

Westchester County Airport Subcommittee on NY/NJ/CT Class-B Modification: Observa- tions and Recommendations On Proposals

Summary of Westchester County Airport Subcom- mittee (WCAS) Response

The WCAS accepts the potential lateral extension of the Class-B airspace out to 25 nm in the vicinity of Westchester County Airport (“HPN”). This acceptance comes on the conditions that:

1. The floor of this extension area will be no lower than 4,000’ MSL.
2. The practice of providing a HPN cutout during metropolitan area-wide Presidential Temporary Flight Restrictions (“TFRs”) will continue to allow for continued VFR operations into and out of HPN.

The WCAS opposes all other parts of the current proposal because of their prospective negative impact on:

1. Safety,
2. Our Community,
3. Standards,
4. ATC and FAA workload,
5. Operating costs
6. Pilot workload.

Class-B Airspace Changes That Affect HPN

Proposals Outlined

The proposals for Class-B airspace changes that have been put forward to date include, in the vicinity or otherwise directly affecting users of Westchester County Airport :

1. The extension of the outer ring of the Class-B airspace from 20 to 25nm in radius from the LaGuardia (“LGA”) VOR.
2. The lowering of the Class-B floor from an 11nm radius (from LGA to the outer edge) from 3,000’ MSL to 2,500’ MSL.
3. The creation of two boxes of airspace, extending 1.5nm left and right of the extended centerlines of Runways 16 and 34 out to a range of 10nm, with the floor of the Class-B airspace in the boxes to be 2,000’ MSL.
4. The creation of a box to the west of Newark Liberty International Airport (“EWR”) and directly adjacent to the Morristown Municipal Airport (“MMU”) Class D airspace, extending out to 25 nm from EWR along the extended centerline of EWR Runway 11.

Accompanying this report as Exhibit 1 is a rough depiction of the proposals 1 through 3, above, on a Terminal Area Chart.

Rationales Offered to WCAS

The rationales offered for these proposed changes include:

1. The continuous containment in the Class-B airspace of all IFR arrivals to the Class-B surface area airports once the Class-B airspace is entered,¹
2. The creation of a buffer zone between all VFR aircraft operating below the floor of the Class-B airspace and IFR traffic within the Class-B airspace at 3,000' MSL, and
3. Protection for IFR arrivals to HPN from conflicting VFR traffic.

¹ It is sometimes stated by NY Tracon personnel that an additional rationale for the proposed changes in the lateral dimensions of the Class-B airspace is to comply with the provisions of Paragraph 7-9-3(b) of Order 7110.65S (the "ATC Order"). The ATC Order provides, in pertinent part, that Air Traffic Control ("ATC") is required to "Inform the aircraft when leaving and reentering Class B airspace if it becomes necessary to extend the flight path outside Class B airspace for spacing." This rationale has been de-emphasized by the Service Center personnel who present the reasons for this proposal.

WCAS Assessment

Safety

- Reducing the vertical space available for VFR operations without a Class-B clearance will compress VFR aircraft traffic and thus increase the risk of midair collisions.
 - A 2,500' floor of the Class-B airspace will effectively compress eastbound VFR departures to operate at or near the turbine traffic pattern altitude for Runway 34, creating conflicts that do not exist at this time due to the VFR traffic being able to climb without restriction in an eastbound departure.
 - The HPN Class-B box along the Runway 16 approach path will compress east/westbound traffic transiting north of the airport, between 5 and 10 miles from HPN, to below 2,000', and will place that traffic in close proximity to terrain and obstructions over congested area and rising terrain, with reduced options for a safe power-off landing if necessary.
 - The HPN Class-B box to the southeast will cause aircraft crossing the extended centerline of runway 34 over Long Island Sound, 5 to 10 miles from HPN, to descend below 2,000',

reducing substantially the engine-out gliding capability to reach the shore of Long Island

- The HPN Class-B box to the north of the airport will cause many VFR departures to the north and northwest to turn into conflict with the HPN Westchester 2 standard instrument departure procedure in order to remain clear of the Class-B airspace.
- The Class-B box to the west of EWR will interfere with the busy NE and SW-bound VFR traffic that currently uses a route roughly from the Solberg VOR (“SBJ”) overhead MMU and Essex County Airport (“CDW”) to the vicinity of Croton Point and the Carmel VOR (“CMK”), forcing that traffic well to the northwest and west of the extended (25nm) Class-B ring. Alternatively, the traffic that elects to fly under the lowered floor will often be in unsafe proximity to terrain and obstructions, with unsafe compression of opposite direction traffic.
- Likewise, the extension of the Class-B box to the southeast of HPN will intrude significantly into busy helicopter routes over Long Island Sound and well clear of HPN and LGA arrivals.

Our Community

- Restricting VFR departures to a maximum practical altitude of 2,000’, as would be the case with a 2,500’ Class-B floor, would place the VFR departures in direct conflict with the VFR pattern

arrivals to HPN at 2,000’. Even a 3,000’ Class-B floor would restrict the VFR departures to 2,500’ until clear of the Class-B lateral edge, in direct conflict with aircraft approaching HPN for landing from the east. Higher is safer for VFR departures due to avoidance of inbound traffic conflicts and less noisy for airport neighbors during a period when the aircraft are operating at high power with significant propeller noise.

- The extension of the Class-B, especially with a floor established at 2,500’ or 3,000’, will result in increased aircraft noise affecting the communities. Pilots of piston aircraft will likely leave their engines at climb settings for the 5 nm necessary to clear the 25nm ring, rather than take on the extra workload of setting cruise power and fuel flows for such a short period of time in a high-traffic environment where the pilot’s eyes and attention should be directly constantly outside the aircraft.
- The creation of the boxes will exacerbate environmental issues and cause economic hardships to VFR operators. Communities in or around the boxes (e.g., Chappaqua, Mt. Kisco, Bedford, Ossining, Port Chester and Greenwich) will see a substantial increase in aircraft operating at much lower altitudes than at present, with a concomitant increase in noise exposure (especially with rotary wing aircraft). Alternatively, many aircraft will choose to fly around the boxes, especially to the northwest of HPN, exposing communities in that area to increased aircraft noise and

causing increased fuel burn due to the extra miles being flown.

Standards

- The proposed changes fail to conform to the FAA's own requirements for establishing and maintaining Class-B airspace, as set forth in FAA Order JO 74200.2G, "Procedures for Handling Airspace Matters" (the "Order"), in numerous respects. These requirements include, but are not limited to: (1) ensuring the simplification of airspace in standardized form with minimum sub-areas, (2) establishment of Class-B areas in a circular configuration based on navaid references and using geographical landmarks where possible, (3) setting the vertical limits of the airspace so that the floor between 10 and 20 nm is between 2,800' and 3,000' above the surface area airport's elevation and the floor outside of 20 nm is between 5,000' and 6,000' above the airport's elevation, and (4) excluding airspace directly over a satellite airport when designation as Class-B airspace is not required and unless the current situation or problem cannot be solved without a Class-B designation.
- The configuration of the proposal includes two boxes of a nature not seen anywhere else in the country. These boxes are non-standard, unlike any that exist for a Class D airport underlying Class-B airspace, anywhere in the United States, and do not comply with the Order in many respects. As described in more detail below, the boxes are not "necessary to correct a current

situation or problem that cannot be solved without a Class-B designation." Order Paragraph 15-2-1(b)(3). Indeed, HPN does not meet the established FAA criteria for protection of its traffic through Class-B airspace designation.

- The boxes are not in keeping with the general design criteria for Class-B airspace. The Order (Paragraph 15-2-3(a)) states that:

Simplification of the Class-B airspace area configuration is a prime requisite. Its vertical and lateral limits should be standardized, and the number of sub-areas should be kept to a minimum.

- The proposed boxes likewise are a significant deviation from the direction in the Order (Paragraph 15-2-3(b)) that it be designed in a circular configuration centered on the primary airport (i.e., LGA in this case), with the airspace to be defined using navaids where available on the primary airport.
- A review of the traffic in the areas to be affected by these changes fails to substantiate the need for the changes to occur. PDARS displays of VFR traffic crossing the finals for HPN show that very few aircraft that do so, and that many of those appear to be helicopters flying established routes over Long Island Sound. Other PDARS displays show that most LGA arrivals remain within the Class-B airspace as it is currently configured, with those that depart its lateral confines in the vicinity of HPN being at 4,000' and above. In

2008, we understand that there were only 5 TCAS RA events recorded in airspace in or around HPN, with only 1 of those involving an aircraft on final approach to HPN. No NMAC reports were filed in the same period at all. Therefore, the probably noise impact on the affected communities is not justified.

- It is respectfully requested that should there be developed quantifiable and objective data that is believed to be supportive of requests for additional Class-B airspace, that WCAS and the rest of the Class-B Ad Hoc Modification Committee be permitted to examine, consider and address such data.

ATC and FAA Workload

- Currently, the Class-B airspace to the north and east of HPN does not fall under any Class-B overhang, such that there is presently no issue of IFR arrivals to HPN being vectored to Runway 34 first into, and then out of, Class-B airspace.
- Lowering the floor of the Class-B airspace in this area will result in increased workload for ATC as more VFR pilots request Class-B clearances in order to maintain higher altitudes over the terrain that rises to the northwest of HPN, or over the water of Long Island Sound where pilots of single engine piston traffic typically seek to fly as high as possible in order to remain within gliding distance of the shore for as long as possible.
- Each of these changes would result in increased workload to ATC, and more

congestion on approach control frequencies that are already at or near saturation as a result of a substantially increase in the number of VFR requests for clearance into the Class-B airspace. Due to the arcane and ill-defined nature of the new airspace, additional controller and FAA time (e.g., technicians, Flight Standards District Office (“FSDO”) and FAA legal personnel) will be spent in dealing with violations of the new airspace.

Operating Costs

- Certain of these changes (i.e., the 2,500’ floor of the Class-B airspace and the creation of the airspace boxes at HPN) will present an economic hardship to flight schools and students who must conduct their training maneuvers farther from HPN than at present, and to corporate and charter operators who will no longer be able to fly VFR from eastern Long Island and the islands of Martha’s Vineyard and Nantucket, over Long Island Sound to the south and southwest of HPN on a transition to Teterboro Airport (“TEB”).
- The Class-B box to the west of EWR will interfere with the busy NE and SW-bound VFR traffic that currently uses a route roughly from the SBJ VOR overhead MMU and CDW to the vicinity of Croton Point and the CMK VOR, forcing that traffic well to the northwest and west of the extended (25nm) Class-B ring.

Pilot Workload

- Pilots transiting below the Class-B box to the north of HPN will have a high workload to be watchful for opposite direction traffic in compressed airspace, while also operating close to the surface in a congested, populated area.
- Pilots departing HPN to the east will require increased vigilance to avoid the turbine aircraft traffic pattern when runway 34 is in use.
- The Class-B box to the west of EWR will interfere with the busy NE and SW-bound VFR traffic that currently uses a route roughly from the SBJ VOR overhead MMU and CDW to the vicinity of Croton Point and the CMK VOR, forcing that traffic well to the northwest and west of the extended (25nm) Class-B ring.

WCAS Findings and Report

WCAS

The WCAS is an ad hoc group representative of HPN pilots, flight school operators, flying clubs, CFIs, corporate flight departments (fixed and rotary wing), charter operators and individual owners, brought together under the auspices of the Westchester Aviation Association, to consider the proposals that have been presented to the Class-B Ad Hoc Modification Committee.

The focus of the WCAS is on how the proposed changes may affect operations on arrival to and departure from HPN and in the airport vicinity, and includes consideration of how the proposals may affect aircraft that are transient through

HPN airspace. While this focus is on HPN operations, the absence of treatment in this report of any other aspect of the current proposals, e.g., the change to the floor of the airspace in the vicinity of FRG, the lowering of the existing 3,000' Class-B floor in areas other than those proximate to HPN and the creation of a Class-B box for arrivals from the southwest to EWR should not be read as the WCAS's agreement with such changes.

The WCAS is pleased to provide its findings and report to the Committee.

A. Nature of HPN Operations

Westchester County Airport, alone among the many satellite airports underneath the NY Class-B airspace, has a broad mix of air carrier, charter, corporate turbojet, helicopter, piston and flight training operations.

HPN operations have suffered as a result of the decline in general aviation since 2001 and, most recently, due to the current recession.

- Flight training, in particular, has been hard hit, with there having been 29,386 touch and go operations at HPN in 2000 but only 12,358 in 2008, a nearly 60% drop in this predominately training activity. With this reduction in flight training, jobs at the airport have suffered, among flight instructors, aviation maintenance technicians, ramp personnel, and office workers.
- Just as flight training has been affected, helicopter operations at HPN have dropped 55% from 2000 (7,232 operations) to 2008 (3,256 operations), with similar effects on local employment

and the financial health of the Fixed Base Operators.

- Total HPN operations were down nearly 20% in the same period, with 187,660 operations in 2000 and 154,128 in 2008. Air carrier operations were off 15% from 2000, with 43,808 in 2000 and 37,530 in 2008. The number of HPN-based jets fell over 20% from 90 to 70.

These numbers are not expected to increase any time soon, and it will be years before HPN may record the traffic levels that it did in the 1980s and 1990s. HPN is not unusual among airports with a significant general aviation user community. VFR flight activity in the entire NY metropolitan area is down noticeably at all local airports since 2000.

Some changes have occurred, however, in the mix of aircraft operating in and around HPN. There are fewer piston training flights (primary and instrument) in legacy aircraft (e.g., Cessna 172s), and more in higher-performing, faster climbing aircraft like the Cirrus products. As the old fleet of Piper and Cessna aircraft are retired or priced out of the HPN environment, and the total number of based light general aviation aircraft continues to fall, the replacements that come onto the airport are more likely to be time-shared Cirrus aircraft, or single engine turboprops. In this regard, we note while that the number of HPN-based light general aviation aircraft fell from 280 in 2000 to 257 in 2008, the number of based turboprop aircraft increased from 19 to 24 in the same period.

B. VFR Flight Patterns In and Around HPN

VFR flights to and from HPN are predominately single and multi-engine fixed wing piston aircraft, and helicopters, with some VFR turbine fixed wing operations. The fixed wing aircraft tend to depart Runways 29 and 34 straight out, or Runway 34 with turns west to the vicinity of the Tappan Zee Bridge or east. Runway 11 departures are most usually straight out or with a turn to an initial course between north and east. Runway 16 departures may turn east, or to the west toward the Hudson River.

Fixed wing arrivals may be vectored by ATC (i) direct to the airport for the traffic pattern appropriate for the runway in use, (ii) straight in arrivals to Runway 16 or 34, or (iii) vectors to Stamford or the Tappan Zee Bridge for sequencing to the airport and appropriate traffic pattern.

Helicopter arrivals and departures tend to use the established N, E, S, and W routings.

- See Exhibit 2, which contains PDARs slides that depict VFR aircraft in the vicinity of HPN on two days in July 2008, July 14 when Runway 34 was predominately in use, and July 20 when Runway 16 was predominately in use.²

² Note that this PDARS data combines data for a full 24 hour period, and may depict aircraft flying tracks that might conflict with inbound or outbound traffic but for the fact that the VFR aircraft operated at a time where there was no conflict. Also please note that spectru-mization information accompanies the slides in

Flight training conducted by the two flight schools currently active at HPN often takes place in practice areas to the north of Croton Point and west of the Runway 16 final approach course, or to the east of Stamford. Altitudes vary from 2,000' MSL to 4,000' MSL depending on the maneuvers being conducted, with the higher altitudes required for instruction involved stall series or commercial air work (chandelles, lazy- 8s, steep spirals, etc.).

The VFR traffic pattern at HPN for piston aircraft is at 1,500', with a 2,000' pattern established for turbine-powered aircraft. The turbine VFR pattern is wider and longer than the typical piston pattern, with the downwind often being flown several miles from the airport with the base to final turn occurring 3-5 miles from the airport. We are seeing an increased number of turbo-prop traffic at HPN, notably PC-12s, C208s, TBMs and PA46s, operated under Parts 91 and 135.

Transient aircraft not landing at or departing from HPN are usually (i) centered over the Hudson River, (ii) to the northwest of the airport generally on northeast or southwest headings, (iii) overhead HPN on a Class D transition, (iv) to the south and southwest of the airport both below the Class-B floor and north of the 11nm ring from LGA VOR, and (v) over Long Island Sound south of the shoreline or on established helicopter routings.

Many VFR aircraft departing from HPN or arriving to it from points to the southwest of the New York metropolitan area (e.g., Trenton, New Jersey and the Philadelphia area airports) use

each exhibit as appropriate and is different between many of the exhibits.

the busy NE and SW-bound route roughly from the SBJ VOR overhead MMU and CDW to the vicinity of Croton Point and then toward the CMK VOR. Aircraft on this route underneath the present 3,000' Class-B floor typically are at altitudes of 1,500' to 2,900', with the highest altitudes being selected by rotary wing aircraft to minimize noise impact and to avoid the need to contact either NY Tracon for a Class-B clearance or the CDW and MMU towers. Accompanying this report as Exhibit 3 is a PDARS slide showing this heavily used VFR flight path.

C. The Proposed 25nm Extension

Extension of the Class-B lateral boundary to the north and east of HPN is being proposed for the stated purpose of containing LGA arrivals that are usually operating at 4,000' and higher on vectors for arrival on Runway 22 at LGA.³ Our review of the PDARS information provided by the Service Area, and through officials at NY Tracon, show that most LGA arrivals are already contained within the 20nm ring as it presently exists, although some leave the Class-B at that point for a brief period (2-3 nm). Within Exhibit

³ See Footnote 1, *supra*. This ATC communications requirement is and has been seldom observed by ATC. This indicates to us that system safety is not dependent upon each aircraft arriving at JFK, LGA or EWR being advised when it leaves the Class-B airspace. Similarly, the fact that many air carrier aircraft are not equipped with navigation displays that show graphically the Class-B boundaries is indicative that knowing that fact is not viewed as critical to flight safety by those operators.

5, the first slide shows the small percentage of LGA arrivals that exit the Class-B beyond 20nm, while the following slides show only those LGA arrivals that exit beyond that lateral distance.

LGA arrivals at this point are at altitudes of 3,800' to 4,800' per the PDARS data provided. (See Exhibit 6) Extension of the Class-B airspace to a 25nm radius from LGA VOR, whether the floor is established at 3,000' or 2,500' (the latter being the current proposal), would adversely affect VFR eastbound operations out of HPN.

- Currently, eastbound departures climb unrestricted by airspace to efficient cruising altitudes, and spend little time in potential conflict with VFR or IFR arrivals to HPN (especially when Runway 34 is in use).
- Restricting VFR departures to a maximum practical altitude of 2,000', as would be the case with a 2,500' Class-B floor, would place the VFR departures in direct conflict with the VFR pattern arrivals to HPN at 2,000'. Even a 3,000' Class-B floor would restrict the VFR departures to 2,500' until clear of the Class-B lateral edge, in direct conflict with aircraft approaching HPN for landing from the east. Higher is safer for VFR departures due to avoidance of inbound traffic conflicts and less noisy for airport neighbors during a period when the aircraft are operating at high power with significant propeller noise. Note that pilots of piston aircraft will likely leave their engines at climb settings for the 5 nm necessary to clear the 25nm ring, rather than take on the extra workload of setting cruise power and fuel flows for such a short period of

time in a high-traffic environment when the pilot's eyes and attention should be directly constantly outside the aircraft.

As noted above, flight training practice takes place in the area east of Stamford, near Darien and Norwalk. Extension of the Class-B to 25nm will remove one third of the area currently available for flight training practice between Stamford and the Bridgeport Airport Class D airspace. As instructors and students would not be likely to engage in air work immediately adjacent to the Class-B boundary, the actual practice area would be confined to a small area east of Norwalk, all at increased expense to the flight school and students due to greater travel distances. The PDARS slide designated as Exhibit 4 shows this current flight training activity.

The extension of the Class-B, especially with a floor established at 2,500' or 3,000', will result in increased aircraft noise affecting the communities.

- Extension of the Class-B may not permit the continuation of the HPN cutout when Presidential TFRs are established in the New York metropolitan area. This would work a hardship on VFR users at HPN for no benefit whatsoever in terms of increased security.

For these reasons, the WCAS submits that extension of the Class-B lateral boundary to 25nm in the vicinity of HPN is not warranted by the operational information provided to us. A very small percentage of LGA arrivals exit the Class-B in this area, and with their altitudes being normally at least 4,000' the Class-B floor in this area should be set at 4,000' MSL or higher if there is to be any extension at all. We note that the Order, at Paragraph 15-2-3(c), states: "the floor

of the area between 20 and 30nm shall be at an altitude consistent with approach control arrival and departure procedures. It is expected that this floor would normally be between 5,000 and 6,000 feet above airport elevation.”

Finally, to the extent that the communications requirement of the ATC Order is a motivating reason for this proposal (see footnote 1, *supra*) we urge that the FAA eliminate this requirement altogether as an unnecessary vestige of a pre-TCAS/Mode C veil/Transponder-On era that contributes little or nothing to flight safety while imposing an additional and unwarranted workload on ATC and a burden on already-saturated communications frequencies.

D. The 2,500' MSL Floor

Lowering of the floor of the Class-B airspace to 2,500' MSL, between the 11nm radius of the LGA VOR and its lateral boundary, is proposed for the stated purpose of increasing separation between VFR aircraft operating below the floor of the Class-B airspace and IFR arrivals operating at the current 3,000' floor.

Currently, the Class-B airspace that extends just to the north and just to the east of HPN does not fall under any Class-B overhang, such that there is presently no issue of IFR arrivals to HPN being vectored to Runway 34 first into, and then out of, Class-B airspace.

Lowering the floor of the Class-B airspace in this area will result in increased workload for ATC as more VFR pilots request Class-B clearances in order to maintain higher altitudes over the terrain that rises to the northwest of HPN, or over the water of Long Island Sound where pilots of single engine piston traffic typically seek to fly as high as possible in order to remain within gliding distance of the shore for as long as possible.

Our experience is that Class-B clearances are often denied to VFR aircraft, especially those who request clearance while airborne, and cannot be counted on due to the volume of IFR traffic in the Class-B airspace. Many less experienced VFR pilots will go to great lengths to avoid any Class-B airspace, out of fear of draconian enforcement penalties should they not comply with ATC instructions in all respects.

HPN does not meet the criteria in the Order (Paragraph 15-2-1(b)) for Class-B protection, and it is improper under the applicable guidance for HPN traffic to be subjected to such requirements.

- The lowering of the Class-B floor to 2,500' is contrary to the requirements of Paragraph 15-2-3(c) of the Order, which provides, in pertinent part, that “[t]he floor of the area between 10 and 20 NM shall be predicated on a 300-foot per NM gradient for 10 NM. This segment will normally have a floor between 2,800' and 3,000' above airport elevation. This floor shall remain constant for that segment” Thus, the present floor of 3,000', which is in compliance with the Order, should not be changed especially where there is no operational reason relating to inbound IFR traffic to the Class-B surface area airport (i.e., LGA in this case) for the floor to be lowered.⁴
- We note that the Order does not contemplate or authorize the use of such buffer areas below the operational

⁴ As noted above, LGA arrivals are typically at 4,000' or higher in this area.

Class-B IFR altitudes. The clear philosophy of the Order is to restrict VFR aircraft as lightly as possible while providing for positive control of all aircraft that may conflict directly with Class-B surface area airport arrivals and departures.

Indeed, there is even less of a need today for such buffer zones than when Class-B airspace (and its immediate predecessor, the Terminal Control Areas), were initially authorized, with TCAS, Mode C veils and mandatory transponder-on rules now providing technological safety benefits that did not then exist.

Reducing the vertical space available for VFR operations without a Class-B clearance will also compress VFR aircraft traffic and thus increase the risk of midair collisions. As noted above, a 2,500' floor of the Class-B airspace will also effectively compress eastbound VFR departures to operate at or near the turbine traffic pattern altitude for Runway 34, creating conflicts that do not exist at this time due to the VFR traffic being able to climb without restriction in an eastbound departure.

Lowering of the floor of the Class-B airspace over Long Island Sound will decrease safety in several ways.

- First, it will tend to concentrate traffic closer to the northern shore of the Sound, as aircraft attempt to stay within a reasonable gliding distance of land while being held to a lower altitude by the 2,500' floor of the Class-B airspace.
- Second, the lowered operational altitudes available for (principally) single engine piston aircraft over the Sound

will provide less gliding range to reach land or a nearby boat, and less time aloft to attempt a restart, in the event of engine problems.

- Third, at present, the most advantageous and appropriate altitudes for much VFR traffic over the Sound is between 2,500 and 3,000', which keeps the VFR traffic clear of both HPN IFR arrivals descending to 2,000' near the shoreline and LGA arrivals descending out of 4,000'. A 2,500' Class-B floor in this area will increase conflicts with the HPN arrivals that cross the shoreline southeast bound descending from 3,000' to 2,000'.

VFR aircraft operating lower than 2,500' over areas of Fairfield County and Westchester County will produce increased noise exposure to those residential areas and reduce pilot options for landing off-airport in the event of engine problems. Helicopters that now fly between 2,500' and 2,900' for noise abatement reasons will fly significantly lower to the surface, thus increasing noise levels in those same areas.

Reviewing the PDARS data that have been made available to us, there is little or no conflict between VFR operations at HPN and IFR arrivals to that airport (or any other). As stated above, the LGA arrivals are not being vectored at 3,000' in the vicinity of HPN. (See Exhibit 6) There is no such conflict to the west of HPN. VFR departures to the east are not coming in conflict with HPN IFR arrivals being vectored to Runway 34 (the only possible conflict, as arrivals being vectored for HPN Runway 16 are not in conflict with eastbound VFR departures), as evidenced by the

lack of TCAS RA events or NMAC reports.⁵ (PDARS slides accompanying this report as Exhibit 7 show the higher VFR traffic, between 2,600' and 5,000', departing HPN.) There is likewise no documented evidence of Conflict Alerts being a significant problem in this area which, in any event, would not relate to issues involving traffic inbound to LGA, the Class-B surface area airport.

Although our data shows minimal conflicts of the sort being advanced as a reason for the lowering of the Class-B floor from 3,000' to 2,500' (see Exhibit 7), we believe that a targeted program of pilot education could be effective, without further regulation, in reducing VFR aircraft operating close to the Class-B floor of 3,000'. This has not been attempted through the various pilot and operator organizations that exist (e.g., the National Business Aircraft Association, Eastern Region Helicopter Council, the Aircraft Owners and Pilots Association, Teterboro Users Group, WCAS) and local flight schools.

E. The HPN Final Approach Course Boxes

The creation of two rectangular areas of Class-B airspace, extending 1.5 nm to the left and right of the final approach courses for Runways 16 and 34, out to a distance of 10 nm from the airport and with a floor of 2,000' is proposed for the stated purpose of protecting IFR arrivals to HPN. It has been stated in Committee meetings that ATC workload is increased by having to call

out VFR traffic near the shoreline and just southeast of CLUBY to IFR traffic inbound to HPN Runway 16. The box to the northwest of HPN would extend slightly beyond the proposed 25 nm lateral boundary of the Class-B airspace, and the box to the southeast of HPN would extend to almost the north shore of Long Island. These boxes would be effective regardless of the runway in use at HPN.

Establishment of these boxes will result in increased workload for ATC as more VFR pilots request Class-B clearances in order to maintain a reasonable altitude over the terrain that rises to the northwest of HPN, or over the water of Long Island Sound where pilots of single engine piston traffic typically seek to fly as high as possible to remain within gliding distance of the shore for as long as possible. Even with the creation of the box on the final approach course for Runway 34, ATC will remain obligated to call VFR traffic at or near the shoreline to IFR arrivals, with the VFR traffic operating below the 2,000' floor of the Class-B box.

These boxes are non-standard, unlike any that exist for a Class D airport underlying Class-B airspace, anywhere in the United States, and do not comply with the Order in many respects. As described in more detail below, the boxes are not "necessary to correct a current situation or problem that cannot be solved without a Class-B designation." Order Paragraph 15-2-1(b)(3). Indeed, HPN does not meet the established FAA criteria for protection of its traffic through Class-B airspace designation.

The boxes are not in keeping with the general design criteria for Class-B airspace. The Order (Paragraph 15-2-3(a)) states that:

Simplification of the Class-B airspace area configuration is a prime requisite.

⁵ In 2008, only 5 TCAS Resolution Advisories ("RAs") occurred in and around HPN. There were no Near Mid-Air Collision ("NMAC") reports filed.

Its vertical and lateral limits should be standardized and the number of sub-areas should be kept to a minimum.

- The proposed boxes likewise are a significant deviation from the direction in the Order (Paragraph 15-2-3(b)) that it be designed in a circular configuration centered on the primary airport (i.e., LGA in this case), with the airspace to be defined using navaids where available on the primary airport.
- The proposed boxes, which are not defined by geography⁶ or reference to any navaid, will prove to be a trap for the unwary VFR pilot, causing an increase in ATC duties to monitor, track and support enforcement action against the increased number of airspace violators. FSDO staff and legal counsel will likewise see increased workload as a result of the establishment of the HPN boxes.

This airspace change will also serve to diminish safety in important ways. It will cause aircraft traveling on east/west routes north of the HPN Class D area to descend to approximately 1,500' MSL in order to remain clear of the box, even when HPN is using Runway 34. The result is that the box will compress VFR traffic – some of it opposite direction - into a narrow altitude band, which will increase the likelihood of a midair collision. It will also reduce the gliding range of aircraft in order to accomplish an off airport

⁶ See Order Paragraph 15-3-2(b)(3) which requires “where possible” reference to geographical features in designing Class-B airspace.

landing in the event of an engine failure, or gliding time necessary for a restart. Toward the northwest end of the box, terrain rises above 500' MSL making VFR flight of questionable legality in an area that might well be considered a congested area by the FAA and NTSB in the course of an enforcement action.

Aircraft operating over Long Island Sound will require either a Class-B clearance or be caused to operate below 2,000', diminishing safety in the event of engine problems, even if HPN is using Runway 16.⁷

The creation of the box will cause departing VFR aircraft to turn left or right on climb out from Runway 34, lest they climb into the Class-B airspace. A left turn will cause conflicts with departing IFR traffic on the Westchester 2 SID.

The creation of the boxes will exacerbate environmental issues and cause economic hardships to VFR operators. Communities in or around the boxes (e.g., Chappaqua, Mt. Kisco, Bedford, Ossining, Port Chester and Greenwich) will see a substantial increase in aircraft operating at much lower altitudes than at present, with a concomitant increase in noise exposure (especially with rotary wing aircraft). Alternatively, many aircraft will choose to fly around the boxes, especially to the northwest of HPN, exposing communities in that area to increased aircraft noise and causing increased fuel burn due to the extra miles being flown.

⁷ If Runway 16 is in use, there is no need for a box to protect the final approach course (“FAC”) for Runway 34. Nor is there a need to protect the Runway 16 FAC when Runway 34 is in use.

Charter operators often fly between TEB and eastern Long Island and the islands VFR via a route that is over the Sound at 2,500', well south of the HPN Runway 16 active final approach course, and then around the southwest and west side of HPN to the Alpine Tower. The box over the Sound will effectively block this route, as it will the established helicopter route from New York City to eastern Long Island, which runs parallel to the north shore of Long Island and off that shoreline by a few nautical miles.⁸ The box to the northwest of HPN will similarly either block a commonly used commercial VFR route between TEB and Danbury Airport ("DXR"), or cause the aircraft to operate below 2,000' over highly populated and noise sensitive areas.

- Similar concerns as are expressed in Section C above about the maintenance of the HPN cutout from NY area TFRs exist with the box proposal as with the extension of the Class-B radius to 25 nm.

Reviewing the PDARS data that have been made available to us, there is little or no conflict between VFR operations at HPN crossing the extended centerlines of Runways 16 or 34 and IFR arrivals to that airport. Slides establishing this fact, from the week of July 14, 2008, are accompanying this report as Exhibit 8. (No slide for the day of July 16 is included as approximately equal use was made of Runways 16 and 34 on that day, while other days had a clearly predominate use of either Runway 16 or 34.)

⁸ This routing was designed specifically to mitigate noise issues over North Shore communities.

- We have examined the data supplied by the Service Area, and find it notable that nearly all the transient VFR traffic passing south of HPN does so at low altitudes and well to the southeast of the airport. (See Exhibit 9)
- Other PDARS data that we have examined for the typically busy summer week commencing July 14, 2008, confirm that conflicting VFR traffic, either along the shoreline when Runway 34 is in use or northwest of HESTR when Runway 16 is in use, is almost completely non-existent and poses no significant risk to IFR arrivals. (Exhibit 8)

Once again, the TCAS and NMAC data bear this out, with only 1 TCAS RA having been recorded on final approach to HPN in all of 2008 (with no NMAC reports).

The lack of such conflicts is not a reason to increase the size of the Class-B airspace by creating the boxes. Such an approach would be contrary to the Order's direction that a Class-B designation must be used only when there is a current situation or problem that can not be solved without Class-B airspace. Order, Paragraph 15-2-1(b)(3).

To the extent that any steps need to be taken to reduce even the few VFR transitions that may affect IFR arrivals to HPN, it should be through pilot education, not additional Class-B airspace, as noted in Section D, *supra*⁹.

⁹ To our knowledge, the Air Traffic Organization has not previously informed the aviation community of the perceived problems that are to be solved by lower the Class-B floor and establishing the HPN Class-B boxes. Thus, edu-

F. The EWR Runway-11 Box

The creation of a rectangular box of Class-B airspace, extending 1.5 nm to the left and right of the final approach courses for EWR Runway 11, out to a distance of 25 nm from the airport and with a floor of 2,000', is proposed for the stated purpose of protecting IFR arrivals to that runway. The box would be effective regardless whether Runway 11 is in use or not.

As is the case with the HPN boxes, establishment of this box will result in increased workload for ATC as more VFR pilots request Class-B clearances in order to maintain a reasonable altitude over the terrain that rises to the south and southwest of MMU. Alternatively, the 2,000' floor of the box will also require all aircraft on the busy northwest/southeast route to seek a transition through the MMU Class D airspace from MMU tower.

- The situation is further complicated by the presence of the Great Swamp National Wildlife Refuge within the box and south to southwest from the Chatham NDB. As stated in the Aeronautical Information Manual, Paragraph 7-4-6, aircraft are to remain not less than 2,000' AGL from such a noise-sensitive area, again mandating a Class-B clearance prior to reaching the MMU Class D (for northeast bound aircraft) or immediately after departing the MMU Class D airspace (for southwest bound aircraft). In either case, not only will the controller need to respond to callups

cation has not be tried as a remedy, assuming that the problem(s) perceived actually exist to some degree.

from the requesting aircraft, but the controller will also need to effect coordination with MMU Tower.

- Also similar to the HPN boxes is the non-compliance of the EWR Runway 11 box with the requirements of the Order. Paragraph 15-2-3(c), states: "the floor of the area between 20 and 30nm shall be at an altitude consistent with approach control arrival and departure procedures. It is expected that this floor would normally be between 5,000 and 6,000 feet above airport elevation." With the EWR box, the floor out to 25 nm will be at 2,000', less than half the altitude required by the Order for distances between 20 and 30 nm from the primary airport (in this case, EWR).
- Paragraph 15-2-3(c) of the Order further provides, in pertinent part, that "[t]he floor of the area between 10 and 20 NM shall be predicated on a 300-foot per NM gradient for 10 NM. This segment will normally have a floor between 2,800' and 3,000' above airport elevation. This floor shall remain constant for that segment" Again, the EWR box is non-compliant with this direction.

The box configuration is non-standard, unlike any that exist for within a Class-B designation anywhere in the United States. As described below, the boxes are not "necessary to correct a current situation or problem that can not be solved without a Class-B designation." Order Paragraph 15-2-1(b)(3).

- To the extent that ATC might on rare occasions need to descend EWR Runway 11 arrivals to 2,000' (or even

3,000') west of a 10 nm radius of EWR, the descent can be conducted close to that 10 nm radius ring and still allow the EWR arrivals to pass below TEB arrivals.

The box is not in keeping with the general design criteria for Class-B airspace. The Order (Paragraph 15-2-3(a)) states that:

Simplification of the Class-B airspace area configuration is a prime requisite. Its vertical and lateral limits should be standardized The number of sub-areas should be kept to a minimum.

The proposed box is likewise a significant deviation from the direction in the Order (Paragraph 15-2-3(b)) that it be designed in a circular configuration centered on the primary airport (i.e., EWR).

- The proposed box, which is not defined by geography¹⁰ or reference to any navaid, will prove to be a trap for the unwary VFR pilot, causing an increase in ATC duties to monitor, track and support enforcement action against the increased number of airspace violators. FSDO staff and legal counsel will likewise see increased workload as a result of the establishment of the EWR box.

Reducing the vertical space available for VFR operations without a Class-B clearance will create a safety hazard. It will compress VFR aircraft traffic in this busy VFR flyway and thus increase the risk of midair collisions. As noted above,

¹⁰ See Order Paragraph 15-3-2(b)(3) which requires "where possible" reference to geographical features in designing Class-B airspace.

especially with rising terrain to the south through west of the MMU Class D, a 2,000' floor of the box is insufficient to maintain adequate separation from both opposite direction traffic (vertical separation would be nearly impossible under the box) and the terrain. Again, this is a populous area, with the FARs requiring at least 1,000' altitude above persons and dwellings in congested areas.

Those pilots wishing to avoid, or unable to obtain, a Class-B clearance will thus either descend below the Class-B box, thereby compromising safety to an unnecessary extent by cruising at a low altitude that allows reduces options in the event of engine failure and causing the surrounding communities increased exposure to higher noise levels, or circumnavigate the box and the entire, enlarged Class-B airspace, thus adding many miles to the flight when the FAA and aviation community should be working toward more efficient, direct routings to reduce our use of and dependence on fossil fuels.

Reviewing the PDARS data that have been made available to us, we note that this VFR flyway is heavily used day in and day out by VFR aircraft. Establishment of the EWR box would directly impede that traffic flow. On the other hand, the PDARS data shows that most frequently, aircraft inbound to EWR remain at 3,000' until at least 10 nm from the airport, and are then given a descent to be below TEB arrivals for Runway 6 with only a minority of Runway 11 arrivals being descended below 3,000' more than 10nm from EWR. (See Exhibit 10)

Class-B airspace is intended as a last resort, where "necessary to correct a current situation or problem that cannot be solved without a Class-B designation", Order Paragraph 15-2-1(b)(3). In this case there is no apparent prob-

lem at the present time (i.e., the EWR Runway 11 arrivals are not descending to altitudes below 3,000' in the area of the proposed box). To the extent that aircraft are occasionally descended by ATC below 3,000' prior to 10 nm from EWR, that descent can be delayed until the 10 nm ring or the 10nm ring can be extended outwards slightly (e.g., to 11 nm) which would then capture these EWR arrivals within the Class-B area. In any case, the correct answer is not to block off a major VFR flyway, but to use the least intrusive and disruptive means to address situations that have been properly documented and quantified.

WCAS Conclusions

For the reasons stated above, the WCAS respectfully notes its opposition to nearly all of the current proposals, save the potential lateral extension of the Class-B airspace out to 25 nm provided that the floor of this extension area is no less than 4,000’.

Although data has been requested from the proponents of these changes, no objective and quantifiable data has been provided other than a few PDARS slides that, in fact, demonstrate to the WCAS the lack of the VFR conflicts that are stated to be the basis for most of the proposed airspace changes around HPN. Anecdotal information should not be a substitute for the hard data on current traffic flows that is required before Class-B changes are put in place. It is respectfully requested that should there be developed quantifiable and objective data that is believed to be supportive of requests for additional Class-B airspace, that WCAS and the rest of the Class-B Ad Hoc Modification Committee be permitted to examine, consider and address such data.

Our traffic numbers and usage have changed substantially in the last 8 years, with further reductions inevitable in the current deep recession and as pilot/owners leave aviation rather than deal with increasing levels of complexity and scrutiny through security initiatives. We submit, from our collective and current experience, that these airspace changes are not cur-

rently, in the terminology of the Order, “necessary” and thus supportive of the additional Class-B airspace.

This is especially important because in the present economic environment, as has been the case since 2001, general aviation is declining in part because costs of initial and proficiency training have grown substantially, as has the complexity of airspace and need to heed security regulations and TFRs. The cost of flight training and flying in the metropolitan area is very high, with flight training being substantially reduced at HPN from what it was in the 1990s and before and fewer based light GA aircraft on the airport than before 2001. Charter operators fly on thin financial margins, as do corporate flight departments, so they share concern with the flight schools when potential airspace changes will only increase their operational costs. These economic concerns further militate against most of the Class-B changes that are being proposed.

To the extent that some modifications to VFR flight practices are identified as desirable, we urge pilot and operator education, not Class-B expansion, as the appropriate vehicle to effect those modifications. We pledge to support that process.

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