

MUNICIPAL AIRPORTS AVIATION ADVISORY COMMISSION  
AND MERRILL FIELD (MRI) USER GROUP COMBINED MEETING MINUTES  
Thursday, April 5, 2017 3-5PM  
Anchorage Fire Training Center  
1140 Airport Heights Road, Building "A" Room 3  
Anchorage, Alaska 99508

ATTENDANCE

COMMISSION MEMBERS PRESENT

Jim Powell, Chair  
Corey Hester (via proxy AK Airmens Assoc Gvt Affairs staffer Alternate Adam White)  
Jamie Patterson-Simes  
Greg Pearce

COMMISSION MEMBERS ABSENT

Sharon Chamard, Vice Chair  
Terry Pena – excused absence

AIRPORT STAFF PRESENT

Paul Bowers A.A.E., Airport Manager

1. CALL TO ORDER

Commission Chair Jim Powell called the meeting to order at 3:00 p.m.

2. SELF INTRODUCTIONS

Chairman Powell explained this is a special combined MAAAC and Merrill Airport User Group meeting to discuss a proposed reconfiguration of Apron-Taxiway separations. He asked all attendees to introduce themselves, tell of their association with Merrill Field, and reminded all to sign the attendance roster.

3. AIRPORT MANAGER'S REPORT

Airport Manager Paul Bowers (PB) provided an overview of the proposed TAXIWAY SEPARATION PROJECT, starting with a background review of MRI that explained:

- MRI is a mature airport, established/configured in 1930 as the sole airport for south central Alaska, and its 75' wide parallel Alpha & November Taxiways are a holdover remnant from long past heavy metal / large aircraft days (TWY Charlie is 60'). For comparison, he noted all ELMENDORF Taxiways are 75' wide and most ANC Taxiways are 75' wide.
- MRI is classified as a "Class B-II Primary Commercial Service Airport" and serves as a general aviation reliever airport to ANC.
- Class B-II standard taxiway width is 35'.

PB also explained FAA AC150/5300-13A dictates Runway Object Free Area (ROFA) & Taxiway Object Free Area (TOFA) and Runway Separation Standards for aircraft approach category B-II Dimensions that MRI is to meet. These *Object Free Areas* are mandated to enhance the safety of aircraft operations by having the area free of objects, *including parked airplanes*.

PB went through the **Agenda identified issues** of:

**Vehicle-Pedestrian Deviations (VPDs) Reduction;**  
**RIMP (Runway Incursion Mitigation Plan);**  
**TWY A & N width reduction (no changes to TWY C);**  
**Tenants' Apron configurations to remain unchanged;**  
**TWY Apron Separation Island Placement;** and

### **Unidirectional TWY use per aircraft.**

He then addressed how this proposed Apron edge-Taxiway separation addressed or impacted each issue. User Group attendees asked questions throughout this presentation/discussion as well as after (questions/comments/discussion/answers are summarized under the Public Comments section.)

**Vehicle-Pedestrian Deviations (VPDs)** are ATCT observed unauthorized vehicles and/or pedestrians on airfield controlled surfaces (taxiways or runways). FAA views VPDs as apparent evidence of unsafely operating the airport – which is a violation of Sponsor Assurances wherein the MOA/MRI agreed to operate the airport in a safe manner.

PB explained that while VPD disruption of aircraft operations exacerbates the VPD severity, statistically a VPD is a VPD, whether it was or is directly or indirectly a result of constrained airport geometry, whether intentional or unintentional – the reason literally makes no difference: a VPD is a VPD.

MRI VPD Recent History:

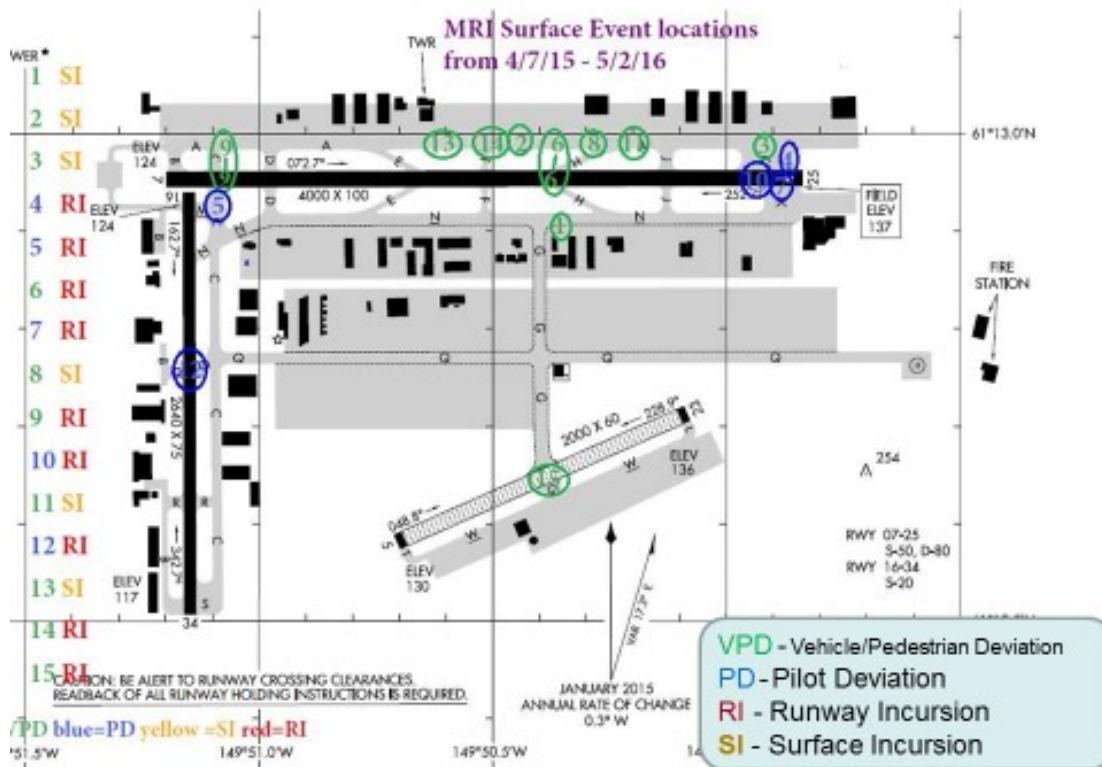
2017 – 3 VPDs (as of 04.05.17)

2016 - 7 VPDs

2015 - 15 VPDs (third highest in the nation in 2015 on a per-operations basis)

2014 - 13 VPDs

The below Figure 1 depicts where VPD Surface Events occurred on MRI during the April 7 2015 to May 2 2016 timeframe.



From this **Figure 1** diagram, it is apparent most VPDs occurred on the Alpha side of the airfield. While not identical, other years also show a similar pattern wherein most VPDs occur on the Taxiway Alpha side.

PB further explained that a VPD is a VPD - and MRI was third highest in the nation in 2015 on a per-operations basis – with 15VPDs on 125,000 operations, nine of which

were Runway Incursions. He further noted that *failure to satisfactorily address VPDs* will adversely impact Airport Improvement Program (AIP) funding, which largely funds airport capital improvements that include Snow Removal Equipment (SRE) acquisition.

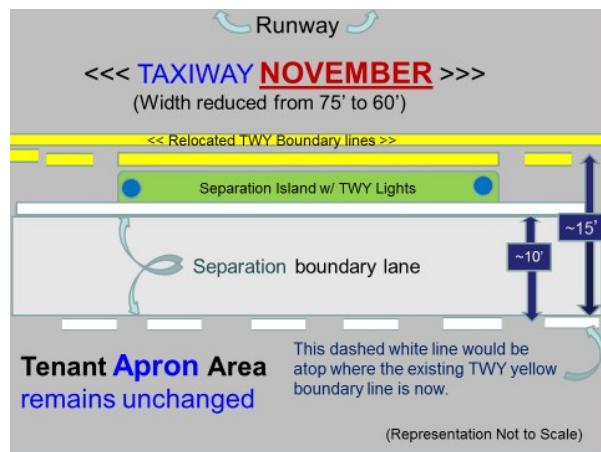
A **Runway Incursion Mitigation Plan** (RIMP) is now necessary as a direct result of a FAA DC headquarters mandate to address the high numbers of VPDs at MRI. Among other things, this will require a reconfiguration of taxiway hold lines at various intersections.

**TWY A & N width reduction (w/o changes to TWY C)**, as noted earlier, this is proposed to separate the Apron edge from the adjoining Taxiway. A diagrammatic layout of the airfield depicted the 75' wide taxiways at Alpha and November and 60' wide taxiway Charlie.

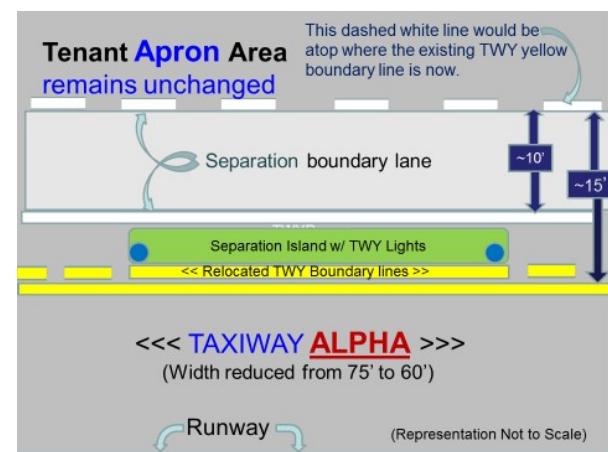
This purpose of the TWY A & N width reduction by 15' would be to implement several changes:

1. Create an obvious separation of the existing taxiways (effectively apron-edge taxi-lanes) from the apron edge, to improve safety and reduce Vehicle-Pedestrian-Deviations.
2. Create within this 15' area a Separation Lane/Island area thereby freeing up limited space on the apron side now used by vehicle traffic (which will be curtailed on the November apron side and better access controlled on the Alpha side).
3. Strategically place the proposed Islands to preclude aircraft having a 'direct shot' access to the taxiway connecting intersections of D, E, F, H, J, K from aprons (to create taxiway geometry that "should force the pilot to consciously make turns to promote situational awareness," in accord w/ AC150/5300-13 FAA Engineering Brief No.75).

Below Figure 2 depicts this conceptual configuration for the TWY November side. Figure 3 depicts this conceptual configuration for the TWY Alpha side.



**Figure 2 – TWY N**



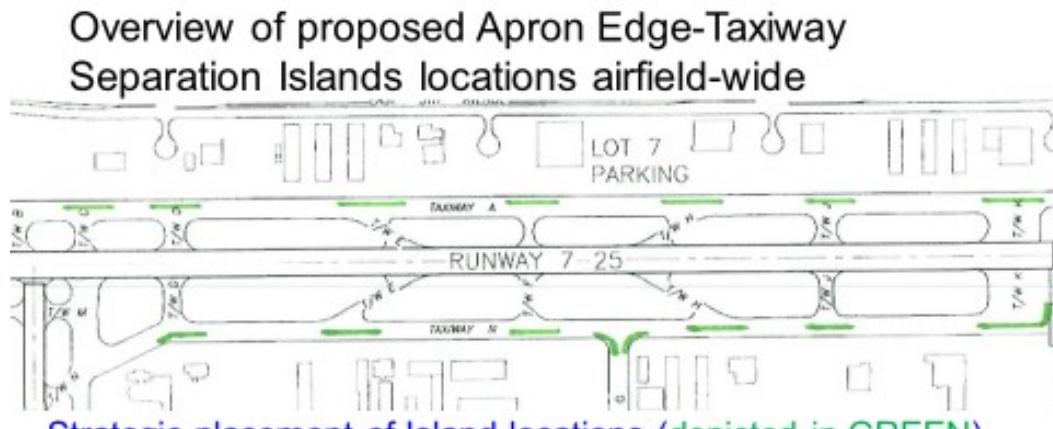
**Figure 3 – TWY A**

### **Tenants' Apron Configurations to Remain Unchanged**

As shown in the above configuration pictures, the 15' for the Separation Lane and Island area plus paint striping would be created out of the 75' TWY width: Tenant Apron areas would remain unchanged.

### **TWY Apron Separation Island Placement**

The below Figure 4 diagram/narrative depicts a conceptual configuration Strategic Placement of the Separation Islands Overview.



Strategic placement of Island locations (depicted in GREEN) is to create taxiway geometry that “should force the pilot to consciously make turns to promote situational awareness” (FAA Engineering Brief No.75 for AC150/5300-13) to preclude aircraft having ‘direct shot’ access to the taxiway via connecting intersections of D, E, F, H, J, K from aprons; i.e., to mandate either a right turn or a left turn from the apron areas to gain taxiway access.

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**Figure 4. Strategic Placement of the Separation Islands Overview**

**TWYs Alpha and November Bidirectional (head-on) Taxiing would cease with 60' width.**

PB noted FAA Airport Design Standards are set up for single direction taxiing and, from a safety perspective, the FAA Airports Division considers it inadvisable to conduct bi-directional (head-on) taxiing operations on a single taxiway. Notwithstanding that, the MRI ATCT chooses - at their discretion - to perform such operations.

Reducing a taxiway 75' width to 60' would likely eliminate such Bidirectional (head-on) Taxiing practices, which the MRI ATCT has stated averages 3-5 ops per day on at least an-every-other-day basis during summer season.

**4. PUBLIC COMMENTS and 5. COMMISSION COMMENTS are combined, as below:**

**Questions (Q) and Comments (C) and Answers (A)** are numerically listed (purely for convenient reference only, not necessarily in order of query, and without specific attribution):

1. **Q**, What is the driver behind this proposal? **A**, Safety and VPD reduction.
2. **Q**, How much would this program cost? **A**, TBD. FAA administered Airport Improvement Program (AIP) funding would cover 93.75%, with the remaining 6.25% covered by MRI. In turn, as MRI does with all AIP projects, an administrative fee is applied to the project for coordination, advertising, staff time, etc, which more than covers the 6.25% airport sponsor share. PB also noted there is no remunerative monetary advantage to MRI of doing *this* AIP project versus another; regardless of the project, admin fee recapture of sponsor share costs would apply. IF this TWY reconfiguration project were undertaken as an AIP project, it would result in re-

painting of all airfield Taxiway and Runway lines - effectively the entire airfield AOA - as part of an AIP grant funded project, thereby saving a MRI M&O operations expense of \$100,000-\$150,000. Doing it piece-meal will not result in it being AIP grant funded.

3. **C**, Reducing Bi-Directional taxiing on November will increase ATCT delays. **A**, Per ATCT, this may very well be the result. **C** This will cost operators money, both for wait time on the ground and in the air. **A**, No doubt any delay would/will cost money; specific TBD impacts will be explored.
4. **C**, Aircraft traffic on November is different than Alpha. All of the Golf and Quebec apron areas as well as Charlie South and Charlie Transient traffic traverse November. Plus Medevac aircraft traverse November only - not Alpha (plus of course Golf and Quebec) while taxiing to/from the hospital ER, so reducing November width warrants different consideration than Alpha. **A**, Agree, all good points.
5. **Q**, There is an obvious clustering of VPDs mostly on the TWY Alpha side, so why pursue this same treatment for the TWY November side? **A**, Aircraft congestion at the Golf-November intersection and adjacent to ACE fuels, as well as the constrained Apron space along TWY N would be helped with this Separation Lane-Lighted Island concept. Reducing and/or eliminating vehicular traffic adjacent to TWY November will also help and PB stated that will be pursued.
6. **C**, Because of the clustering of VPDs along TWY Alpha and less so on TWY November, why not restrict vehicle traffic to all businesses-along-November to access via Merrill Field Drive only to address the November side issues? **A**, Clearly all businesses along TWY November can be accessed via Merrill Field Drive and with our recently installed vehicle gate ingress/egress system, access control can indeed be so restricted – and it will be.

However, on the north / TWY Alpha side – complements of the elimination of the 5<sup>th</sup> Av frontage road when 5<sup>th</sup> Ave was widened – AOA and TWY Alpha side business/tenant access is only via four 5<sup>th</sup> Ave cul-de-sac access points and the vehicle gate at Stoddards. So vehicle driving onto the AOA is necessary in many cases – and is the *only* access for several. That access must be either across individual tenant apron ramps or adjacent to the taxiway - and therein is a problem. Better signage will help and better informed customers/guests by the respective businesses or tenants will also help, but some type of restrictive parameter is necessary to keep drivers off the taxiway.

7. **Q**, Would islands be an above ground barrier of any type? **A**, No, nothing above surrounding surface asphalt except taxiway frangible light stems.
8. **Q**, If potential prop strikes can (will) occur with TWY light stems, why not use flush-mount (“flush” with the asphalt surface) sunken lights? **A**, ‘Flush mount’ lights actually protrude above the surrounding surface  $\frac{1}{2}$ ” to 1”, thereby requiring a poly or Lexan material moldboard (the ‘moldboard’ is the wearing or cutting edge on Snow Removal Equipment (SRE) blades). Steel edges will snag the ‘flush’ lights. Snags damage the blades and/or tear out/off the light lids.

PB further explained that MRI SRE uses carbide steel moldboards, because steel cleans better and doesn't glaze the pavement surface as much as poly does – and glazed surfaces reduce surface braking friction. Also, MRI SRE Sweepers use stainless steel wafers on their brooms and steel scratches the flush mount lenses, requiring periodic lens replacement. Poly wafers do not scratch as much, but more surface glazing occurs with poly.

The glazing can be overcome with de-icing chemical applications, but that is quite expensive and our de-icing chemical additive use is budget-limited because of that substantial additional cost. Flush lights also use more electricity as they need to be

incandescent to provide enough heat to melt the lens ice buildup to keep them visible, i.e. snow and frost free (flush mount LEDs lights in snow country need a supplemental heat source to remain ice/frost-free). Standard above ground TWY lights can be either – and most MRI lights are LED.

Generally flush mount lights are only found at Part 139 Category I, II, II airports (where RWY centerline lights are required for such categorization). Because of above practicality and cost issues, MRI will not be installing flush mount lights.

9. **C**, Cutting into the asphalt to create grass islands would create more problems than it would address: aircraft excursions into/onto an island could create nose gear/tire issues/even stuck aircraft if the ground is soft; grass mowing would add costs, mandate ATCT coordination, and create inconvenience to TWY users; grass areas could become a waterfowl attractant, may need insecticide spraying for grass hoppers; cuts into the asphalt would allow water penetration which could create unforeseen problems and may exacerbate drainage; snow removal becomes more problematic; simply painting asphalt surface green would finesse all of these points, except prop strikes that could occur with additional taxiway lights stems. **A**, PB agreed with all points, particularly that green-painted asphalt simplifies and resolves most points made in this regard. He noted rebuttal concern expressed regarding painted surface asphalt were that many pilots would simply ignore them and drive or taxi across at will, and if this were the case, taxiway light stem prop strikes would be even more likely. Also, strategically placed painted Islands that were fully ‘drivable’ would not necessarily create airport geometry that would force the pilot to consciously make turns to promote situational awareness to/from aprons.
10. **C**, Islands at Spernak’s look like they would exacerbate aircraft parking space. **A**, PB noted approximately 31% of Spernak’s lease lot is used for vehicle parking. It would appear reconfiguration and/or better utilization of the lot could help address the congestion.
11. **C**, A graduated approach may be appropriate; i.e. do a partial or temporary paint only arrangement rather than an engineered permanent cutting-into-the-asphalt installation. **A**, A graduated approach may indeed be practical. Downside is any piecemeal approach will be a 100% MRI cost, w/o any grant funding. Certainly more emphasis and VPD reduction concern on the part of all parties will help.
12. **Q**, What is the proposed timing for this? **A**, The window to get this designed to where it can be *advertised and capture AIP grant funding* for this project for construction in CY 2017 is past. So AIP funded treatment of both TWYs A & N, plus full field-wide repainting as part of an AIP project would not occur before 2018. Particularly so as a definitive plan at this point is yet to be decided.

13.

PB comments:

While a definitive plan is yet to be determined, a probable direction from here following our two hours of questions/comments/discussion is that:

1. ALL TWY November business/tenant access will be only via Merrill Field Drive. Driving parallel to November will not be allowed (other than MRI, APD and tenant SRE efforts), likely starting May 1.
2. Any to be installed Islands they will be green painted asphalt, not grass-filled cut-into-asphalt.
3. Any additional taxiway lights will be standard above ground frangible light stems, not flush mounts.
4. Some type of restrictive parameter is necessary to keep drivers off TWY Alpha and a vehicle separation lane will be implemented. Whether that comes out of the indi-

- vidual leaseholds or the taxiway width remains TBD (latter is likely). Some type of MRI funded address of TWY Alpha portions of this may be implemented in 2017.
5. North side vehicle access via the N8 vehicle gate at Stoddards will not be available for other than Stoddards customers. No more access for convenience to any area along Alpha because Stoddards Way access is easier than 5<sup>th</sup> Av access. Gate codes will be changed accordingly.
  6. A reiteration that tenants have (or should have) control of their leasehold spaces. Many – not all – VPD cases have resulted from failure to control AOA access by customers/patrons, via left open gates/doors, not awaiting vehicle gate closure after entry or exit, and not reporting a gate failure situation. Much of this discussion of Safety related VPD reduction would be unnecessary if better address of these items were to occur.

PB also noted he would send draft minutes to all who signed up (w/ legible email addresses) and invited attendees to send him recommended edits/responses if/as warranted.

6. OTHER

PB provided a quick overview of our Runway 05/23 Lighting (RWY MIRL lights + lighted windsock), construction of which has been winter suspended. Swanson General is the general contractor on this \$485K project. PB explained that because this gravel runway is a snow covered 'Ski Strip' in winter and snow depths will be unknown, runway lights will be 30" total height at 20' out from the runway shoulder (both dimensions are higher and wider than typical). Specific construction dates and coordination are TBD.

7. ADJOURNMENT at 5PM