July 28, 2014

Memorandum to: Councilwoman Kathee Burke-Gonzalez

From: Airport Planning Committee, Noise Sub-committee

Re: Fourth Preliminary Findings and Recommendations – Ongoing Safety Issues and Their Priority.

Dependence of Noise Reduction on Airport Safety and Prudent Airport Financial Management.

The two sub-committees of the Airport Noise Planning Committee, the Airport Noise sub-committee and the Airport Operations sub-committee, supported by the BFAC Airport Finances sub-committee, have each been charged with proposing a comprehensive plan for the airport that includes: operations, noise regulation, capital/infrastructure, and finances. The reason that all must be considered together is that each bears on the other. But the reasons are still not sufficiently understood.

While some dissenters remain, it is now accepted by both sub-committees that, upon expiration of the relevant FAA grant assurances on December 31, 2014, the Town will regain the authority to regulate airport access for the purpose of controlling noise under the so-called "proprietor's exception" without being subject to the requirements in that regard of either the grant assurances or the Airport Noise and Capacity Act of 1990 (ANCA). Among other things, the Town would be able to impose airport access restrictions without first having to meet any FAA requirements, including either a Part 150 study or a Part 161 study.

The proprietor's exception is a judicially crafted exception to the general rule of Federal preemption over aviation and aviation regulation. The Supreme Court and the

Congress have since recognized it, but its scope remains defined by the Federal courts. It is not subject to either definition or control by the FAA for an airport that is not subject to grant assurances and does not wish to be eligible for Federal grants. The scope of the proprietor's exception is explicated by the controlling authority, the Second Circuit Court of Appeals, in the case of *National Helicopter* v. *City of New York*. The Second Circuit recognized the authority of the municipal airport proprietor to limit days and hours of operations, the numbers of operations permitted in a given time period, and to exclude aircraft based on how noisy they are all for the purpose of protecting the community from noise. These are all forms of "airport access restrictions" that would be difficult or impossible to achieve as long as FAA grant assurances and ANCA apply.

The proprietor's exception does not mean that a municipal airport proprietor has unfettered discretion to control airport access. However, it is generally accepted among aviation lawyers that the scope of local authority is broader under the judicially created proprietor's exception than is the case for an airport subject to FAA grant assurances. There is no question that the local authority is much broader than for an airport that must comply with the ANCA as there is no need for an expensive Part 161 study or to satisfy the FAA as to the costs and benefits of regulation as Part 161 requires.

There are a variety of policy reasons why the scope of local authority is broader under the proprietor's exception standing alone, but the single most important as applies to East Hampton is very simple: The FAA standard for what constitutes noise is average sound that exceeds the 65 DNL standard. The FAA regards any regulation that does not achieve a community benefit within the 65 DNL contour, either presumptively or conclusively, not to be justified. Noise benefits beyond the 65 DNL contour are not

acknowledged or considered by the FAA in its response to proposed airport access restrictions.

In East Hampton, it is well established, based on the Airport FGEIS, that the 65 DNL contour lies entirely within the airport boundary. Thus, it is likely impossible for East Hampton to impose any airport access restrictions that would be accepted by the FAA. Although the Airport Noise sub-committee is only in the middle of its work, and the technical noise study critical to that work has just begun, it is widely anticipated that the Town will seek to impose some airport access restrictions come January, their scope yet to be determined. It is therefore essential not only that the current FAA grant assurances be permitted to expire, but that the Town not accept any further grants from the FAA, as that would renew the application of ANCA and result in the renewal of grant assurances for a term of 20 years, again rendering local airport access restrictions virtually impossible.

Based on the work of the BFAC sub-committee, there is increasing optimism, shared by this committee, that the airport can be maintained and operated safely and efficiently, funding capital improvements with bonded indebtedness based on its own revenues, without any further need for FAA subsidies in the form of capital improvement grants. The BFAC sub-committee has delivered to the Board its resolution and finding to that effect. However, to ensure that this is the case, the airport's finances and capital budget must still be managed prudently. The projections of the BFAC sub-committee are just that, projections, not yet actual experience. All those who have ever worked with financial projections understand that they are contingent on many things and are seldom exact. Prudent management means not placing excessive reliance on financial

projections. There is no room for profligate or wasteful spending, or spending on low-priority projects, based solely on optimism.

For that reason, an essential task is to prioritize capital projects and spend money on the highest priorities first, while developing actual experience with efforts to increase net airport revenues and the debt capacity that comes with them. The highest priority must be accorded to safety-related projects and then on the proper maintenance of existing airport infrastructure and capacity. If money is spent prematurely on low priority projects, this creates the risk that debt capacity will be insufficient to satisfy higher priority needs, thereby renewing pressure for FAA subsidies and endangering the entire project of regulating the airport to control noise. What is required is triage, the classification of projects as: (1) urgent – that is, safety related, (2) essential but not urgent -- maintenance related, or (3) useful but not essential. We anticipate that the engineering consultant to be retained by the Town will assist in so classifying projects.

It is in the interests of both the community and airport users that the highest priority projects be undertaken first, both for the functionality of the airport and so that capital capacity is not exhausted while urgent or essential projects remain undone. That would inevitably, but unnecessarily, renew pressure to take money from the FAA. This is especially the case with the recent discovery that the airport fund has been over-credited by $250,000 from the general fund and the return of this money to the general fund.

Status of Safety Projects.

Of the five safety projects identified in our First Preliminary Findings and Recommendations -- taxiway repair, taxiway lighting, obstruction clearing, AWOS, and deer fencing – two are underway, the taxiway repair and lighting.

A third project, obstruction clearing, is still uncertain as to its scope for reasons that we fail to understand. The TERPS surface (the invisible approach surface) is both fixed and well defined. Given the fixed location of the Daniels Hole Road penetration of this surface and the fairly standard height of mature trees in the area, it should be a straightforward matter to determine the penetrations and the area of obstructions to be cleared. Remarkably, this is still uncertain.

The other two projects, the AWOS and fencing, are not as yet moving forward. As to the AWOS, this is in part because the scope has also been difficult to ascertain with any assurance; the proposal has varied widely in cost and nature as it has been subject to scrutiny. We would propose that this be the first task assigned to the new consulting engineer and that, once the scope is determined, the project move forward promptly.

AWOS.

The importance of the AWOS is two-fold. First, providing timely weather information to pilots has an important and immediate safety impact. If pilots know that current or anticipated conditions at East Hampton Airport are not acceptable for their operations, they are able to make timely alternative plans, including delaying departures to or from East Hampton and diverting to another airport, if necessary. We are fortunate to have two much larger and more capable airports within a short distance, Gabreski and

MacArthur, and other airports in between, that give pilots safer alternatives in difficult weather or conditions that are adverse only in East Hampton. It is, however, a fact of human nature that, once people arrive at the airport either for departure or landing, they are somewhat more likely to ignore concerns about current conditions in order to proceed with their plans. This may indeed have played a role in the recent fatal crash of Richard Rockefeller at Westchester County Airport after taking off in rainy and foggy conditions. Thus, having detailed weather information available when aircraft are preparing to depart for East Hampton and en route is an important aid to safety.

Second, reliable data on weather conditions at East Hampton are important for airport planning. It is not possible fully to evaluate the safety importance of different projects without regard to weather conditions. At present, the nearest official recording weather station is at Gabreski. There have been claims that local weather at East Hampton may be significantly different, but there are no data with which to verify or disprove these claims. Nor is it sufficient to know that the weather at East Hampton is different. We need a reliable record of what the actual weather conditions at East Hampton are. A suitably upgraded AWOS will serve this purpose. There is every reason to proceed as soon as possible and we propose that this be the first priority upon retaining the new engineering consultant. This project can be bonded for or allocated a portion of other bonded indebtedness in order to conserve the airport's cash reserve position.

Deer and Security Fencing.

More than two years ago, at a public meeting held in the winter of 2012, pilots, in some cases accompanied by their children, expressed gave concern about the risk posed

to aircraft by deer on or near the runways. They expressed unequivocally the need fully to enclose the airside facilities of the airport with a deer fence. Yet, in the intervening two years, nothing has been done. An initial proposal for FAA funding was not approved. Then, the proposal morphed into a project for a high security fence that was also not approved for FAA funding. This is no excuse for not addressing what pilots have publicly stated is an urgent safety concern.

The airport manager has expressed the need for a security fence to keep intruders off of the airfield. However, in discussions with the airport manager at our meeting of May 19, it emerged that almost all inappropriate pedestrian intrusions onto the airfield are casual, either by users who for convenience skip passing through the terminal building as they should, or people who use the airport as a shortcut to walk to Wainscott, particularly to the Jitney stop there. The last reported malicious intrusion, a theft from an aircraft, is more than three years ago. Fortunately, these have been very few and far between, no doubt in part due to the presence of security cameras and signs notifying of the same.

On the basis of these facts, we consider that a high-security fence is completely unnecessary at East Hampton Airport and would be pointlessly expensive. If the airfield were fully enclosed with a deer fence with only a small number of locked vehicular and pedestrian accesses (the airport manager says the two would suffice in his opinion), it is highly unlikely that casual intruders would breach a deer fence.

While malicious intruders would certainly be willing and able to do so, the reality is that they would have little more difficulty in breaching an unpatrolled security fence, especially given the length of the airport perimeter and how much of it is remote from the terminal. Thus, a security fence would provide barely more of a deterrent to a malicious

intruder than a deer fence, while a deer fence that fully encloses the airfield, with locked accesses, would almost surely deter any casual intruder. The security of aircraft and buildings would be better managed by increasing the coverage of security cameras, if necessary, and possibly by providing for real-time monitoring than by building an unpatrolled security fence.

For the most part, the enclosure of the airfield is not an aviation engineering matter, with the exception of the possible need for specialized, frangible fencing near runway ends and the access needed for airport users and emergency personnel. We recommend that the airport manager and town engineer be assigned immediately the task of making a preliminary determination of the route for a deer fence, using as much of the existing fence as possible, and of the necessary accesses. This preliminary route should then be reviewed by an airport engineer, special aviation provisions made, if any, and an RFP issued for the project, also to be bonded for to preserve airport cash reserves. We see no reason why this project should not proceed with all due speed. It has languished for far too long.

Obstruction Clearing.

Unfortunately, it appears that the Town has again been given bad information about a technical matter. It has been reported to the Town that the FAA has cancelled authorization for nighttime instrument approaches to East Hampton based on the existence of penetrations into the Terminal Instrument Approach Procedures (TERPS) visual approach surfaces. These penetrations include both Daniels Hole Road and trees. However, at a BFAC sub-committee meeting on July 18, 2014, a presentation by DY

Consultants made clear that, although some limits have been imposed, we do still have night instrument approaches for all but Category D aircraft, the largest types that use the airport. Based on the operations data presented by DY, there are only approximately 10 nighttime landings a year by Category D aircraft. Thus, there is no crisis as we had been led to believe.

It is our understanding that only the FAA itself can permit alternatives, such as an altered glide slope or obstruction lighting, to the stated requirements of the TERPS regulations. According to DY, the current solution is a "temporary" one under which the FAA has accepted a slightly higher approach angle, 3.4 degrees, rather than 3.1 degrees, that is advised to pilots by NOTAM (Notice to Airmen) and indicated on the field by the angle at which the Precision Approach Path Indicator (PAPI) lighting is set. The FAA can remove the temporary modification of its rules at any time and prohibit nighttime approaches. But there is no reason to believe it is imminently inclined to do so. To the contrary, it has recently advised DY that it will correct its instrument approaches to restore an approach that had been eliminated due to what DY identified as an FAA error.

The FAA letter, dated May 30, 2013, to the airport manager, identifies particular tree obstructions. However, the letter is also clear that it is the responsibility of the Town, not the FAA, to determine that the TERPS surfaces are free of penetrations that the FAA has not itself excepted on some basis. This is understandable, as the FAA clearly does not have the resources to manage possible obstructions at thousands of airports. The FAA expressly states that the advice is not necessarily complete as to the existence of obstructions and that the Town continues to have the responsibility to

"ensure the entire 20:1 visibility surface is clear of all obstructions as defined in FAAO 8269.3B, paragraph 3.3.2."

It has been suggested that the Town remove the specific tree obstructions identified by the FAA and then wait for the FAA again to notify the Town that it has identified obstructions, which may be a matter of years. In our view, this would be an evasion by the Town of its safety responsibility to keep the approach surfaces clear of obstruction. The town has definite knowledge that there are many more tree penetrations than those identified by the FAA, possibly acres more of tree penetrations.

Despite the fact that the geographical location, in three dimensions, of the 20:1 visual approach surface is well defined, the airport's current engineer has been unable to demonstrate in any comprehensible way what needs to be done to ensure that the surfaces are free of obstructions. The surfaces aren't moving. The road isn't moving. The trees aren't moving and, as they are mature trees, are generally of a consistent height. There are only a couple of species involved, scrub oak and pitch pine. It ought not be a problem that has now consumed months to determine to a fair degree of certainty what must be done.

Recently, employees of the Town's Department of Natural Resources took measurements of the tree line and estimated that most trees in the airport vicinity are between 45 and 65 feet in height, with the height distribution concentrated between 50 and 60 feet. In consultation with an arborist, Councilwoman Burke-Gonzalez has determined that topping trees is not an option. The visual approach surface, at a 20:1 ratio, reaches 50 feet 1,000 feet out from the threshold of the surface, 200 feet from the runway ends. Thus, if there are significant numbers of trees 50 feet in height, the area

under the TERPS surface must be clear-cut out to 1,200 feet from the runway ends. This is in fact the existing condition of clear-cutting at the airport. To clear 55 feet, the clear zone would have to extent another 100 feet out; to clear 60 feet, another 200 feet out.

In advance of further effort to determine the mix of tree heights, it appears to us likely that, past 60 feet in height, or 1,400 feet from the runway end, a strategy of removing the occasional higher tree may well suffice. Between 50 and 60 feet in height, a more refined survey might be needed. This might be achieved with the proposed LIDAR fly-over so that the Town can either concretely determine the area to be clear-cut and the occasional outlier requiring individual removal or apply to the FAA to maintain the higher glide slope on the basis of concrete information about tree heights.

However, there are some superseding considerations. First, if the Town were to clear more than 1,200 feet from the runway ends, it will have to clear land that is in Southampton on the west and land that is not owned by the Town on the east. While perhaps technically achievable, this is likely to be prohibitively expensive. Second, the most important consideration that determines how much would have to be cleared is not the tree height, but whether the approaches are to be cleared to Category C and D specifications or Category A and B specifications. The DY presentation clarified that the approach surface for Category C and D aircraft is 400 feet wider at all relevant points, and this is the difference between clearing virtually nothing and clearing tens of acres of trees.

A review via Google Earth, which should be confirmed with the Town's GIS software, suggests that out to 1,200 feet from the runway ends, essentially the boundary of the Town-owned airport, the necessary area *is already cleared on the runway 10 end*

and only approximately two acres would have to be cleared on the runway 28 end, provided that the approaches are only cleared to Category A and B standards. See, attachments that show the A/B area (up to a 50 foot tree height) and the wider C/D area.

The Critical Design Aircraft is a Category B Cessna Citation. The airport is designed for A and B aircraft, although under FAA grant assurances C and D aircraft are permitted to use it in the discretion of the pilot. Even if we cannot bar Category C and D aircraft (until January of next year), there is a huge difference between permitting them and redesigning the airport to accommodate them. Furthermore, according to DY's figures, there are fewer than 50 Category C and D night landings per year. The Town is under no obligation to provide any instrument approaches. Hence, it is under no obligation to design them to Category C and D standards.

Given that only a trivial number of flights would be affected, and that the Town has never intended to provide an airport to Category C and D standards, the sensible course is to advise the FAA that the area under the visual approach surfaces will be cleared up to, but not beyond, 1,200 feet from the runway ends and only to a width in accordance with Category A and B standards. The FAA can then decide whether it will permit night instrument approaches, for Categories A and B only or for Categories A, B and C or for Categories A, B, C and D with the assistance of visual aids. As explained, this can be achieved by clearing only approximately two acres of trees (actually a bit less) at the runway 28 end. Anything else would require clearing tens of acres of trees chiefly on land that the Town does not own. That is both impracticable and far too great an environmental cost for a trivial aviation benefit.

Bona fide safety problems must be addressed with the highest priority claim on airport funds and debt capacity.

Respectfully submitted,

Airport Planning Committee, Noise Sub-committee