



The Flyin' Solo VanLife on the Highways and Byways of North America

# RICK'S ROADS

Ride Along and Enjoy the People, Places, and Who Knows What



BLOG POST: 2024.08.11  
Little Bird Does Beantown



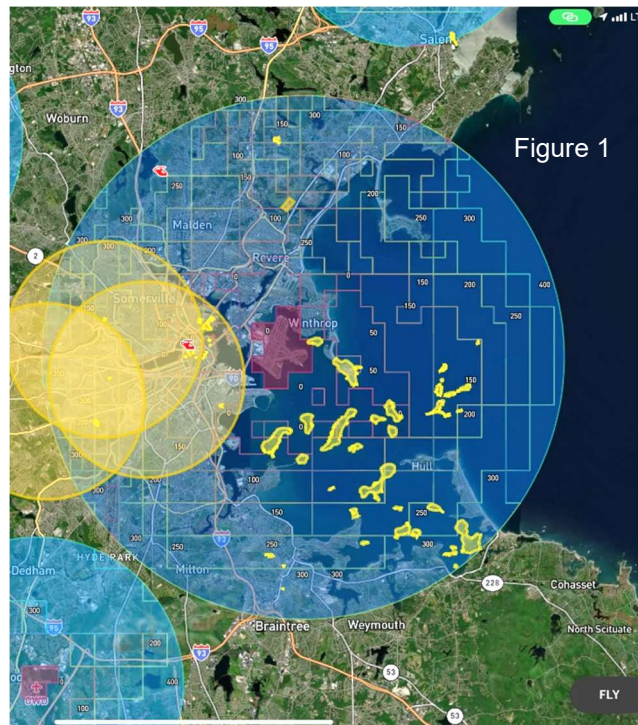
*Skyline of Boston (right) at sunset (left), from Blue Hills Reservation in Milton (9 miles south)*

Finding places to fly a drone in Boston is a bit of a challenge. Boston is a busy city with a busy airspace. Logan Airport is one of the busiest airports in the northeast; 42,000,000 passengers passed through it in 2019.

Aeronautical charts of Boston are packed with various colored overlapping circles and markings. The AirControl app, which simplifies it for us drone pilots – as opposed to the daunting charts that pilots of real planes need to use – still shows layers of colors that all say, to varying degrees, “keep that drone outa here.”

But AirControl is the tool I used to get Little Bird *into* there. The blue circle is the Class B airspace around Logan. It's pretty obvious why that is restricted.

The yellow circles are areas to be aware of: places where fly-with-caution is the rule. There might be a hospital with a



heliport in there (i.e., Mass. General, Tufts Medical), or a university campus rife with pedestrians (i.e., MIT, Harvard), or a stadium (i.e., Fenway Park) that it is not legal to fly over (or near) during (or near) events -- anything that might require extra vigilance or schedule knowledge on the part of a droner.

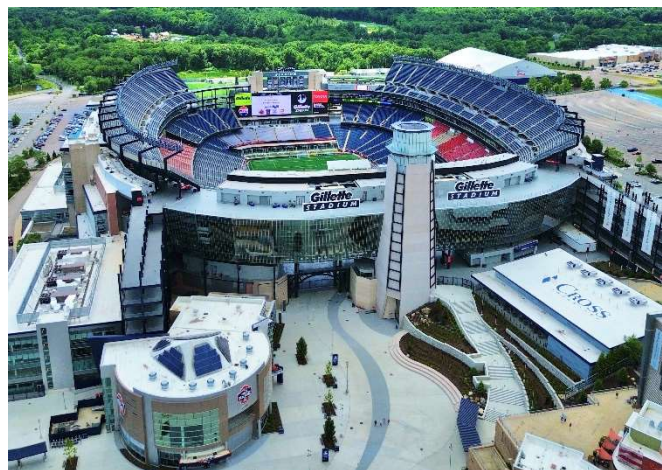
The red zones have some kind of National Defense restriction that prohibits any use of the airspace above them. Makes sense, right? They sometimes also denote areas around someplace – Gillette Stadium in Foxboro, for instance – where there is a Temporary Flight Restriction (TFR) notice in place. Usually, those are limited to a time window around an event, but in Gillette’s case, it appears to be a permanent TFR. (Yes, a permanent temporary notice.)



See the black pointer marker near the top of Figure 6? At that point, I was 14' outside the red TFR zone. I had pulled up in the breakdown lane and launched LB to try to get an air view of the stadium. I took a few pics, but about halfway across the lot, I got a red-box warning on my

screen, telling me that I was violating something or other. I didn't really think I was: I was (barely) outside the red area, and I was not operating, taking off, or landing within it. But I complied. Not gonna push it. Good enough pic, right?

The areas defined by bright yellow lines on Figure 1 are operated by the National Park Service (or similar). Drone operation is not allowed within those boundaries. There is a catch there, though. I can't stand inside those lines and operate my drone. Got it. BUT I *can* stand outside those lines and fly Little Bird over that ground; The Federal Aviation Administration controls





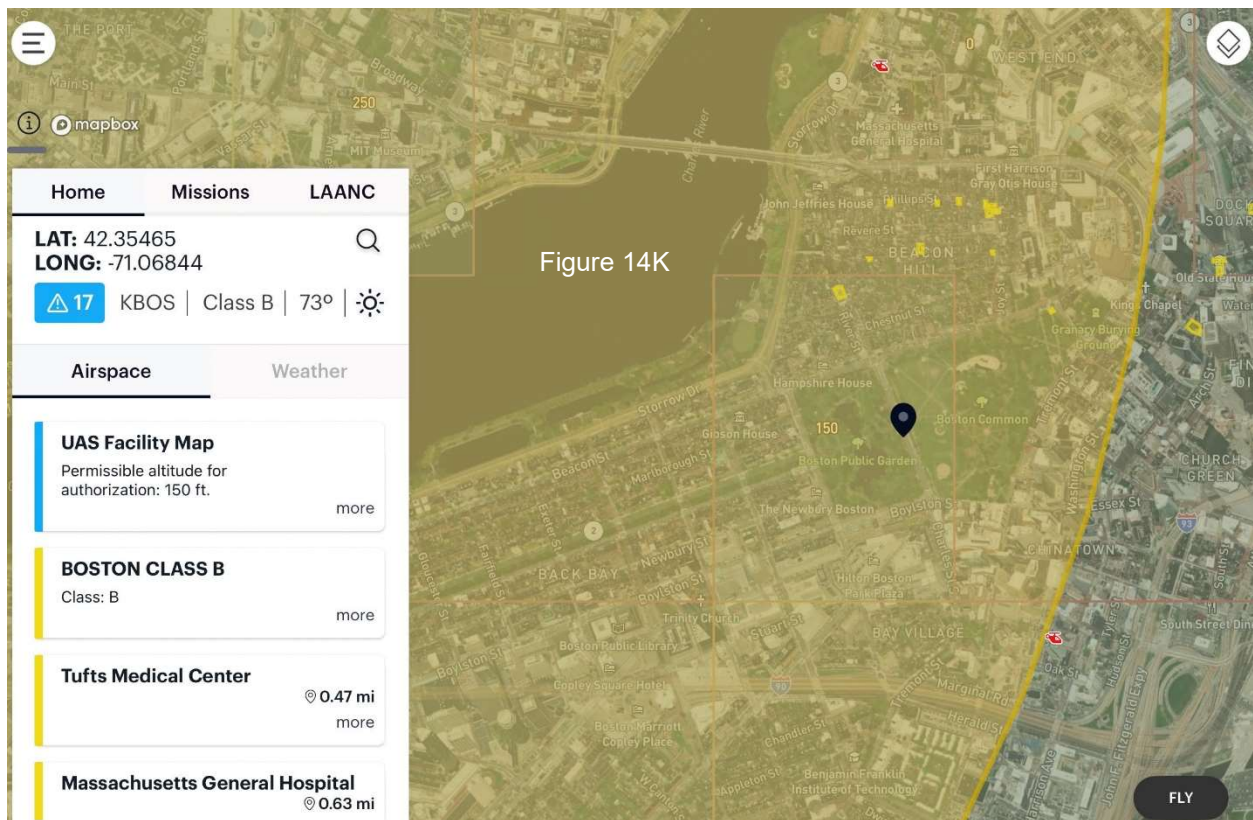
the airspace, not the NPS (or any property owner). The skies are under sole control of the FAA (but the FAA is still subject to the whims of the US government).

But what good is that when it's all in the blue circle anyway? Well, all good rules have exceptions, and there are many at play here.

See all those light green lines on Figure 1? Yeah, the ones that look all Etch-a-Sketch-ish. Within those irregular grids are numbers: 0, 50, 100, 150, 200, 250, up to 400. Those numbers tell me how high I can legally fly my bird.

400' AGL (above ground level) is the absolute legal limit regardless of grid lines. Even in the vast void of the eastern Oregon desert, my flight height was capped at 400'.

0' should be self-explanatory; the highest you can fly your drone is not-at-all (0'). Hard-to-acquire permission is required, along with a reason stronger than "cuz I wanna."



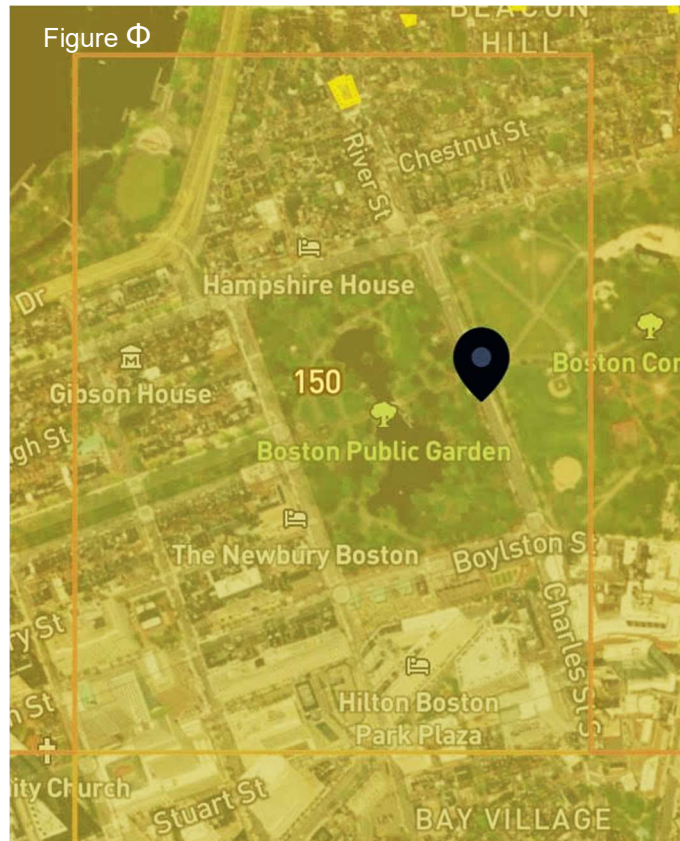
The intermediate numbers are the key. Even if they lie under the blue circle -- as well as under most of the yellow Venn diagram -- there might still be zones that allow 100' or 150' of altitude for drone flight.

Next to the black pointer in Figure 14K, above, is the number 150. If you look closely, you can also make out a thin orange line that forms a rectangle. From any spot within that rectangle, I can fly Little Bird up to 150' ... *if* I acquire a LAANC.

The sidebar on Figure 14K also shows you that there are 17 notices (only the first 4 appear in the photo; you'd scroll down for the rest), with the blue-lined notice that indicates Class B airspace listed as most important.

In that, it says, "UAS Facility Map" where UAS stands for Unmanned Aircraft Systems, which is the technical term for drones and remote-controlled airplanes. It also states, "Permissible altitude for authorization: 150 ft." The key word is *authorization*.

LAANC stands for *Low Altitude Authorization and Notification Capability*, and it is a service that can provide prompt permission to fly in a precisely designated area in a precisely designated time frame. I type in the info on the AirControl app, and, in less than 60 seconds, I get the approval texted (and emailed) to me.



*No one* could actually be reviewing the info in the short amount of time it takes to get the approval, so it seems that I'm basically just reporting that I'll be flying here and now. If any disaster occurs in this "here and now", the FAA knows who to come looking for. That's fine with me.

So, in this case, craving some aerial photos and videos, I came to the Boston Public Garden (BPG) on a Sunday morning, looking to give LB some flight time over the city's famed botanical garden.

In Figure  $\Phi$ , the entirety of BPG was within the LAANC-150 rectangle, which also extended a few hundred yards beyond. As long as I stayed within that orange line, and did not exceed my 150' ceiling, I was legal. Outside the line, on all sides, is a 0 zone, where flying was not allowed at all.

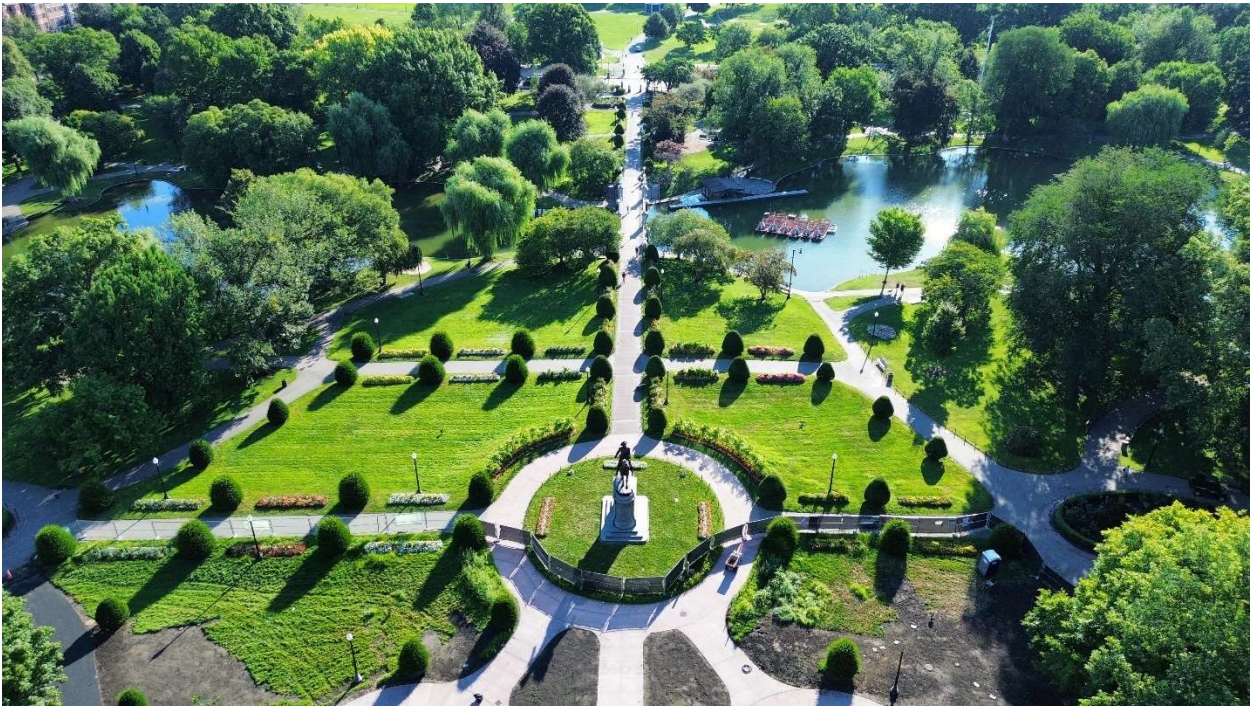
You'll notice in the upper left of the rectangle in Figure  $\Phi$ , there is an oblong greenspace. That is the Hatch Shell, a concert venue within the famed Charles River Esplanade. I decided that views of that would be required this morning as well.

So, I submitted and instantly got my approvals for each, and "Fly, Little Bird, fly!"





*Boston Public Garden, looking west*



*Boston Public Garden, looking east*





*Boston Public Garden, looking north*

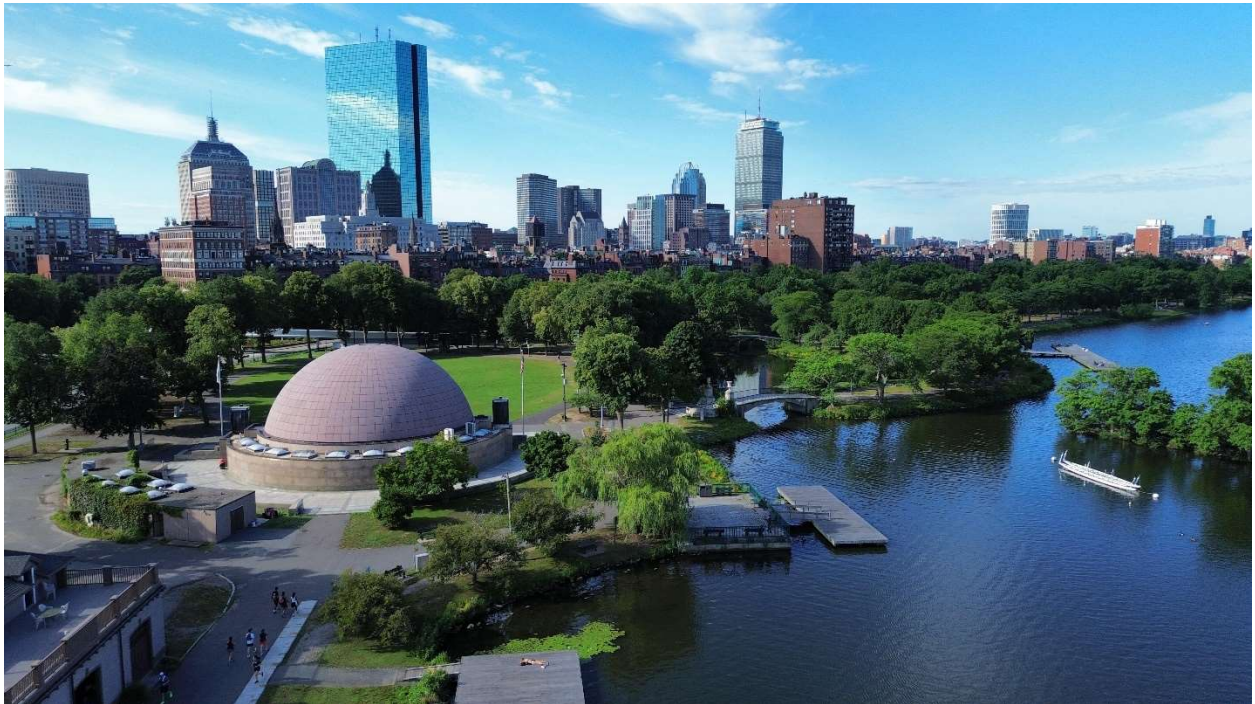


*Boston Public Garden, looking north at Duck Island  
The ramp is for all the ducks that live in Boston Public Garden. This is their safe haven from people.*





*Boston Common, looking northeast.  
The Massachusetts State House, with its golden dome sits atop Beacon Hill.*



*The Hatch Memorial Shell, on the Charles River Esplanade.  
The site of the Boston Pops' famous Independence Day concerts.*



Full disclosure, I went to a different location first – two weeks prior, in fact. After checking out ViewBoston, the new observation deck on the 52<sup>nd</sup> floor of the Prudential Tower, I strolled over to the Christian Science Plaza (CSP), one of the most impressive architectural properties in the whole city.

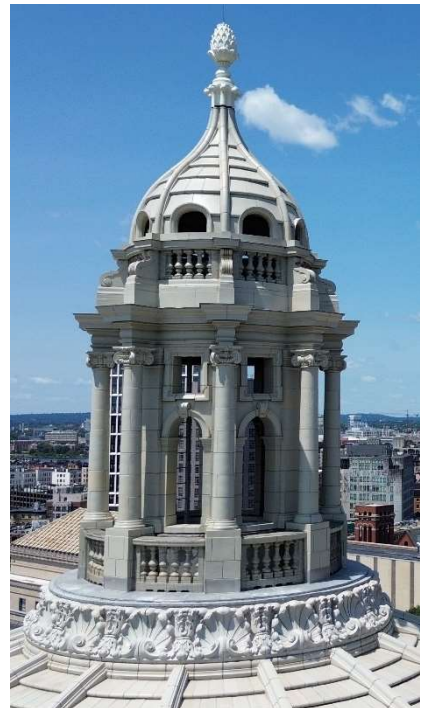


I've always loved the layout of this place, but it has also always baffled me. How the hell could The Church of Christ Scientist afford to acquire so much prime downtown real estate (13.5 acres), and how could they afford to put such amazing structures on it? I wonder that to this day.

The Plaza welcomes the public for chilling out. The vibe is ultra mellow. I have taken many photos of this place over the years, and I deemed it time to get some aerial shots, including an up-close-and-personal photo of the cupola atop the dome. Little Bird was a speck next to that. The structure looks tiny compared to the domed church that it rests on, but *look* at it; it has to be as tall as a two-story building, and it just sits up there as a mere decoration.

The Original Mother Church, the darker gray Romanesque Revival structure with the pointy tower in the photo above, was built in 1894. It's pretty big, but it is dwarfed by the humungous Mother Church Extension, which was built just a dozen years later.

As huge as the churches are, they do not fully





dominate the Plaza. The Reflecting Pool is 675' long and 100' wide. The Colonnade building is similar in length. And the Administration Building towers (right) over all of it.



LB took a few videos to complement these stills, but there were a lot of gulls flying around – the inner city body of water seems to be a popular spot for them – and a few of them were starting to fuss about to the drone's imposition on their prime hangout. So, I backed him away and brought him down. Blue Maxx's meter was almost out of time anyway, so I needed to scoot.

But once I got back to BM and checked the pix that LB had taken, I looked at that circular, in-ground fountain and imagined what a cool video it would be to hover directly over the center of that circle, starting low then slowly rising straight up, then raising the camera to gradually reveal the full length of that pool and, finally, the churches and other structures at the far end. And capture all that in early morning when the sun angle would be primo.

So, I chose a Sunday morning – despite my revulsion for early rising (even moreso on weekends, retirement notwithstanding) – because the traffic would be lighter, parking would be *much* easier (and free), and pedestrians would be scarcer ... and the video would be grander.

There were several empty spots across the street from the CSP, so I parked BM and strolled over to the grounds. It was a still morning, and the water was almost like glassy. It still looked great. And there was almost nobody here. I snapped several iPhone pix, then turned to walk up to the fountain end of the pool.





I stopped cold in my tracks. The fountain was not on. No arching jets of water, no splashes, nothing but dry bricks. Bah.

I figured, since I had gotten up so early for it, I would do the same kind of reveal shot, but without the super-cool flowing fountain effect. I launched LB and had just maneuvered him above the center of the circle, when a college-age, white-shirted man came over to advise me that I did not have permission to fly my drone here.

“Actually, I do,” I replied and began to explain the LAANC authorization that I had acquired just about 15 minutes before.

He listened, but politely rejected the thought. It was clear that I was not the first LAANC-authorized droner he had dealt with. He knew about the FAA and LAANC, but played the Private Property card and trumped the authorization notion.

There really was nothing I could say, so I complied, though he let me snap the above photo before bringing LB back to terra firma.

So that sucked. I’ve considered trying again, but later in the morning when the water’s on, and by launching from across the street, which is public property. I have not done it yet, though, and kinda doubt I will.

But instead, I did a revisit to the Esplanade. There had been couple of workers inside the Hatch Shell on my previous flight there, and they kinda spoiled the effect of my at-up-and-over video. I wanted to give it another go.





*The Charles River Esplanade, with the Concert Lagoon in the foreground, the Massachusetts Avenue bridge in the distant center (Boston on left, Cambridge on right), and the beige-colored Green Building tower of MIT to the right of it*



*The Charles River Esplanade, with the Longfellow Bridge in the upper center (Cambridge on left, Boston on right)*





*The Hatch Shell from 150' above*



*The Hatch Shell from the 25' above the concert lawn*

Finally, a week or so before my New England visit came to a close, I took the train into town and went on a Boston Harbor Historic Cruise. The 8:45 train would have cut it too close to check-in time, so I took the 7:45 and found myself with plenty of time to kill.

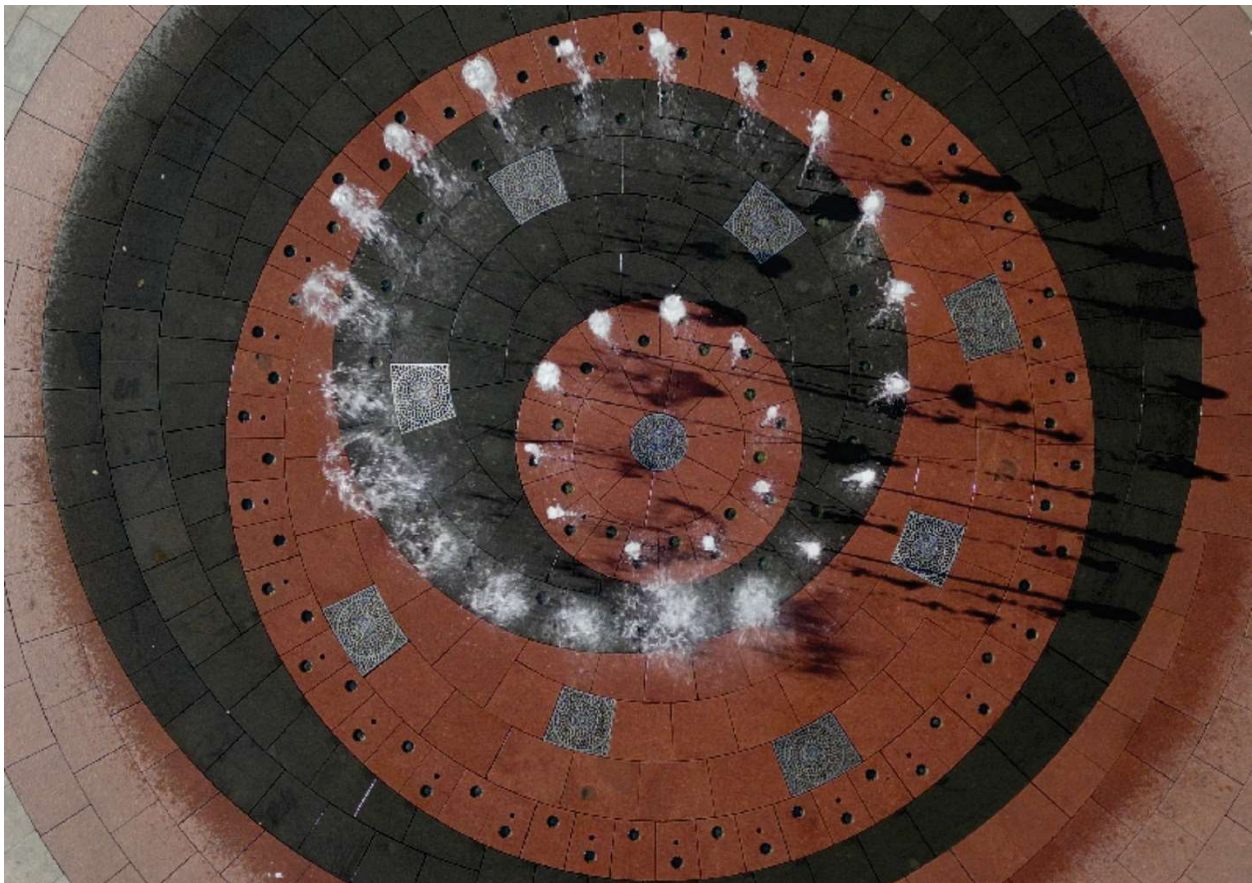
Across the street from Long Wharf, where the cruise would be departing from, was a small park on the Rose Kennedy Memorial Greenway, which is the long and narrow stretch of surface area created when the overhead I-93 structure was replaced by a tunnel and dismantled during the Big Dig.





I mainly wanted to get some drone shots of the Custom House Tower (left), but I quickly figured out that my 150-foot flight ceiling was going to leave me well below the peak of the 456-foot-tall tower. LB's photo might as well have been taken from the sidewalk with a modest zoom lens.

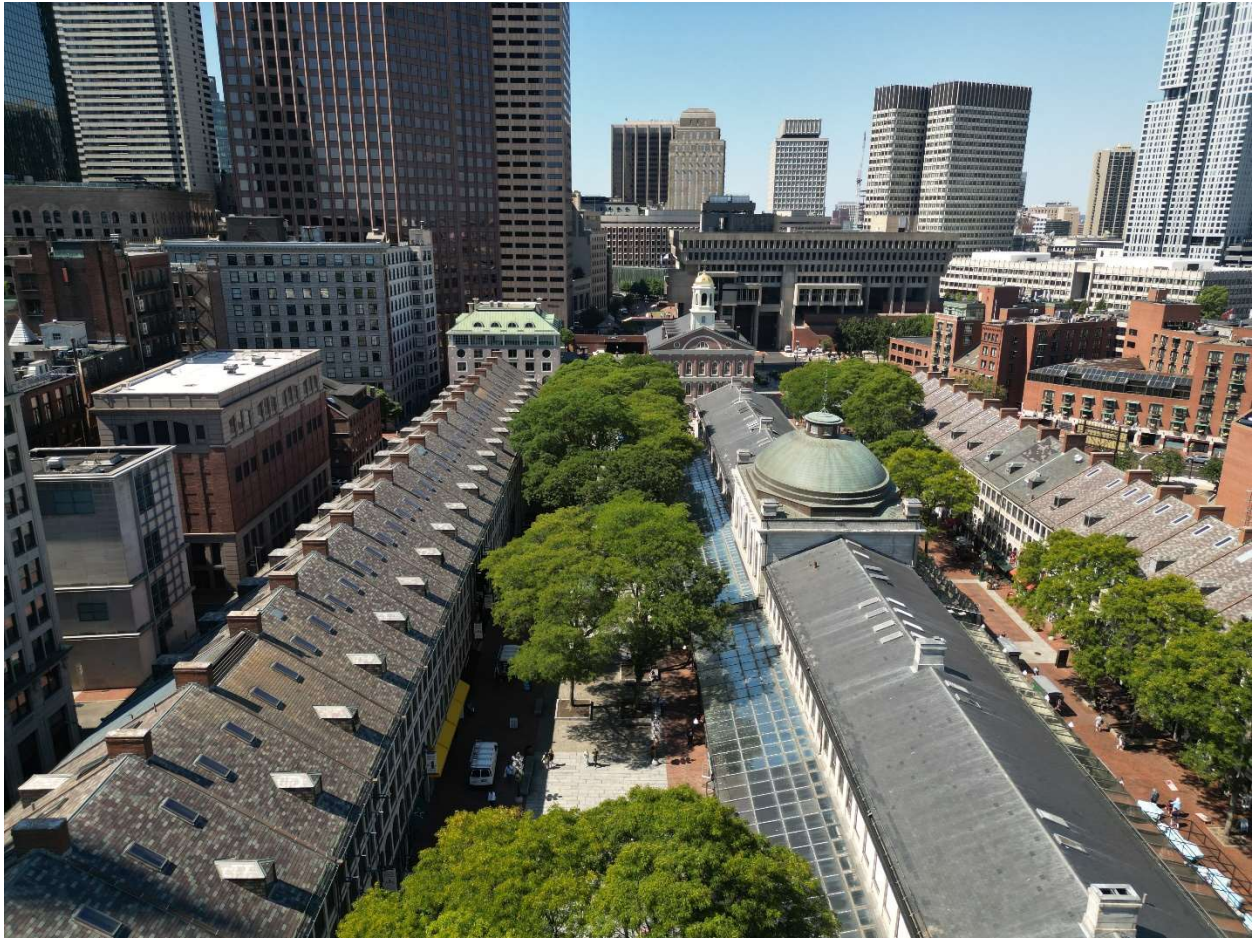
But, in the process, I found out that there was also a very cool in-ground fountain in that little park. It's known as the Ring Fountain, due to its rounded, spiraling design. The jets of water shoot up in choreographed patterns. It looks cool from ground level, but it looked amazing from Little Bird's perspective.



Between the shadows, the splashes, and the jets themselves, this was quite a show. I hovered LB over the center spot and caught it just as the pattern was starting over. It made for a great video, especially when I reversed both the visual and the audio after almost two minutes so that the splashes came first, the shadows leapt off the ground, and they raced the jets of water as they re-formed and dove back tidily into the holes. Looks craaaazy.

Then, after the Historic Cruise, which was great mainly because it was such perfect weather for a boat ride -- about 70 degrees, very low humidity, and just a slight breeze, I couldn't have asked for better -- I picked a different small park (this one had a carousel) and launched LB from there to fly over Quincy Market to historic Faneuil Hall.





Right across the street from the famous meeting house is Boston City Hall. It was a futuristic-looking structure when it was built in 1969, but now that the future is here, it fits in quite well. The gray concrete is a bit stark, but it's a functional starkness, I guess.

There was a temptation to fly LB over and around BCH, but there were plenty of things around that were more than 150' tall, and, therefore, potential obstacles. But the real problem was my grid for authorized flying. The orange lines extended as far as the north wall of Faneuil Hall and no further.

Sometimes, you get a gentle warning on your screen that you have reached the end of your world and need to reel that bird back in. In rare cases, the drone is somehow compelled to do a Forced





Landing, where your control of the craft is nullified and the drone lowers vertically to whatever surface is under it: roof of a building, roof of a truck, onto a busy street, up in a tree, splashdown in a body of water, vanished behind a wall, etc. A Forced Landing is a Very Bad Thing.

So, wary of that, and content that LB had enjoyed himself, I yawed him about and zipped him back over those rooftops to the small Carousel Park where I was comfortably sitting on a stone wall, discreetly manipulating my remote control in the shade.

Carousel Park has, duh, a carousel in it. It's off to the side, though, so it would be easy to walk directly across the park from the waterfront to Quincy Market and not even notice it.

What would be almost impossible to miss, though, would be the artwork painted on the ground. It's called "Gateway to Infinity (An Anti-monument)" and was painted by Maria Molteni in 2023. Forty feet in diameter, it has a central tri-spiral design, backed by a triskelion representing gull wings. This configuration allows the work to be viewed from any angle ... but the best view of all was Little Bird's view.



Some people walked right across it, while others took a few steps out of their way to avoid treading on it. A close look at the photo shows some scuffed areas of wear.



I tried creating a video where LB was positioned directly above the center triangle then slowly rotating while descending. It strayed off course, so I removed the rotation and went for straight descent. It wasn't bad, but my thumb must have been pushing the stick a degree or so off verticality and I lost the center.

I tried again with the same result. Bah. I did not think this would be so tricky.

Then I tried descending a bit and simulating the rest of the descent by zooming in. My gimbal must have been a tiny bit off the 90-degree angle, though, because that didn't work either.

LB was getting really low on battery power by now, so rather than have him force-land on some pedestrian's head, I brought him over to me, plucked him gently from the air and shut him down. Between the warm summer weather and the extended flight, he was one very hot little drone.

The Bird enjoyed Boston, his first urban experiences.

