Malcolm.Salway@hdrinc.com; pat.oien@faa.gov; Richard Sill; Rorie Watt; tcarson@carsondorn.com; Terry Stone
Subject: Further questions on FAA RSA compromise

Thanks, Patti. Based on your clarification below, I strongly suggest we all remove any reference to Alt 6B from the drawing that was attached.

As we previously requested, it would be very helpful for our comparisons if we could see a profile of both ends of the proposed RSA, as well as a drawing similar to that in Figure 2-23. This would show the taxiways in relation to takeoff points & landing thresholds. This would be very beneficial in my presentation to my Board.

By my calculations, the compromise solution extends 188 feet east of where RSA-6B ends. This answers the question asked during Tuesday's phone conversation about whether it extends 188 feet or twice that distance beyond 6B.

1) A question we've been grappling with has to do with the difference between Huffman's proposal and RSA-6B. It has been made to sound like, even if the Airport Board agrees with this proposal, it is tentative until some agreement is reached with resource agencies. The concern is, if we do agree, but then the resource agencies do not, where does that leave us. Have we then inadvertently agreed to the RSA-6B footprint without emas, with an even shorter runway? Have we got no agreement and are back to the drawing table? Please address this so I can add that to my briefing to the Board.

2) A second, related question, refers to something you said when we first discussed the new FAA proposal. That had to do with the de minimis determination, that the FAA considered you were the ones who had responsibility/authority to make that determination, and therefore what the State came up with would make no difference (my paraphrasing what I heard you say). This contradicts something you had told Airport Board Chair Ron Swanson & myself several months ago - that is, if the State came up with a determination that our project met the de minimis criteria, you would likely accept that. This also seems to contradict what I thought the de minimis guidance was, that is, the owner of the land is the entity which would be able to make the determination. Please expand on this with the FAA's position on de minimis and how it applies to our alternative.

During the same part of that teleconference, you continued that even if our alternative met de minimis criteria, there were other considerations that would preclude the FAA from being able to select our alternative, this having to do with the Clean Water Act. It would seem, from our perspective, that if de minimis is met, 4(f) is out of the picture. Therefore, we are looking at wetlands impacts, costs, and *all* other factors which NEPA considers. Given the sponsor's (our) strong opposition to emas, given the extreme cost differential of emas over traditional fill, and given other factors, our alternative would be the most prudent and feasible alternative. Please explain why this is not the case, or expound on this further.

5/2/2006

3) One of our concerns about emas (as stated above) is the extreme cost of emas over a traditional safety area. A recent news article stated that Midway Airport in Chicago is now looking at installing emas at a cost of \$40 million. If possible, please give us some detail as to what that \$40 million is going to purchase, and verify the cost estimates in the DEIS for emas alternatives are still valid. As we have said several times in the past, we feel the emas cost estimates are low; this may give more detail to support or refute that concern. I believe this is germane to the present question regarding the new alternative, as it goes to the rationale that the FAA will continue to pursue the emas alternative for JNU if we were to reject this most recent FAA proposed alternative, or that the Corps would not allow selection of a more reasonably priced alternative in their Clean Water Act permitting process.

Thanks for your continued efforts on this project. Allan