#### Airport Management Advisory Committee

#### Minutes of Meeting –March 23, 2018 at Town Hall

Arthur Malman, Chairman of Town of East Hampton's Airport Management Advisory Committee ("AMAC"), called the meeting to order at 9 AM.

The following members of the AMAC were present: voting members: Bonnie Krupinski, Gene Oshrin, David Gruber, Steve Tuma, Pat Trunzo III, and Arthur Malman and non-voting ex- officio members: Sylvia Overby and Jeff Bragman, Councilpersons and Co-Board liaisons for the AMAC, James Brundige, Interim Airport Director and Len Bernard, the Town's Chief Budget Officer.

Absent were Munir Saltoun and Charles Ehren, a voting member.

Among others attending for all or part of the meeting were JoAnne Pilgrim, Executive Assistant to the Supervisor, Kent Feuerring, President of the EH Airport Pilots' Association, several Wainscott residents and other members of the public.

The agenda had been previously distributed to members and copies were distributed to attendees.

The next meetings were SCHEDULED for the following at Town Hall, at 9 AM:

Friday, April 20

Thursday, May 17

#### Thursday, June 28

The draft minutes of the January 18, 2018 meeting, as previously distributed, were approved.

Jeff Bragman gave an update on the Wainscott water issues, indicating the desirability of having Suffolk County water supplied to the affected areas as soon as practical. However, since that may take some time, he was recommending having the town supply separate in home water purification systems on an expedited basis. While testing is on-going there is still no definite indication of where the perfluorinated chemicals originated. Moreover. while only two wells tested to date have shown perfluorinated chemical levels above 70 parts per trillion which is the current EPA endangerment level, several showed lower readings above the 13-20 parts per trillion levels set by neighboring states as their levels for endangerment.

Arthur Malman explained that all AMAC members were recommending comprehensive environmental testing of all airport areas starting this spring, initially to the Phase I level that would be the first screening level for a typical real estate buyer, with further testing being considered thereafter depending on the Phase I results. However, because of the concern of lead emissions and water contamination, lead testing at runway ends and some test wells would be started while the Phase I was being completed. Arthur Malman reported that he had spoken with an experienced environmental lawyer friend of his who estimated that the Phase I would probably cost the airport about \$50 thousand before consideration of the cost of lead and water testing. Sylvia Overby explained that as part of the Wainscott testing, there were already wells being drilled at the airport, so there would be no reason to duplicate that aspect.

An important benefit of the Phase I and lead testing being done expeditiously would be to put to rest rumors about high levels of lead emissions by piston planes. Gene Oshrin noted that based on the results of lead testing at other regional airports, lead emissions by piston planes using HTO was probably negligible; he believes the prompt independent environmental testing results this summer is critical to give everyone the same facts and put unfounded rumors to rest.

Arthur Malman noted that Len Bernard would need to leave the meeting early and, as a consequence, in order to benefit from his input, the meeting should consider first landing fees and leases.

Arthur Malman suggested a policy change that would set parameters for aggregate landing fee increases of say 3-5% annually to allow better planning and minimize the possibility of unexpected sharp changes, that lead to uncertainty and expensive Part 16 controversies.

James Brundige noted that, when he originally became airport director (during his "first term"), he had recommended substantial increases to landing fees to cover shortfalls and help fund some longdeferred maintenance. Len Bernard reported that, by contrast, at present the airport's revenues are covering its expenses and it has substantial reserves and borrowing capacity to cover capital expenditures, with additional cash due at the closing of land sales to tenants under pre-existing options (although a budgeted \$125,000 increase in rentals from an expected lease to a landscaper will not be realized since the tenant determined not to go forward).

David Gruber said that another facet for a landing fee discussion was the allocation of landing fees among classes of aircraft which is now solely by weight and therefore, effectively undercharging helicopters for their use of the airport. He explained that the Town, on the advice of Peter Kirsch (during the current Part 16 proceeding in which was asserted that the Town had improperly increased landing fees), had moved to this system which had the counterintuitive effect of lowering landing fees for helicopters at the same time that the town was trying to reduce helicopter noise. For example, the annual cost of the tower is over \$300,000 and certainly it is used equally by helicopters and fixed wing aircraft regardless of their relative weights.

David Gruber stated that after reading FAA policy pronouncements, both he and others had reported at the time that aircraft weight (which causes wear and tear on pavements) could be one factor for landing fee rates but was not required to be the sole criteria.

While Arthur Malman agreed that under FAA policies weight was not required to be the sole criteria for setting landing fees, he felt that the more complex discussion of landing fee re-allocation should be the subject of an extended separate Amac discussion in the near future, his recommendation

today had been much narrower: just smoothing out annual increases in aggregate landing fees so all stakeholders have reasonable predictability.

Len Bernard and Gene Oshrin suggested that the increases in aggregate landing fees could be allocated to a designated reserve for airport maintenance—for example aggressive periodic pavement crack sealing that would extend lives of the pavements. Although such crack sealing might not be needed in a particular year or might be budgeted in a low amount in a particular year, actual weather conditions could change that—for example it crack sealing had been budgeted for \$30,000 this year for only the main runway but the harsh winter has lead us to need about \$120,000 for more extensive crack sealing on several airport pavements.

<u>The consensus was that the AMAC would recommend to the Board</u> that the airport would target annual aggregate increases in landing fees of 4%, with the incremental increases being specifically reserved for airport maintenance and repairs.

The Liaisons were asked about the efforts underway to settle the pending Part 16 actions on landing fees and other issues—as the FAA strongly recommends in its written policies. It was suggested that the appropriate person from the town attorney's office attend the next meeting to review these Part 16 settlement opportunities in order to stop ongoing legal expenses where possible.

A lease collections chart had been emailed to members prior to the meeting. There was concern that, although the AMAC and predecessor committees had repeatedly recommended outside professional lease administration for at least airport leases, the chart suggested sporadic follow up with tenants. For example

**Munson** lease expired 1987 but seems to be still paying old rent which is a fraction of the FMR rent required by the Town's settlement with the FAA

Country School lease expired 2013, with no payments at all since 2014

**GT Power** lease expired 2013 with no indication of any increase to FMV and with no payments at all since 2016

**Sound Aircraft** lease under renegotiation for all of 2017 but still paying old rent with no target date for completion although the tenant is actively seeking resolution.

**LI Airways** lease to have been renewed at end of 2016 but no target date for completion of renewal although tenant is actively seeking resolution and still paying old rent

**10 other tenants** have not paid rent since 2017 late notices were finally sent to most but not all 3/20/18 rather than January 15, 2018

**Summerhill Landscape** cancelled option to lease (\$125,000 of expected rent in 2018) but no evidence of any effort to lease this or any other available space

Since many of these items are shown on the leasing chart as needing the Town Attorney's update it was recommended that the appropriate person from the attorney's office attend the next AMAC meeting.

On the topic of unleaded fuel, there has been community demand (especially by Wainscott residents who are already dealing with the water issue) to try to reduce 100LL, low lead, sales at HTO even before the FAA specifies a universal substitute no lead fuel for piston planes--a date which is hard to determine-especially with the present EPA. The HTO FBO's are both in favor of moving to unleaded fuel as soon as practical and will support such efforts. However Swift Fuels which currently has the only unleaded product, 94UL, available to HTO, cannot be used by all piston planes.

Arthur Malman reported that after several conversations with Swift Fuels, the supplier of 94UL (the airport's main fuel supplier does not presently supply any no lead fuel for piston planes) by Munir Saltoun, James Brundige and Steve Tuma, it seems that the most practical solution to offering its unleaded fuel—Swift's 94UL-- this summer is the following.

Swift will deliver by flatbed a fully loaded 750-gallon UL 94 on-field, re-fueler truck to the airport. The 750-gallon re-fueler truck cost will be built into the cost of the fuel – estimatedat \$5.25 per gallon as this arrangement is for the trial period between initial delivery and November 2018. The incremental cost to subsequently refuel this truck, after the initial 750-gallon UL 94 load, will be borne by the airport and is dependent on logistics to be worked out with Swift – subject to all local rules and regulations for refueling trucks on the airport property (and may require sending the 750-gallon truck back to the fuel terminal by flat bed and returning it filled again by flatbed). The timing for the initial delivery given by Swift is approximately 30 days so a Board decision is needed promptly if any unleaded fuel is to be available at HTO this summer.

It has been estimated that, if the airport subsidizes the cost per gallon of 94UL to the based aircraft and transient aircraft to make it competitive with 100LL, up to about 4-5,000 gallons could be sold at HTO in 2018 and the cost for the subsidies on fuel, equipment and administration to be borne by HTO (through reimbursement to Sound) could be in the \$15-30,000 range for 2018. Steve Tuma has several practical questions of how all this will work.

Arthur Malman noted that, at this point, before we have everyone spending more time on finetuning all of the practical problems and working out administrative detail for 94UL at HTO for 2018, we <u>need Board approval</u> to proceed with this initiative to try to reduce the Town's present sales (about 30,000 gallons per year) of 100LL.

Swift's delivery of the 750-gallon on field delivery truck, prefilled with 94UL would eliminate the problem of transfers of 94UL from truck to truck at HTO which is not permitted without a fuel farm tank. An additional tank and related equipment at the new fuel farm would cost in the range of \$200,000 or more --which would not be justifiable at this juncture given the low level of expected sales of 94UL in 2018 and the fact that, at some point, the FAA will approve a universal fuel for piston planes so that the current 100LL tank can be used instead for such new replacement fuel.

Arthur Malman noted that if Board approval is given to the Swift UL 94 proposal we can fine tune the process and perhaps narrow the estimated cost to HTO; if Board approval is not to be forthcoming we should tell the community that we are waiting for final action by the FAA and the Town has no program to reduce 100LL sales at HTO at this time.

If a program such as this is to be adopted then we can, as Pat Trunzo suggested, try to encourage other airports in the area to join our efforts locally and push the FAA for early adoption of a universal unleaded fuel for piston planes.

Separately, we have estimated that completion of Taxiway A extension should result in additional reduction of 100LL consumption at HTO by about 4-5,000 more gallons from about 9,600 annual operations of based and transient piston aircraft which would have shorter taxi distances, and shorter ground waiting and airborne maneuvering times as aircraft move more efficiently on HTO runways.

Jeff Bragman asked if Sound, which would be selling the 94UL would absorb the cost. Arthur Malman and David Gruber felt that it was unfair that Sound bear this cost since Sound was willing to bear the additional administrative and operational costs not for any profit from the 94UL sales. Rather, it was for the benefit of the airport generally to show, as Pat Trunzo III stressed at our prior meeting that HTO was making every reasonable effort to move forward the transition to unleaded fuel as quickly as possible. [Steve Tuma subsequently indicated that, in order to help relations with the community, Sound would be willing to bear with the Town a part of the 2018 cost of this pilot project for UL 94].

James Brundige then reviewed his monthly update (a copy of which is attached as Exhibit A).

As to the perimeter deer fence, it was stressed that this is a major safety issue: deer on the field had been hit by landing aircraft which had been damage but with, luckily no one hurt ; deer continuing to be on the field[while new Board member David Lys was recently visiting the airport James Brundige had to interrupt operations while he shooed away several deer] ; people walking across the airport operations area as a short cut from the Wainscott jitney stop to their homes north of the airport; a delivery man mistakenly driving across the active runways last summer as a shortcut from the executive terminal to the main terminal; tire marks on the main runway from kids using it to drag race [subsequent to the meeting one of the newly installed airport runway lights was knocked over by an unauthorized nighttime drag racer].

Since the fence project is ready to go out for bid and be built before the airport's busy season when a serious accident becomes more possible, Arthur Malman asked Sylvia Overby is she could help expedite her submission of the project to the architectural review board for its review. It was noted that the committee had already recommended a more decorative fence around the terminal similar to that already in use at the terminal but several members stressed that the style was not relevant as long as the project gets done with the 8-foot fencing (except at main runway end where a lower height may be required at this time) before another accident.

Attached as Exhibits B and C are two memos from the committee to the Town Board enumerating the reasons for the completion of Taxiway A Extension which had been requested by Jeff Bragman at the January meeting. Sylvia Overby asked for clarification of how planes where now taxiing. Arthur Malman explained the current circuitous route which was resulting annually in about 5,000 gallons more low lead gas being burned than would needed if the taxiway A extension were completed.

Jeff Bragman noted that the Liaisons were only two of the 5 boards members and a date should be set for the board to review the project at a work session.

Arthur Malman reported that there had been relatively few responses to the 2017 airport passenger survey--which was passive with no airport person stopping people and asking them to respond. He explained that last year we were late in getting the survey organized and by then it was too late to engage a professional who could supply on-site personnel to inter-act with passengers for survey responses at least during busy summer period on selected weekends. Sylvia Overby noted that such a survey could be conducted by the contractors who were already doing work on the Part 161.

Since a major potential new tenant backed out with an annual loss to budget of about \$125,000 per year in rent, Arthur Malman reiterated the AMAC's recommendation that a large "for rent" sign should be put up at the corner of Industrial and Daniel Hole Roads. Sylvia Overby was against this since the Town was working to eliminate signs where possible. Bonnie Krupinski suggested more modest "for rent" signs on the particular sites available.

Sylvia Overby thought that brokers were generally aware that sites were available. Arthur Malman recounted his own experience with a substantial up-island contractor who wanted a new site in East Hampton and neither he nor his broker had any idea of airport sites being available. Since the airport was losing hundreds of thousands of dollars a year in potential rental income—contrary to the spirit of its settlement with the FAA over below market rents—members reiterated their prior recommendation that HTO at least place print ads in local papers-- but not in the legal notice section which is rarely read by most people, but rather in the real estate section where potential tenants and brokers are more likely to read them.

The meeting adjourned at 11 AM.

Respectfully submitted,

Arthur Malman

# EXHIBIT A

# <u>AMAC Meeting</u> <u>Airport Director's Update</u> <u>March 23, 2018</u>

## Taxiway A Extension and Taxiway D Overlay Project

- Drawings complete
- Funding is in place
- Bid package is ready to be sent to contractors
- Construction should be started ASAP in order to be completed by May.
- Estimated cost: \$2.1 million

# <u>Fuel Farm</u>

- Fuel Tanks Installed
- PSEG still has not hooked up 3 phase power supply. Very disappointing, given that they were given the design and \$30,000 to do the job last fall. They claim the storms have taken their resources away from this job. Email Trail from PSEG attached.
- Commissioning now expected to be early April.
- Old Fuel Farm will be removed soon after the new one is fully functional.

## **Perimeter Fence**

- FAA has confirmed that an 8-foot fence at the approach end of Runway 28 violates 20:1 surface and cannot be mitigated by obstruction lights. Obstruction lights only mitigate Part 77 surfaces according to FAA. Only remedy: displaced threshold.
- Baker confirmed that they can only repair the 4-foot fence that is already there—they cannot replace it with a deer fence of any height without displaced threshold.
- Possible alternative remedy: regrade the RSA (Runway Safety Area) to the level of the runway and install a deer fence at that grade level. I would have to get authorization for Baker to engineer that option. Then the question is, what to do with Daniels Hole Rd
- Need to set up meeting with ARB to discuss fence design around terminal areas.

# **Runway and Taxiway Crack Sealing**

- Baker is developing a Scope of work to have cracks in both runways and taxiway A sealed to extend pavement life.
- Originally planned for Runway 16-34 at a cost of \$29,000. After this harsh winter, Runway 10-18 and Taxiway A to be included. Estimated cost: \$120,000.
- Scope of Work will include upgrading all taxiway and runway markings and striping.
- Work Authorization Proposal will be ready next week.

## Taxiway H signs and Lights

- Resolution to authorize Baker to do design work adopted in December.
- Design and bidding scope of work near completion. Cost \$9000
- Cost of project (Waiting for an estimate from Baker) .

## **Reduced Lead in Aviation Gasoline**

- Some aircraft engines can use 94 octane unleaded. Those that can do not need an engine modification, however the aircraft owner may need an STC, Supplemental Type Certificate, allowing them to use a lower octane fuel.
- Because many higher performance engines cannot use 94 UL, 100LL Avgas would still have to be available for sale.
- Our supplier, World Fuel does not sell 94UL.
- Gabreski, Islip MacArthur, Republic, Martha's Vineyard Nantucket do not sell 94UL.
- Munir hosted a conference call with Swift Fuels and will brief AMAC on the findings.
- The two options for having 94UL on the airport property are separate containers and having a truck filled with 93UL. Both options have several problems:
  - Containers—most likely would not be approved by SCHD and would not meet industry standards for storing and dispensing aviation fuel. Those standards include storing fuel in double-walled tanks and being dispensed through filters.
  - Truck—who will sign the lease for the truck? Who is liable? How would the truck be replenished with fuel?
- Steve Tuma will have more to say about that.

# Exhibit B

# March 5, 2018

It is the unanimous recommendation by the East Hampton Airport Management Advisory Committee ("AMAC) to the Town Board for the immediate completion of Taxiway A (and related rehabilitation of Taxiway D) to serve as a full parallel taxiway for the length of the Main Runway.

We note that this project was among the critical safety-related projects recommended to the Town Board by the Airport Planning Committee, Noise sub-committee in 2015 and unanimously supported by the Budget and Finance Advisory Committee/Airport sub-committee and the Airport Operations Advisory Committee—and now unanimously recommended by the AMAC. Prompt completion is also supported by the Airport Manager and the Chief Tower Controller.

### Purpose of a Taxiway

The purpose of a taxiway is to reduce to a minimum the time that landing and departing aircraft spend on the runway. This is primarily for reasons of safety, to reduce the risk of landing and departing aircraft colliding with aircraft maneuvering on the ground. It is also for reasons of time and efficiency: to reduce the time that aircraft, with engines needlessly burning fuel, spend getting to and from the runway ends and waiting for the runway to be available and, also, to reduce time and fuel wasted on airborne maneuvers while awaiting a clear runway for landing. Efficient taxiways also reduce aircraft engine noise on the ground and in the air.

Although taxiways are not needed by helicopters, inefficient taxiways result in ground congestion causing arriving helicopters to circle longer than would otherwise be necessary, prolonging needless noise over neighboring areas.

At HTO, taxiway A was originally planned to be parallel to the main runway and continuous for its entire length in order for aircraft to taxi, by the most direct and efficient route. All Airport Layout Plans for HTO going back to 1989 call for a taxiway parallel to the main runway for its full length (Taxiways A and D).

# **Problems with the Current Configuration:**

## Excessive Wear on Pavements Designed for Light Aircraft

Although it is counterintuitive, aircraft put more stress on pavements and their sub-surfaces when used for taxiing than for landing and takeoffs, when air movement over the wings produces lift which reduces the load on the wheels and thereby the pavements.

AMAC has been advised by the engineers that light aircraft, 12,500 lbs. and under, do not typically wear out pavements due to landings or to taxiing because they are too light significantly to stress the

pavements. Pavements designed for, and used by, light aircraft typically wear due to weather, heating and cooling, water infiltration, and icing, causing cracks. However, with maintenance, such pavements can last a long time.

The present airport configuration compels heavy aircraft that were barely a factor when the airport was designed either to back taxi on the main runway, a poor practice and almost out of the question during busy periods, or to traverse former runway, now taxiway, 4-22 and either runway 16-34 or the parking apron to reach the main terminal. These aircraft wear out pavements not designed for their weight, because they do stress pavements. 4-22, 16-34, and most of the parking apron were not designed for these loads and can therefore be expected to wear out and require major reconstruction far sooner due to their use by heavy aircraft for which they were not designed. The cost of reconstruction of the various pavements designed for light aircraft far exceeds the cost of completing the full parallel taxiway to the proper standard for the aircraft that will use it. It is wasteful to continue to have heavy aircraft using pavements not designed to bear those loads.

### Safety Concerns

The circuitous route for the present main runway taxiway, traversing sections of 4-22 and 16-34 or the apron, also causes greater mingling of large and small aircraft on the aprons and taxiways. This increases the risk of ground collision. Ideally, large and small aircraft should be kept as separate as possible on the ground. If taxiway A were completed, heavy aircraft would rely almost exclusively on this route, the most direct, to the main terminal minimizing mingling with small aircraft on 4-22, 16-34, and the parking apron. Additionally, the direct route minimizes turns onto and off of the two separate pieces of the main taxiway. Turning onto pavements, when vision is obscured, is more likely to cause accidents than a straight traverse.

### Reducing waste of both fuel

Although not the most significant factor in favor of efficient ground movement, congestion on the ground at intersections increases the time spend by aircraft with engines idling while waiting or traversing. When the airport is busy, there is a knock-on effect that keeps aircraft waiting to land longer in the arrival pattern. The wasted fuel is not only a cost, but increases the amount of carbon, lead, and other pollutants in the vicinity of the airport. Efficient ground operations would reduce this burden on the community.

### Traffic will not increase if the main taxiway is completed

The project is in no way capacity-enhancing. It will not result in so much as a single additional aircraft operation. While the lack of a full parallel taxiway renders ground operations less efficient, with waste of time, fuel, possible additional time spent maneuvering for aircraft on approach, and increased risk of collisions on the ground, it is implausible that the existing condition is severe enough to deter any aircraft from using the airport or that any aircraft would be induced to do so if these conditions were relieved. No one comes to an airport in order to use its taxiways.

### Adequate capital funds at HTO

It is the view of AMAC that the airport fund can well afford promptly to complete the main taxiway without compromising necessary long-term maintenance, Part 161 preparation, litigation funding and adequate reserves. To the contrary, preserving the light aircraft pavements will over time enhance the financial position of the airport. Completing taxiway A will also complete the "safety agenda" for the airport so that management effort can then be devoted to ensuring that existing infrastructure is properly maintained.

# Exhibit C

### SUBSTANTIAL ADDITIONAL COSTS OF DELAYING COMPLETION OF THE TAXIWAY A EXTENSION

All town appointed airport committees, including the Airport Planning Committee, Noise sub-committee, have recommended the same suite of important safety improvements, including the completion of Taxiway A.

None would constitute an expansion of the airport or encourage more traffic. All can be completed within capital resources of the airport without the need for federal funding.

Some have been completed and the engineering for the others has been completed and they are ready to go out for bid.

One, the completion of the taxiway A extension is **time sensitive**.

Since taxiway A has not been completed, heavier aircraft must now detour over the two crosswind runways which were never designed to accommodate them. Aircraft of these weights did not exist at KHTO at the time the present pavement system was designed. They are now here due to changes in demand and changes in technology that allow heavier aircraft to land on shorter runways than was the case more than a decade ago.

Failure to move promptly on this project could result in the failure of sections of the two crosswind runways designed for landings and takeoffs of light aircraft, but now being mis-used as taxiways for larger, heavier aircraft.

Should sections of these mis-used runways fail, the airport would be faced with millions of dollars of unbudgeted expenditures to rebuild them.

### Failing Condition of the Secondary Runways being mis-used as Taxiways

Although it is counterintuitive, aircraft put more stress on pavements and their sub-surfaces when used for taxiing than for landing and takeoffs (when air movement over the wings produces lift which reduces the load on the wheels and thereby the pavements).

Visual inspection showed deterioration, to varying degrees, in the crosswind runways and other airport pavements. However, as the Town had allowed the airport to deteriorate for over a decade because of policy conflicts, there had been no thorough investigation of the condition of all sections of asphalt pavements and, more importantly, no investigation of any kind of the sub-surface bases on which these asphalt pavement sections are supported.

In January 2017 the Town received from Baker Engineering a Comprehensive Airfield Pavement Evaluation (the "Pavement Report") of several hundred pages and numerous charts, detailing the asphalt surface conditions in discrete sections of all runways, taxiways and aprons. More importantly a total of 95 on-pavement locations were drilled and the cores analyzed, along with data from hundreds of locations where Baker had used non-destructive testing. This provided a measure of the overall support conditions for the pavement layers and subgrade.

Everyone could see the general condition of the surface of airport pavements without the Pavement Report. However, in order to compile data for the report, Baker did extensive soil borings and non-destructive testing that revealed, for the first time, the true condition of the sub base.

The Report showed that the condition of the surface asphalt of the crosswind runways: 16-34 is fair to satisfactory and 4-22 (closed as a runway) is generally satisfactory to good in the areas still being used as taxiway except poor where it is adjacent to 16-34.

The Pavement Report's data on the supporting sub-surface base conditions were more alarming: many sections of the sub-base under these secondary runways may have a remaining useful life of only 2-5 years and some sections less than 2 years. This reflects the fact that the sub-base which supports them was never designed to handle heavy aircraft now routinely taxiing over them.

The Pavement Report disclosed, for the first time, that, **if the mis-use 4-22 and 16-34 as taxiways for heavy aircraft continues, major sections of 4-22 and 16-34 have a remaining structural useful life of only 2-5 years (some sections even less) before they start to fail.** 

4-22 (now used only as a taxiway because of its deteriorated pavement) and 16-34 were designed as crosswind runways for light aircraft. A Pavement Classification Number ("PCN") measures a pavement's ability to support an aircraft. The Pavement Report showed that most of the usable lengths of 4-22 and 16-34 have a PCN of only 13 as opposed to Taxiways A and D (paralleling most of the main runway) which have PCN's of 30-33—more appropriate for the load of taxiing heavier aircraft using them.

Because of the original design of 16-34 and 4-22 for runway use by light aircraft and the cumulative effect of repeated mis-use as a taxiway by increasing numbers of heavier aircraft, the Pavement Report shows that most of the relevant sections of 16-34 and 4-22 have a remaining structural useful life of only 2-5 years if Taxiway A Extension is not built<sup>1</sup>.

By contrast, existing Taxiway A and Taxiway D have PCN's of 30-33 and structural useful lives of more than 10 years.

<sup>&</sup>lt;sup>1</sup> Because the deteriorated surface asphalt of 4-22 was causing damage to taxing aircraft engines which were absorbing debris, in 2015 the Town determined to rebuild the poorest 920-foot "keel" portion of 4-22 at a width of 35 feet to continue service as an alternate taxiway. The Town believed that this new portion would have long life of over 20 years and could serve as a portion of a full rebuild of 4-22. The Pavement Report surprised readers when it showed that the surface asphalt of this keel portion was indeed good but that the sub-surface base, which apparently had not been rehabilitated properly, if at all, had a remaining useful structural life of only about 2 years (the Town had bonded for it at a 10-year Period of Probable Usefulness ("PPU")—the maximum permitted at that time by New York law for airports of our size but would have used a 20-year PPU had the New York Law already been amended to its current more flexible requirements). The AMAC recommended that the Town's legal department examine all relevant documentation to ascertain if the Town has a claim against the airport's prior engineers or contractors for this engineering and/or construction deficiency.

While surface conditions of 16-34 and 4-22 will reflect normal asphalt deterioration over time, the present compromised sub-surface base conditions have the possibility of us seeing portions failing over the next few years if they continue to be used as prime taxiways.

Nonetheless, the Baker report confirmed that most sections of the crosswind runways, now being misused as taxiways, have surface pavements which should be useable for many years with routine maintenance, if no longer used as taxiways for heavy aircraft. Hence the need and reason promptly to complete Taxiway A and exclude heavy aircraft from the secondary runways.